Chapter 01 Modern Project Management Answer Key

Multiple Choice Questions

1. The advent of project management has been most profound in
A. Automobile manufacturing
B. Construction
C. Information technology
D. The U.S. Department of Defense
E. Film making

The impact of project management is most profound in the area of electronics industry, where the new folk heroes are young professionals whose Herculean efforts lead to the constant flow of new hardware and software products.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Easy

2. A professional organization for project management specialists is the
A. PMI
B. AMA
C. MIS
D. IPM
E. PMBOK

The Project Management Institute (PMI), is a professional organization for project managers.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Easy

3. Which of the following is not considered to be a characteristic of a project?
A. An established objective
B. A clear beginning and end
C. Complex tasks
D. Only for internal use
E. Never been done before

See List on Page 5.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: What is a Project?
Level: Medium

4. Which of the following activities is not considered a project?
A. Developing a new software program
B. Designing a space station
C. Preparing the site for the Olympic Games
D. Production of automobile tires
E. Developing a new advertising program

A project is not routine, repetitive work! Ordinary daily work typically requires doing the same or similar work over and over, while a project is done only once; a new product or service exists when the project is completed.

AACSB: Analytic
Bloom's: Evaluation
Learning Objective: What is a Project?
Level: Medium

5. From among the following activities, which is the best example of a project?
A. Processing insurance claims
B. Producing automobiles
C. Writing a term paper
D. Completing a college degree
E. All of these are good examples of projects

See table 1.1 on Page 6.

AACSB: Analytic
Bloom's: Analysis
Learning Objective: What is a Project?
Level: Medium

6. Which of the following constraints is not typically found in managing projects?
A. Time
B. People
C. Cost
D. Performance
E. Both B and D are not typical constraints

Specific time, cost, and performance requirements bind projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Medium

7. Which of the following choices is not one of the stages of a project life cycle?
A. Conceptualizing
B. Defining
C. Planning
D. Executing
E. Delivering

See List on Page 7.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: What is a Project?
Level: Medium

8. In which of the following stages are project objectives established, teams formed, and major responsibilities assigned?
A. Conceptualizing
B. Defining
C. Planning
D. Executing
E. Delivering

Specifications of the project are defined; project objectives are established; teams are formed; major responsibilities are assigned.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Medium

9. In which of the following stages is a major portion of the physical and mental project work performed?
A. Conceptualizing
B. Defining
C. Planning
D. Executing
E. Delivering

A major portion of the project work takes place—both physical and mental.

AACSB: Analytic
Bloom's: Application
Learning Objective: What is a Project?
Level: Medium

10. In which of the following stages are you more likely to find status reports, many changes, and the creation of forecasts?
A. Conceptualizing
B. Defining
C. Planning
D. Executing
E. Delivering

Time, cost, and specification measures are used for control.

AACSB: Analytic
Bloom's: Application
Learning Objective: What is a Project?
Level: Medium

11. Which of the following characteristics is not typical of a project manager?
A. Managing a temporary activity
B. Possesses in-depth technical knowledge
C. Managing a non-repetitive activity
D. Manages independently of the formal organization
E. Provides a direct link to the customer

Increased competition has placed a premium on customer satisfaction. Customers no longer simply settle for generic products and services.

AACSB: Analytic
Bloom's: Analysis
Learning Objective: The Importance of Project Management
Level: Difficult

12. Which of the following choices is not one of the driving forces behind the increasing demand for project management?
A. Compression of the product life cycle
B. Knowledge explosion
C. Development of third world and closed economies
D. More emphasis on the product and less on the customer
E. Corporate downsizing

Increased customer attention has prompted the development of customized products and services.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: The Importance of Project Management
Level: Medium

13. Which of the following statements is true?
A. Project management is becoming a standard way of doing business
B. Project management is increasingly contributing to achieving organizational strategies
C. Project management is being used at a consistent percentage of a firm's efforts
D. Both A and B are true
E. A, B, and C are all true

Project management is no longer a special-need management. It is rapidly becoming a standard way of doing business. The future promises an increase in the importance and the role of projects in contributing to the strategic direction of organizations.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Importance of Project Management
Level: Difficult

14. Project management is ideally suited for a business environment requiring all of the following except
A. Accountability
B. Flexibility
C. Innovation
D. Speed
E. Repeatability

Competing in a global market influenced by rapid change, innovation, and time to market means organizations manage more and more projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Medium

15. Which of the following is the number one characteristic that is looked for in management candidates?
A. Overall intelligence
B. Works well with others
C. Experience
D. Past successes
E. Good references

The phrase "works well with others" has long been a staple on grade school report cards; now, in the IT world, it's the No. 1 criterion for management candidates.(See Research Highlight on page 16).

AACSB: Communication
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Medium

16. A common rule of thumb in the world of high-tech product development is that a six-month project delay can result in a loss of product revenue share of ____ percent. The waste on failed projects and cost overruns is estimated in the neighborhood of
A. 10
B. 20
C. 33
D. 45
E. 50

A common rule of thumb in the world of high-tech product development is that a six-month project delay can result in a 33 percent loss in product revenue share.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Importance of Project Management
Level: Medium

17. The waste on failed projects and cost overruns is estimated in the neighborhood of
A. Under $100 Million
B. Over $150 Billon
C. Under $10 Billion
D. Between $90-$100 Billion
E. Between $125-$135 Billion

The need for elevating performance continues to challenge the project management profession. The waste on failed projects and cost overruns is estimated in the neighborhood of over $150 billion!

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: What is a Project?
Level: Easy

18. Which of the following is the first step in developing a set of strategies designed to best meet the needs of customers?
A. Market Research
B. Define the Integrated Project Management System
C. Environmental Analysis
D. Project Selection
E. All of the above are correct

Project management is critical both to development of customized products and services and to sustaining lucrative relationships with customers.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: The Importance of Project Management
Level: Easy

19. Integration of project management with the organization takes place with the
A. Master budget
B. Strategy plan
C. Process of managing actual projects
D. Both b and c are correct
E. A, B, and C are all correct

Since projects are the modus operandi, strategic alignment of projects is of major importance to conserving and effective use of organization resources. Selection criteria need to ensure each project is prioritized and contributes to strategic goals.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Today - An Integrated Approach
Level: Medium

20. Two dimensions within the project management process are
A. Technical and sociocultural
B. Cost and time
C. Planned and unexpected
D. Established and new
E. Unique and reoccurring

There are two dimensions within the actual execution of projects (see Figure 1.3. The Technical and Sociocultural Dimensions of the Project Management Process on page 15).

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Today - An Integrated Approach
Level: Easy

21. Which of these is not part of the "technical dimension" of project management?
A. WBS
B. Budgets
C. Problem solving
D. Schedules
E. Status reports

See Figure 1.3. The Technical and Sociocultural Dimensions of the Project Management Process on page 15.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Today - An Integrated Approach
Level: Medium

22. Which of these is not part of the "sociocultural dimension" of project management?
A. Negotiation
B. Resource allocation
C. Customer expectations
D. Leadership
E. Politics

See Figure 1.3. The Technical and Sociocultural Dimensions of the Project Management Process on page 15.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Medium

23. Corporate downsizing has increased the trend toward
A. Reducing the number of projects a company initiates
B. Outsourcing significant segments of project work
C. Using dedicated project teams
D. Shorter project lead times
E. Longer project lead times

Companies outsource significant segments of project work, and project managers have to manage not only their own people but also their counterparts in different organizations.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Importance of Project Management
Level: Medium

24. The importance of project management has increased due to
A. The movement of manufacturing operations out of the U.S
B. Time to market
C. The movement toward flatter and leaner organizations
D. Both a and b are true
E. A, B, and C are all true

One of the most significant driving forces behind the demand for project management is the shortening of the product life cycle. In today's flatter and leaner organizations, where change is a constant, project management is replacing middle management as a way of ensuring that things get done. Corporate downsizing has also led to a change in the way organizations approach projects. Companies outsource significant segments of project work, and project managers have to manage not only their own people but also their counterparts in different organizations.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: The Importance of Project Management
Level: Difficult

25. Which of the following is not typically the responsibility of a project manger?
A. Meeting budget requirements
B. Meeting schedule requirements
C. Meeting performance specifications
D. Coordinates the actions of the team members
E. All of these are typical responsibilities

They must ensure that appropriate trade-offs are made between the time, cost, and performance requirements of the project.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: What is a Project?
Level: Easy

26. A series of coordinated, related, multiple projects that continue over extended time intended to achieve a goal is known as a
A. Strategy
B. Program
C. Campaign
D. Crusade
E. Venture

A program is a group of related projects designed to accomplish a common goal over an extended period of time.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Easy

27. In which of the following stages is it determined what the project will entail, when it will be scheduled, whom it will benefit, and what the budget will be?
A. Conceptualizing
B. Defining
C. Planning
D. Executing
E. Delivering

The level of effort increases, and plans are developed to determine what the project will entail, when it will be scheduled, whom it will benefit, what quality level should be maintained, and what the budget will be.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Easy

28. Competing in a global market is influenced by
A. Rapid change
B. Innovation
C. Time to market
D. Politics
E. A, B, and C are all true

Competing in a global market influenced by rapid change, innovation, and time to market means organizations manage more and more projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Easy

29. Integration of all project processes and practices to improve Project Management is due to
A. Centralization
B. Environmental analysis
C. Customer Expectations
D. Project management system
E. The organization's environment and culture

Centralization entails integration of all project processes and practices to improve project management.

AACSB: Analytic
Bloom's: Application
Learning Objective: Project Management Today - An Integrated Approach
Level: Easy

30. From 1994 to 2009 the trend for projects late or over budget was:
A. Significantly better
B. Slightly better
C. About the same
D. Slightly worse
E. Significantly worse

Failed projects also declined from 31 percent in 1994 to 18 percent in 2004. However, the CHAOS Summary 2009 report shows a small decrease in the numbers.

Fill in the Blank Questions

31. Like most organizational effort, the major goal of a project is to _____.
satisfy a customer's need

Like most organizational effort, the major goal of a project is to satisfy a customer's need.

32. The initial stage in the Project Life Cycle is the _____ stage.
defining

Specifications of the project are defined; project objectives are established; teams are formed; major responsibilities are assigned.

33. The final stage in the Project Life Cycle is the _____ stage.
<u>closure</u>

Closure includes three activities: delivering the project product to the customer, redeploying project resources, and post-project review.

34. The _____, a professional organization for project managers, has grown from 93,000 in 2002 to more than 230,000 currently.
<u>PMI</u>

The Project Management Institute (PMI), is a professional organization for project managers.

35. In the _____ stage of the Project Life Cycle a major part of the project work, both physical and mental, takes place.
<u>executing</u>

A major portion of the project work takes place—both physical and mental.

36. In the _____ stage of the Project Life Cycle what will be accomplished by the project is determined along with the project's schedule and budget.
<u>planning</u>

The level of effort increases, and plans are developed to determine what the project will entail, when it will be scheduled, whom it will benefit, what quality level should be maintained, and what the budget will be.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: What is a Project?
Level: Easy

37. A common rule of thumb in the world of high-tech product development is that a six-month project delay can result in a _____ percent loss in product revenue share.
<u>thirty-three</u>

A common rule of thumb in the world of high-tech product development is that a six-month project delay can result in a 33 percent loss in product revenue share.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Importance of Project Management
Level: Medium

38. In today's high-tech industries the product life cycle is averaging _____ years.
<u>1 to 3</u>

Today in high-tech industries the product life cycle is averaging 1 to 3 years. Only 30 years ago, life cycles of 10 to 15 years were not uncommon.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Importance of Project Management
Level: Easy

39. The advent of many small projects has created the need for an organization that can support _____ management.

multiproject

This climate has created a multiproject environment and a plethora of new problems. Sharing and prioritizing resources across a portfolio of projects is a major challenge for senior management.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Importance of Project Management
Level: Easy

40. Increased competition has placed a premium on customer satisfaction and the development of _____ products and services.

customized

Customers want customized products and services that cater to their specific needs.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Importance of Project Management
Level: Easy

41. In some organizations, selection and management of projects often fail to support the broad-based _____ of the organization.

strategic plan

Today, projects are the modus operandi for implementing strategy. Yet in some organizations, selection and management of projects often fail to support the strategic plan of the organization.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Today - An Integrated Approach
Level: Medium

42. WBS, schedules, and budgets are examples of the _____ dimension of the project management process.

<u>technical</u>

See Figure 1.3. The Technical and Sociocultural Dimensions of the Project Management Process on page 15.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Medium

43. Leadership, teamwork, and negotiation are examples of the _____ dimension of the project management process.

<u>sociocultural</u>

See Figure 1.3. The Technical and Sociocultural Dimensions of the Project Management Process on page 15.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Medium

44. The _____ is a professional organization for project management specialists.

<u>Project Management Institute (PMI)</u>

The Project Management Institute (PMI), is a professional organization for project managers.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Easy

45. One of the defining characteristics of a project is that it has a singular purpose, i.e., an established _____.
objective

Projects have a defined objective—whether it is constructing a 12-story apartment complex by January 1 or releasing version 2.0 of a specific software package as quickly as possible.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Easy

46. Because projects have a defined beginning and end, the _____ is frequently used to manage the transition of a project from start to completion.
Project Life Cycle

The project life cycle typically passes sequentially through four stages: defining, planning, executing, and delivering.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: What is a Project?
Level: Difficult

47. The development of schedules, budgets, and identifying risks are common elements to the _____ stage of the project life cycle.
planning

The level of effort increases, and plans are developed to determine what the project will entail, when it will be scheduled, whom it will benefit, what quality level should be maintained, and what the budget will be.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: What is a Project?
Level: Medium

48. The establishment of project goals, specifications, and responsibilities usually occurs in the _____ stage of the project life cycle.
<u>defining</u>

Specifications of the project are defined; project objectives are established; teams are formed; major responsibilities are assigned.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: What is a Project?
Level: Medium

49. Training the customer, reassigning staff, and releasing resources occurs in the _____ stage of the project life cycle.
<u>closure</u>

Includes three activities: delivering the project product to the customer, redeploying project resources, and post-project review. Delivery of the project might include customer training and transferring documents.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: What is a Project?
Level: Medium

50. Project managers are expected to ensure that appropriate trade-offs are made between the time, cost, and _____ requirements of the project.
<u>performance</u>

Project managers are ultimately responsible for performance (frequently with too little authority). They must ensure that appropriate trade-offs are made between the time, cost, and performance requirements of the project.

AACSB: Analytic
Bloom's: Analysis
Learning Objective: What is a Project?
Level: Medium

51. The growth in _____ has increased the complexity of projects because projects typically include the latest advances.
new knowledge

The growth in new knowledge has increased the complexity of projects because projects encompass the latest advances. Product complexity has increased the need to integrate divergent technologies. Project management has emerged as an important discipline for achieving this task.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: The Importance of Project Management
Level: Medium

52. A _____ is a series of coordinated, related; multiple projects that continue over extended time intended to achieve a goal.
program

A program is a group of related projects designed to accomplish a common goal over an extended period of time.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Easy

53. In the _____ stage, it determined what the project will entail, when it will be scheduled, whom it will benefit, and what the budget will be.
planning

The level of effort increases, and plans are developed to determine what the project will entail, when it will be scheduled, whom it will benefit, what quality level should be maintained, and what the budget will be.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: What is a Project?
Level: Easy

True / False Questions

54. Because of the profitability motive, project management is nearly always limited to the private sector.
<u>FALSE</u>

Project management is not limited to the private sector. Project management is also a vehicle for doing good deeds and solving social problems.

55. Ten years ago major universities offered only one or two classes in project management, primarily for engineers.
<u>TRUE</u>

Ten years ago major universities offered one or two classes in project management, primarily for engineers. Today, most universities offer multiple sections of project management classes, with the core group of engineers being supplemented by business students majoring in marketing, management information systems (MIS).

56. The professional certification for project managers is a Project Management Professional (PMP).
<u>TRUE</u>

PMI provides certification as a Project Management Professional (PMP)—someone who has documented sufficient project experience, agreed to follow the PMI code of professional conduct, and demonstrated mastery of the field of project management by passing a comprehensive examination. (See Snapshot on Page 4).

57. Because of its flexibility, project management is equally useful in ongoing, routine work as well as unique, one-time projects.
FALSE

A project is not routine, repetitive work! Ordinary daily work typically requires doing the same or similar work over and over, while a project is done only once; a new product or service exists when the project is completed.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: What is a Project?
Level: Easy

58. One of the defining characteristics of project management is that the projects are not confined to a single department but involve several departments and professionals.
TRUE

One of the major characteristics is the involvement of several departments and professionals.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Medium

59. One of the characteristics that separate project management from other endeavors of the organization is that there are specific time, cost, and performance requirements.
TRUE

Major characteristics are specific time, cost, and performance requirements.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Medium

60. The singular purpose of a project is often lacking in daily organizational life in which workers perform repetitive operations each day.
TRUE

This singular purpose is often lacking in daily organizational life in which workers perform repetitive operations each day.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Medium

61. Since a construction company builds many buildings the projects after the first building do not fit the definition of a project.
FALSE

All projects are nonroutine and has some unique elements.

AACSB: Reflective Thinking
Bloom's: Comprehension
Level: Medium

62. The first stage in the Project Life Cycle is the Concept stage.
FALSE

The first stage is defining.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: What is a Project?
Level: Easy

63. A major portion of the project work, both physical and mental, takes place during the Production stage of the Project Life Cycle.
FALSE

A major portion of the project work, both physical and mental is done in the executing stage.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: What is a Project?
Level: Medium

64. In practice, the amount of work accomplished in each stage of the Project Life Cycle will vary greatly depending on the department or work group.
TRUE

In practice, the project life cycle is used by some project groups to depict the timing of major tasks over the life of the project.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: What is a Project?
Level: Easy

65. Because of the requirement for in-depth expertise, project management is generally restricted to specialists.
FALSE

Unlike their functional counterparts, project managers generally possess only rudimentary technical knowledge.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: What is a Project?
Level: Easy

66. On the project team, the Marketing manager is the primary, direct link with the customer.
FALSE

Project Managers are typically the direct link to the customer and must manage the tension between customer expectations and what is feasible and reasonable.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: What is a Project?
Level: Easy

67. One of the most significant driving forces behind the demand for project management is the ever increasing expansion of the product life cycle.
FALSE

One of the most significant driving forces behind the demand for project management is the shortening of the product life cycle.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: The Importance of Project Management
Level: Easy

68. Unlike their functional counterparts, project managers generally possess only rudimentary technical knowledge to make trade-off decisions.
TRUE

Unlike their functional counterparts, project managers generally possess only rudimentary technical knowledge.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: What is a Project?
Level: Medium

69. Because of the significant loss in potential product revenue, "time to market" has become one of the most critical factors in developing new products.
TRUE

Time to market for new products with short life cycles has become increasingly important.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: The Importance of Project Management
Level: Easy

70. A common rule of thumb in the world of high-tech product development is that a six-month project delay can result in a 33 percent loss in product revenue share.
TRUE

A common rule of thumb in the world of high-tech product development is that a six-month project delay can result in a 33 percent loss in product revenue share. Speed, therefore, becomes a competitive advantage; more and more organizations are relying on cross-functional project teams to get new products and services to the market as quickly as possible.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: The Importance of Project Management
Level: Easy

71. Project management integration necessitates combining all of the major dimensions of project management under one umbrella.
TRUE

Project management integration necessitates combining all of the major dimensions of project management under one umbrella. Each dimension is connected in one seamless, integrated domain. Integration means applying a set of knowledge, skills, tools, and techniques to a collection of projects in order to move the organization toward its strategic goals.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Easy

72. Due to corporate downsizing significant segments of project work have been outsourced to other organizations.
TRUE

Corporate downsizing has also led to a change in the way organizations approach projects. Companies outsource significant segments of project work, and project managers have to manage not only their own people but also their counterparts in different organizations.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Importance of Project Management
Level: Easy

73. Smaller projects in larger organizations tend not to need project management skills.
FALSE

Many small projects can eat up the people resources of a firm and represent hidden costs not measured in the accounting system. Organizations with many small projects going on concurrently face the most difficult project management problems.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Importance of Project Management
Level: Medium

74. In the current trends, Project managers are typically required to manage many diverse systems such as; networks, bar charts, job costing, task forces, partnering and schedule, to manage projects.
FALSE

Project managers must shape a project culture that stimulates teamwork and high levels of personal motivation as well as a capacity to quickly identify and resolve problems that threaten project work. This dimension also involves managing the interface between the project and external environment. Project managers have to assuage and shape expectations of customers, sustain the political support of top management, negotiate with their functional counterparts, monitor subcontractors, and so on. Overall, the manager must build a cooperative social network among a divergent set of allies with different standards, commitments, and perspectives.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Easy

75. Project management is usually restricted to specialists.
FALSE

Unlike their functional counterparts, project managers generally possess only rudimentary technical knowledge.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Easy

76. Project management is becoming a standard way of doing business.
TRUE

Project management is no longer a special-need management. It is rapidly becoming a standard way of doing business.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: The Importance of Project Management
Level: Easy

Short Answer Questions

77. Compare and contrast the Product Life Cycle and the Project Life Cycle.

Product Life Cycle deals with the time it takes to develop a product and the time it remains in the marketplace. The Project Life Cycle is the stages that a new product goes through while being developed.

AACSB: Analytic
Bloom's: Analysis
Learning Objective: The Importance of Project Management
Level: Medium

78. Identify the five major characteristics of a project.

see list on page 5 of your text

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Medium

79. Identify and briefly describe the four stages of the Project Life Cycle.

see list on page 1-7

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: What is a Project?
Level: Easy

80. "Project managers perform the same functions as other managers." Agree or Disagree and support your decision.

Many of the same basic management functions are performed by project managers; however, there are aspects of the project manager's job that make it unique.

AACSB: Analytic
Bloom's: Analysis
Learning Objective: What is a Project?
Level: Medium

81. Identify and briefly describe the six factors that are increasing the demand for project management.

1. compression of the product life cycle, 2. knowledge explosion, 3. triple bottom line, 4. corporate downsizing, 5. increased customer focus, 6. small projects represent big problems

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Importance of Project Management
Level: Difficult

82. What is meant by an "Integrated Project Management Process"?

All efforts are focused toward the strategic plan. Piece meal tools are no longer accepted.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Difficult

83. Identify and briefly discuss the two key areas where project management need to be integrated within the organization.

1. with the Strategic Plan and 2. within the process of managing actual projects

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Medium

84. Identify and briefly discuss the two key dimensions of managing actual projects.

1. Technical and 2. Sociocultural

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Medium

85. The success of individual projects is typically measured by performance compared to three constraints usually placed on all projects. Identify and briefly describe those three constraints.

1. time, 2. cost, and 3. performance

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Medium

86. Describe what it means that a Project Manager must work with a diverse troupe of characters?

They are typically the direct link to the customer and must manage the tension between customer expectations and what is feasible and reasonable. Project managers provide direction, coordination, and integration to the project team, which is often made up of part-time participants loyal to their functional departments. They often must work with a cadre of outsiders—vendors, suppliers, subcontractors—who do not necessarily share their project allegiance.

AACSB: Analytic
Bloom's: Analysis
Learning Objective: What is a Project?
Level: Medium

87. What is the difference between a project and a program?

The terms are often used interchangeably in business, however, a program is considered to be a series of coordinated, related, and multiple projects that continue over extended time intended to achieve a goal.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What is a Project?
Level: Medium

88. Describe the connection between Project Management and an organization's Strategic Plan.

Today the emphasis is on an integrated project management process that focuses all project effort toward the strategic plan of the organization.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Today - An Integrated Approach
Level: Medium

Chapter 02 Organization Strategy and Project Selection Answer Key

Multiple Choice Questions

1. Which of the follow is not one of the commonly heard comments of project managers?
A. Where did this project come from?
B. Why are we doing this project?
C. How can all these projects be first priority?
D. Why is this project so strongly linked to the strategic plan?
E. Where are we going to get the resources to do this project?

Ample evidence still suggests that many organizations have not developed a process that clearly aligns project selection to the strategic plan.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Easy

2. Strategy considered to be under purview of senior management is
A. Old school thinking
B. A new school of management thought
C. Necessary in a company structure
D. Beneficial to the Project Manager
E. Depended on company goals

Project management historically has been preoccupied solely with the planning and execution of projects. Strategy was considered to be under the purview of senior management. This is old-school thinking.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Easy

3. A critical factor to ensure the success of integrating the strategic plan with projects lies in a process that
A. Is open and published for all participants to review
B. Starts with top management's directives
C. With projects first and integrates them with the strategic plan
D. Both B and C are correct
E. A, B, and C are all correct

A crucial factor to ensure the success of integrating the plan with projects lies in the creation of a process that is open and transparent for all participants to review.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: The Strategic Management Process: An Overview
Level: Difficult

4. The intended outcome of strategy/projects integration is
A. Clear organization focus
B. Best use of scare organization resources
C. Improved communication across projects and departments
D. Both A and C are correct
E. A, B, and C are all correct

A generic methodology that ensures integration by creating very strong linkages of project selection and priority to the strategic plan is then discussed. The intended outcomes are clear organization focus, best use of scarce organization resources (people, equipment, capital), and improved communication across projects and departments.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

5. Which of the following is a main reason why project managers need to understand their organization's mission and strategy?
A. They can better focus on the immediate customer
B. They can make appropriate decisions and adjustments
C. So they can be effective project advocates
D. Both B and C are correct
E. A, B, and C are all correct

There are two main reasons why project managers need to understand their organization's mission and strategy. The first reason is so they can make appropriate decisions and adjustments. For example, how a project manager would respond to a suggestion to modify the design of a product to enhance performance will vary depending upon whether his company strives to be a product leader through innovation or to achieve operational excellence through low cost solutions. The second reason project managers need to understand their organization's strategy is so that they can be effective project advocates. Project managers have to be able to demonstrate to senior management how their project contributes to their firm's mission.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

6. Project managers who do not understand the role that their project plays in accomplishing the organization's strategy tend to make all the following mistakes except:
A. Focusing on low priority problems
B. Overemphasizing technology as an end in and of itself
C. Focusing on the immediate customer
D. Trying to solve every customer issue
E. All the above are likely mistakes

See list on page 24.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

7. In today's business environment, project managers find it valuable to have a keen understanding of
A. Strategic management
B. Technical issues
C. Project selection process
D. Both A and C are correct
E. A, B, and C are all correct

Project managers need to understand their organization's strategy is so that they can be effective project advocates. Project managers have to be able to demonstrate to senior management how their project contributes to their firm's mission. Protection and continued support come from being aligned with corporate objectives. Project managers also need to be able to explain to team members and other stakeholders why certain project objectives and priorities are critical. This is essential for getting buy-in on contentious trade-off decisions. For these reasons project managers will find it valuable to have a keen understanding of strategic management and project selection processes.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

8. The textbook indicated that _____ is the major dimension of strategic management.
A. Responding to changes in the external market
B. Allocating scarce resources of the organization
C. Beating competition to the market
D. Both a and b are correct
E. Both a and c are correct

Two major dimensions of strategic management are responding to changes in the external environment and allocating scarce resources of the firm to improve its competitive position.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

9. Which of the following is not true for strategic management?
A. It should be done once each year just before developing the operating plan
B. It supports consistency of action at every level of the organization
C. It develops an integrated and coordinated long-term plan of action
D. It positions the firm to meet the needs of its customers
E. All of these are true statements

Two major dimensions of strategic management are responding to changes in the external environment and allocating scarce resources of the firm to improve its competitive position. Constant scanning of the external environment for changes is a major requirement for survival in a dynamic competitive environment.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: The Strategic Management Process: An Overview
Level: Difficult

10. Which of the following is the correct order for the strategic management process?
A. Strategies, mission, goals, projects
B. Goals, projects, mission, strategies
C. Mission, goals, strategies, projects
D. Goals, mission, strategies, projects
E. Projects, mission, strategies, goals

See list on page 26.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: The Strategic Management Process: An Overview
Level: Difficult

11. Which of the following questions does the organization's mission statement answer?
A. What are our long-term strategies?
B. What are our long-term goals and objectives?
C. How do we operate in the existing environment?
D. What do we want to become?
E. All of these are answered by the mission statement

The mission identifies "what we want to become," or the raison d'être. Mission statements identify the scope of the organization in terms of its product or service.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

12. Which of the following is not one of the traditional components found in mission statements?
A. Major products and services
B. Profitability
C. Target customers and markets
D. Geographic domain
E. Contribution to society

Traditional components found in mission statements are major products and services, target customers and markets, and geographical domain. In addition, statements frequently include organizational philosophy, key technologies, public image, and contribution to society.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: The Strategic Management Process: An Overview
Level: Difficult

13. Which of the following is not one of the characteristics of effective objectives?
A. Realistic
B. Assignable
C. Flexible
D. Specific
E. Measurable

See Exhibit 2-1 on page 29.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Easy

14. Strategy formulation includes which of the following activities?
A. Determining alternatives
B. Creating profitability targets
C. Evaluating alternatives
D. Both a and c are correct
E. A, B, and C are all correct

Strategy formulation includes determining and evaluating alternatives that support the organization's objectives and selecting the best alternative.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Easy

15. The assessment of the external and internal environments is called _____ analysis.
A. SWOT analysis
B. Competitive
C. Industry
D. Market
E. Strategic

The keys are to attempt to forecast fundamental industry changes and stay in a proactive mode rather than a reactive one. This assessment of the external and internal environments is known as the SWOT analysis (strengths, weaknesses, opportunities, and threats).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

16. Which of the following would not be classified as an organizational threat?
A. Slowing of the economy
B. A maturing life cycle
C. Poor product quality
D. Government regulations
E. All of these are organizational threats

Examples of perceived external threats could be a slowing of the economy, a maturing life cycle, exchange rates, or government regulation.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

17. Which of the following would not be classified as an organizational opportunity?
A. Increasing product demand
B. Excellent employees
C. Emerging markets
D. demographics
E. All of these are organizational opportunities

Typical opportunities are increasing demand, emerging markets, and demographics. Managers or individual firms have limited opportunities to influence such external environmental factors; however, in recent years notable exceptions have been new technologies such as Apple using the iPod to create a market to sell music.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Easy

18. Which of the following is not one of the requirements for successful implementation of strategies through projects?
A. Allocation of resources
B. Prioritizing of projects
C. Motivation of project contributors
D. Adequate planning and control systems
E. All of these are requirements

First, completing tasks requires allocation of resources. Resources typically represent funds, people, management talents, technological skills, and equipment. Frequently, implementation of projects is treated as an "addendum" rather than an integral part of the strategic management process. However, multiple objectives place conflicting demands on organizational resources. Second, implementation requires a formal and informal organization that complements and supports strategy and projects. Authority, responsibility, and performance all depend on organization structure and culture. Third, planning and control systems must be in place to be certain project activities necessary to ensure strategies are effectively performed. Fourth, motivating project contributors will be a major factor for achieving project success. Finally, an area receiving more attention in recent years is prioritizing projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Difficult

19. Which of the following terms is often used to denote a project that a powerful, high-ranking official is advocating?
A. Sacred cow
B. Pet project
C. Political necessity
D. Special undertaking
E. Strategic ploy

The term "sacred cow" is often used to denote a project that a powerful, high-ranking official is advocating.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Need for an Effective Project Portfolio Management System
Level: Easy

20. Susie's department is implementing many projects. She finds herself starting and stopping work on one task to go and work on another task, and then return to the work on the original task. Susie is experiencing
A. Poor scheduling
B. Excess work burden
C. Flexible tasking
D. Multitasking
E. Burnout

Resource sharing also leads to multitasking. Multitasking involves starting and stopping work on one task to go and work on another project, and then returning to the work on the original task. People working on several tasks concurrently are far less efficient, especially where conceptual or physical shutdown and startup are significant.

AACSB: Analytic
Bloom's: Application
Learning Objective: The Need for an Effective Project Portfolio Management System
Level: Medium

21. Project selection criteria are typically classified as:
A. Financial and non-financial
B. Short-term and long-term
C. Strategic and tactical
D. Required and optional
E. Cost and schedule

Although there are many criteria for selecting projects, selection criteria are typically identified as financial and nonfinancial.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Portfolio Management System
Level: Easy

22. Which of the following financial models are typically included in project selection?
A. Payback
B. Net present value
C. Internal rate of return
D. Both A and B are correct
E. A, B, and C are all correct

For most managers financial criteria are the preferred method to evaluate projects. These models are appropriate when there is a high level of confidence associated with estimates of future cash flows; These models are payback and net present value (NPV).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Portfolio Management System
Level: Medium

23. Projects are usually classified into all but one of the following categories. Which one is not one of the typical classifications?
A. Compliance and emergency
B. Operational
C. Strategic
D. Political necessity
E. All of these are typical classifications

Many organizations find they have three different kinds of projects in their portfolio: compliance and emergency (must do), operational, and strategic projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Portfolio Management System
Level: Medium

24. Which of the following is not one of the classifications for assessing a project portfolio?
A. Sacred cow
B. Bread-and-butter
C. Pearls
D. Oysters
E. White elephants

See list on page 49.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: A Portfolio Management System
Level: Medium

25. A project screening matrix typically contains all of the following except:
A. The list of available projects
B. Specific criteria
C. Weights assigned to specific criteria
D. Costs to complete each project
E. All of the above are typically contained

See Figure 2.3 on page 41 representing a project scoring matrix.

AACSB: Analytic
Bloom's: Analysis
Learning Objective: A Portfolio Management System
Level: Difficult

26. Which of the following is the reason(s) why project managers need to understand their organization's mission and strategy?
A. To make appropriate decisions and adjustments
B. To be effective project advocates
C. To be able to get their job done
D. Both A and B are correct
E. A, B, and C are all correct

There are two main reasons why project managers need to understand their organization's mission and strategy. The first reason is so they can make appropriate decisions and adjustments. For example, how a project manager would respond to a suggestion to modify the design of a product to enhance performance will vary depending upon whether his company strives to be a product leader through innovation or to achieve operational excellence through low cost solutions. The second reason project managers need to understand their organization's strategy is so that they can be effective project advocates. Project managers have to be able to demonstrate to senior management how their project contributes to their firm's mission.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

27. In the Snapshot from Practice, Intel's CEO has concentrated Intel's strategy toward?
A. Creating chips to support the digital device market
B. Eliminating AMD as a competitor
C. Strengthening Intel's position in the PC market
D. Expanding Intel's international market
E. Expand efforts in the mainframe computer market

Barrett wants INTEL chips to be the guts of every digital device on the planet—especially in the communications, consumer electronics, and entertainment industries. Think—cell phones, wireless home networks, video players, flat panel TVs—INTEL's expertise fits right in.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

28. Which of the following is not true of multi-weighted scoring models?
A. Will include quantitative criteria
B. Will include qualitative criteria
C. Each criterion is assigned a weight
D. Projects with higher scores are considered more desirable
E. All of the above are true

A weighted scoring model typically uses several weighted selection criteria to evaluate project proposals. Weighted scoring models will generally include qualitative and/or quantitative criteria. Each selection criterion is assigned a weight. Scores are assigned to each criterion for the project, based on its importance to the project being evaluated. The weights and scores are multiplied to get a total weighted score for the project. Using these multiple screening criteria, projects can then be compared using the weighted score. Projects with higher weighted scores are considered better.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: A Portfolio Management System
Level: Difficult

29. A major project proposal form will likely include all of the following except:
A. Project Classification
B. Schedule objective
C. Major deliverables of the project
D. How success will be measured
E. All of these are likely to be included

See Figure 2.4A on page 44 for an example of A Proposal Form

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Applying a Selection Model
Level: Medium

30. Which of the following is a common multicriteria selection model?
A. Checklist
B. Net Present Value
C. Weighted criteria model
D. Both A and C are correct
E. All of these are common multicriteria selection models

Since no single criterion can reflect strategic significance, portfolio management requires multi-criteria screening models. There are two models, the checklist and multiweighted scoring models.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: A Portfolio Management System
Level: Medium

Fill in the Blank Questions

31. Successful _____ requires strong links among mission statements, goals, objectives, and strategies.
strategic management

Strategic management requires strong links among mission, goals, objectives, strategy, and implementation.

AACSB: Analytic
Bloom's: Analysis
Learning Objective: A Portfolio Management System
Level: Medium

32. _____ change infrequently and may require revision only when the nature of the business changes or shifts.
Mission statements

Mission statements change infrequently; however, when the nature of the business changes or shifts, a revised mission statement may be required.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

33. _____ translate the organization's mission statement into specific, concrete, and measurable terms.
Objectives

Objectives translate the organization mission into specific, concrete, measurable terms. Organizational objectives set targets for all levels of the organization.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

34. _____ answers the question of how strategies will be realized, given available resources.
Implementation

Implementation answers the question of how strategies will be realized, given available resources. The conceptual framework for strategy implementation lacks the structure and discipline found in strategy formulation.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

35. Project _____ are typically high-ranking managers who endorse and lend political support for the completion of a specific project.
sponsors

Project sponsors are typically high-ranking managers who endorse and lend political support for the completion of a specific project. They are instrumental in winning approval of the project and in protecting the project during the critical development stage.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Portfolio Management System
Level: Medium

36. A weighted scoring model such as _____ typically uses several weighted selection criteria to evaluate project proposals.
Project Screening Matrix

A weighted scoring model typically uses several weighted selection criteria to evaluate project proposals. Weighted scoring models will generally include qualitative and/or quantitative criteria. Each selection criterion is assigned a weight. Scores are assigned to each criterion for the project, based on its importance to the project being evaluated. The weights and scores are multiplied to get a total weighted score for the project. Using these multiple screening criteria, projects can then be compared using the weighted score. Projects with higher weighted scores are considered better.

AACSB: Analytic
Bloom's: Analysis
Learning Objective: A Portfolio Management System
Level: Difficult

37. The _____ identifies what the organization wants to become and the scope of the firm in terms of its product or service.
mission statement

The mission identifies "what we want to become," or the raison d'être. Mission statements identify the scope of the organization in terms of its product or service.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

38. In a SWOT analysis, good product quality, low debt, and an established dealer network are examples of positive _____.
strengths

Examples of internal strengths could be core competencies, such as technology, product quality, management talent, low debt, and dealer networks.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

39. In a SWOT analysis, strong competition, reduced product demand, and a maturing product life cycle are examples of _____.
threats

Examples of perceived external threats could be a slowing of the economy, a maturing life cycle, exchange rates, or government regulation.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

40. The assessment of the internal and external environments is known as a _____.
SWOT analysis

The keys are to attempt to forecast fundamental industry changes and stay in a proactive mode rather than a reactive one. This assessment of the external and internal environments is known as the SWOT analysis (strengths, weaknesses, opportunities, and threats).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

41. Apple Computers has been successful in developing a turnaround strategy that has developed new markets and increased market share. This began with strict adherence to the _____.
Mission Statement

Since Steve Jobs returned to Apple Computers as CEO in 1997, he has been strikingly successful in developing a turnaround strategy that has developed new markets and increased market share. It all begins with strict adherence to their mission statement.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Easy

42. The term _____ is often used to denote a project that a powerful, high-ranking official is advocating.
<u>sacred cow</u>

Project selection may be based not so much on facts and sound reasoning, but rather on the persuasiveness and power of people advocating projects. The term "sacred cow" is often used to denote a project that a powerful, high-ranking official is advocating.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Need for an Effective Project Portfolio Management System
Level: Easy

43. Xerox's ALTO computer and the Ford Mustang are examples of the significance that _____ can play in project management.
<u>politics</u>

Politics can play a role not only in project selection but also in the aspirations behind projects. Individuals can enhance their power within an organization by managing extraordinary and critical projects. Power and status naturally accrue to successful innovators and risk takers rather than to steady producers. Many ambitious managers pursue high-profile projects as a means for moving quickly up the corporate ladder.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Need for an Effective Project Portfolio Management System
Level: Medium

44. Capacity overload which inevitably leads to confusion and inefficient use of scarce resources is an _____.
<u>implementation gap</u>

Capacity overload inevitably leads to confusion and inefficient use of scarce organizational resources. The presence of an implementation gap, of power politics, and of multitasking adds to the problem of which projects are allocated resources first.

AACSB: Analytic
Bloom's: Application
Learning Objective: The Need for an Effective Project Portfolio Management System
Level: Medium

45. The _____ financial model measures the time it will take to recover the project investment.
payback

The payback model measures the time it will take to recover the project investment. Shorter paybacks are more desirable. Payback is the simplest and most widely used model.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Portfolio Management System
Level: Easy

46. The _____ financial model measures the current value of all cash inflows and outflows using management's minimum desired rate of return.
net present value (NPV)

The net present value (NPV) model uses management's minimum desired rate-of-return (discount rate, for example, 20 percent) to compute the present value of all net cash inflows.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Portfolio Management System
Level: Easy

47. In classifying the kinds of projects an organization has in its portfolio, _____ projects are typically those needed to meet regulatory conditions required to operate in a region.
compliance (must do)

Compliance projects are typically those needed to meet regulatory conditions required to operate in a region; hence, they are called "must do" projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Portfolio Management System
Level: Easy

48. In classifying the kinds of projects an organization has in its portfolio, _____ projects are typically those needed to support current operations.
<u>operational</u>

Operational projects are those that are needed to support current operations. These projects are designed to improve efficiency of delivery systems, reduce product costs, and improve performance.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Portfolio Management System
Level: Easy

49. In classifying the kinds of projects an organization has in its portfolio, _____ projects are typically those that directly support the organization's long run mission.
<u>strategic</u>

Strategic projects are those that directly support the organization's long-run mission. They frequently are directed toward increasing revenue or market share.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Portfolio Management System
Level: Easy

50. Using the Project Portfolio Matrix, software upgrades and manufacturing cost reduction projects are examples of _____ projects that involve evolutionary improvements to existing products.
<u>Bread-and-Butter</u>

Bread and butter projects typically involve evolutionary improvements to current products and services. Examples include software upgrades and manufacturing cost reduction efforts.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: A Portfolio Management System
Level: Medium

51. In some cases organizations will use a _____ to solicit ideas for projects when the knowledge requirements for the project are not available in the organization.
RFP (Request for Proposal)

Organizations will solicit ideas for projects when the knowledge requirements for the project are not available in the organization. Typically, the organization will issue an RFP (Request for Proposal) to contractors/vendors with adequate experience to implement the project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Applying a Selection Model
Level: Medium

52. A _____ will typically include a list of potential projects, several criteria, weights for those criteria, and criteria scores for those projects.
Project Screening Matrix

See Figure 2.3 on page 41 representing a project scoring matrix.

AACSB: Analytic
Bloom's: Analysis
Learning Objective: A Portfolio Management System
Level: Medium

53. The most common approach to selecting project has been to use the _____ model.
Checklist

The most frequently used method in selecting projects has been the checklist. This approach basically uses a list of questions to review potential projects and to determine their acceptance or rejection.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: A Portfolio Management System
Level: Medium

True / False Questions

54. Project Management historically has been preoccupied solely with the planning and execution of projects while strategy was under the purview of senior management.
TRUE

Project management historically has been preoccupied solely with the planning and execution of projects. Strategy was considered to be under the purview of senior management; which is old-school thinking.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

55. The problem in many organizations is not with formulating strategies but with implementing the strategies.
TRUE

The problem in many organizations is implementing strategies—that is, making them happen. Integration of strategy formulation and implementation often does not exist.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

56. A written mission statement provides focus for decision making when shared by organizational managers and employees.
TRUE

A written mission statement provides focus for decision making when shared by organizational managers and employees. Everyone in the organization should be keenly aware of the organization's mission.

AACSB: Reflective Thinking
Bloom's: Synthesis
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

57. Effective objectives can be created to apply only at the department level and not relating to organizational objectives.
FALSE

Each level below the organizational objectives should support the higher level objectives in more detail; this is frequently called cascading of objectives.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Strategic Management Process: An Overview
Level: Easy

58. Organizational objectives set targets for all levels of the organization not just for top management.
TRUE

Organizational objectives set targets for all levels of the organization. Objectives pinpoint the direction managers believe the organization should move toward. Objectives answer in detail where a firm is headed and when it is going to get there.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Strategic Management Process: An Overview
Level: Easy

59. Formulating strategy answers the questions *who* and *when* the tasks will be performed to reach objectives.
FALSE

Formulating strategy answers the question of what needs to be done to reach objectives.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

60. Strategy formulation ends with cascading objectives or projects assigned to lower divisions, departments, or individuals.
<u>TRUE</u>

Strategy formulation includes determining and evaluating alternatives that support the organization's objectives and selecting the best alternative. The first step is a realistic evaluation of the past and current position of the enterprise.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Strategic Management Process: An Overview
Level: Easy

61. If a proposed project does not meet one of the designated "must" objectives it is immediately removed from consideration.
<u>TRUE</u>

If a project does not meet designated "must" objectives, it is not considered and removed from consideration.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Applying a Selection Model
Level: Medium

62. Using the Project Portfolio Matrix, revolutionary commercial advances using proven technical advances are classified as Oyster projects.
<u>FALSE</u>

Oysters involve technological breakthroughs with high commercial payoffs. Examples include embryonic DNA treatments and new kinds of metal alloys.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: A Portfolio Management System
Level: Medium

63. It is necessary to have exactly the same strategic and operations criteria for different projects
<u>FALSE</u>

It is not necessary to have exactly the same criteria for the different types of projects discussed above (strategic and operations). However, experience shows most organizations use similar criteria across all types of projects, with perhaps one or two criteria specific to the type of project—e.g., strategic breakthrough versus operational.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Applying a Selection Model
Level: Easy

64. The two axes of the Project Portfolio Matrix are technical feasibility and commercial potential.
<u>TRUE</u>

The vertical axis reflects a project's probability of success (the technical feasibility). The horizontal axis reflects potential commercial value.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: A Portfolio Management System
Level: Medium

65. Many organizations find they have three different kinds of projects in their portfolio, compliance, operational, and sacred cows.
Refer to 2.2
<u>FALSE</u>

Many organizations find they have three different kinds of projects in their portfolio: compliance and emergency (must do), operational, and strategic projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Portfolio Management System
Level: Medium

66. The first step in the Strategic Management Process is to set long-range goals and objectives.
<u>FALSE</u>

The first step is: Review and define the organizational mission.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

67. Reviewing and revising the organization's mission is best achieve through the use of a SWOT analysis.
<u>TRUE</u>

This assessment of the external and internal environments is known as the SWOT analysis (strengths, weaknesses, opportunities, and threats). From this analysis, critical issues and a portfolio of strategic alternatives are identified. These alternatives are compared with the current portfolio and available resources; strategies are then selected that should support the basic mission and objectives of the organization.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Easy

68. Opportunities and threats are the flip sides of each other; that is, a threat can be viewed as an opportunity, and vice versa.
<u>TRUE</u>

Opportunities and threats are the flip sides of each other. That is, a threat can be perceived as an opportunity, or vice versa. Examples of perceived external threats could be a slowing of the economy, a maturing life cycle, exchange rates, or government regulation.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

69. The information gap refers to the lack of understanding and consensus of organization strategy among top and middle-level managers.
<u>FALSE</u>

The implementation gap refers to the lack of understanding and consensus of organization strategy among top and middle-level managers.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Need for an Effective Project Portfolio Management System
Level: Easy

70. One way to offset the influence of politics on project management within an organization is to have a well-defined project selection model.
<u>TRUE</u>

Top management needs to develop a system for identifying and selecting projects that reduces the impact of internal politics and fosters the selection of the best projects for achieving the mission and strategy of the firm.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Need for an Effective Project Portfolio Management System
Level: Medium

71. Lee Iacocca's career was built on successfully leading the design and development of the highly successful Ford Mustang.
<u>TRUE</u>

Lee Iacocca's career was built on successfully leading the design and development of the highly successful Ford Mustang.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Need for an Effective Project Portfolio Management System
Level: Easy

72. Generally, people working on several projects at the same time are more efficient than having several people working part-time on the same projects.
FALSE

People working on several tasks concurrently are far less efficient, especially where conceptual or physical shutdown and startup are significant. Multitasking adds to delays and costs.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Need for an Effective Project Portfolio Management System
Level: Medium

73. The NPV financial model measures the time it will take to recover the project investment.
FALSE

The net present value (NPV) model uses management's minimum desired rate-of-return (discount rate, for example, 20 percent) to compute the present value of all net cash inflows.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Portfolio Management System
Level: Medium

74. Intel's CEO, Craig R. Barrett, is envisioning Intel's future as being beyond computers and to include all digital products as Intel's potential customers.
TRUE

Barrett wants INTEL chips to be the guts of every digital device on the planet—especially in the communications, consumer electronics, and entertainment industries. Think—cell phones, wireless home networks, video players, flat panel TVs—INTEL's expertise fits right in.

AACSB: Reflective Thinking
Bloom's: Application
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

75. Multi-weighted scoring models include only quantitative criteria, not qualitative.
<u>FALSE</u>

Weighted scoring models will generally include qualitative and/or quantitative criteria.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: A Portfolio Management System
Level: Medium

Short Answer Questions

76. "Politics and project management should not mix." Agree or Disagree and support your position.

Projects and politics invariably mix and effective project managers recognize that any significant project has political ramifications. A good project selection process will minimize the impact of internal politics.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: The Need for an Effective Project Portfolio Management System
Level: Difficult

77. Identify and briefly discuss the three intended outcomes of integrating and linking projects with the strategic plan.

1) clear organization focus, 2) best use of scarce organization resources (people, equipment, and capital), and 3) improved communication across projects and departments.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Difficult

78. What is *strategic management*?

Strategic management is the process of assessing "what we are" and deciding and implementing "what we intend to be and how we are going to get there."

79. Identify and briefly describe the four components of strategic management and why they must be strongly linked.

1) mission, 2) goals and objectives, 3) strategy, and 4) implementation

80. The typical Strategic Management Process includes four activities. Identify and briefly describe each of those four activities.

1) Review and define the organizational mission, 2) Set long-range goals and objectives, 3) Analyze and formulate strategies to reach objectives, and 4) Implement strategies through projects.

81. Identify and briefly describe the five characteristics of effective objectives.

1) Specific, 2) Measurable, 3) Assignable, 4) Realistic, and 5) Time related

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Medium

82. What is a SWOT analysis and how does it relate to the Strategic Management Process?

It is an assessment of the internal and external environments and id the link between reviewing the current mission statement and the development of goals and objectives.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Strategic Management Process: An Overview
Level: Difficult

83. What is the *implementation gap* and why is it important to project management?

The implementation gap refers to the lack of understanding and consensus of organization strategy among top and middle-level managers. If managers lack a common understanding of the priority for a given set of projects, then the achievement of long-range goals will be impossible.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: The Need for an Effective Project Portfolio Management System
Level: Medium

84. Identify and briefly discuss the three classes of projects usually found in an organization's project portfolio.

1) compliance and emergency, 2) operational, and 3) strategic

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: A Portfolio Management System
Level: Medium

85. Draw the Project Portfolio Matrix identifying the major elements on the drawing.

see Figure 2.7 in your text

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: A Portfolio Management System
Level: Difficult

86. Identify and briefly describe five of the benefits of Project Portfolio Management.

See Exhibit 2-2 in your text for the complete list

AACSB: Analytic
Bloom's: Application
Learning Objective: A Portfolio Management System
Level: Difficult

87. Why is profitability alone not an adequate measure of a project's value to an organization?

Today management is interested in identifying the potential mix of projects that will yield the best use of human and capital resources to maximize return on investment in the long run. Factors such as researching new technology, public image, ethical position, protection of the environment, core competencies, and strategic fit might be important criteria for selecting projects.

AACSB: Analytic
Bloom's: Application
Learning Objective: A Portfolio Management System
Level: Medium

88. What are the two major shortcomings of using the Checklist approach to project selection?

1) failure to determine the relative importance of the project to the firm and 2) fails to compare to other potential projects

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: A Portfolio Management System
Level: Difficult

Chapter 03 Organization: Structure and Culture Answer Key

Multiple Choice Questions

1. Organizational culture is best explained as organizational
A. Personality
B. Hierarchy
C. Reporting relationships
D. Background
E. Management style

A simple explanation of organizational culture is that it reflects the "personality" of an organization.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Easy

2. A good project management system provides for defining the interface between the project team and the organization in all the following areas except
A. Authority
B. Allocation of resources
C. Development of project team members
D. Integration of the project into the organization
E. All of these are provided

A project management system provides a framework for launching and implementing project activities within a parent organization. A good system appropriately balances the needs of both the parent organization and the project by defining the interface between the project and parent organization in terms of authority, allocation of resources, and eventual integration of project outcomes into mainstream operations.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

3. Organizations have difficulty in creating a system for managing projects because
A. Contrary to typical operations, projects are one-time efforts
B. Projects are multidisciplinary while organizations are usually departmentalized by discipline
C. Projects are not focused on profits
D. Both a and b are correct
E. A, B, and C are all correct

Many business organizations have struggled with creating a system for organizing projects while managing ongoing operations.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Project Management Structure
Level: Difficult

4. The structure that manages projects within the existing organizational structure is _____ organization.
A. Functional
B. Balanced matrix
C. Weak matrix
D. Strong matrix
E. Project

One approach to organizing projects is to simply manage them within the existing functional hierarchy of the organization. Once management decides to implement a project, the different segments of the project are delegated to the respective functional units with each unit responsible for completing its segment of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Easy

5. Bill is working on a project involving the upgrading of a management information system. The project is being managed by the information systems department with coordination with other departments occurring through normal channels. He is working in a _____ organization.
A. Functional
B. Balanced matrix
C. Weak matrix
D. Strong matrix
E. Project

Once management decides to implement a project, the different segments of the project are delegated to the respective functional units with each unit responsible for completing its segment of the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

6. Which of the following is an advantage of a functional project management organization?
A. Maximum flexibility in the use of staff
B. Good integration across functional units
C. Shorter project duration
D. Strong motivation of project team members
E. All of these are advantages

There is maximum flexibility in the use of staff. Appropriate specialists in different functional units can temporarily be assigned to work on the project and then return to their normal work.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Project Management Structure
Level: Difficult

7. Which of the following is a disadvantage of functional project management organization?
A. Lack of motivation of project team members
B. Longer project duration
C. Lack of focus on the project
D. Both b and c are correct
E. A, B, and C are all correct

See list on pages 68-69.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Project Management Structure
Level: Difficult

8. Kim is reviewing a proposed project. The scope of the project is narrow with a lot of in-depth expertise required and it will take a short period of time to complete. The best choice for organizing the project is _____ organization.
A. Functional
B. Balanced matrix
C. Weak matrix
D. Strong matrix
E. Project

Top management decides to implement the project, and different segments of the project are distributed to appropriate areas.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

9. A project team that operates with a full-time project manager as a separate unit from the rest of the organization is structured as a _____ organization.
A. Functional
B. Balanced matrix
C. Weak matrix
D. Strong matrix
E. Projectized

Instead of one or two special projects, the organization consists of sets of quasi-independent teams working on specific projects. The main responsibility of traditional functional departments is to assist and support these project teams. This type of organization is referred to in the literature as a Projectized Organization.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Easy

10. Which of the following combinations represents the extremes of project organization?
A. Strong matrix and balanced matrix organizations
B. Functional and dedicated project teams
C. Project and balanced matrix organizations
D. Project and strong matrix organizations
E. Strong matrix and functional organizations

The functional organization is also commonly used when, given the nature of the project, one functional area plays a dominant role in completing the project or has a dominant interest in the success of the project. At the other end of the structural spectrum is the creation of dedicated project teams. These teams operate as separate units from the rest of the parent organization.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Medium

11. MegaComputers, Inc. has assigned a project manager for each of the five new-product teams. The managers as well as the project team members work on the projects on a full-time basis. The structure being used is _____ organization.
A. Functional
B. Balanced matrix
C. Weak matrix
D. Strong matrix
E. Project

Instead of one or two special projects, the organization consists of sets of quasi-independent teams working on specific projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

12. Which of the following structures is referred to in popular literature as a *projectized* form of organizations?
A. Functional organization
B. Balanced matrix organization
C. Weak matrix organization
D. Strong matrix organization
E. Projectized organization

In the case of firms where projects are the dominant form of business, such as a construction firm or a consulting firm, the entire organization is designed to support project teams. Instead of one or two special projects, the organization consists of sets of quasi-independent teams working on specific projects. The main responsibility of traditional functional departments is to assist and support these project teams.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Medium

13. Elizabeth is considering how to structure a project team that will not directly disrupt ongoing operations. The project needs to be done quickly and a high level of motivation will be needed in order to do that. For this situation, the _____ organization would be the best choice.
A. Functional
B. Balanced matrix
C. Weak matrix
D. Strong matrix
E. Project

In many cases, the project team approach is the optimum approach for completing a project when you view it solely from the standpoint of what is best for completing the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

14. *Projectitis* is most likely to occur in the _____ organization structure.
A. Functional
B. Balanced matrix
C. Weak matrix
D. Strong matrix
E. Project

Sometimes dedicated project teams take on an entity of their own and a disease known as projectitis develops. See Snapshot from Practice: Projectitis—The Dark Side. A strong we-they divisiveness emerges between the project team and the parent organization.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Medium

15. Computers R Us is concerned about keeping project costs low and wants to be sure that all pools of expertise are used. Additionally they want to minimize duplication of efforts across projects. Their best choice for project management structure is the _____ organization structure.
A. Functional
B. Balanced matrix
C. Weak matrix
D. Strong matrix
E. Project

Specialists from different areas work closely together and, with proper guidance, become committed to optimizing the project, not their respective areas of expertise.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

16. _____ organization is a hybrid form in which a horizontal project management structure is overlaid in the normal functional hierarchy.
A. Functional
B. Matrix
C. Project
D. Balanced
E. A, B, and C are all correct

Matrix management is a hybrid organizational form in which a horizontal project management structure is "overlaid" on the normal functional hierarchy.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Medium

17. A project management system provides a framework for launching and implementing project activities within a _____ organization.
A. Matrix
B. Balanced
C. Weak
D. Sponsor
E. Parent

A project management system provides a framework for launching and implementing project activities within a parent organization.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

18. In which of the following is the balance of authority strongly in favor of the functional managers?
A. Weak matrix
B. Balanced matrix
C. Strong matrix
D. Strong
E. Both C and D are correct

This form attempts to create the "feel" of a project team within a matrix environment. The project manager controls most aspects of the project, including scope trade-offs and assignment of functional personnel. The project manager controls when and what specialists do and has final say on major project decisions. The functional manager has title over her people and is consulted on a need basis. In some situations a functional manager's department may serve as a "subcontractor" for the project, in which case they have more control over specialized work.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Easy

19. The project manager has the responsibility to answer which of the following questions?
A. What task has to be done?
B. Who will do the task?
C. How will the task be done?
D. How well has the functional input been integrated?
E. Why will the task be done?

See table 3.1 on page 73.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

20. Matrix management violates the management principle of
A. Span of control
B. Unity of command
C. Parity principle
D. Empowerment
E. All of these management principles

Matrix management violates the management principle of unity of command. Project participants have at least two bosses—their functional head and one or more project managers.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Medium

21. All are negotiated issues except:
A. Who will do the task?
B. Where will the task be done?
C. Why will the task be done?
D. Is the task satisfactorily completed?
E. The total cost of the project

See table 3.1 on page 73.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Easy

22. The project structure that is ranked as least effective is _____ organization.
A. Functional
B. Balanced matrix
C. Weak matrix
D. Strong matrix
E. Project

The functional organization is also commonly used when, given the nature of the project, one functional area plays a dominant role in completing the project or has a dominant interest in the success of the project. Under these circumstances, a high-ranking manager in that area is given the responsibility of coordinating the project. For example, the transfer of equipment and personnel to a new office would be managed by a top-ranking manager in the firm's facilities department. Likewise, a project involving the upgrading of the management information system would be managed by the information systems department. In both cases, most of the project work would be done within the specified department and coordination with other departments would occur through normal channels.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

23. The project structure that is ranked as most effective for developing new products is _____ organization.
A. Functional
B. Balanced matrix
C. Weak matrix
D. Strong matrix
E. Project

Instead of one or two special projects, the organization consists of sets of quasi-independent teams working on specific projects. The main responsibility of traditional functional departments is to assist and support these project teams. For example, the marketing department is directed at generating new business that will lead to more projects, while the human resource department is responsible for managing a variety of personnel issues as well as recruiting and training new employees.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Medium

24. From the list below, which is not a primary characteristic of organization culture?
A. Control
B. Team emphasis
C. History
D. Conflict tolerance
E. Risk tolerance

Organizational culture refers to a system of shared norms, beliefs, values, and assumptions which binds people together, thereby creating shared meanings.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Organizational Culture
Level: Medium

25. Factors in identifying cultural characteristics include all the following except
A. Norms.
B. Customs.
C. Values.
D. Both B and C are correct.
E. A, B, and C are all correct.

Organizational culture refers to a system of shared norms, beliefs, values, and assumptions which binds people together, thereby creating shared meanings. This system is manifested by customs and habits that exemplify the values and beliefs of the organization.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Organizational Culture
Level: Medium

26. Who is responsible for determining how tasks will be done in a matrix project management structure?
A. The functional manager
B. The project manager
C. Both are responsible
D. This is no pattern of who takes responsibility
E. None of these are true

Matrix management is a hybrid organizational form in which a horizontal project management structure is "overlaid" on the normal functional hierarchy. In a matrix system, there are usually two chains of command, one along functional lines and the other along project lines. Instead of delegating segments of a project to different units or creating an autonomous team, project participants report simultaneously to both functional and project managers.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Easy

27. Who is responsible for determining what tasks have to be done in a matrix project management structure?
A. The functional manager
B. The project manager
C. Both are responsible
D. This is no pattern of who takes responsibility
E. None of these are true

The project manager controls most aspects of the project, including scope trade-offs and assignment of functional personnel. The project manager controls when and what specialists do and has final say on major project decisions.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Easy

28. The Macintosh development team at Apple is a good example of what kind of project structure?
A. Project
B. Balanced Matrix
C. Project Matrix
D. Functional Matrix
E. Functional

See Snapshot on Page 71: Projectitis. A we-they attitude can emerge between project team members and the rest of the organization. The project team succumbs to hubris and develops a holier than- thou attitude that antagonizes the parent organization. People not assigned to the project become jealous of the attention and prestige being showered on the project team, especially when they believe that it is their hard work that is financing the endeavor.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Easy

29. The Organizational Culture Diagnosis Worksheet classifies cultural characteristics into all of the following except:
A. Physical characteristics
B. Public documents
C. Behavior
D. Folklore
E. Ethics

See page 82 Figure 3.6 Organizational Culture Diagnosis Worksheet.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Organizational Culture
Level: Medium

30. Which of the following cultural characteristics relates to the degree to which employees identify with the organization as a whole rather than with their type of job or field of professional expertise?
A. Member identity
B. Team emphasis
C. Managerial focus
D. Unit integration
E. Control

Member identity is the degree to which employees identify with the organization as a whole rather than with their type of job or field of professional expertise.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organizational Culture
Level: Easy

31. Which of the following cultural characteristics relates to the degree to which work activities are organized around groups rather than individuals?
A. Member identity
B. Team emphasis
C. Managerial focus
D. Unit integration
E. Control

Team emphasis is the degree to which work activities are organized around groups rather than individuals.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Organizational Culture
Level: Easy

32. Which of the following is not one of the typical forms of a project management office?
A. Command center
B. Control tower
C. Resource pool
D. Weather station
E. All of these are typical forms of a project management office

See Snapshot from Practice on page 78.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: What Is the Right Project Management Structure?
Level: Easy

33. Which of the following cultural characteristics relates to the degree to which groups within the organization are encouraged to operate in a coordinated or independent manner?
A. Member identity
B. Team emphasis
C. Managerial focus
D. Unit integration
E. Control

Unit integration is the degree to which units within the organization are encouraged to operate in a coordinated or interdependent manner.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organizational Culture
Level: Easy

34. Which of the following cultural characteristics relates to the degree to which management focuses on outcomes rather than on techniques and processes used to achieve those results?
A. Risk tolerance
B. Reward criteria
C. Conflict tolerance
D. Means versus end orientation
E. Open-systems focus

Means versus end orientation is the degree to which management focuses on outcomes rather than on techniques and processes used to achieve those results.

AACSB: Reflective Thinking
Bloom's: Knowledge
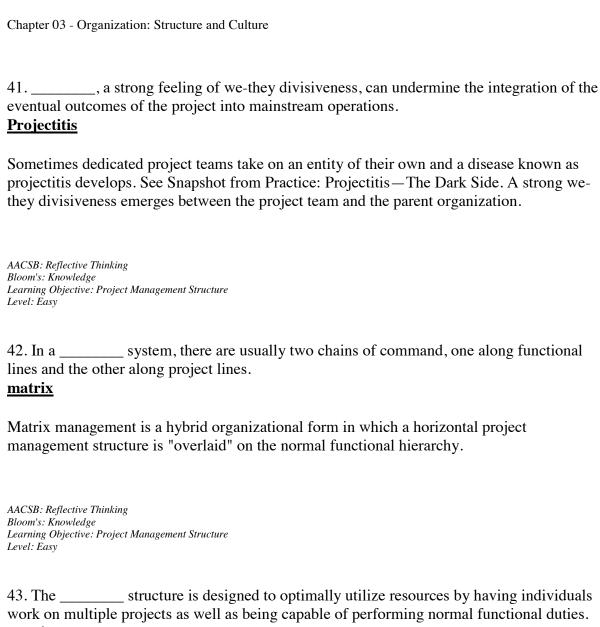*Learning Objective: Organizational Culture*
Level: Easy

Fill in the Blank Questions

35. A simple explanation of _____ is that it reflects the personality of an organization.
organizational culture

Organizational culture refers to a system of shared norms, beliefs, values, and assumptions which binds people together, thereby creating shared meanings.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Organizational Culture
Level: Easy

36. The _____ organizational approach to project management uses the existing hierarchy of the organization to manage projects.
functional

One approach to organizing projects is to simply manage them within the existing functional hierarchy of the organization. Once management decides to implement a project, the different segments of the project are delegated to the respective functional units with each unit responsible for completing its segment of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Easy

37. One of the major advantages of the _____ organizational approach to project management is that specialists in different departments can temporarily be assigned to work on the project and then return to their normal work.
functional

Once management decides to implement a project, the different segments of the project are delegated to the respective functional units with each unit responsible for completing its segment of the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

38. Two of the major disadvantages of the _____ organizational approach to project management are that projects may lack focus and it can take longer to complete projects.
functional

These disadvantages are particularly pronounced when the scope of the project is broad and one functional department does not take the dominant technological and managerial lead on the project.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Medium

39. At Apple Computer, the Macintosh development team was isolated in a separate building and given the prime directive to develop a breakthrough computer as quickly as possible. This is an example of using the _____ organizational approach to project management.
project

The project manager recruits necessary personnel from both within and outside the parent company. The subsequent team is physically separated from the parent organization and given marching orders to complete the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

40. A high level of motivation and the tendency for projects to get done more quickly are benefits of using the _____ organizational approach to project management.
project

A high level of motivation and cohesiveness often emerges within the project team. Participants share a common goal and personal responsibility toward the project and the team.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

41. _____, a strong feeling of we-they divisiveness, can undermine the integration of the eventual outcomes of the project into mainstream operations.
Projectitis

Sometimes dedicated project teams take on an entity of their own and a disease known as projectitis develops. See Snapshot from Practice: Projectitis—The Dark Side. A strong we-they divisiveness emerges between the project team and the parent organization.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Easy

42. In a _____ system, there are usually two chains of command, one along functional lines and the other along project lines.
matrix

Matrix management is a hybrid organizational form in which a horizontal project management structure is "overlaid" on the normal functional hierarchy.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Easy

43. The _____ structure is designed to optimally utilize resources by having individuals work on multiple projects as well as being capable of performing normal functional duties.
matrix

Instead of delegating segments of a project to different units or creating an autonomous team, project participants report simultaneously to both functional and project managers.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Implications of Organizational Culture for Organizing Projects
Level: Medium

44. Strong, heavyweight, or _____ is used to describe a matrix in which the balance of authority is strongly on the side of the project manager.
project matrix

When the dominant organization culture inhibits collaboration and innovation, it is advisable to insulate the project team from the dominant culture. Here it becomes necessary to create a self-sufficient project team. If a dedicated project team is impossible because of resource constraints, then at least a project matrix should be used where the project manager has dominant control over the project. In both cases, the managerial strategy is to create a distinct team subculture where a new set of norms, customs, and values evolve that will be conducive to project completion.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

45. One key factor that determines the relative importance of project and functional managers is the determination of which and how _____ are to be performed.
tasks or activities

See table 3.1 on page 73.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Medium

46. Matrix management violates the management principle of _____.
unity of command

Matrix management violates the management principle of unity of command. Project participants have at least two bosses—their functional head and one or more project managers.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

47. The _____ matrix form of project organization is likely to enhance project integration, diminish internal power struggles, and ultimately improve control of project activities and costs.
strong

The project manager controls when and what specialists do and has final say on major project decisions.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Medium

48. The _____ matrix form of project organization is likely to improve technical quality as well as provide a better system for managing conflict across projects because the functional manager assigns personnel to different projects.
weak

The project manager basically acts as a staff assistant who draws the schedules and checklists, collects information on status of work, and facilitates project completion.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

49. The _____ matrix form of project organization can achieve better equilibrium between technical and project requirements, but it is a very delicate system to create and manage.
balanced

This is the classic matrix in which the project manager is responsible for defining what needs to be accomplished while the functional managers are concerned with how it will be accomplished. More specifically, the project manager establishes the overall plan for completing the project, integrates the contribution of the different disciplines, sets schedules, and monitors progress.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Medium

50. _____ were originally developed as a response to the poor track record many companies had in completing projects on time, within budget, and according to plan.
<u>Project offices</u>

See Page 78 Snapshot from Practice.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What Is the Right Project Management Structure?
Level: Medium

51. As more and more companies embrace project management as a critical vehicle for realizing corporate objectives, they are creating centralized _____ to oversee and improve the management of projects.
<u>project offices (POs)</u>

See Page 78 Snapshot from Practice.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What Is the Right Project Management Structure?
Level: Medium

52. Research suggests that there is a strong connection between project management structure, organization _____, and project success.
<u>culture</u>

Culture reflects the personality of the organization and, similar to an individual's personality, can enable us to predict attitudes and behaviors of organizational members.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Organizational Culture
Level: Medium

53. Organization _____ refers to a system of shared norms, beliefs, values, and assumptions which bind people together, thereby creating shared meanings.
culture

Organizational culture refers to a system of shared norms, beliefs, values, and assumptions which binds people together, thereby creating shared meanings.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Organizational Culture
Level: Medium

54. In a Snapshot from Practice, at _____ Corporation, employees put in the hours necessary to get a job done, even if it requires staying up all night; however, they also may stay home to tend to a sick child and do makeup work at some other time.
Microsoft

See Page 81 Snapshot from Practice.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Organizational Culture
Level: Medium

55. In a _____ PO structure, the primary function of the PMO is to track and monitor project performance.
weather station

The primary function of the weather station PO is to track and monitor project performance. It is typically created to satisfy top management's need to stay on top of the portfolio of projects under way in the firm.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What Is the Right Project Management Structure?
Level: Medium

56. In a _____ PO structure, the primary function of the PMO is to provide the organization with a cadre of trained project managers and professionals.
resource pool

The goal of the resource pool PO is to provide the organization with a cadre of trained project managers and professionals. It operates like an academy for continually upgrading the skills of a firm's project professionals.

57. In a _____ PO structure, the primary function of the PMO is to improve project execution.
control tower

The primary function of the control tower PO is to improve project execution. It considers project management as a profession to be protected and advanced.

58. _____ refers to the degree to which the organization monitors and responds to changes in the external environment.
Open-systems focus

Open-systems focus is the degree to which the organization monitors and responds to changes in the external environment.

59. _____ refers to the degree to which employees are encouraged to be aggressive, innovative, and risk seeking.
Risk tolerance

Risk tolerance is the degree to which employees are encouraged to be aggressive, innovative, and risk seeking.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What Is the Right Project Management Structure?
Level: Medium

True / False Questions

60. While organization culture is important to the overall function of an organization, it has minor influence on its project management.
FALSE

Culture reflects the personality of the organization and, similar to an individual's personality, can enable us to predict attitudes and behaviors of organizational members.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Organizational Culture
Level: Easy

61. Many organizations have struggled with project management organization because projects contradict fundamental design principals associated with traditional organizations.
TRUE

Many business organizations have struggled with creating a system for organizing projects while managing ongoing operations. One of the major reasons for this struggle is that projects contradict fundamental design principles associated with traditional organizations.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

62. The project form of project management structure is commonly used when one functional area plays a dominant role in completing the project or has a dominant interest in the success of the project.
<u>FALSE</u>

The functional organization is also commonly used when, given the nature of the project, one functional area plays a dominant role in completing the project or has a dominant interest in the success of the project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

63. The matrix form of project management structure is a good choice when the scope of the project is narrow and maximum flexibility in staff usage is important.
<u>FALSE</u>

If the scope of the project is narrow and the proper functional unit is assigned primary responsibility, then in-depth expertise can be brought to bear on the most crucial aspects of the project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

64. A disadvantage of using the functional form of project management structure is that projects generally take longer to complete.
<u>TRUE</u>

It generally takes longer to complete projects through this functional arrangement. This is in part attributable to slow response time—project information and decisions have to be circulated through normal management channels.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

65. The functional project team is usually physically separated from the parent organization and given the primary directive of accomplishing the objectives of the project.
FALSE

Dedicated project teams are teams which operate as separate units from the rest of the parent organization. Usually a full-time project manager is designated to pull together a core group of specialists who work full time on the project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Easy

66. In the projectized form of company organization the main responsibility of traditional functional departments is to assist and support the project teams.
TRUE

The main responsibility of traditional functional departments is to assist and support these project teams. For example, the marketing department is directed at generating new business that will lead to more projects, while the human resource department is responsible for managing a variety of personnel issues as well as recruiting and training new employees.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

67. The project form of project management structure is a good choice when speed of completion of the project without directly disrupting ongoing operations is important.
TRUE

Projects tend to get done more quickly when participants devote their full attention to the project and are not distracted by other obligations and duties.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

68. One of the major disadvantages of the project form of project management structure is that it tends to be more expensive than other forms of organizing.
TRUE

It is Expensive. Not only have you created a new management position (project manager), but resources are also assigned on a full-time basis. This can result in duplication of efforts across projects and a loss of economies of scale.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Easy

69. Creating teams using the project form of project management structure results in the maximum technological expertise being brought to bear on project problems.
FALSE

Creating self-contained teams inhibits maximum technological expertise being brought to bear on problems. Technical expertise is limited somewhat to the talents and experience of the specialists assigned to the project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

70. Matrix management is a hybrid organizational form in which a horizontal project management structure is "overlaid" on the normal functional hierarchy.
TRUE

Matrix management is a hybrid organizational form in which a horizontal project management structure is "overlaid" on the normal functional hierarchy.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Easy

71. "Silver bullets" and "Tiger Teams" are terms that are frequently given to functional project management teams.
FALSE

The tendency to assign project teams exotic titles such as "Silver Bullets" and "Tiger Teams," as well as give them special perks, tends to intensify the gap between the project team and the parent organization.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

72. The relationship between the Apple II and Mac teams at Apple Computer is a good example of *projectitis*.
TRUE

A we-they attitude emerged between Mac project team members and the Apple II members.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

73. In a matrix form of project management, the project managers report directly to a Director of projects, who supervises all projects.
TRUE

Instead of delegating segments of a project to different units or creating an autonomous team, project participants report simultaneously to both functional and project managers.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

74. The three forms of matrix project management are weak, mixed, and strong.
FALSE

The three forms are week, balanced and strong.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Easy

75. Whether a matrix is weak or strong is determined by the extent to which the project manager has direct authority over project participants.
TRUE

In practice there are really different kinds of matrix systems, depending on the relative authority of the project and functional managers.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

76. In a balanced matrix form of project management, the project manager is responsible for defining *what* needs to be accomplished while the functional managers are concerned with *how* it will be accomplished.
TRUE

The merger of "what and how" requires both parties to work closely together and jointly approve technical and operational decisions.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

77. The matrix form of project management is predicated on tension between functional managers and project managers who bring critical expertise and perspectives to the project.
TRUE

The matrix approach is predicated on tension between functional managers and project managers who bring critical expertise and perspectives to the project. Such tension is viewed as a necessary mechanism for achieving an appropriate balance between complex technical issues and unique project requirements.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

78. Project management offices were originally developed to make optimal use of scarce project resources.
FALSE

Many organizations have created Project Management Offices to support project management efforts.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Medium

79. The functional form of project management has been rated as the most effective of the various forms of organizing project teams.
FALSE

When thinking only in terms of what is best for the project, the creation of an independent project team is clearly favored.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Easy

80. Organizational culture refers to a system of shared norms, beliefs, values, and assumptions which bind people together.
<u>TRUE</u>

Organizational culture refers to a system of shared norms, beliefs, values, and assumptions which binds people together, thereby creating shared meanings. This system is manifested by customs and habits that exemplify the values and beliefs of the organization.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organizational Culture
Level: Easy

81. Probably the most important function of organization culture is to clarify and reinforce standards of behavior within the organization.
<u>TRUE</u>

Organizational culture clarifies and reinforces standards of behavior. Culture helps define what is permissible and inappropriate behavior.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organizational Culture
Level: Easy

82. There is a strong connection between project management structure, organizational culture, and project success.
<u>TRUE</u>

There are strong relationships among project management structure, organizational culture, and successful project management.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Implications of Organizational Culture for Organizing Projects
Level: Easy

Short Answer Questions

83. "Projects are a smaller version of the larger organization and thus have similar fundamental design principles." Agree or Disagree and support your conclusion.

Disagree. See discussion in text.

84. Identify and briefly describe the three basic project management structures.

1. functional, 2. matrix, and 3. project

85. Identify and briefly describe at least two advantages and two disadvantages of having project teams report directly to an existing functional area.

See discussion in text.

86. Identify and briefly describe at least two advantages and two disadvantages of organizing project teams as dedicated teams.

See discussion in text.

87. Identify and briefly describe at least two advantages and two disadvantages of organizing project teams using the matrix management approach.

See discussion in text.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Project Management Structure
Level: Difficult

88. Identify and briefly describe the three forms of organizing projects using the matrix management approach.

1. weak matrix, 2. balanced matrix, and 3. strong matrix. See text for discussion.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Management Structure
Level: Difficult

89. What are Project Management Offices? Identify the three most common forms.

PMOs are used to help project teams meet their project objectives. The three most common forms are: weather station, control tower, and resource pool.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: What Is the Right Project Management Structure?
Level: Medium

90. Identify and briefly describe at least five of the ten primary characteristics of organization culture as discussed in the text.

See list in text.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Organizational Culture
Level: Difficult

91. Culture provides three major functions within today's organizations. Identify and briefly describe those three functions.

1. provides a sense of identity, 2. helps legitimize the management system, and 3. clarifies and reinforces standards of behavior.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Organizational Culture
Level: Difficult

92. The metaphor used to describe the relationship between organizational culture and project management was that of a riverboat trip. Briefly describe that metaphor.

Culture is the river, the boat is the project. Moving downstream (culture conducive to PM) requires much less effort. Moving upstream (toxic culture) requires much more time, effort, and attention.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Organizational Culture
Level: Medium

93. Briefly describe the task decision making responsibilities under the three project management matrix structures.

In a weak matrix structure, the functional manager makes all the decisions on what and how tasks are to be done. In a strong matrix structure, the project manager makes all the decisions on what and how tasks are to be done. In a balanced matrix they share responsibility with the project manager deciding what is to be done, while the functional manager decides how it is to be done.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Project Management Structure
Level: Difficult

94. What is an Organizational Culture Diagnosis Worksheet and what is its purpose?

The worksheet is a tool to help decipher an organization's culture. It is composed of four parts, Physical Characteristics, Public Documents, Behavior, and Folklore.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Organizational Culture
Level: Difficult

Chapter 04 Defining the Project Answer Key

Multiple Choice Questions

1. The method used to collect information to use through all phases of the project life cycle is called
A. Responsibility matrix
B. Organization breakdown structure
C. Work breakdown structure
D. Priority matrix
E. Work package

The method suggested is a selective outline of the project called the work breakdown structure.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

2. Jose is looking at a document that outlines the specific tasks and subtasks required to complete the writing of a technical support manual. The method that was probably used to develop the document is most likely
A. Responsibility matrix
B. Organization breakdown structure
C. Work breakdown structure
D. Priority matrix
E. Work package

The method suggested is a selective outline of the project called the work breakdown structure. The early stages of developing the outline serve to ensure that all tasks are identified and that participants of the project have an understanding of what is to be done.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Medium

3. The first step in creating the necessary information to manage a project is to
A. Establish project priorities
B. Define the project scope
C. Verify the budget available
D. Assign team members to work on the project
E. Determine the required completion date

Defining the project scope sets the stage for developing a project plan. Project scope is a definition of the end result or mission of your project—a product or service for your client/customer.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

4. Linda has just been assigned a project to develop a new advertising campaign for an established product. Her first step should be to
A. Establish project priorities
B. Define the project scope
C. Verify the budget available
D. Assign team members to work on the project
E. Determine the required completion date

Defining the project scope sets the stage for developing a project plan. Project scope is a definition of the end result or mission of your project—a product or service for your client/customer.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Medium

5. Research shows the most frequently mentioned barrier to project success is
A. Not enough budget resources
B. Poor performance by team members
C. Weak project leadership
D. Poorly defined scope or mission
E. Political in-fighting

Research clearly shows that a poorly defined scope or mission is the most frequently mentioned barrier to project success.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Medium

6. An expected output over the life of a project would be classified as
A. A deliverable
B. A product
C. An end object
D. An objective
E. A target

Major deliverables—the expected outputs over the life of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

7. The first step of project scope definition is to
A. Analyze the strategic plan
B. Analyze the current budget plan
C. Meet with team members
D. Select team members
E. Define the overall objective to meet the customer's needs

The first step of project scope definition is to define the overall objective to meet your customer's need(s).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

8. In reviewing the project plan, Susan sees that the first prototype is due by October 12. This would be best classified as a
A. Project target
B. Limit item
C. Milestone
D. Project objective
E. Critical goal

A milestone is a significant event in a project that occurs at a point in time. The milestone schedule shows only major segments of work; it represents first, rough-cut estimates of time, cost, and resources for the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Medium

9. The ability of 911 emergency systems to identify the caller's phone number and location are considered to be a
A. Technical requirement
B. Milestone
C. Project limit
D. Project exclusion
E. Project deliverable

More frequently than not, a product or service will have technical requirements to ensure proper performance.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

10. Which of the following is not one of the items that would appear on a project scope checklist?
A. Deliverables
B. Technical requirements
C. Objectives
D. Work breakdown structure
E. Reviews with customer

See Project Scope Checklist on Page 102.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

11. "To construct a high-quality, custom home within five months at costs not to exceed $150,000" is best classified as
A. A deliverable
B. A milestone
C. An objective
D. A limit
E. An exclusion

The first step of project scope definition is to define the overall objective to meet your customer's need(s). For example, as a result of extensive market research a computer software company decides to develop a program that automatically translates verbal sentences in English to Russian. The project should be completed within three years at a cost not to exceed $1.5 million.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Medium

12. The second step in the defining of a project would be to
A. Analyze the strategic plan
B. Analyze the current budget plan
C. Establish project priorities
D. Select team members
E. Define the major objectives to meet the customer's needs

Quality and the ultimate success of a project are traditionally defined as meeting and/or exceeding the expectations of the customer and/or upper management in terms of cost (budget), time (schedule), and performance (scope) of the project (see Figure 4.1).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 2: Establishing Project Priorities
Level: Easy

13. Which of the following is not one of the basic classifications of project priorities?
A. Profit
B. Cost
C. Time
D. Performance
E. All of these are basic classifications

One of the primary jobs of a project manager is to manage the trade-offs among time, cost, and performance. To do so, project managers must define and understand the nature of the priorities of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 2: Establishing Project Priorities
Level: Easy

14. If a project criterion indicates that the project must meet a specific date, that criterion is classified as
A. Constrained
B. Enhanced
C. Accepted
D. Limited
E. Fixed

The original parameter is fixed. The project must meet the completion date, specifications and scope of the project, or budget.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

15. Scott has just been given a project that has a specific target date. After discussion with top management he finds that while the date is important the cost is more important and a slip in delivery would be acceptable if required to meet the cost targets. The target date is best classified as
A. Constrain
B. Enhance
C. Accept
D. Limit
E. Optional

For which criterion is it tolerable not to meet the original parameters? When trade-offs have to be made, is it permissible for the schedule to slip, to reduce the scope and performance of the project, or to go over budget?

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

16. The tool used to assist in making project trade-offs between schedule, budget, and performance objectives is called a
A. Responsibility matrix
B. Work breakdown structure
C. Project priority matrix
D. Work package
E. Criterion matrix

One technique found in practice that is useful for this purpose is completing a priority matrix for the project to identify which criterion is constrained, which should be enhanced, and which can be accepted.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

17. The lowest element in the hierarchical breakdown of the WBS is
A. A deliverable
B. A work package
C. A cost account
D. A lowest sub deliverable
E. An object

See Figure 4.3 on page 108.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

18. The highest element in the hierarchical breakdown of the WBS is
A. A work package
B. Sub deliverables
C. A cost account
D. Major deliverables
E. The project

See Figure 4.3 on page 108.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

19. All of the following are true about work packages except
A. Consume resources
B. Assigned to only one manager
C. Have medium to long duration
D. Definitive starts and stops dates
E. All of these are true

Work packages are short duration tasks that have a definite start and stop point, consume resources, and represent cost. Each work package is a control point. A work package manager is responsible for seeing that the package is completed on time, within budget, and according to technical specifications.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

20. All of the following are usually included in a work package except
A. What will be done?
B. The time needed to complete the work.
C. A single person who is responsible for its completion.
D. All the costs for the work package.
E. All of these are included in a work package.

Work packages are short duration tasks that have a definite start and stop point, consume resources, and represent cost. Each work package is a control point. A work package manager is responsible for seeing that the package is completed on time, within budget, and according to technical specifications.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

21. The integration of project work packages within the organization's management structure is known as
A. Responsibility matrix
B. Organization breakdown structure
C. Work breakdown structure
D. Priority matrix
E. Process breakdown structure

In practice, the outcome of this process is the organization breakdown structure (OBS). The OBS depicts how the firm has organized to discharge work responsibility.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 4: Integrating the WBS with the Organization
Level: Medium

22. The final step in the creation of a Work Breakdown Structure is to
A. Code the WBS for tracking
B. Assign the cost account to a manager
C. Assign the work package to a manager
D. Develop the responsibility matrix
E. All of these are included in the final step

The codes are used to define levels and elements in the WBS, organization elements, work packages, and budget and cost information.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 5: Coding the WBS for the Information System
Level: Easy

23. The intersection of the WBS and the OBS is called the
A. Responsibility matrix
B. Priority matrix
C. Work package
D. Cost account
E. Project overlap

The "cost account" is the focal point because all budgets, work assignments, time, cost, and technical performance come together at this point.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 4: Integrating the WBS with the Organization
Level: Medium

24. Creating an extranet website or an internal software database system would be most closely associated with the
A. Responsibility matrix
B. Organization breakdown structure
C. Work breakdown structure
D. Priority matrix
E. Process breakdown structure

The classic WBS is when the project is broken down to the lowest manageable deliverable and subsequent work packages.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 4: Integrating the WBS with the Organization
Level: Medium

25. If a project is small or of narrow scope and does not require an elaborate system, which of the following is a good choice?
A. Responsibility matrix
B. Organization breakdown structure
C. Work breakdown structure
D. Priority matrix
E. Process breakdown structure

The RM (sometimes called a linear responsibility chart) summarizes the tasks to be accomplished and who is responsible for what on a project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Responsibility Matrices
Level: Medium

26. The project scope statement indicates that the client is responsible for training the people who will be using the equipment and that the project team will train the client's trainers. This is an example of:
A. Project objectives
B. Deliverables
C. Limits and exclusions
D. Technical requirements
E. Milestones

The limits of scope should be defined. Failure to do so can lead to false expectations and to expending resources and time on the wrong problem.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

27. The tendency for the project deliverables to expand over time—usually by changing requirements, specifications, and priorities—is called:
A. Scope erosion
B. Scope creep
C. Project bloat
D. Scope enhancement
E. Project add-ons

The tendency for the project scope to expand over time—usually by changing requirements, specifications, and priorities. Scope creep can be reduced by carefully writing your scope statement.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

28. Which of the following is a good example of a Process Breakdown Structure?
A. New car prototype
B. New software program
C. New computer hardware
D. New sports stadium
E. New project management book

See Figure 4.4 on Page 112.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

29. Which of the follow is least likely to be included in a Work Package?
A. Materials
B. Labor
C. Overhead
D. Duration
E. Responsibilities

Work packages are short duration tasks that have a definite start and stop point, consume resources, and represent cost.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 4: Integrating the WBS with the Organization
Level: Medium

30. The Snapshot from Practice dealing with Big Bertha II illustrated how important a project's _____ is to the successful completion of a project.
A. Objective
B. Deliverables
C. Technical requirements
D. Milestones
E. Limits and exclusions

See Snapshot from Practice on Page 104.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 4: Integrating the WBS with the Organization
Level: Medium

Fill in the Blank Questions

31. A selective outline of the project that ensures the identification of all tasks and an understanding of what is to be done is called a _____.
work breakdown structure

Once the scope and deliverables have been identified, the work of the project can be successively subdivided into smaller and smaller work elements. The outcome of this hierarchical process is called the work breakdown structure (WBS).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Easy

32. The first step in planning any project is to _____.
define the project scope

Defining the project scope sets the stage for developing a project plan. Project scope is a definition of the end result or mission of your project—a product or service for your client/customer.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

33. The primary purpose of the first step of defining a project is to identify the _____ for the end user and to focus project plans.
objective

The first step of project scope definition is to define the overall objective to meet your customer's need(s).

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Medium

34. Significant events in a project that occur at a specific point in time, are natural control points, and are easily recognized by project participants are known as _____.
Milestones

A milestone is a significant event in a project that occurs at a point in time. The milestone schedule shows only major segments of work; it represents first, rough-cut estimates of time, cost, and resources for the project.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Medium

35. The need for a computer to function in countries having different electrical systems is an example of a _____.
technical requirement

More frequently than not, a product or service will have technical requirements to ensure proper performance. For example, a technical requirement for a personal computer might be the ability to accept 120-volt alternating current or 240-volt direct current without any adapters or user switches.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Medium

36. The agreement that training will be the responsibility of the customer is an example of a project _____.
limit and exclusion

The limits of scope should be defined. Failure to do so can lead to false expectations and to expending resources and time on the wrong problem.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Medium

37. A project parameter such as completion date or cost is _____ if it is fixed and must be met.
<u>constrained</u>

The original parameter is fixed. The project must meet the completion date, specifications and scope of the project, or budget.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

38. Taking advantage of opportunities to reduce costs or accelerate the schedule are examples of project criteria being classified as _____.
<u>enhance</u>

In the case of time and cost, this usually means taking advantage of opportunities to either reduce costs or shorten the schedule. Conversely, with regard to performance, enhancing means adding value to the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

39. In making project trade-offs, a criteria that is allowed to not meet the original target is classified as _____.
<u>accept</u>

Questions to ask in regards to accept. For which criterion is it tolerable not to meet the original parameters? When trade-offs have to be made, is it permissible for the schedule to slip, to reduce the scope and performance of the project, or to go over budget?

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

40. Developing a _____ provides a forum for clearly establishing priorities with customers and top management so as to create shared expectations and avoid misunderstandings.
priority matrix

One technique found in practice that is useful for this purpose is completing a priority matrix for the project to identify which criterion is constrained, which should be enhanced, and which can be accepted.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

41. The result of subdividing the work of a project into smaller and smaller work elements is called _____.
work breakdown structure

Once the scope and deliverables have been identified, the work of the project can be successively subdivided into smaller and smaller work elements. The outcome of this hierarchical process is called the work breakdown structure (WBS).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Easy

42. The most detailed element in the hierarchical breakdown of the project work to be accomplished is known as the _____.
work package

The lowest level of the WBS is called a work package. Work packages are short duration tasks that have a definite start and stop point, consume resources, and represent cost.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Easy

43. A(n) _____ is a grouping of work packages for monitoring progress and responsibility.
<u>cost account</u>

See Figure 4.3 on Page 108.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Easy

44. Practice suggests that a work package should not exceed _____ workdays or one reporting period.
<u>ten</u>

Practice suggests a work package should not exceed 10 workdays or one reporting period. If a work package has a duration exceeding 10 days, check or monitoring points should be established within the duration, say, every three to five days, so progress and problems can be identified before too much time has passed.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Easy

45. The process of assigning specific work packages to a particular group or person within the organization is called _____.
<u>organization breakdown structure</u>

The WBS is used to link the organizational units responsible for performing the work. In practice, the outcome of this process is the organization breakdown structure (OBS).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 4: Integrating the WBS with the Organization
Level: Easy

46. The final step in the defining of a project is focused on assigning _____ to each of the work packages.
codes

Gaining the maximum usefulness of a breakdown structure depends on a coding system. The codes are used to define levels and elements in the WBS, organization elements, work packages, and budget and cost information.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 5: Coding the WBS for the Information System
Level: Medium

47. In a work breakdown structure the _____ is the focal point because all budgets, work assignments, time, cost, and technical performance come together at that point.
cost account

The "cost account" is the focal point because all budgets, work assignments time, cost, and technical performance come together at this point.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 5: Coding the WBS for the Information System
Level: Medium

48. Once the _____ has been established, it is the basis for making trade-off decisions later in the project.
Priority Matrix

If midway through the project, a trade-off must be made between cost and expediting, which criterion has priority? One technique found in practice that is useful for this purpose is completing a priority matrix for the project to identify which criterion is constrained, which should be enhanced, and which can be accepted.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

49. In a _____ the project is organized around phases or groups of activities rather than the more conventional deliverables.
work breakdown structure

Once the scope and deliverables have been identified, the work of the project can be successively subdivided into smaller and smaller work elements. The outcome of this hierarchical process is called the work breakdown structure (WBS).

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

50. The _____ summarizes, in graphic format, the tasks to be accomplished and who is responsible for what on a given project.
responsibility matrix

The RM (sometimes called a linear responsibility chart) summarizes the tasks to be accomplished and who is responsible for what on a project.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Responsibility Matrices
Level: Easy

51. The Work Breakdown Structure is an outline of the project with different levels of

_____.
detail

The WBS is an outline of the project with different levels of detail.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

52. The purposes of the _____ are to provide a framework to summarize organization unit work performance, identify organization units responsible for work packages, and tie the organizational unit to cost control accounts.
OBS (Organization Breakdown Structure)

The purposes of the OBS are to provide a framework to summarize organization unit work performance, identify organization units responsible for work packages, and tie the organizational unit to cost control accounts.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 4: Integrating the WBS with the Organization
Level: Easy

53. The most commonly used method for coding the WBS is _____.
numeric indention

The most commonly used scheme in practice is numeric indention.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 5: Coding the WBS for the Information System
Level: Easy

54. The gradual expansion of project requirements during the execution of project is known as _____.
scope creep

Scope describes what you expect to deliver to your customer when the project is complete. Your project scope should define the results to be achieved in specific, tangible, and measurable terms.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

True / False Questions

55. The development of a work breakdown structure with appropriate dates and budget is usually accomplished in a single iteration.
<u>FALSE</u>

The WBS is an outline of the project with different levels of detail.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

56. Studies suggest that there is a strong correlation between project success and clear project scope definition.
<u>TRUE</u>

Research clearly shows that a poorly defined scope or mission is the most frequently mentioned barrier to project success.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

57. Project scope describes what you expect to deliver to your customers when the project is complete.
<u>TRUE</u>

Project scope is a definition of the end result or mission of your project—a product or service for your client/customer.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

58. One of the items included on a project scope checklist is the reviews with the customer.
<u>TRUE</u>

See Project Scope Checklist on Page 102.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

59. Quality and the ultimate success of a project are traditionally defined as meeting or exceeding the expectations of the customer or management.
Refer to Figure 4.1
<u>TRUE</u>

Quality and the ultimate success of a project are traditionally defined as meeting and/or exceeding the expectations of the customer and/or upper management in terms of cost (budget), time (schedule), and performance (scope) of the project (see Figure 4.1).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 2: Establishing Project Priorities
Level: Easy

60. The criteria for project success include attaining objectives relating to cost, schedule, and revenue.
Refer to Figure 4.1
<u>FALSE</u>

Quality and the ultimate success of a project are traditionally defined as meeting and/or exceeding the expectations of the customer and/or upper management in terms of cost (budget), time (schedule), and performance (scope) of the project (see Figure 4.1).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

61. Statements of project scope are sometimes referred to as Statements of Work or Project Charters.
TRUE

Many companies engaged in contracted work refer to scope statements as statements of work (SOW). Other organizations use the term project charter. However, the term project charter has emerged to have a special meaning in the world of project management. A project charter refers to a document that authorizes the project manager to initiate and lead the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Easy

62. If a project criterion should be optimized if at all possible, it is classified as being constrained.
FALSE

The original parameter is fixed. The project must meet the completion date, specifications and scope of the project, or budget.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

63. Basically, the WBS is an outline of the project with different levels of detail.
TRUE

The WBS is an outline of the project with different levels of detail.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Easy

64. In general, work packages should not exceed 10 work days.
TRUE

Practice suggests a work package should not exceed 10 workdays or one reporting period. If a work package has a duration exceeding 10 days, check or monitoring points should be established within the duration, say, every three to five days, so progress and problems can be identified before too much time has passed.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Easy

65. In a Work Breakdown Structure for a software development project, the typical structure follows the major phases of software development.
Refer to Figure 4.4
TRUE

See Figure 4.4 on Page 112.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

66. Integrating a project's work packages within the organization's management structure is known as work breakdown structure.
FALSE

Work packages are short duration tasks that have a definite start and stop point, consume resources, and represent cost.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

67. Scope definitions are usually brief with only one or two pages being typical for small projects.
TRUE

Scope definition should be as brief as possible but complete; one or two pages are typical for small projects.

68. A work breakdown structure is frequently used on projects such as software development where the project is focused on activities rather than deliverables.
Refer to Snapshot from Practice on Page114
TRUE

The WBS should conform to how you are going to schedule work. For example, if assignments are made in terms of days, then tasks should be limited as best as possible to one day or more to complete. Conversely, if hours are the smallest unit for scheduling, then work can be broken down to one-hour increments; final activities should have clearly defined start/end events. Avoid open-ended tasks like "research" or "market analysis."

69. Responsibility matrices are used primarily with small and medium sized projects and have limited use in large projects.
FALSE

One tool that is widely used by project managers and task force leaders of small projects is the responsibility matrix (RM). The RM (sometimes called a linear responsibility chart) summarizes the tasks to be accomplished and who is responsible for what on a project.

70. In a work breakdown structure deliverables are ignored and replaced with activities or tasks that have been grouped in phases.
FALSE

Once the scope and deliverables have been identified, the work of the project can be successively subdivided into smaller and smaller work elements. The outcome of this hierarchical process is called the work breakdown structure (WBS).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Management Structure
Level: Medium

71. The intersection of the WBS and the OBS represents a control point, called a cost account.
TRUE

The intersection of the WBS and OBS represents the set of work packages necessary to complete the subdeliverable located immediately above and the organizational unit on the left responsible for accomplishing the packages at the intersection.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 4: Integrating the WBS with the Organization
Level: Easy

72. The most commonly used scheme for coding the work breakdown structure is to use a department project number assigned by the accounting department.
FALSE

The most commonly used scheme in practice is numeric indention.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 5: Coding the WBS for the Information System
Level: Medium

73. For large companies, the organization breakdown structure is used rather than the work breakdown structure.
<u>FALSE</u>

The OBS defines the organization subdeliverables in a hierarchical pattern in successively smaller and smaller units. Frequently, the traditional organization structure can be used. Even if the project is completely performed by a team, it is necessary to break down the team structure for assigning responsibility for budgets, time, and technical performance.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 4: Integrating the WBS with the Organization
Level: Medium

74. The hierarchical work breakdown structure can be used to represent the need for information at various levels of management.
<u>TRUE</u>

The WBS is a map of the project. Use of WBS helps to assure project managers that all products and work elements are identified, to integrate the project with the current organization, and to establish a basis for control.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

75. The intersection of work packages and the organization unit creates a project control point called a cost account.
<u>TRUE</u>

The intersection of the WBS and OBS represents the set of work packages necessary to complete the subdeliverable located immediately above and the organizational unit on the left responsible for accomplishing the packages at the intersection.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 4: Integrating the WBS with the Organization
Level: Medium

76. Reviews with customers only refers to projects with external customers who are paying for the project.
FALSE

Completion of the scope checklist ends with a review with your customer—internal or external. The main concern here is the understanding and agreement of expectations.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

77. A typical responsibility matrix will include not only those responsible for a specific task but also those who supply support and assistance.
Refer to Figure 4.6
TRUE

See Figure 4.6 on page 117.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Responsibility Matrices
Level: Easy

Short Answer Questions

78. Identify and briefly describe the five steps in defining a project.

1. defining the project scope, 2. establishing project priorities, 3. creating the work breakdown structure, 4. integrating the WBS with the organization, and 5. coding the WBS

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Medium

79. Identify and briefly describe the six elements on the recommended project scope checklist.

1. project objectives, 2. deliverables, 3. milestones, 4. technical requirements, 5. limits and exclusions, and 6. reviews with customers

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Defining the Project Scope
Level: Medium

80. In terms of project management, what is a deliverable and give an example.

A deliverable is an expected output that occurs during the life of a project.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 1: Defining the Project Scope
Level: Easy

81. Identify and briefly describe the three elements that are traditionally used to measure the ultimate success of a project.

1. costs (budget), 2. time (schedule), and 3. performance (scope)

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

82. In project management terms, what is meant by "managing the trade-offs?"

During project execution decisions will be needed to balance the three success criteria; costs, schedule, and performance. Typically one will be degraded in order to maintain or improve another. Thus the criteria are traded off.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Step 2: Establishing Project Priorities
Level: Difficult

83. Identify and briefly describe the three categories used to classify the priority of major project parameters.

1. constrain (the parameter is fixed), 2. enhance (the parameter should be optimized), and 3. accept (lower results are acceptable)

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 2: Establishing Project Priorities
Level: Medium

84. What is a Project Priority Matrix and how would you use one?

The Project Priority Matrix is a graphic representation classifying the major project parameters of time, performance, and cost according to their priority. It is used to assist in making project trade-off decisions.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Step 2: Establishing Project Priorities
Level: Difficult

85. What is meant by a work breakdown structure and how does it help manage projects?

WBS is the logical subdividing of major activities into smaller elements. It is useful to ensure complete planning of a project as well as a basis for monitoring progress.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

86. Identify in order from broadest to most specific, the six parts of the hierarchical breakdown of the WBS.

1. project, 2. deliverable, 3. sub deliverable, 4. lowest sub deliverable, 5. cost account, and work package

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 3: Creating the Work Breakdown Structure
Level: Medium

87. What is a Responsibility Matrix and how would it be used in project management?

The RM summarizes the tasks to be accomplished and who is responsible for what on a project. It is used to ensure that all participants understand and agree on their assignments.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Responsibility Matrices
Level: Medium

88. What is meant by "Scope Creep" and why is it significant to project managers?

It is the gradual expansion of project deliverables to the point that overall project constraints (costs and schedule) can no longer be met.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Step 1: Defining the Project Scope
Level: Difficult

89. What is an OBS and how would you use it to plan a project?

The OBS is the process of defining which organization units are responsible for performing the work outlined in the individual work packages.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Step 4: Integrating the WBS with the Organization
Level: Difficult

Chapter 05 Estimating Project Times and Costs Answer Key

Multiple Choice Questions

1. The process of forecasting or approximating the time and cost of completing project deliverables is called
A. Budgeting
B. Predicting
C. Estimating
D. Planning
E. Guesstimating

Estimating is the process of forecasting or approximating the time and cost of completing project deliverables.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Factors Influencing the Quality of Estimates
Level: Easy

2. In practice, estimating processes are frequently classified as
A. Top down/bottom up
B. Rough/polished
C. Precise/order of magnitude
D. Draft/final
E. Both A and B are correct

Estimating processes are frequently classified as top-down and bottom-up. Top-down estimates are usually done by senior management.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Factors Influencing the Quality of Estimates
Level: Easy

3. A typical statement in actual practice is that estimates should have a probability of being met _____ of the time.
A. 100%
B. 98%
C. 95%
D. 90%
E. 80%

But past experience estimates must almost always be refined by other considerations to reach the 95 percent probability level.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Factors Influencing the Quality of Estimates
Level: Easy

4. A good starting point for developing time and cost estimates is
A. Past experience
B. Work packages
C. Task analysis
D. Time and motion studies
E. Work breakdown structure

Past experience is a good starting point for developing time and cost estimates.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Easy

5. Which of the following is not one of the factors that need to be considered to improve quality of estimates for project times and costs?
A. Planning horizon
B. People
C. Padding estimates
D. Profit
E. Project structure

See List on Page 128-129.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

6. Ed is looking over the actual results of projects and comparing them to what was estimated. He notices that projects that took six months or longer to complete were noticeably more off the estimates. Which of the following factors is he recognizing?
A. Padding estimates
B. Planning horizon
C. Project structure
D. People
E. Organization culture

The quality of the estimate depends on the planning horizon; estimates of current events are close to 100 percent accurate but are reduced for more distant events. The accuracy of time and cost estimates should improve as you move from the conceptual phase to the point where individual work packages are defined.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

7. Janet is forecasting how much money her department needs to support a new project. She estimates that two people and $25,000 in expenses will cover her needs. Because management typically insists on reducing forecasts by 20 percent, she increases her estimates to allow for that reduction. Which of the following factors is illustrated in this situation?
A. Padding estimates
B. Planning horizon
C. Project structure
D. People
E. Organization culture

In work situations where you are asked for time and cost estimates, most of us are inclined to add a little padding to increase the probability and reduce the risk of being late. If everyone at all levels of the project adds a little padding to reduce risk, the project duration and cost are seriously overstated.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

8. Which of the following is a good condition for top-down estimating?
A. Cost and time important
B. Fixed price contract
C. Customer wants details
D. Internal, small project
E. All of these are good conditions for top-down estimating

See table 5-1 on Page 132.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Medium

9. Which of the following is a good condition for bottom-up estimating?
A. Strategic decision making
B. Internal, small project
C. Fixed price contract
D. High uncertainty
E. Both C and D are good conditions for bottom-up estimating

See table 5-1 on Page 132.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Medium

10. Top-down estimates are most likely to occur during the _____ phase.
A. Concept
B. Planning
C. Execution
D. Delivery
E. All of these are equally likely

Top-down estimates are only a rough cut and typically occur in the "conceptual" stage of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Easy

11. _____ estimates are most likely to use low cost, efficient methods.
A. Apportion
B. Ratio
C. Top-down
D. Bottom-up
E. All of these are equally likely

The bottom-up approach also provides the customer with an opportunity to compare the low-cost, efficient method approach with any imposed restrictions.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Medium

12. Which of the following methods is not considered a top-down approach to estimating project time and cost?
A. Ratio
B. Template
C. Apportion
D. Function point
E. Learning curve

Template Methods are used in bottom-down approach to estimating.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

13. Jose is forecasting project time and cost for constructing a new building by multiplying the total square footage by a given dollar amount. Which of the following methods is he using?
A. Ratio
B. Template
C. Apportion
D. Function point
E. Learning curve

Top-down methods (sometimes called parametric) usually use ratios, or surrogates, to estimate project times or costs. Top-down approaches are often used in the concept or "need" phase of a project to get an initial duration and cost estimate for the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

14. Sean is forecasting the time and cost of developing a customized software program by looking at the number of inputs, outputs, inquires, files, and interfaces. Which of the following methods is he using?
A. Ratio
B. Template
C. Apportion
D. Function point
E. Learning curve

In the software industry, software development projects are frequently estimated using weighted macro variables called "function points" or major parameters such as number of inputs, number of outputs, number of inquiries, number of data files, and number of interfaces.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

15. Laura is forecasting the time and cost of developing an intranet for a new customer. Her department has completed six such intranets for customers during the last two years. Although the proposed system is about the same size as the others she estimates that it will take about 10 percent less time and money. Which of the following methods is she using?
A. Ratio
B. Template
C. Apportion
D. Function point
E. Learning curve

A phenomenon of tasks that are labor intensive. In these circumstances the pattern of improvement phenomenon can be used to predict the reduction in time to perform the task. From empirical evidence across all industries, the pattern of this improvement has been quantified in the learning curve (also known as improvement curve, experience curve, and industrial progress curve).

16. Learning curves are more likely to apply in situations where most of the costs are
A. Materials
B. Labor
C. Overhead
D. Evenly spread over materials, labor, and overhead
E. All of these are equally likely situations for learning curves

A phenomenon of tasks that are labor intensive. In these circumstances the pattern of improvement phenomenon can be used to predict the reduction in time to perform the task. From empirical evidence across all industries, the pattern of this improvement has been quantified in the learning curve (also known as improvement curve, experience curve, and industrial progress curve).

17. Which of the following is not one of the bottom-up approaches to estimating project time and cost?
A. Parametric procedures applied to specific tasks
B. Estimates for the WBS work packages
C. Learning curve
D. Template method
E. All of these are bottom-up approaches

Learning curve is part of top-down approach to estimating.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

18. The approach that begins with a top-down estimate for the project and then refines estimates as the project is implemented is known as _____ method.
A. Function point
B. Template
C. Learning curve
D. Phase estimating
E. Apportion

This approach begins with a top-down estimate for the project and then refines estimates for phases of the project as it is implemented.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Methods for Estimating Project Times and Costs
Level: Easy

19. Which of the following would be the best method for projects where the final product is not known and the uncertainty is very large?
A. Function point
B. Template
C. Learning curve
D. Phase estimating
E. Apportion

Phase estimating is used when an unusual amount of uncertainty surrounds a project and it is impractical to estimate times and costs for the entire project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

20. The accuracy of top-down estimates will typically be in the range of
A. Minus 50% to plus 50%
B. Minus 0% to plus 75%
C. Minus 20% to plus 60%
D. Minus 35% to plus 35%
E. Minus 10% to plus 30%

See Table 5.4 on page 141.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

21. The accuracy of bottom-up estimates will typically be in the range of
A. Minus 50% to plus 50%
B. Minus 0% to plus 75%
C. Minus 20% to plus 60%
D. Minus 35% to plus 35%
E. Minus 10% to plus 30%

See Table 5.4 on page 141.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

22. The cost to prepare bottom-up estimates will typically run how much more than the costs to prepare the top-down estimates?
A. About the same
B. About twice as much
C. About three times as much
D. About four times as much
E. About five times as much

See Table 5.4 on page 141.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

23. Typical kinds of costs found in a project include
A. Direct costs
B. Project overhead costs
C. General and administrative costs
D. Only A and B are included
E. A, B, and C are all included

See list on Page 142.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Level of Detail
Level: Easy

24. Project costs are typically viewed from all of the following except:
A. Scheduled
B. Sunk
C. Actual
D. Committed
E. All of these are correct

See Figure 5.6 on Page 143.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Level of Detail
Level: Easy

25. Which of the following would be considered a direct project cost?
A. Labor
B. Materials
C. Equipment
D. Both A and B are direct costs
E. A, B, and C are all considered direct costs

Direct project overhead costs can be tied to project deliverables or work packages. Examples include the salary of the project manager and temporary rental space for the project team.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Level of Detail
Level: Easy

26. Which of the following is not one of the recommended guidelines for developing useful work package estimates?
A. Estimates should be made by those responsible for the work
B. Use several people to estimate the same work
C. Estimates should be based on normal conditions
D. Estimates should include a normal level of contingency
E. Estimates should be independent of other projects

See list on pages 144-145.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Refining Estimates
Level: Medium

27. Companies like Boeing, Kodak, and IBM are using which of the following for improving the estimating process?
A. Adjusting estimates based on individual forecasting abilities
B. Benchmarking using the experience of other companies
C. Using time and motion studies
D. Creating historical databases of previous projects
E. All of these are correct

Some organizations have large estimating departments of professional estimators—e.g., Boeing, Kodak, IBM—that have developed large time and cost databases.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Creating a Database for Estimating
Level: Easy

28. Reasons why estimating time and cost are important include all of the following except:
A. To schedule work
B. To determine how long the project should take and cost
C. To develop cash flow needs
D. To determine how well the project is progressing
E. All of the above are valid reasons

See Exhibit 5.1 on Page 127.

AACSB: Comprehension
Bloom's: Knowledge
Learning Objective: Factors Influencing the Quality of Estimates
Level: Easy

29. In a learning curve, the improvement ratio is applied to which of the following items?
A. Direct materials
B. Direct labor
C. Overhead
D. Both A and B are correct
E. A, B, and C are all correct

These costs are clearly chargeable to a specific work package. Direct costs can be influenced by the project manager, project team, and individuals implementing the work package. These costs represent real cash outflows and must be paid as the project progresses; therefore, direct costs are usually separated from overhead costs. Lower-level project rollups frequently include only direct costs.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

30. The bottom-up approach for estimating times and costs that uses costs from past projects that were similar to the current project is known as:
A. Detailed WBS work package estimates
B. Template method
C. Function point method
D. Time-phased cost estimates
E. Phase estimating

If the project is similar to past projects, the costs from past projects can be used as a starting point for the new project. Differences in the new project can be noted and past times and costs adjusted to reflect these differences.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Methods for Estimating Project Times and Costs
Level: Easy

31. Which of the follow top-down methods is used when projects closely follow past projects in features and costs and result in costs being assigned by percentages to major segments of the project?
A. Apportion
B. Function point
C. Phase estimating
D. Learning curve
E. Consensus

Apportionment is used when projects closely follow past projects in features and costs. Given good historical data, estimates can be made quickly with little effort and reasonable accuracy. This method is very common in projects that are relatively standard but have some small variation or customization.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

32. Resource shortages, in the form of people, equipment, or materials, is a good example of
A. Hidden interaction costs
B. Things going wrong on a project
C. Normal conditions not applying
D. Changes in project scope
E. None of these are correct

Estimates are supposed to be based on normal conditions. While this is a good starting point, it rarely holds true in real life. This is especially true when it comes to the availability of resources. Resource shortages, whether in the form of people, equipment, or materials, can extend original estimates.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Refining Estimates
Level: Medium

33. People working on prototype development needing time to interact with the design engineers after the design is completed is an example of:
A. Hidden interaction costs
B. Things going wrong on a project
C. Normal conditions not applying
D. Changes in project scope
E. None of these are correct

Interaction costs are hidden in estimates. According to the guidelines, each task estimate is supposed to be done independently. However, tasks are rarely completed in a vacuum. Work on one task is dependent upon prior tasks, and the hand-offs between tasks require time and attention. For example, people working on prototype development need to interact with design engineers after the design is completed, whether to simply ask clarifying questions or to make adjustments in the original design.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Refining Estimates
Level: Medium

34. A manager getting further into a project and obtaining a better understanding of what needs to be done to accomplish a project is an example of:
A. Hidden interaction costs
B. Things going wrong on a project
C. Normal conditions not applying
D. Changes in project scope
E. None of these are correct

As one gets further and further into the project, a manager obtains a better understanding of what needs to be done to accomplish the project. This may lead to major changes in project plans and costs. Likewise, if the project is a commercial project, changes often have to be made midstream to respond to new demands by the customer and/or competition.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Refining Estimates
Level: Medium

35. Design flaws being revealed after the fact, extreme weather conditions, and accidents occurring are examples of:
A. Hidden interaction costs
B. Things going wrong on a project
C. Normal conditions not applying
D. Changes in project scope
E. None of these are correct

Design flaws are revealed after the fact, extreme weather conditions occur, accidents happen, and so forth. Although you shouldn't plan for these risks to happen when estimating a particular task, the likelihood and impact of such events need to be considered.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Refining Estimates
Level: Medium

Fill in the Blank Questions

36. Estimates that are typically based on estimates of elements found in the work breakdown structure are called _____ estimates.
bottom-up

The bottom-up approach at the work package level can serve as a check on cost elements in the WBS by rolling up the work packages and associated cost accounts to major deliverables.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Factors Influencing the Quality of Estimates
Level: Easy

37. Estimates that are usually derived from analogy or mathematical relationships are called _____ estimates.

top-down

Top-down estimates are usually done by senior management. Management will often derive estimates from analogy, group consensus, or mathematical relationships.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Factors Influencing the Quality of Estimates
Level: Easy

38. The estimating factor known as _____ considers the decreasing accuracy of estimates as one forecasts activities that are further into the future.

planning horizon

The quality of the estimate depends on the planning horizon; estimates of current events are close to 100 percent accurate but are reduced for more distant events. The accuracy of time and cost estimates should improve as you move from the conceptual phase to the point where individual work packages are defined.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

39. The _____ factor in estimating project times and costs can introduce errors due to staff turnover, the skills of the participants, and whether the team members have worked with each other on previous projects.

people

The people factor can also introduce errors in estimating times and cost. For example, accuracy of estimates depends on the skills of the people making the estimates. A close match of people skills to the task will influence productivity and learning time.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

40. The tendency to over-estimate project time and cost in order to improve the likelihood of meeting the estimates is known as the _____ factor.
padding estimates

In work situations where you are asked for time and cost estimates, most of us are inclined to add a little padding to increase the probability and reduce the risk of being late. If everyone at all levels of the project adds a little padding to reduce risk, the project duration and cost are seriously overstated.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

41. The prevailing belief in some firms that detailed estimating takes too much time and is not worth the effort or that it is impossible to predict the future is an example of the _____ factor.
organization culture

Organizations vary in the importance they attach to estimates. The prevailing belief in some organizations is that detailed estimating takes too much time and is not worth the effort or that it's impossible to predict the future. Other organizations subscribe to the belief that accurate estimates are the bedrock of effective project management. Organization culture shapes every dimension of project management; estimating is not immune to this influence.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

42. Using the _____ method of forecasting project time and costs is the preferred method for situations involving strategic decision-making, projects with a high degree of uncertainty, and projects with an unstable scope.
top-down

See table 5-1 on Page 132.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Medium

43. Using the _____ method of forecasting project time and costs is the preferred method for situations where the cost and time estimates are important, in a fixed contract situation, and when the customer wants a lot of detail.
bottom-up

See table 5-1 on Page 132.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Medium

44. The information necessary to conduct a bottom-up estimate of project time and costs starts with the _____.
work package

If possible and practical, you want to push the estimating process down to the work package level for bottom-up estimates that establish low-cost, efficient methods. This process can take place after the project has been defined in detail. Good sense suggests project estimates should come from the people most knowledgeable about the estimate needed.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Difficult

45. In the _____ method of top-down estimating, a quantitative relationship is established between the estimates and a project parameter.
ratio

Top-down methods (sometimes called parametric) usually use ratios, or surrogates, to estimate project times or costs. Top-down approaches are often used in the concept or "need" phase of a project to get an initial duration and cost estimate for the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

46. Given that a project closely follows past projects in features and costs, the _____ method of assigns costs and times to particular phases that a project will go through.
<u>apportion</u>

This method is an extension to the ratio method. Apportionment is used when projects closely follow past projects in features and costs. Given good historical data, estimates can be made quickly with little effort and reasonable accuracy. This method is very common in projects that are relatively standard but have some small variation or customization.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium
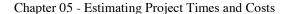
47. The _____ method for estimating project time and cost uses weighted variables based on major parameters and is frequently used in the development of software.
<u>function point</u>

In the software industry, software development projects are frequently estimated using weighted macro variables called "function points" or major parameters such as number of inputs, number of outputs, number of inquiries, number of data files, and number of interfaces.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

48. The _____ method of estimating project time and costs is useful for projects requiring the same task, group of tasks, or product repeated several times, especially if it is labor intensive.
learning curve

A phenomenon of tasks that are labor intensive. In these circumstances the pattern of improvement phenomenon can be used to predict the reduction in time to perform the task. From empirical evidence across all industries, the pattern of this improvement has been quantified in the learning curve (also known as improvement curve, experience curve, and industrial progress curve).

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

49. In the _____ method of estimating project time and costs past projects are used as a starting point with adjustments made based on differences in the new project.
template

If the project is similar to past projects, the costs from past projects can be used as a starting point for the new project. Differences in the new project can be noted and past times and costs adjusted to reflect these differences.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

50. Probably the most reliable method for estimating time and cost is to use the _____ and to ask the people responsible for the work package to make the estimates.
bottom-up

If possible and practical, you want to push the estimating process down to the work package level for bottom-up estimates that establish low-cost, efficient methods. This process can take place after the project has been defined in detail. Good sense suggests project estimates should come from the people most knowledgeable about the estimate needed.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

51. The _____ approach to estimating project time and cost begins with an overall estimate for the project and then refines estimates for various stages of the project as it is implemented.
phase estimating

This approach begins with a top-down estimate for the project and then refines estimates for phases of the project as it is implemented. Some projects by their nature cannot be rigorously defined because of the uncertainty of design or the final product. Phase estimating is used when an unusual amount of uncertainty surrounds a project and it is impractical to estimate times and costs for the entire project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

52. The cost to prepare a top-down budget will typically run _____ percent of the total project cost.
one-tenth to three tenths

See Table 5.4 on page 141.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Methods for Estimating Project Times and Costs
Level: Easy

53. The cost to prepare a bottom-up budget will typically run _____ percent of the total project cost.
three tenths to one

See Table 5.4 on page 141.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Methods for Estimating Project Times and Costs
Level: Easy

54. Project costs such as labor and materials are typically classified as _____ costs.
direct

See list on Page 142.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Types of Costs
Level: Easy

55. The salary of the project manager and temporary rental space for the project team would be classified as _____ costs.
direct overhead

Direct overhead rates more closely pinpoint which resources of the organization are being used in the project. Direct project overhead costs can be tied to project deliverables or work packages. Examples include the salary of the project manager and temporary rental space for the project team.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Types of Costs
Level: Medium

56. Estimates should be made based on _____ conditions, efficient methods, and a normal level of resources.
normal

Estimates should be based on normal conditions, efficient methods, and a normal level of resources.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Estimating Guidelines for Times; Costs; and Resources
Level: Easy

57. The _____ method is a top-down approach that uses the pooled experience of senior and/or middle managers to estimate the total project duration and cost.
consensus

The consensus simply uses the pooled experience of senior and/or middle managers to estimate the total project duration and cost.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Methods for Estimating Project Times and Costs
Level: Easy

58. Costs that are not directly related to a specific project, such as advertising, accounting, and senior management, are classified as _____.
General and administrative overhead costs

These represent organization costs that are not directly linked to a specific project. These costs are carried for the duration of the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Types of Costs
Level: Medium

True / False Questions

59. Project estimates should be broken down into as much detail than and with as much accuracy as possible.
FALSE

Detailed data gathering is not always possible or practical and other methods are used to develop project estimates.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

60. Bottom-up-estimating is another name for overzealous top management estimates.
FALSE

Top-down estimates usually are derived from someone who uses experience and/or information to determine the project duration and total cost. These estimates are sometimes made by top managers who have very little knowledge of the processes used to complete the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Easy

61. The use of past experience is almost always used primarily in the initial phases of a project.
TRUE

Past experience is a good starting point for developing time and cost estimates.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

62. Due to the averaging out of under-estimates and over-estimates, a long duration project is more likely to be on target than a short term, small project.
Refer to Snapshot from Practice Page 140.
FALSE

The smaller the element of a work package, the more accurate the overall estimate is likely to be.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

63. The project structure chosen to manage the project will have little impact on the actual project work to be accomplished.
FALSE

Which project structure is chosen to manage the project will influence time and cost estimates.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

64. As long as everyone in a project adds just a little padding to reduce risk, the project duration and costs are probably overstated by a small amount.
FALSE

This phenomenon causes some managers or owners to call for a 10-15 percent cut in time and/or cost for the project. Of course the next time the game is played, the person estimating cost and/or time will pad the estimate to 20 percent or more.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

65. Organization culture can significantly influence project time and cost estimates.
TRUE

Organization culture can significantly influence project estimates.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Factors Influencing the Quality of Estimates
Level: Easy

66. If a project is internal to the company and relatively small, the bottom-up approach to estimating time and costs for the project is the best choice.
Refer to Table 5.1
FALSE

See Table 5.1 on page 132.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Easy

67. If time and costs are important to a project the top-down approach to estimating time and costs for the project is the best choice.
FALSE

The bottom-up approach at the work package level can serve as a check on cost elements in the WBS by rolling up the work packages and associated cost accounts to major deliverables. Similarly, resource requirements can be checked. Later, the time, resource, and cost estimates from the work packages can be consolidated into time-phased networks, resource schedules, and budgets that are used for control.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Easy

68. The ideal approach to estimating project time and costs is to use both the top-down and the bottom-up approach.
TRUE

The ideal approach is for the project manager to allow enough time for both the top-down and bottom-up estimates to be worked out so a complete plan based on reliable estimates can be offered to the customer. In this way false expectations are minimized for all stakeholders and negotiation is reduced.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Medium

69. At the strategic level top-down estimating methods are used to evaluate a project proposal. Refer to Table 5.1
TRUE

See Table 5.1 on page 132.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Easy

70. Top-down estimates usually are derived from someone who uses experience and/or information to determine the project duration and total cost.
TRUE

Top-down estimates usually are derived from someone who uses experience and/or information to determine the project duration and total cost.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Easy

71. Estimating the total cost of a house by multiplying the total square feet by a cost per square foot is an example of the apportion method of estimating costs.
FALSE

Apportionment is used when projects closely follow past projects in features and costs. Given good historical data, estimates can be made quickly with little effort and reasonable accuracy. This method is very common in projects that are relatively standard but have some small variation or customization.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

72. Estimating the total cost of a project by multiplying each major function by a complexity factor is an example of the apportion method of estimating costs.
FALSE

Apportionment is used when projects closely follow past projects in features and costs. Given good historical data, estimates can be made quickly with little effort and reasonable accuracy. This method is very common in projects that are relatively standard but have some small variation or customization.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

73. Phase estimating is used when a project cannot be rigorously defined because of the uncertainty of design or the final product.
TRUE

Phase estimating is used when an unusual amount of uncertainty surrounds a project and it is impractical to estimate times and costs for the entire project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

74. Phase estimating uses both the bottom-up and top-down methods for estimating project time and costs.
TRUE

This approach begins with a top-down estimate for the project and then refines estimates for phases of the project as it is implemented.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

75. Using a WBS permits the use of different levels of detail for different levels of management.
TRUE

Getting the level of detail in the WBS to match management needs for effective implementation is crucial, but the delicate balance is difficult to find. The level of detail in the WBS varies with the complexity of the project; the need for control; the project size, cost, duration; and other factors.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Level of Detail
Level: Easy

76. The Consensus method of estimating costs is a bottom-up technique.
FALSE

These first top-down estimates are only a rough cut and typically occur in the "conceptual" stage of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Methods for Estimating Project Times and Costs
Level: Easy

77. The salary of the project manager and her administrative assistant is classified as direct labor costs.
FALSE

Direct project overhead costs can be tied to project deliverables or work packages. Examples include the salary of the project manager and temporary rental space for the project team.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Types of Costs
Level: Medium

78. General and Administrative costs are usually allocated as a percent of the total of a direct cost such as labor, materials, or equipment.
TRUE

G&A costs are usually allocated as a percent of total direct cost, or a percent of the total of a specific direct cost such as labor, materials, or equipment.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Types of Costs
Level: Medium

79. The apportion method is a top-down approach that uses the pooled experience of senior and/or middle managers to estimate the total project duration and cost.
FALSE

Apportionment is used when projects closely follow past projects in features and costs. Given good historical data, estimates can be made quickly with little effort and reasonable accuracy. This method is very common in projects that are relatively standard but have some small variation or customization.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Methods for Estimating Project Times and Costs
Level: Easy

80. The function point method of time and cost estimating is best applied to projects that have large, complex physical deliverables, such as a bridge or building.
<u>FALSE</u>

In the software industry, software development projects are frequently estimated using weighted macro variables called "function points" or major parameters such as number of inputs, number of outputs, number of inquiries, number of data files, and number of interfaces.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Methods for Estimating Project Times and Costs
Level: Easy

Short Answer Questions

81. Identify and briefly describe the two major categories of estimating project time and costs.

1. Top-down estimates made by top management, and 2. bottom-up estimates are made by those responsible for completing the work packages

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Medium

82. Why are the estimates for a project's time and costs important for all phases of a project?

The estimates serve as the standard for comparison of actual and plan throughout the life of a project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Easy

83. Identify the factors that should be considered to improve the quality of estimates for project times and costs.

1. planning horizon, 2. project duration, 3. people, 4. project structure and organization, 5. padding estimates, 6. organization culture, and 7. non-project factors

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Factors Influencing the Quality of Estimates
Level: Difficult

84. Under what conditions would the top-down approach to estimating project times and costs be the best choice?

In the early stages of a project to help develop the initial plan, in making strategic decisions, in projects of high uncertainty, in small internal projects, or in projects with an unstable scope.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Difficult

85. Under what conditions would the bottom-up approach to estimating project times and costs be the best choice?

When low cost, efficient estimates are needed, when time and cost are important, when working on a fixed price contract, or when the customer wants details.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Difficult

86. Describe the ideal approach for a project manager to develop optimal estimates for a project's time and costs.

Allow enough time for both the top-down and bottom-up estimates to be worked out and included in the final plan.

87. Identify and briefly describe the five major methods of top-down estimating.

1. consensus, 2. ratio method, 3. apportion method, 4. function point, and 5. learning curves

88. Identify and briefly describe the four major methods of bottom-up estimating.

1. template method, 2. parametric procedure applied to specific tasks, 3. detailed estimates from the WBS work packages, and 4. phase estimating

89. Identify the drawbacks to an excessive level of detail in project times and costs.

1. emphasis on departmental outcomes, and 2. increased paperwork

90. Identify the three major categories of project costs and give an example of each.

1. Direct costs (labor, materials, equipment, other), 2. Project Overhead Costs (salaries of project manager, rent on space to house the project), and 3. General and Administrative Overhead Costs (advertising, accounting, and senior management of the organization)

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Types of Costs
Level: Difficult

91. "The best way to improve estimates is to collect and archive data on past project estimates and actuals." Agree or disagree and support your answer.

This technique is rated as a 'best practice' among leading project management organizations. Several large firms have large estimating departments that have developed large time and cost databases.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Creating a Database for Estimating
Level: Difficult

Chapter 06 Developing a Project Plan Answer Key

Multiple Choice Questions

1. Information to develop a project network is collected from the
A. Organization breakdown structure
B. Work breakdown structure
C. Budget
D. Project proposal
E. Responsibility matrix

The network is developed from the information collected for the WBS and is a graphic flow chart of the project job plan.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Developing the Project Network
Level: Easy

2. Which of the following represents an activity on an AON project network?
A. An arrow
B. A line
C. A node
D. Both A and B are correct
E. A, B, and C are all correct

The two approaches used to develop project networks are known as activity-on-node (AON) and activity-on-arrow (AOA). Both methods use two building blocks— the arrow and the node. Their names derive from the fact that the former uses a node to depict an activity.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

3. Arrows on an AON project network represent:
A. An activity
B. Project flow
C. Dependency
D. Both B and C are correct
E. Both A and B are correct

The node depicts an activity, and the arrow shows dependency and project flow.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: From Work Package to Network
Level: Medium

4. When translated into a project network, a work package will become
A. A single activity
B. One or more activities
C. A milestone
D. A critical path
E. An arrow

Work packages from the WBS are used to build the activities found in the project network. An activity can include one or more work packages. The activities are placed in a sequence that provides for orderly completion of the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: From Work Package to Network
Level: Medium

5. Which of the following is provided by a project network but not by the work breakdown structure?
A. Dependencies
B. Sequencing
C. Interrelationships
D. Both A and B are correct
E. A, B, and C are all correct

Project networks are developed from the WBS. The project network is a visual flow diagram of the sequence, interrelationships, and dependencies of all the activities that must be accomplished to complete the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: From Work Package to Network
Level: Medium

6. On a project network, the activity times are derived from the
A. Organization breakdown structure
B. Work packages
C. Budget
D. Project proposal
E. Responsibility matrix

Work packages from the WBS are used to build the activities found in the project network. An activity is an element in the project that consumes time—for example, work or waiting.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: From Work Package to Network
Level: Difficult

7. Part of a project is to *Develop Product Specifications.* This is best classified as a(n)
A. Event
B. Path
C. Activity
D. Node
E. Milestone

Activities usually represent one or more tasks from a work package. Descriptions of activities should use a verb/noun format: for example, develop product specifications.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Medium

8. An activity that has more than one dependency arrow flowing into it is termed a(n)
A. Parallel activity
B. Critical path
C. Burst activity
D. Merge activity
E. Independent activity

Merge activity is an activity that has more than one activity immediately preceding it (more than one dependency arrow flowing to it).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

9. The critical path in a project network is the
A. Shortest path through the network
B. Longest path through the network
C. Network path with the most difficult activities
D. Network path using the most resources
E. Network path with the most merge activities

When this term is used, it means the path(s) with the longest duration through the network; if an activity on the path is delayed, the project is delayed the same amount of time.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

10. A/an _____ activity has more than one dependency arrow flowing from it.
A. Parallel
B. Critical path
C. Burst
D. Merge
E. Independent

Burst activity is an activity has more than one activity immediately following it (more than one dependency arrow flowing from it).

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Easy

11. An item on a project network is *Design Software Completed.* This is best described as a(n)
A. Event
B. Path
C. Activity
D. Node
E. Milestone

Event is a term used to represent a point in time when an activity is started or completed. It does not consume time.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

12. Activities which can take place at the same time are termed
A. Parallel activity
B. Critical path
C. Burst activity
D. Merge activity
E. Independent activity

These are activities that can take place at the same time, if the manager wishes. However, the manager may choose to have parallel activities not occur simultaneously.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

13. A sequence of connected, dependent activities is termed a(n)
A. Critical path
B. Parallel path
C. Activity chain
D. Path
E. Dependent chain

A Path is a sequence of connected, dependent activities.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

14. An AON project network uses which of the following basic building blocks?
A. Arrows
B. Bars
C. Nodes
D. Both A and C are correct
E. A, B, and C are all correct

The two approaches used to develop project networks are known as activity-on-node (AON) and activity-on-arrow (AOA). Both methods use two building blocks— the arrow and the node.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

15. Which of the following is not one of the basic rules to follow when developing project networks?
A. An activity cannot begin until all preceding activities have been completed
B. Each activity must have a unique identification number
C. Conditional statements are allowed but looping statements are not allowed
D. An activity identification number must be larger that that of any preceding activities
E. Networks flow from left to right

See List on Page 161.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

16. _____ activities must be completed immediately before a particular activity.
A. Merge
B. Burst
C. Predecessor
D. Successor
E. Critical

Which activities must be completed immediately before this activity? These activities are called predecessor activities.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Activity-on-Node (AON) Fundamentals
Level: Easy

17. _____ activities are to be completed immediately following a particular activity.
A. Merge
B. Burst
C. Predecessor
D. Successor
E. Critical

Which activities must immediately follow this activity? These activities are called successor activities.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Activity-on-Node (AON) Fundamentals
Level: Easy

18. The forward pass in project network calculations determines the
A. Earliest time's activities can begin
B. Earliest time's activities can be finished
C. Duration of the project
D. Both A and B are correct
E. A, B, and C are all correct

The forward pass starts with the first project activity(ies) and traces each path (chain of sequential activities) through the network to the last project activity(ies).

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Network Computation Process
Level: Medium

19. The backward pass in project network calculations determines the
A. Latest time's activities can begin
B. Earliest time's activities can be finished
C. Critical path
D. Both A and C are correct
E. A, B, and C are all correct

See list on Page 165.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Network Computation Process
Level: Medium

20. Which of the following correctly calculates the early finish for an activity?
A. LS + DUR
B. ES + DUR
C. LF + DUR
D. ES + SL
E. LF + SL

The early finish for activity = (ES + DUR).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Network Computation Process
Level: Medium

21. Which of the following correctly calculates the late start for an activity?
A. EF - DUR
B. ES - DUR
C. LF - DUR
D. ES - SL
E. LF - SLACK

You subtract activity times along each path starting with the project end activity (LF - DUR = LS).

22. The amount of time an activity can be delayed and yet not delay the project is termed
A. Total slack
B. Free slack
C. Critical float
D. Float pad
E. Slip pad

Total slack tells us the amount of time an activity can be delayed and yet not delay the project. Stated differently, total slack is the amount of time an activity can exceed its early finish date without affecting the project end date or an imposed completion date.

23. Which of the following will correctly calculate the total slack in an activity?
A. LS - ES
B. LF - EF
C. LS - LF
D. LF - ES
E. Both A and B are correct

Total slack or float for an activity is simply the difference between the LS and ES (LS - ES = SL) or between LF and EF (LF - EF = SL).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Network Computation Process
Level: Easy

24. The laying pipe example in the text illustrates the concept of
A. Laddering
B. Hammock activities
C. Critical path
D. Concurrent engineering
E. Forward pass

The assumption that all immediate preceding activities must be 100 percent complete is too restrictive for some situations found in practice. This restriction occurs most frequently when one activity overlaps the start of another and has a long duration. Under the standard finish-to-start relationship, when an activity has a long duration and will delay the start of an activity immediately following it, the activity can be broken into segments and the network drawn using a laddering approach so the following activity can begin sooner and not delay the work.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Medium

25. Using a special color copy machine for a tradeshow publication illustrates the concept of
A. Laddering
B. Hammock activities
C. Critical path
D. Concurrent engineering
E. Forward pass

Hammock activities are frequently used to identify the use of fixed resources or costs over a segment of the project. Typical examples of hammock activities are inspection services, consultants, or construction management services. A hammock activity derives its duration from the time span between other activities. For example, a special color copy machine is needed for a segment of a tradeshow publication project. A hammock activity can be used to indicate the need for this resource and to apply costs over this segment of the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Medium

26. If, for some reason, the project must be expedited to meet an earlier date, which of the following actions would the project manager take first?
A. Check to see which activities cost the least
B. Check to see which activities have the longest duration
C. Check to see which activities are on the critical path
D. Check to see which activities have the most slack
E. Check to see which activities have the highest risk

If for some reason the project must be expedited to meet an earlier date, it is possible to select those activities, or combination of activities, that will cost the least to shorten the project. Similarly, if the critical path is delayed and the time must be made up by shortening some activity or activities on the critical path to make up any negative slack, it is possible to identify the activities on the critical path that cost the least to shorten. If there are other paths with very little slack, it may be necessary to shorten activities on those paths also.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Using the Forward and Backward Pass Information
Level: Medium

27. Typically an activity on a project network represents
A. A single work package
B. One or more tasks from a work package
C. Several work packages
D. A sub-deliverable
E. A cost account

Work packages from the WBS are used to build the activities found in the project network.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: From Work Package to Network
Level: Medium

28. Project network logic errors include which of the following?
A. Activities with less than 1 day duration
B. Sequences such as "if test successful build prototype, if failure redesign"
C. A sequence such as B succeeds A, C succeeds B, A succeeds C
D. Both B and C are network logic errors
E. A, B, and C are all network logic errors

One rule is that conditional statements such as "if test successful build proto, if failure redesign" are not permitted. Another rule that defeats the project network and computation process is looping. Looping is an attempt by the planner to return to an earlier activity.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Medium

29. Which company utilized concurrent engineering to design a new line of cars and in the process completed its development six months ahead of schedule?
A. General Motors
B. Chrysler
C. Ford
D. Nissan
E. Toyota

The traditional chainlike sequence of finish-to-start relationships is replaced by a series of start-to-start lag relationships as soon as meaningful work can be initiated for the next phase. Figure 6.17 summarizes the dramatic gains in time to market achieved by this approach. For example, this approach was used by Chrysler Corporation to design its new line of SC cars including the popular Neon sedan.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Easy

30. The minimum amount of time a dependent activity must be delayed to begin or end is referred to as:
A. Hammock
B. Laddering
C. Lag
D. Cushion
E. Buffer

A lag is the minimum amount of time a dependent activity must be delayed to begin or end.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Easy

31. The requirement for a freshly poured foundation to cure before beginning construction is an example of which of the following type of lag?
A. Start to Start
B. Start to Finish
C. Finish to Finish
D. Finish to Start
E. Any of these could be correct

There are situations in which the next activity in a sequence must be delayed even when the preceding activity is complete. For example, removing concrete forms cannot begin until the poured cement has cured for two time units.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Easy

32. Concurrent engineering is a good example of good use of
A. Start to Start lags
B. Start to Finish lags
C. Finish to Finish lags
D. Finish to Start lags
E. Any of these could be correct

Concurrent Engineering, basically breaks activities into smaller segments so that work can be done in parallel and the project expedited. Start-to-start relationships can depict the concurrent engineering conditions and reduce network detail.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Easy

33. If testing cannot be completed any earlier than four days after the prototype is built, which of the following type of lag exists?
A. Start to Start
B. Start to Finish
C. Finish to Finish
D. Finish to Start
E. Any of these could be correct

The finish of one activity depends on the finish of another activity. For example, testing cannot be completed any earlier than four days after the prototype is complete.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Easy

34. Which of the following represents an activity on an AOA project network?
A. An arrow
B. A line
C. A node
D. Both A and B are correct
E. A, B, and C are all correct

The activity-on-arrow (AOA) uses an arrow to depict an activity.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: From Work Package to Network
Level: Easy

35. Nodes on an AON project network represent:
A. An activity
B. An event
C. Responsibility
D. Both B and C are correct
E. Both A and B are correct

The activity-on- node (AON) uses a node to depict an activity.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: From Work Package to Network
Level: Medium

Fill in the Blank Questions

36. A(n) _____ is an element in the project that consumes time.
activity

An activity is an element of the project that requires time. It may or may not require resources.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

37. The activity time estimates used to build a project network are derived from _____.
work packages

A work package is defined independently of other work packages, has definite start and finish points, requires specific resources, includes technical specifications, and has cost estimates for the package.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Developing the Project Network
Level: Easy

38. A _____ is an activity that has more than one predecessor.
merge activity

Merge activity is an activity that has more than one activity immediately preceding it (more than one dependency arrow flowing to it).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

39. In a _____ the delaying of any activity will delay the completion of the project by the same amount.
critical path

Critical path means the path(s) with the longest duration through the network; if an activity on the path is delayed, the project is delayed the same amount of time.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

40. Activities that can take place at the same time if the manager wishes them to are called _____.
parallel activities

Parallel activities are activities that can take place at the same time, if the manager wishes. However, the manager may choose to have parallel activities not occur simultaneously.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

41. A (n) _____ represents a point in time when an activity is started or completed and does not consume time.
event

Event is used to represent a point in time when an activity is started or completed. It does not consume time.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

42. A (n) _____ has more than one successor activity.
burst activity

Burst activity has more than one activity immediately following it (more than one dependency arrow flowing from it).

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

43. The _____ approach to creating project networks has come to dominate most projects.
AON or activity-on-node

In practice, the activity-on-node (AON) method has come to dominate most projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

44. In a project network, _____ (recycling through a set of activities) is not permitted.
looping

Looping is not allowed (in other words, recycling through a set of activities cannot take place).

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Easy

45. In a project network, _____ indicate precedence and flow.
arrows

The wide availability of personal computers and graphics programs has served as an impetus for use of the activity-on-node (AON) method (sometimes called the precedence diagram method). The dependencies among activities are depicted by arrows between the rectangles (boxes) on the AON network. The arrows indicate how the activities are related and the sequence in which things must be accomplished.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Activity-on-Node (AON) Fundamentals
Level: Easy

46. The _____ method for creating project networks is sometimes called the Precedence Diagram Method.
AON or activity-on-node

The wide availability of personal computers and graphics programs has served as an impetus for use of the activity-on-node (AON) method (sometimes called the precedence diagram method).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Activity-on-Node (AON) Fundamentals
Level: Easy

47. Activities that must occur immediately before a given activity are called _____ activities.
predecessor

Activities that must be completed immediately before an activity are called predecessor activities.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Activity-on-Node (AON) Fundamentals
Level: Easy

48. Activities that must immediately follow a given activity are called _____ activities.
successor

Activities that must immediately follow an activity are called successor activities.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Activity-on-Node (AON) Fundamentals
Level: Easy

49. Activities that can occur while an activity is taking place are called _____ activities.
parallel or concurrent

Activities that can occur while an activity is taking place is known as a concurrent or parallel relationship.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Activity-on-Node (AON) Fundamentals
Level: Easy

50. The _____ calculates the earliest times that activities can be started or finished.
forward pass

Forward Pass describes how soon can the activity start? (early start—ES) and how soon can the activity finish? (early finish—EF).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Network Computation Process
Level: Medium

51. The _____ calculates the critical path and determines how long an activity can be delayed without delaying the project.
backward pass

The backwards pass which activities represent the critical path (CP). This is the longest path in the network which, when delayed, will delay the project and how long can the activity be delayed? (slack or float—SL).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Network Computation Process
Level: Medium

52. An activity is on the critical path if its _____ is the lowest in the network.
total slack

Total slack tells us the amount of time an activity can be delayed and yet not delay the project. Stated differently, total slack is the amount of time an activity can exceed its early finish date without affecting the project end date or an imposed completion date.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Network Computation Process
Level: Medium

53. _____ can never be negative and applies only to the last activity in a single chain of activities.
Free slack

Free slack is the amount of time and activity can be delayed without delaying any immediately following (successor) activity. Or, free slack is the amount of time an activity can exceed its early finish date without affecting the early start date of any successor(s). Free slack can never be negative.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Network Computation Process
Level: Medium

54. A(n) _____ is the minimum amount of time a dependent activity must be delayed to begin or end.
lag

A lag is the minimum amount of time a dependent activity must be delayed to begin or end.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Easy

55. In the _____ technique, an activity with a long duration is broken into smaller segments so that the following activities can begin sooner.
laddering

The assumption that all immediate preceding activities must be 100 percent complete is too restrictive for some situations found in practice. This restriction occurs most frequently when one activity overlaps the start of another and has a long duration. Under the standard finish-to-start relationship, when an activity has a long duration and will delay the start of an activity immediately following it, the activity can be broken into segments and the network drawn using a laddering approach so the following activity can begin sooner and not delay the work.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Medium

56. _____ is defined as the difference between the EF of an activity and the ES of the activity that follows it.
Free Slack (Float)

See Figure 6.9 on Page 172.

57. _____ reflects the likelihood the original critical path(s) will change once the project is initiated.
Sensitivity

Sensitivity reflects the likelihood the original critical path(s) will change once the project is initiated. Sensitivity is a function of the number of critical or near-critical paths.

58. A _____ lag exists if debug cannot begin until two days after coding has started and that coding must be completed four days before debug can be completed.
combination

More than one lag relationship can be attached to an activity. These relationships are usually start-to-start and finish-to-finish combinations tied to two activities. For example, debug cannot begin until two time units after coding has started. Coding must be finished four days before debug can be finished (see Figure 6.20 on page 181).

59. The _____ lag is the most typical type of lag that is encountered in developing networks.
finish to start

The finish-to-start relationship represents the typical, generic network However, there are situations in which the next activity in a sequence must be delayed even when the preceding activity is complete.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Easy

60. A _____ activity is frequently used to identify the use of fixed resources or costs over a segment of the project.
hammock

Hammock activities are frequently used to identify the use of fixed resources or costs over a segment of the project. Typical examples of hammock activities are inspection services, consultants, or construction management services. A hammock activity derives its duration from the time span between other activities. For example, a special color copy machine is needed for a segment of a tradeshow publication project. A hammock activity can be used to indicate the need for this resource and to apply costs over this segment of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Easy

True / False Questions

61. An activity includes only one work package.
FALSE

Activities usually represent one or more tasks from a work package.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

62. Project networks are built using nodes and arrows.
TRUE

The two approaches used to develop project networks are known as activity-on-node (AON) and activity-on-arrow (AOA). Both methods use two building blocks—the arrow and the node.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

63. The WBS identifies dependencies, the sequencing of activities, and the timing of activities.
FALSE

Networks provide the project schedule by identifying dependencies, sequencing, and timing of activities, which the WBS is not designed to do.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: From Work Package to Network
Level: Medium

64. The critical path is the shortest path through a network and indicates activities that cannot be delayed without delaying the project.
FALSE

Critical path means the path(s) with the longest duration through the network; if an activity on the path is delayed, the project is delayed the same amount of time.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

65. An activity is an element of the project that always requires time but may or may not require resources.
TRUE

An activity is an element of the project that requires time. It may or may not require resources.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

66. The two approaches used to develop project networks are AOA and AON.
TRUE

The two approaches used to develop project networks are known as activity-on-node (AON) and activity-on-arrow (AOA).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Network
Level: Easy

67. In an AOA network an activity is represented by a box.
Refer to Appendix 6.1
FALSE

The activity-on-arrow (AOA) approach also uses the arrow and node as network building blocks. However, in this approach the arrow represents an individual project activity that requires time. The length and slope of the arrow have no significance. The node represents an event; it is usually presented as a small circle.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

68. In developing a project network, each activity should have a unique identification number that is smaller than the identification numbers of activities that follow it.
TRUE

Each activity should have a unique identification number. And that activity identification number must be larger than that of any activities that precede it.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

69. In developing a project network, neither looping statements nor conditional statements are permitted.
TRUE

Looping is not allowed (in other words, recycling through a set of activities cannot take place). Also Conditional statements are not allowed (that is, this type of statement should not appear: If successful, do something; if not, do nothing).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

70. Experience suggests that when there are multiple starts, a common start node should not be used to indicate a clear project beginning on the network. Similarly, a single project end node can be used to indicate a clear ending.
FALSE

Experience suggests that when there are multiple starts, a common start node can be used to indicate a clear project beginning on the network. Similarly, a single project end node can be used to indicate a clear ending.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

71. Burst activities have more than one activity immediately following it (more than one dependency arrow flowing from it).
<u>TRUE</u>

Burst activities have more than one activity immediately following it (more than one dependency arrow flowing from it).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Easy

72. It is acceptable for arrows to cross one another in a network diagram.
<u>TRUE</u>

Arrows on networks indicate precedence and flow. Arrows can cross over each other.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Easy

73. The forward pass through a project network determines the critical path.
<u>FALSE</u>

The forward pass starts with the first project activity(ies) and traces each path (chain of sequential activities) through the network to the last project activity(ies). The forward pass assumes every activity will start the instant in time when the last of its predecessors is finished.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Network Computation Process
Level: Medium

74. The backward pass though a project network determines how long an activity can be delayed without impacting the completion date of the project.
<u>TRUE</u>

The backwards pass which activities represent the critical path (CP). This is the longest path in the network which, when delayed, will delay the project and how long can the activity be delayed (slack or float—SL).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Network Computation Process
Level: Medium

75. Different activities along the same path can have different total slack.
<u>TRUE</u>

If slack of one activity in a path is used, the ES for all activities that follow in the chain will be delayed and their slack reduced. Use of total slack must be coordinated with all participants in the activities that follow in the chain.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Network Computation Process
Level: Medium

76. By definition, the critical path always has zero slack.
<u>FALSE</u>

The critical path follows activity start and finish constraints that occur due to the use of the additional relationships available and the imposed lags.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Medium

77. It is possible to have more than one critical path at the same time.
TRUE

Critical path means the path(s) with the longest duration through the network; if an activity on the path is delayed, the project is delayed the same amount of time.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

78. Free slack applies to an entire project network.
FALSE

Free slack is the amount of time and activity can be delayed without delaying any immediately following (successor) activity. Or, free slack is the amount of time an activity can exceed its early finish date without affecting the early start date of any successor(s).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Network Computation Process
Level: Medium

79. Gantt charts are popular because they represent an easy-to-understand, clear picture on a time-scaled horizon.
Refer to Figure 6.12
TRUE

See Figure 6.12 on Page 176.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Practical Considerations
Level: Easy

80. Lags are used to break larger activities into smaller segments so that activities that follow can be started earlier.
FALSE

When activities of long duration delay the start or finish of successor activities, the network designer normally breaks the activity into smaller activities to avoid the long delay of the successor activity. Use of lags can avoid such delays and reduce network detail.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Medium

81. Only activities that occur at the end of a chain of activities can have free slack.
TRUE

Free slack occurs at the last activity in a chain of activities. In many situations the "chain" can have only one link.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Network Computation Process
Level: Medium

82. Lags can be use to constrain the start and finish of an activity.
TRUE

Lags can be used to constrain the start and finish of an activity.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Medium

Short Answer Questions

83. Identify and discuss the two major reasons for the integration of work packages into the project network failing in actual practice.

1. different people are used to define work packages and the network, and 2. the WBS is poorly constructed and not deliverable/output oriented.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Developing the Project Network
Level: Medium

84. What are the two approaches used to develop project networks and identify the differences between them?

1. activity-on-node; where nodes depict activities and the arrows show flow and dependencies and 2. activity-on-arrow; where nodes represent events and achievement of the activities is represented by the arrow connecting the nodes.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Medium

85. What are the eight rules to follow in developing project networks?

1. flow left to right, 2. activities cannot begin until all predecessors have been completed, 3. arrows indicate precedence and flow, 4. each activity should have a unique identification number, 5. activity ID numbers must be larger than preceding ID number, 6. looping is not permitted, 7. conditional statements are not permitted, and 8. create a common start node for multiple start activities.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Constructing a Project Network
Level: Difficult

86. In the network computation process what is a *forward pass* and what three things does it determine?

Starting with the first activity, each path is traced forward through the network, adding times until the end of the project. This determines 1. how soon each activity can start, 2. how soon each activity can finish, and 3. how soon the entire project can be completed.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Network Computation Process
Level: Difficult

87. In the network computation process what is a *backward pass* and what four things does it determine?

Starting with the last activity, each path is traced backward through the network, subtracting times until the beginning of the project. This determines 1. how late each activity can start, 2. how late each activity can finish, 3. the critical path, and 4. how long can each activity be delayed without changing the completion date.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Network Computation Process
Level: Difficult

88. What is total slack and how do you determine it?

Slack is the amount of time specific activities can be delayed without causing the project to miss its completion date. It is calculated by subtracting the Early Start date from the Late Start date (SL = LS-ES) or subtracting the Early Finish date from the Late Finish date (SL = LF-EF).

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Network Computation Process
Level: Medium

89. What is a Gantt chart and what advantages does it have over project networks?

Gantt charts are bar charts where activities are displayed as bars on a horizontal time-scale. They are easy-to-read and provide a clear overview of the project schedule and progress against that schedule.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Medium

90. What is the laddering approach to project networks and why would you use this approach?

In laddering, lengthy activities are segmented into small pieces so that successor activities can begin prior to the completion of the initial activity. This effectively reduces the overall project time. The text used a laying pipeline example to illustrate.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Medium

91. What is a lag and why would you need to use one?

A lag is the minimum amount of time a dependent activity must be delayed to begin or end. They occur during laddering and avoid delays and they are also used to constraint the start and finish of an activity.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Extended Network Techniques to Come Closer to Reality
Level: Medium

92. What is a hammock activity and give an example?

A hammock activity identifies the use of a resource over a segment of the project. Thus its duration is determined by the duration of other activities. The example used in the text was for a color copier during specific phases of a project.

93. What is the Concurrent Engineering Approach and why should project managers be aware of it?

The chainlike sequence of finish-to-start relationships is replaced by a series of start-to-start lag relationships as soon as meaningful work can be initiated for the next phase. The resulting overlap of tasks slightly increases risk but results in a much shorter schedule.

94. Identify and briefly describe the four types of lags giving an example for each type.

1. Finish-to-Start, 2. Start-to-Start, 3. Finish-to-Finish, 4. Start-to-Finish.

Chapter 07 Managing Risk Answer Key

Multiple Choice Questions

1. An uncertain event or condition that, if it occurs, has a positive or negative effect on a project objectives is termed.
A. Random chance
B. A disaster
C. Risk
D. Hazard
E. Bad luck

In the context of projects, risk is an uncertain event or condition that, if it occurs, has a positive or negative effect on project objectives.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Risk Management Process
Level: Easy

2. The chances of a risk event occurring as a project proceeds through its life cycle tends to
A. Slowly rise
B. Drop sharply and then level out
C. Rise sharply and then level out
D. Remain about the same
E. Slowly drop

See Figure 7.1 on Page 212.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Risk Management Process
Level: Medium

3. The cost impact of a risk event occurring as a project proceeds through its life cycle tends to
A. Slowly rise
B. Drop sharply and then level out
C. Rise sharply and then level out
D. Remain about the same
E. Slowly drop

The cost impact of a risk event in the project is less if the event occurs earlier rather than later.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Risk Management Process
Level: Medium

4. The attempt to recognize and manage potential and unforeseen trouble spots that may occur when a project is implemented is known as
A. Risk forecasting
B. Risk management
C. Contingency planning
D. Scenario analysis
E. Disaster protection

Risk management attempts to recognize and manage potential and unforeseen trouble spots that may occur when the project is implemented.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Risk Management Process
Level: Easy

5. Which of the following is not one of the steps in the risk management process?
A. Risk response development
B. Risk assessment
C. Risk identification
D. Risk tracking
E. Risk response control

See Figure 7.2 on Page 213.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Risk Management Process
Level: Medium

6. The initial step in the risk management process is to
A. Determine the level of acceptable risk
B. Assess the risk potential
C. Identify the risks
D. Set aside budget funds for managing the risks
E. Appoint a risk manager

See Figure 7.2 on Page 213.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Risk Management Process
Level: Easy

7. One common mistake made early in the risk identification process is to
A. Not all possibilities are considered
B. Participants are over-optimistic
C. Participants are over-pessimistic
D. Focus on objectives and not on the events that could produce consequences.
E. Too much attention is given to past events

One common mistake that is made early in the risk identification process is to focus on objectives and not on the events that could produce consequences.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 1: Risk Identification
Level: Easy

8. In the beginning the focus of risk management should be on risks that
A. Impact the whole project
B. Impact the critical path
C. Are known
D. Have the greatest cost impact
E. Have the greatest schedule impact

The focus at the beginning should be on risks that can affect the whole project as opposed to a specific section of the project or network.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 1: Risk Identification
Level: Medium

9. The 1999 NASA Mars Climate Orbiter is an example of
A. Disaster avoidance through proactive risk management
B. Murphy's Law
C. Proper use of critical thinking
D. Mismanaged risk control
E. Using historical records to assess risk

The cost of mismanaged risk control early on in the project is magnified by the ill-fated 1999 NASA Mars Climate Orbiter.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Risk Management Process
Level: Medium

10. Which of the following would not be considered a *threat*?
A. Inflation
B. Meeting the project schedule
C. International disruptions
D. Economic conditions
E. Competition

There are sources external to the organization, such as inflation, market acceptance, exchange rates, and government regulations. In practice, these risk events are often referred to as "threats" to differentiate them from those that are not within the project manager's or team's responsibility area.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Risk Management Process
Level: Difficult

11. A list of questions that address traditional areas of uncertainty on a project is termed a risk
A. Risk profile
B. Questionnaire
C. Research
D. Query
E. Checklist

A risk profile is a list of questions that address traditional areas of uncertainty on a project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 1: Risk Identification
Level: Easy

12. Which of the following is typically included in risk profiles?
A. Management aspects
B. Market aspects
C. Technical aspects
D. Both A and C are included
E. A, B, and C are all included

Risk profiles recognize the unique strengths and weaknesses of the firm; also risk profiles address both technical and management risks.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 1: Risk Identification
Level: Medium

13. All of the following are included in the risk identification process except
A. Customers
B. Subcontractors
C. Competitors
D. Vendors
E. None of these are included

The risk identification process should not be limited to just the core team. Input from customers, sponsors, subcontractors, vendors, and other stakeholders should be solicited.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 1: Risk Identification
Level: Easy

14. One of the keys to success in risk identification is
A. Critical thinking
B. Optimism
C. Pessimism
D. A "can do" attitude
E. All of these are correct

While a "can do" attitude is essential during implementation, project managers have to encourage critical thinking when it comes to risk identification.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Risk Identification
Level: Medium

15. The easiest and most commonly used technique for analyzing risks is _____ analysis.
A. Probability
B. Scenario
C. Payback
D. Risk/reward
E. Impact

Scenario analysis is the easiest and most commonly used technique for analyzing risks.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 2: Risk Assessment
Level: Easy

16. A risk profile is a list of questions that address traditional areas of uncertainty on a project that answers developed from:
A. When the event might occur in the project
B. Chances of the event occurring
C. Interaction with other parts of the project or with other projects
D. From previous, similar projects
E. Magnitude or severity of the event's impact

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 2: Risk Assessment
Level: Medium

17. The risk management tool that is divided into three color-coded zones representing major, moderate, and minor risks is the risk
A. Assessment form
B. Responsibility matrix
C. Scenario assessment
D. Impact assessment
E. Risk severity matrix

The risk severity matrix provides a basis for prioritizing which risks to address. Red zone risks receive first priority followed by yellow zone risks. Green zone risks are typically considered inconsequential and ignored unless their status changes.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 2: Risk Assessment
Level: Medium

18. The risk assessment form contains all of the following except
A. Likelihood of the risk event occurring
B. Potential impact of the risk event
C. Who will detect the occurrence of the risk event.
D. Difficulty of detecting the occurrence of the risk event
E. When the risk event may occur

See Figure 7.6 on Page 217.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 2: Risk Assessment
Level: Medium

19. The two scales of a risk severity matrix measure
A. Time, cost
B. Cost, schedule
C. Impact, cost
D. Time, impact
E. Likelihood, impact

The risk matrix presented in Figure 7.7 on page 218 consists of a 5 x 5 array of elements with each element representing a different set of impact and likelihood values.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 2: Risk Assessment
Level: Medium

20. Which of the following is not one of the probability analysis tools?
A. Ratio/range analysis
B. Decision tree
C. PERT simulation
D. PERT
E. All of these are probability analysis tools

Decision trees have been used to assess alternative courses of action using expected values PERT (program evaluation and review technique) and PERT simulation can be used to review activity and project risk.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 2: Risk Assessment
Level: Medium

21. This risk assessment tool is a variation of the risk severity matrix that includes the ease of detection for each of the identified risks.
A. PERT simulation
B. FMEA analysis
C. Ratio/range analysis
D. Probability analysis
E. Semi-quantitative analysis

Failure Mode and Effects Analysis (FMEA) extends the risk severity matrix by including ease of detection in the equation: Impact x Probability x Detection = Risk Value.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 2: Risk Assessment
Level: Medium

22. Which of the following is not included in a Failure Mode and Effects Analysis?
A. Impact
B. Probability
C. Detection
D. Risk value
E. All of these are included

Failure Mode and Effects Analysis (FMEA) extends the risk severity matrix by including ease of detection in the equation: Impact x Probability x Detection = Risk Value.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 2: Risk Assessment
Level: Medium

23. Which of the following is used to review activity and project risk?
A. NPV
B. S-curves
C. PERT
D. Decision trees
E. All of these can be used

PERT (program evaluation and review technique) and PERT simulation can be used to review activity and project risk.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 2: Risk Assessment
Level: Medium

24. Which of the following is not one of the potential responses to a specific risk event?
A. Mitigating
B. Retaining
C. Ignoring
D. Transferring
E. Sharing

When a risk event is identified and assessed, a decision must be made concerning which response is appropriate for the specific event. Responses to risk can be classified as mitigating, avoiding, transferring, sharing, or retaining.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 3: Risk Response Development
Level: Medium

25. A Risk Response Matrix contains all of the following except
A. Contingency plan
B. Trigger
C. Who is responsible?
D. Response
E. All of these are included in the matrix

See Figure 7.8 on Page 224.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Contingency Planning
Level: Medium

26. The demolition of the Seattle Kingdome (Snapshot from Practice) is an example of which of the following?
A. Mitigating
B. Retaining
C. Ignoring
D. Transferring
E. Sharing

Reducing risk is usually the first alternative considered. There are basically two strategies for mitigating risk: (1) reduce the likelihood that the event will occur and/ or (2) reduce the impact that the adverse event would have on the project. Most risk teams focus first on reducing the likelihood of risk events since, if successful, this may eliminate the need to consider the potentially costly second strategy. The Dome to Dust Snapshot from Practice details the steps Controlled Demolition took to minimize damage when they imploded the Seattle Kingdome.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 3: Risk Response Development
Level: Medium

27. The risk associated with one of the key members being stuck by lightning would most likely be handled by which of the following?
A. Mitigating
B. Retaining
C. Ignoring
D. Transferring
E. Sharing

The risk of a project manager being struck by lightning at a work site would have major negative impact on the project, but the likelihood is so low it is not worthy of consideration. Conversely, people do change jobs, so an event like the loss of key project personnel would have not only an adverse impact but also a high likelihood of occurring in some organizations. If so, then it would be wise for that organization to be proactive and mitigate this risk by developing incentive schemes for retaining specialists and/or engaging in cross-training to reduce the impact of turnover.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 2: Risk Assessment
Level: Medium

28. Funds that are for identified risks that have a low probability of occurring and that decrease as the project progresses are called _____ reserves.
A. Management
B. Budget
C. Contingency
D. Padded
E. Just in case

Budget reserves are set up to cover identified risks; these reserves are those allocated to specific segments or deliverables of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Contingency Funding and Time Buffers
Level: Medium

29. Technical risks are:
A. Can often be the kind that cause the project to be shut down.
B. Problematic
C. Imposed duration dates
D. Both A and B are correct
E. A, B, and C are all correct

Technical risks are problematic; they can often be the kind that cause the project to be shut down.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Contingency Planning
Level: Medium

30. Detailing all identified risks, including descriptions, category, and probability of occurring, impact, responses, contingency plans, owners and current status is called:
A. Management reserves
B. Change control
C. Contingency reserves
D. Risk register
E. Risk profiles

A risk register details all identified risks, including descriptions, category, and probability of occurring, impact, responses, contingency plans, owners and current status.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 4: Risk Response Control
Level: Medium

31. Which of the following is identified to cover major unforeseen risks and, hence, are applied to the total project?
A. Budget reserves
B. Management reserves
C. Time buffers
D. Both B and C are correct
E. A, B, and C are all correct

Management reserve funds are needed to cover major unforeseen risks and, hence, are applied to the total project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Contingency Funding and Time Buffers
Level: Medium

32. Change management systems are designed to accomplish all of the following except:
A. Track all changes that are to be implemented
B. Review, evaluates, and approve/disapprove proposed changes formally
C. Identify expected effects of proposed changes on schedule and budget
D. Reflect scope changes in baseline and performance measures
E. All of the above are correct

See list on page 231.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Change Control Management
Level: Medium

Fill in the Blank Questions

33. The _____ impact of a risk event in a project is less if the event occurs earlier rather than later.
cost

See Figure 7.1 on Page 212.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Risk Management Process
Level: Easy

34. The likelihood of a risk event occurring _____ as a project goes through its life cycle.
decreases

See Figure 7.1 on Page 212.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Risk Management Process
Level: Easy

35. The first step in the Risk Management process is _____.
risk identification

See Figure 7.2 on Page 213.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Risk Management Process
Level: Easy

36. Risk events such as inflation, market acceptance, and government regulations are referred to as _____.
threats

The sources of project risks are unlimited. There are sources external to the organization, such as inflation, market acceptance, exchange rates, and government regulations. In practice, these risk events are often referred to as "threats" to differentiate them from those that are not within the project manager's or team's responsibility area.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Risk Management Process
Level: Medium

37. A _____ is a list of questions that address traditional areas of uncertainty on a project.
risk profile

A risk profile is a list of questions that address traditional areas of uncertainty on a project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Risk Identification
Level: Medium

38. The easiest and most commonly used technique for analyzing risks is _____.
scenario analysis

Scenario analysis is the easiest and most commonly used technique for analyzing risks.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 2: Risk Assessment
Level: Easy

39. The _____ form identifies each risk event, the likelihood of it occurring, the potential impact, when it may occur, and the degree of difficulty in detecting it.
<u>risk assessment</u>

See Figure 7.6 on Page 217.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 2: Risk Assessment
Level: Medium

40. The _____ matrix is divided into red, yellow, and green zones representing major, moderate, and minor risks.
<u>risk severity</u>

The risk severity matrix provides a basis for prioritizing which risks to address. Red zone risks receive first priority followed by yellow zone risks. Green zone risks are typically considered inconsequential and ignored unless their status changes.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 2: Risk Assessment
Level: Medium

41. The vertical scale on the Risk Severity Matrix measures the _____ of a potential risk event.
<u>likelihood</u>

See Figure 7.6 on Page 218.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 2: Risk Assessment
Level: Difficult

42. The horizontal scale on the Risk Severity Matrix measures the _____ of a potential risk event.
impact

See Figure 7.6 on Page 218.

43. In _____ the Risk Severity Matrix is extended by including the ease of detecting a risk event occurring.
Failure Mote and Effects Analysis (FMEA)

Failure Mode and Effects Analysis (FMEA) extends the risk severity matrix by including ease of detection in the equation: Impact x Probability x Detection = Risk Value.

44. In a _____, three different estimates of activity times are used to statistically predict the time an activity will take to complete.
probability analysis

There are many statistical techniques available to the project manager that can assist in assessing project risk. Decision trees have been used to assess alternative courses of action using expected values. Statistical variations of net present value (NPV) have been used to assess cash flow risks in projects. Correlations between past projects' cash flow and S-curves (cumulative project cost curve—baseline—over the life of the project) have been used to assess cash flow risks.

45. The "Snapshot from Practice" case where Ellipsus Systems developed parallel prototype systems (WAP and JAVA) is an example of _____ a risk.
<u>avoiding</u>

Risk avoidance is changing the project plan to eliminate the risk or condition. Although it is impossible to eliminate all risk events, some specific risks may be avoided before you launch the project. Rikard Kjellberg's solution was to have projects in his company's portfolio based on both standards. Ellipsus built early prototypes of both systems and took them to a trade show, with both systems sitting side by side. "We knew within an hour which way to go," says Douglas Davies, the COO. Ellipsus began securing million dollar contracts to supply its Java-based system to leading U.S. operators.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 3: Risk Response Development
Level: Medium

46. Testing a new project on a smaller isolated area prior to installing it for the entire organization is an example of _____ a risk.
<u>mitigating</u>

Reducing risk is usually the first alternative considered. There are basically two strategies for mitigating risk: (1) reduce the likelihood that the event will occur and/ or (2) reduce the impact that the adverse event would have on the project. Most risk teams focus first on reducing the likelihood of risk events since, if successful, this may eliminate the need to consider the potentially costly second strategy.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 3: Risk Response Development
Level: Medium

47. Performance bonds, warranties, and insurance are examples of _____ a risk.
<u>transferring</u>

Passing risk to another party is common; this transfer does not change risk. Passing risk to another party almost always results in paying a premium for this exemption. Fixed-price contracts are the classic example of transferring risk from an owner to a contractor.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 3: Risk Response Development
Level: Medium

48. When the entertainment industry formed a consortium to define a common operating format for DVD it was _____ the risk.
<u>sharing</u>

This strategy involves allocating some or all of the ownership of an opportunity to another party who is best able to capture the opportunity for the benefit of the project. Examples include establishing continuous improvement incentives for external contractors or joint ventures.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Contingency Planning
Level: Medium

49. If a risk event is very unlikely to occur the project owner would probably _____ the risk.
<u>retain</u>

Some risks are so large it is not feasible to consider transferring or reducing the event (e.g., an earthquake or flood). The project owner assumes the risk because the chance of such an event occurring is slim.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 3: Risk Response Development
Level: Medium

50. A _____ identifies what to do if a potential risk event actually occurs.
<u>risk response matrix</u>

See Figure 7.6 on Page 225.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Contingency Planning
Level: Medium

51. _____ reserves are identified for specific work packages and cover risks that have a low probability of occurring.
<u>Budget</u>

These reserves are identified for specific work packages or segments of a project found in the baseline budget or work breakdown structure. For example, a reserve amount might be added to "computer coding" to cover the risk of "testing" showing a coding problem. The reserve amount is determined by costing out the accepted contingency or recovery plan. The budget reserve should be communicated to the project team.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Contingency Funding and Time Buffers
Level: Medium

52. _____ reserves are controlled by the project manager and used to cover major unforeseen risks to the entire project.
<u>Management</u>

These reserve funds are needed to cover major unforeseen risks and, hence, are applied to the total project. For example, a major scope change may appear necessary midway in the project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Contingency Funding and Time Buffers
Level: Medium

53. A _____ is an alternative that will be used if a possible foreseen risk event becomes a reality.
contingency plan

A contingency plan is an alternative plan that will be used if a possible foreseen risk event becomes a reality.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Contingency Planning
Level: Easy

54. A _____ is useful for summarizing how the project team plans to manage risks that have been identified.
Risk Response Matrix

Risk response matrices such as the one shown in Figure 7.8 on page 225 are useful for summarizing how the project team plans to manage risks that have been identified.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Contingency Planning
Level: Easy

True / False Questions

55. The probability that a risk event will occur is higher during the initial stages of a project.
TRUE

The chances of a risk event occurring (e.g., an error in time estimates, cost estimates, or design technology) are greatest in the concept, planning, and start-up phases of the project.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Risk Management Process
Level: Easy

56. Due to the impact over a long period of time, risk events that occur in the early stages of a project will have a greater cost impact than those that occur in later stages.
FALSE

The cost impact of a risk event in the project is less if the event occurs earlier rather than later.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Risk Management Process
Level: Easy

57. During risk identification the smaller risks should be identified first because they will naturally lead to identifying the larger risks.
FALSE

The focus at the beginning should be on risks that can affect the whole project as opposed to a specific section of the project or network.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 1: Risk Identification
Level: Medium

58. One common mistake that is made early on in the risk identification process is to focus on consequences and not on the events that could produce consequences.
TRUE

One common mistake that is made early in the risk identification process is to focus on objectives and not on the events that could produce consequences.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 1: Risk Identification
Level: Medium

59. Risks such as inflation and monetary exchange rates are not usually included in a project's risk assessment.
TRUE

The sources of project risks are unlimited. There are sources external to the organization, such as inflation, market acceptance, exchange rates, and government regulations. In practice, these risk events are often referred to as "threats" to differentiate them from those that are not within the project manager's or team's responsibility area.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 1: Risk Identification
Level: Difficult

60. The first step in the risk management process is Risk Assessment.
Refer to Figure 7.2
FALSE

See Figure 7.2 on Page 213. The first step is Risk Identification. Risk Assessment is the second step.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 1: Risk Identification
Level: Easy

61. A risk profile is a list of questions that have been developed and refined from previous, similar projects.
TRUE

A risk profile is a list of questions that address traditional areas of uncertainty on a project. These questions have been developed and refined from previous, similar projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Risk Identification
Level: Medium

62. The risk identification process should be limited to just the core project team.
<u>FALSE</u>

The risk identification process should not be limited to just the core team. Input from customers, sponsors, subcontractors, vendors, and other stakeholders should be solicited.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 1: Risk Identification
Level: Medium

63. Since the goal is to find problems before they happen, the project manager should encourage critical thinking when it comes to risk identification.
<u>TRUE</u>

One of the keys to success in risk identification is attitude. While a "can do" attitude is essential during implementation, project managers have to encourage critical thinking when it comes to risk identification. The goal is to find potential problems before they happen.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Risk Identification
Level: Medium

64. The Risk Severity Matrix rates risk events based upon schedule and cost.
Refer to Figure 7.7
<u>FALSE</u>

See Figure 7.7 on Page 218. The Risk Severity Matrix events are based on likelihood and impact.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 2: Risk Assessment
Level: Medium

65. In a Risk Severity Matrix a green zone risk is considered inconsequential and ignored unless their status changes.
TRUE

The risk severity matrix Green zone risks are typically considered inconsequential and ignored unless their status changes.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 2: Risk Assessment
Level: Medium

66. The quality and credibility of the risk analysis process requires that different levels of risk probabilities and impacts be defined.
TRUE

The quality and credibility of the risk analysis process requires that different levels of risk probabilities and impacts be defined.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 2: Risk Assessment
Level: Easy

67. Adopting proven technology instead of experimental technology is an example of mitigating a risk.
FALSE

Adopting proven technology instead of experimental technology is an example of avoiding risk.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 3: Risk Response Development
Level: Medium

68. The FMEA method calculates a risk value by assigning ease of detection ratings to the key risk elements.
TRUE

Failure Mode and Effects Analysis (FMEA) extends the risk severity matrix by including ease of detection in the equation: Impact x Probability x Detection = Risk Value.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Step 2: Risk Assessment
Level: Medium

69. Performance bonds, warranties, and guarantees are financial instruments used to share risk.
FALSE

Performance bonds, warranties, and guarantees are other financial instruments used to transfer risk.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 3: Risk Response Development
Level: Medium

70. Fixed price contracts are an example of transferring risk from an owner to a contractor.
TRUE

Fixed-price contracts are the classic example of transferring risk from an owner to a contractor.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Step 3: Risk Response Development
Level: Easy

71. Scheduling outdoor work in the summer, investing in up front safety training, and choosing high quality materials are examples of retaining a risk.
FALSE

An example of reducing the probability of risks occurring are scheduling outdoor work during the summer months, investing in up-front safety training, and choosing high-quality materials and equipment.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 3: Risk Response Development
Level: Medium

72. Budget reserves are setup to cover identified risks associated with specific segments of a project while management reserves are set up to cover unidentified risks associated with the total project.
TRUE

Budget reserves are set up to cover identified risks; these reserves are those allocated to specific segments or deliverables of the project. Management reserves are set up to cover unidentified risks and are allocated to risks associated with the total project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Contingency Funding and Time Buffers
Level: Easy

73. Change management systems involve reporting, controlling, and recording changes to the project baseline.
TRUE

Change management systems involve reporting, controlling, and recording changes to the project baseline. (Note: Some organizations consider change control systems part of configuration management.)

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Change Control Management
Level: Easy

74. Project managers need to establish an environment in which participants feel comfortable raising concerns and admitting mistakes.
<u>FALSE</u>

Project managers need to establish an environment in which participants feel comfortable raising concerns and admitting mistakes.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Network
Level: Easy

75. Contingency funding is made up of budget reserves and management reserves.
<u>TRUE</u>

In practice, the contingency reserve fund is typically divided into budget and management reserve funds for control purposes.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Contingency Funding and Time Buffers
Level: Easy

Short Answer Questions

76. Describe the relationship between the likelihood of a risk event occurring and the cost of fixing the risk event as a project proceeds through its life cycle.

In the early stages of the project life cycle the probability of a risk event occurring is greater than at any other time and the cost to fix it is lower than at any other point. As time passes the probability of occurrence drops lower and lower while the cost rises. See figure 7-1.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Risk Management Process
Level: Easy

77. Identify and briefly describe the four steps in risk management.

1. Risk Identification; all possible risks are identified, 2. Risk Assessment; risks are assessed in terms of importance and need for attention, 3. Risk Response Development; plans are developed to respond if the risk actually occurs, and 4. Risk Response Control; the actual response to the risk and controlling changes associated with the risks.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 1: Risk Identification
Level: Medium

78. Describe the process for identifying project risks.

The project manager pulls together a risk management team consisting of core team members and other relevant stakeholders and uses brainstorming and other techniques to identify project risks. Focus should be on the WBS and the risks associated with the deliverables.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 1: Risk Identification
Level: Medium

79. What is a *risk profile* and what benefits does it provide to risk management?

A risk profile is a list of questions that address traditional areas of uncertainty on a project. The questions have been developed and refined from previous, similar projects. These profiles are generated and maintained by the project office and are updated and refined during the life of the project. This historical file assists in identifying risks for future projects.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Step 1: Risk Identification
Level: Difficult

80. Identify at least six items that may be included on a Risk Profile.

1. technical requirements, 2. Design, 3. Testing, 4. Development, 5. Schedule, 6. Budget, 7. Quality, 8. Management, 9. Work Environment, 10. Staffing, 11. Customer, and 12. Contractors.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Step 1: Risk Identification
Level: Medium

81. How should a *risk assessment* be conducted?

Not all identified risks deserve attention, some are trivial and others are serious threats. The Scenario analysis is the easiest and most commonly used technique for analyzing risks. Each risk is assessed in terms of 1. what the risk are, 2. the outcomes of the event's occurrence, 3. the severity of the event's impact, 4. the probability of the event occurring, 5. when the event may occur, and 6. the interaction with other parts of the project or other projects.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Step 2: Risk Assessment
Level: Difficult

82. What is a *Risk Severity Matrix* and what does it do?

Risks are placed on a matrix that has Likelihood as the vertical axis and Impact as the horizontal axis. Risks in the upper right corner are considered major, those further left are considered moderate, while the rest are considered minor. The matrix is usually color-coded with the major risks in red, moderate risks in yellow and minor risks in green. It is an easily read graphical representation of a project's risks.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Step 2: Risk Assessment
Level: Medium

83. Identify and briefly describe the five ways to respond to identified risks.

1. Mitigate the risk; duplicate systems, backup systems, alternate technology development, 2. Avoid the risk; changing the project plan to eliminate the risk, 3. Transfer the risk; fixed-price contract, insurance, 4. Sharing the risk; find others to share the costs of the risk, and 5. Retain the risk; take preventative measures to reduce the risk such as training.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Step 3: Risk Response Development
Level: Medium

84. What is the difference between *budget reserves* and *management reserves*?

Budget reserves are controlled by team participants and have been identified for known risks that have a low chance of occurring and are directly associated with specific work packages. Management reserves are controlled by the project manager and cover items which were unforeseen usually at the total project level.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Contingency Funding and Time Buffers
Level: Medium

85. What is Change Control Management and what function does it perform?

Change Control Management is the formal process for making and tracking changes once a project has started. Any changes must be detailed and accepted by the project team. Risks associated with making changes are thus assessed and documented.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Change Control Management
Level: Difficult

86. Identify and briefly describe the parts of a Risk Response Matrix and explain how one would be used.

The parts are: the risk event, the response, contingency plan, trigger, and who is responsible. It is used for summarizing how the project team plans to manage risks that have been identified.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Step 3: Risk Response Development
Level: Difficult

87. Compare and contrast budget reserves and management reserves.

Budget reserves are for known risks associated with specific work packages and controlled by the project managers. Management reserves are for unforeseen risks associated with the overall project and are controlled by upper management.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Contingency Funding and Time Buffers
Level: Difficult

Chapter 08 Scheduling Resources and Costs Answer Key

Multiple Choice Questions

1. Delaying noncritical activities to lower peak demand on resources is known as resource
A. Shifting
B. Effectiveness
C. Manipulating
D. Resource smoothing
E. Allocation

If resources are adequate but the demand varies widely over the life of the project, it may be desirable to even out resource demand by delaying noncritical activities (using slack) to lower peak demand and, thus, increase resource utilization. This process is called resource smoothing.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Overview of the Resource Scheduling Problem
Level: Easy

2. If resources are not adequate to meet peak demands, the resulting reschedule is termed
A. Resource-constrained scheduling
B. Time-constrained scheduling
C. Mandatory leveling
D. Project resource adjustment
E. Allocation

If resources are not adequate to meet peak demands, the late start of some activities must be delayed, and the duration of the project may be increased. This process is called resource-constrained scheduling.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Overview of the Resource Scheduling Problem
Level: Easy

3. Which of the following is a potential consequence of failing to schedule limited resources?
A. Costly activity delays
B. Costly project delays
C. Difficulty in taking quick corrective action
D. Both A and B are correct
E. A, B, and C are all correct

The consequences of failing to schedule limited resources are a costly activity and project delays usually manifest themselves midway in the project when quick corrective action is difficult.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Overview of the Resource Scheduling Problem
Level: Easy

4. When developing a new software package, the software must be designed, the code must be written, and the code must be tested. This is an example of a _____ constraint.
A. Physical
B. Technical
C. Resource
D. Schedule
E. Time

A network for a new software project could place the activities in the network, as a sequence of (1) design, (2) code, and (3) test. In other words, you cannot logically perform activity 2 until 1 is completed, and so on. The project network depicts technical constraints.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Overview of the Resource Scheduling Problem
Level: Medium

5. Which of the following is not one of the types of project constraints?
A. Physical
B. Technical
C. Resource
D. Time
E. All of these are types of project constraints

If resources are not adequate to meet peak demands, the late start of some activities must be delayed, and the duration of the project may be increased. The absence or shortage of resources can drastically alter technical constraints. In rare situations, physical factors cause activities that would normally occur in parallel to be constrained by contractual or environmental conditions.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Overview of the Resource Scheduling Problem
Level: Medium

6. Sam the project engineer has been scheduled to run the product system test at the same time he is to build a marketing prototype. This is an example of a _____ constraint.
A. Physical
B. Technical
C. Resource
D. Scheduling
E. Time

If one person must perform all activities, the resource constraint requires the activities be performed in sequence or series.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Overview of the Resource Scheduling Problem
Level: Easy

7. Susan is to conduct environmental testing but the chamber cannot hold all the equipment that she wants to test. This is an example of a _____ constraint.
A. Physical
B. Technical
C. Resource
D. Scheduling
E. Time

Since space allows only one person to work at one time, all tasks have to be performed sequentially this is a physical constraint.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Computer Demonstration of Resource-Constrained Scheduling
Level: Easy

8. All of the following are kinds of resource constraints except
A. Materials
B. People
C. Equipment
D. Information
E. All of the above are resource constraints

See list on pages 255-257.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Types of Resource Constraints
Level: Easy

9. Sam is trying to order the concrete needed to continue his project. However, the supplier won't be able to deliver it until next week. This is an example of a _____ constraint.
A. Working capital
B. People
C. Equipment
D. Information
E. Materials

Material availability and shortages have been blamed for the delay of many projects. When it is known that a lack of availability of materials is important and probable, materials should be included in the project network plan and schedule.

AACSB: Analytic
Bloom's: Reflective Thinking
Learning Objective: Types of Resource Constraints
Level: Medium

10. A special truck that George needs on his project has been scheduled on another project. This is a _____ constraint.
A. Working capital
B. People
C. Equipment
D. Information
E. Materials

Equipment is usually presented by type, size, and quantity. In some cases equipment can be interchanged to improve schedules, but this is not typical. Equipment is often overlooked as a constraint. The most common oversight is to assume the resource pool is more than adequate for the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Types of Resource Constraints
Level: Medium

11. Most of the scheduling methods available today require the project manager to classify the project as either _____ constrained or _____ constrained.
A. Time, quality
B. Quality, resource
C. Cost, time
D. Quality, cost
E. Time, resource

Most of the scheduling methods available today require the project manager to classify the project as either time constrained or resource constrained.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Classification of a Scheduling Problem
Level: Medium

12. Regina's boss has told her that her project is very important. If the critical path is delayed, she will be given whatever she needs to get it back on schedule. Her project is _____ constrained.
A. Time
B. Quality
C. Cost
D. Performance
E. Resource

A time-constrained project is one that must be completed by an imposed date. If required, resources can be added to ensure the project is completed by a specific date. Although time is the critical factor, resource usage should be no more than is necessary and sufficient.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Classification of a Scheduling Problem
Level: Medium

13. In reviewing the status of her project with top management, Shirley was told that there only were two programmers that she could use for her project. Her project is _____ constrained.
A. Time
B. Quality
C. Cost
D. Performance
E. Resource

A resource-constrained project is one that assumes the level of resources available cannot be exceeded. If the resources are inadequate, it will be acceptable to delay the project, but as little as possible.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Classification of a Scheduling Problem
Level: Medium

14. All resource leveling techniques involve
A. Delaying noncritical activities
B. Delaying critical activities
C. Using negative slack
D. Both A and C are correct
E. A, B, and C are all correct

All leveling techniques delay noncritical activities by using positive slack to reduce peak demand and fill in the valleys for the resources.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Resource Allocation Methods
Level: Medium

15. Scheduling time-constrained projects focuses on resource
A. Demands
B. Increases
C. Assumptions
D. Utilization
E. All are correct

Scheduling time-constrained projects focuses on resource utilization.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Resource Allocation Methods
Level: Medium

16. The most widely used approach to apply heuristics, which have been found to consistently minimize project delay over a large variety of projects is the
A. Parallel method
B. Resource method
C. Materials
D. Both A and C are correct
E. A, B, and C are all correct

The parallel method is the most widely used approach to apply heuristics, which have been found to consistently minimize project delay over a large variety of projects.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Resource Allocation Methods
Level: Easy

17. Resource leveling can provide
A. Lower peak demand
B. Reduced resource need over the life of the project
C. Reduced fluctuations in resource demand
D. Both A and B are correct
E. A, B, and C are all correct

Practitioners have attacked the utilization problem using resource leveling techniques that balance or smooth demand for a resource. Basically, all leveling techniques delay noncritical activities by using positive slack to reduce peak demand and fill in the valleys for the resources.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Resource Allocation Methods
Level: Medium

18. Jan is trying to reallocate resources in a time-constrained project to create smoother resource utilization with a low level of risk. She should move to activities with the
A. Smallest duration
B. Least slack
C. Most slack
D. Lowest identification number
E. Highest cost

The rationale is those activities with the most slack pose the least risk.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Difficult

19. In a resource-constrained project, which of the following is most likely to be changed?
A. The completion date
B. The budget
C. Project quality
D. Both A and B are equally likely
E. A, B, and C are all equally likely

Managers who fail to schedule resources usually encounter a scheduling risk when it is too late to work around problems, resulting in a project delay.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Resource Allocation Methods
Level: Medium

20. In a resource-constrained project, the first priority in assigning resources is usually given to activities with the
A. Smallest duration
B. Least slack
C. Most slack
D. Lowest identification number
E. Highest cost

The first activity placed in the schedule would be the activity with the least slack (rule 1).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Resource Allocation Methods
Level: Easy

21. In a resource-constrained project the second priority in assigning resources is usually given to activities with the
A. Smallest duration
B. Least slack
C. Most slack
D. Lowest identification number
E. Highest cost

If all activities have the same slack, the next rule would be invoked (rule 2), and the activity with the smallest duration would be placed in the schedule first.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Easy

22. The word Heuristics means
A. Resource constraints
B. Flexibility
C. The critical path changed
D. Parallel activities become sequential
E. Rule of thumb

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Resource Allocation Methods
Level: Medium

23. Splitting an activity creates the following situation:
A. More people working on the same activity
B. There are possible startup and shutdown costs
C. A resource may be moved from one activity to another and then back
D. Both B and C are correct
E. A, B, and C are all correct

A planner splits the continuous work included in an activity by interrupting the work and sending the resource to another activity for a period of time and then having the resource resume work on the original activity. Splitting can be a useful tool if the work involved does not include large start-up or shutdown costs—for example, moving equipment from one activity location to another. The most common error is to interrupt "people work," where there are high conceptual start-up and shutdown costs.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Splitting Activities
Level: Medium

24. The U.S. Forest Service "snapshot from practice" illustrated the importance of
A. Time constraints
B. Resource constraints
C. Cost constraints
D. Both B and C are correct
E. A, B, and C are all correct

It is important to remember that, if resources are truly limited and activity time estimates are accurate, the resource-constrained schedule will materialize as the project is implemented—not the time-constrained schedule! Therefore, failure to schedule limited resources can lead to serious problems for a project manager. The benefit of creating this schedule before the project begins leaves time for considering reasonable alternatives.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Benefits of Scheduling Resources
Level: Medium

25. More common problems associated with managing multiproject resources include all of the following except
A. Inefficient resource utilization
B. Delays in one project cause delays in other projects
C. Reducing "downtime" created by lack of tasks to perform
D. Resource bottlenecks
E. All of these are common problems

See List on page 274

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Multiproject Resource Schedules
Level: Medium

26. When a company will reduce the number of projects they have to manage internally to only core projects and send noncritical projects to contractors and consulting firms this is called
A. Outsourcing
B. Redistribution of projects
C. Project allocation
D. Task sharing
E. Both B and D are correct

Many companies are using outsourcing as a means for dealing with their resource allocation problems. In some cases, a company will reduce the number of projects they have to manage internally to only core projects and outsource noncritical projects to contractors and consulting firms. In other cases, specific segments of projects are outsourced to overcome resource deficiencies and scheduling problems.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Multiproject Resource Schedules
Level: Easy

27. Which of the following is <u>not</u> one of the more common problems associated with scheduling multiproject resources?
A. Overall schedule slippage
B. Inefficient resource utilization
C. Resource bottlenecks
D. Both A and C are correct
E. A, B, and C are all correct

See List on Page 274.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Multiproject Resource Schedules
Level: Easy

28. In a resource-constrained project the third priority in assigning resources is usually given to activities with the
A. Smallest duration
B. Least slack
C. Most slack
D. Lowest identification number
E. Highest cost

In very rare cases, when all eligible activities have the same slack and the same duration, the tie is broken by the lowest activity identification number (rule 3), since each activity has a unique ID number.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Resource Allocation Methods
Level: Easy

29. In the Botanical Garden example, which of the following was used to solve the resource problem?
A. Resource allocation
B. Smoothing resource demand
C. The parallel method
D. Both A and C are correct
E. A, B, and C are all correct

The Botanical Garden project schedule reached the three goals of smoothing: The peak of demand for the resource was reduced, resources over the life of the project have been reduced, the fluctuations in resource demand were minimized.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Medium

30. Project budgets are developed by time-phasing which of the following?
A. Resource schedules
B. Work packages
C. The network diagram
D. Both A and C are correct
E. A, B, and C are all correct

Using your project schedule, you can time-phase work packages and assign them to their respective scheduled activities to develop a budget schedule over the life of your project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Using the Resource Schedule to Develop a Project Cost Baseline
Level: Medium

31. A project budget report is showing our project as spending $35,000 against a budgeted amount of $40,000. Which of the following is true?
A. We are spending less than we should for the project
B. We are doing a good job managing the project
C. We should check to see if all the bills have been paid
D. Both A and B are correct
E. We can't be sure how the project is going

There is no way to be certain how much of the physical work has been accomplished.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Using the Resource Schedule to Develop a Project Cost Baseline
Level: Medium

Fill in the Blank Questions

32. Delaying noncritical activities to lower peak demand and, thus, increase resource utilization is called _____ leveling.
resource

Practitioners have attacked the utilization problem using resource leveling techniques that balance or smooth demand for a resource. Basically, all leveling techniques delay noncritical activities by using positive slack to reduce peak demand and fill in the valleys for the resources.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Types of Resource Constraints
Level: Easy

33. A(n) _____ constraint addresses the sequence in which project activities must occur.
technical or logic

The start and sequence of activities has been based solely on technical or logical considerations. For example, a project network for framing a house might show three activities in a sequence: (1) pour foundation, (2) build frame, and (3) cover roof.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Overview of the Resource Scheduling Problem
Level: Easy

34. Having one person responsible for performing several activities, all due at the same time, is an example of a(n) _____ constraint.
resource

If one person must perform all activities, the resource constraint requires the activities be performed in sequence or series.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Overview of the Resource Scheduling Problem
Level: Easy

35. Trying to renovate a ship compartment that is too small for more than one person is an example of a(n) _____ constraint.
physical

In rare situations, physical factors cause activities that would normally occur in parallel to be constrained by contractual or environmental conditions. For example, in theory the renovation of a sailboat compartment might involve four to five tasks that can be done independently. However, since space allows only one person to work at one time, all tasks have to be performed sequentially.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Resource Constraints
Level: Easy

36. A shortage of programmers to write software is an example of a(n) _____ type of resource constraint.
<u>people</u>

This is the most obvious and important project resource. Human resources are usually classified by the skills they bring to the project—for example, programmer, mechanical engineer, welder, inspector, marketing director, supervisor. In rare cases some skills are interchangeable, but usually with a loss of productivity. The many differing skills of human resources add to the complexity of scheduling projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Resource Constraints
Level: Easy

37. The shortage of computer chips to produce a circuit board is an example of a(n) _____ type of resource constraint.
<u>materials</u>

Material availability and shortages have been blamed for the delay of many projects. When it is known that a lack of availability of materials is important and probable, materials should be included in the project network plan and schedule.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Resource Constraints
Level: Easy

38. If three copiers are needed to produce a final report on time and only two are available, the project is facing a(n) _____ type of resource constraint.
<u>equipment</u>

The most common oversight is to assume the resource pool is more than adequate for the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Types of Resource Constraints
Level: Easy

39. Hector wants to bring on another programmer to work on the project but the company does not have anyone who has the needed skills. Hector's project is facing a(n) _____ constraint.
people type of resource

This is the most obvious and important project resource. Human resources are usually classified by the skills they bring to the project—for example, programmer, mechanical engineer, welder, inspector, marketing director, supervisor. In rare cases some skills are interchangeable, but usually with a loss of productivity. The many differing skills of human resources add to the complexity of scheduling projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Resource Constraints
Level: Easy

40. In order that the new product is on the shelf for the Christmas buying season, the development of the new product would be classified as a(n) _____ constrained project.
time

A time-constrained project is one that must be completed by an imposed date. If required, resources can be added to ensure the project is completed by a specific date. Although time is the critical factor, resource usage should be no more than is necessary and sufficient.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Classification of a Scheduling Problem
Level: Medium

41. Beth has two engineers assigned to her project and cannot get any more even if it means slipping the due date on her project. She is managing a(n) _____ constrained project.
resource

A resource-constrained project is one that assumes the level of resources available cannot be exceeded. If the resources are inadequate, it will be acceptable to delay the project, but as little as possible.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Classification of a Scheduling Problem
Level: Medium

42. All leveling techniques delay noncritical activities by using _____ to reduce peak demand.
positive slack

All leveling techniques delay noncritical activities by using positive slack to reduce peak demand and fill in the valleys for the resources.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Medium

43. Scheduling activities in a constrained project typically has _____ as the top heuristic rule.
minimum slack

See list on Page 260.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Easy

44. The _____ is the most widely used approach to apply heuristic rules to scheduling activities in a constrained project.
parallel method

The parallel method is the most widely used approach to apply heuristics, which have been found to consistently minimize project delay over a large variety of projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Resource Allocation Methods
Level: Medium

45. When using the _____ scheduling technique, the work in an activity is interrupted to work on another activity and is then resumed at a later point in time.
<u>splitting or multitasking</u>

A planner splits the continuous work included in an activity by interrupting the work and sending the resource to another activity for a period of time and then having the resource resume work on the original activity.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Splitting Activities
Level: Medium

46. In scheduling resource-constrained projects, _____ are typically used rather than optimum mathematical solutions.
<u>heuristics</u>

A few researchers have demonstrated optimum mathematical solutions to the resource allocation problem but only for small networks and very few resource types. The massive data requirements for larger problems make pure mathematical solutions (e.g., linear programming) impractical. An alternative approach to the problem has been the use of heuristics (rules of thumb) to solve large combinatorial problems.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Medium

47. In scheduling terms, _____ constrained means that project duration is fixed and resources are flexible.
<u>time</u>

In scheduling terms, time constrained means time (project duration) is fixed and resources are flexible.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Classification of a Scheduling Problem
Level: Easy

48. In scheduling terms, _____ constrained means that a specific resource is fixed and the duration of the project is flexible.
<u>resource</u>

In scheduling terms, constrained means resources are fixed and time is flexible.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Classification of a Scheduling Problem
Level: Easy

49. Start-up and shutdown costs are major considerations when using the _____ scheduling technique.
<u>splitting/multitasking</u>

The most common error is to interrupt "people work," where there are high conceptual start-up and shutdown costs.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Splitting Activities
Level: Easy

50. To deal with problems related to having several concurrent projects, companies are creating _____ to oversee the scheduling of resources across multiple projects.
<u>project offices or project departments</u>

More and more companies create project offices or departments to oversee the scheduling of resources across multiple projects.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Multiproject Resource Schedules
Level: Easy

51. Many companies are using _____ from contractors and consultants as a means of dealing with the peaks and valleys of resource allocation among projects.
<u>outsourcing</u>

Many companies are using outsourcing as a means for dealing with their resource allocation problems. In some cases, a company will reduce the number of projects they have to manage internally to only core projects and outsource noncritical projects to contractors and consulting firms. In other cases, specific segments of projects are outsourced to overcome resource deficiencies and scheduling problems.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Multiproject Resource Schedules
Level: Easy

52. The _____ is the most widely used approach to apply heuristics in resource-constrained projects.
<u>parallel method</u>

The parallel method is the most widely used approach to apply heuristics, which have been found to consistently minimize project delay over a large variety of projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Easy

53. The ability to more efficiently manage the ebbs and flows of project work is one of the major driving forces behind _____ today.
<u>outsourcing</u>

The ability to more efficiently manage the ebbs and flows of project work is one of the major driving forces behind outsourcing today.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Multiproject Resource Schedules
Level: Medium

54. Without a time-phased _____ good project schedule and cost control are impossible.
budget

These systems do not measure how much work was accomplished for the money spent! Hence, without time-phasing cost to match your project schedule, it is impossible to have reliable information for control purposes.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Using the Resource Schedule to Develop a Project Cost Baseline
Level: Medium

55. A project cost baseline is also called _____.
planned value (PV)

The outcome of these budget allocations is the project cost baseline (also called planned value—PV), which is used to determine cost and schedule variances as the project is implemented.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Using the Resource Schedule to Develop a Project Cost Baseline
Level: Medium

True / False Questions

56. The sequence of (1) pour foundation, (2) build frame, and (3) cover roof is a type of physical constraint.
FALSE

The start and sequence of activities has been based solely on technical or logical considerations. For example, a project network for framing a house might show three activities in a sequence: (1) pour foundation, (2) build frame, and (3) cover roof.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Overview of the Resource Scheduling Problem
Level: Easy

57. Too many parallel activities for one individual are an example of a resource constraint.
<u>TRUE</u>

If one person must perform all activities, the resource constraint requires the activities be performed in sequence or series.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Overview of the Resource Scheduling Problem
Level: Medium

58. A project that is not resource-constrained is time-constrained.
<u>TRUE</u>

In scheduling terms, time constrained means time (project duration) is fixed and resources are flexible, where constrained means resources are fixed and time is flexible.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Classification of a Scheduling Problem
Level: Medium

59. Resource leveling is only used on projects which are resource-constrained.
<u>FALSE</u>

Practitioners have attacked the utilization problem using resource leveling techniques that balance or smooth demand for a resource. Basically, all leveling techniques delay noncritical activities by using positive slack to reduce peak demand and fill in the valleys for the resources.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Medium

60. Resource Bottlenecks are one of the three more common problems encountered in managing multiproject resource schedules.
<u>TRUE</u>

See list on Page 274.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Multiproject Resource Schedules
Level: Medium

61. The inability to get more than two earth movers on a construction site at the same time is an example of a physical constraint.
<u>TRUE</u>

In rare situations, physical factors cause activities that would normally occur in parallel to be constrained by contractual or environmental conditions.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Types of Resource Constraints
Level: Medium

62. The most obvious and important kind of resource constraint is a lack of materials.
<u>FALSE</u>

People are the most obvious and important project resource.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Resource Constraints
Level: Easy

63. Having too few programmers and too many engineers is an example of a people resource constraint.
TRUE

Finding people with certain differing skills adds to the complexity of scheduling projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Resource Constraints
Level: Medium

64. If a project needs one earth-mover six months from now and the organization has four such machines, there is no equipment resource constraint.
FALSE

The most common oversight is to assume the resource pool is more than adequate for the project. For example, if a project needs one earth-moving tractor six months from now and the organization owns four, it is common to assume the resource will not delay the pending project. However, when the earthmoving tractor is due on-site in six months, all four machines in the pool might be occupied on other projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Resource Constraints
Level: Medium

65. A lack of readily available engineers is a technical constraint.
FALSE

When the number of people and/or equipment is not adequate to meet peak demand requirements and it is impossible to obtain more, the project manager faces a resource-constrained problem.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Easy

66. All projects are usually either time-constrained or resource-constrained.
<u>TRUE</u>

Most of the scheduling methods available today require the project manager to classify the project as either time constrained or resource constrained.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Classification of a Scheduling Problem
Level: Easy

67. To determine if a project is time-constrained or resource-constrained you would consult the project priority matrix.
<u>TRUE</u>

Project managers need to consult their priority matrix to determine which case fits their project.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Classification of a Scheduling Problem
Level: Medium

68. Scheduling time-constrained projects focuses on the optimal utilization of resources.
<u>TRUE</u>

A time-constrained project is one that must be completed by an imposed date. If required, resources can be added to ensure the project is completed by a specific date. Although time is the critical factor, resource usage should be no more than is necessary and sufficient.

AACSB: Analytic
Bloom's: Reflective Thinking
Learning Objective: Classification of a Scheduling Problem
Level: Medium

69. All leveling techniques delay noncritical activities by using positive slack to smooth out the resource requirements.
TRUE

All leveling techniques delay noncritical activities by using positive slack to reduce peak demand and fill in the valleys for the resources.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Medium

70. Scheduling time-constrained projects focuses on resource utilization.
FALSE

Scheduling time-constrained projects focuses on resource utilization.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Easy

71. Scheduling resource-constrained projects focuses on completing the project as soon as possible under the given constraints.
TRUE

When the number of people and/or equipment is not adequate to meet peak demand requirements and it is impossible to obtain more, the project manager faces a resource-constrained problem. Something has to give. The trick is to prioritize and allocate resources to minimize project delay without exceeding the resource limit or altering the technical network relationships.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Difficult

72. Heuristics are used in resource-constrained projects to develop the optimal schedule.
<u>FALSE</u>

Heuristics do not always yield an optimal schedule, but they are very capable of yielding a "good" schedule for very complex networks with many types of resources.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Medium

73. The top priority in using heuristics to allocate scare resources is those activities with the smallest duration.
<u>FALSE</u>

Heuristics allocate resources to activities to minimize project delay; that is, heuristics prioritize which activities are allocated resources and which activities are delayed when resources are not adequate.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Easy

74. The critical path in a resource-constrained schedule can be a group of disjointed, unconnected activities.
<u>TRUE</u>

The traditional critical path concept of sequential activities from the start to the end of the project is no longer meaningful. The resource constraints can break the sequence and leave the network with a set of disjointed critical activities.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Computer Demonstration of Resource-Constrained Scheduling
Level: Medium

75. Splitting is a scheduling technique used to get a better schedule or better resource utilization.
<u>TRUE</u>

Splitting tasks is a scheduling technique used to get a better project schedule and/or to increase resource utilization.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Splitting Activities
Level: Easy

76. Without a time-phased budget good project schedule and cost control are impossible.
<u>TRUE</u>

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Using the Resource Schedule to Develop a Project Cost Baseline
Level: Easy

77. Many companies are using outsourcing as a means for dealing with their resource allocation problems associated with managing multiproject resources.
<u>TRUE</u>

Companies may hire temporary workers to expedite certain activities that are falling behind schedule or contract project work during peak periods when there are insufficient internal resources to meet the demands of all projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Multiproject Resource Schedules
Level: Easy

Short Answer Questions

78. Identify and briefly describe the three types of project constraints.

1. Technical (logic); the sequence that activities must be performed, 2. resource; the absence of required people, materials, equipment, or working capital, and 3. physical; limitations based on space or environmental limits.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Overview of the Resource Scheduling Problem and Types of Resource Constraints
Level: Medium

79. What is the difference in project goals when using resource leveling on time-constrained projects and using it on resource-constrained projects?

In time-constrained projects the goal is to smooth out the peaks and valleys and thus improve the utilization. In resource-constrained projects the goal is to achieve the shortest project duration given a limited supply of resources.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Computer Demonstration of Resource-Constrained Scheduling
Level: Difficult

80. Identify the potential impacts of project constraints.

1. reduction in slack on the project network, 2. decrease in flexibility, 3. possible decrease in parallel activities, and 4. increase in the likelihood of delaying the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Resource Allocation Methods
Level: Medium

81. Identify and give an example of the three types of resource constraints.

1. People; by skill classification (engineer, programmer, salesperson), 2. materials; paint, data, parts, and 3. equipment; computers, earth-movers, office space.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Types of Resource Constraints
Level: Medium

82. Identify and briefly describe the two classifications of scheduling problems.

1. time-constrained; the end date is fixed and needed resources are available, 2. resource-constrained; the resources are fixed and the end date is flexible.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Classification of a Scheduling Problem
Level: Medium

83. What are the disadvantages of resource leveling?

1. loss of flexibility, 2. increased risk of project delay, 3. more critical or near critical activities.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Difficult

84. Why would a project manager use heuristics rather than a mathematical solution to level resources?

Mathematical models work on small networks and a small number of resources. Larger projects have massive data requirements. Heuristics tend to yield a good solution without the heavy burden imposed by math models.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Resource Allocation Methods
Level: Difficult

85. What are the three most common heuristics (in order of priority) used to allocate resources to project activities?

1. minimum slack; start with activities with the least amount of slack, 2. smallest duration; if two activities have the same slack select the one with the smallest duration, and 3. lowest activity identification number, if slack and duration are the same select the earliest activity.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Medium

86. Describe the parallel method for applying heuristics to the allocation of project resources.

The first priority is to allocate resources to the activity with the least amount of slack, usually an activity on the critical path. If more than one activity has the same amount of slack then selects the activity with the smallest duration. If more than one activity has the same slack and the same duration then select the activity that occurs the earliest.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Difficult

87. Why should project managers be cautious about using the splitting scheduling technique?

The splitting technique is where an activity is interrupted and the resources are applied to another activity. The potential problems are in the addition of shutdown and startup costs which are added as one moves from activity to activity prior to completing the original activity.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Splitting Activities
Level: Medium

88. Identify and briefly discuss the three more common problems encountered in managing multiproject resource schedules.

1. overall schedule slippage, 2. inefficient resource utilization, and 3. resource bottlenecks.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Multiproject Resource Schedules
Level: Difficult

89. Identify and briefly describe the potential impacts of resource-constrained scheduling.

1. reduced slack reduces flexibility, 2. increased number of critical and near-critical activities, 3. increase complexity due to resource constrains added to technical constraints, 4. the critical path may become a set of disjointed critical activities, and 5. formerly critical activities may now become non-critical.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Computer Demonstration of Resource-Constrained Scheduling
Level: Difficult

90. If your project has spent $50,000 versus a budget of $45,000 and it is a week ahead of schedule, is it a certainty that your project is doing well?

Not necessarily. You need more information to draw that conclusion.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Using the Resource Schedule to Develop a Project Cost Baseline
Level: Difficult

Chapter 09 Reducing Project Duration Answer Key

Multiple Choice Questions

1. The president of a software company remarks in a speech that new technologically advanced software will be available in one year. This is an example of reducing project duration caused by:
A. Imposed project deadlines
B. Time to market
C. Unforeseen project delays
D. High overhead
E. Incentive contracts

"Imposed deadlines" is another reason for accelerating project completion. For example, the president of a software company remarks in a speech that new advanced software will be available in one year. Such statements too often become imposed project duration dates—without any consideration of the problems or cost of meeting such a date. The project duration time is set while the project is in its "concept" phase before or without any detailed scheduling of all the activities in the project. This phenomenon occurs very frequently in practice!

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Rationale for Reducing Project Duration
Level: Easy

2. Intense global competition and rapid technological advances create pressure on developing projects rapidly. This is an example of reducing project duration caused by:
A. Imposed project deadlines
B. Time to market
C. Unforeseen project delays
D. High overhead
E. Incentive contracts

Intense global competition and rapid technological advances have made speed a competitive advantage. To succeed, companies have to spot new opportunities, launch project teams, and bring new products or services to the marketplace in a flash.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Rationale for Reducing Project Duration
Level: Easy

3. A contractor finished a bridge across a lake 18 months early and received more than $6 million for the early completion. This is an example of reducing project duration caused by:
A. Imposed project deadlines
B. Time to market
C. Unforeseen project delays
D. High overhead
E. Incentive contracts

Incentive contracts can make reduction of project time rewarding—usually for both the project contractor and owner. For example, a contractor finished a bridge across a lake 18 months early and received more than $6 million for the early completion. The availability of the bridge to the surrounding community 18 months early to reduce traffic grid-lock made the incentive cost to the community seem small to users.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Rationale for Reducing Project Duration
Level: Easy

4. Adverse weather, design flaws, and equipment breakdown can create negative slack. This is an example of reducing project duration caused by:
A. Imposed project deadlines
B. Time to market
C. Unforeseen project delays
D. High overhead
E. Incentive contracts

Another common reason for reducing project time occurs when unforeseen delays—for example, adverse weather, design flaws, and equipment breakdown— cause substantial delays midway in the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Rationale for Reducing Project Duration
Level: Easy

5. Total project costs include all of the following except:
A. Supervision
B. Administration
C. Project manager's salary
D. Interest
E. All of these are included in total project costs

Direct costs commonly represent labor, materials, equipment, and sometimes subcontractors. Indirect costs generally represent overhead costs such as supervision, administration, consultants, and interest.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Cost-Duration Graph
Level: Medium

6. Which of the following is <u>not</u> considered a project indirect cost?
A. Supervision
B. Consultants
C. Equipment
D. Interest
E. All of these are considered project indirect costs

Indirect costs generally represent overhead costs such as supervision, administration, consultants, and interest.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Cost-Duration Graph
Level: Medium

7. Project costs are generally classified as _____ costs.
A. Direct
B. Indirect
C. Overhead
D. Both A and B are correct
E. A, B, and C are all correct

Direct Costs + Indirect Costs = Total Costs

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

8. Low-cost, realistic, efficient methods for completing an activity under normal conditions are supported by _____ time.
A. Normal
B. Budget
C. Optimized
D. Expected
E. Target

Normal time assumes low-cost, efficient methods to complete the activity.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

9. The shortest possible time an activity can be completed realistically is called ___ time.
A. Expedited
B. Accelerated
C. Crash
D. Optimistic
E. Optimal

The shortest possible time an activity can realistically be completed in is called its crash time.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

10. The most common response for meeting unattainable deadlines is to
A. Reduce or scale back the scope of the project.
B. Decrease the critical paths
C. Crash all elements of the project
D. Change the time to market statement
E. B, and C are correct

It is prudent to examine the direct costs of shortening the critical path versus the overhead cost savings.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Options for Accelerating Project Completion
Level: Easy

11. _____ costs are incurred when completing an activity in its realistically shortest time.
A. Normal
B. Reserve
C. Crash
D. Accelerated
E. Expedited

The shortest possible time an activity can realistically be completed in is called its crash time. The direct cost for completing an activity in its crash time is called crash cost.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

12. An activity's crash costs include _____ costs.
A. Direct
B. Indirect
C. Overhead
D. Both A and B are correct
E. A, B, and C are correct

The direct cost for completing an activity in its crash time is called crash cost. Both normal and crash times and costs are collected from personnel most familiar with completing the activity.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

13. Cost slope can be determined by dividing the
A. Run by the rise
B. Rise by the run
C. Crash cost by the normal cost
D. Normal cost by the crash cost
E. Both B and C are correct

Cost slope = Rise/Run

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

14. The less steep the cost slope of an activity, the
A. Less it costs to shorten one time period
B. More it costs to shorten one time period
C. Smaller the crash time
D. Larger the crash time
E. Cannot be determined by the information given

The less steep the cost slope of an activity, the less it costs to shorten one time period.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

15. Which of the following correctly calculates an activity's cost slope?
A. (normal cost-crash cost)/(normal time-crash time)
B. (crash cost-normal cost)/(normal time-crash time)
C. (normal time-crash time)/(crash cost-normal cost)
D. (normal time-crash time)/(normal cost-crash cost)
E. (crash cost-normal cost)/(crash time-normal time)

(crash cost-normal cost)/(normal time-crash time).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

16. An activity's cost slope represents an activity's
A. Total cost per unit of time
B. Cost per unit of time
C. Indirect cost per unit of time
D. Both B and C are correct
E. A, B, and C are all correct

Knowing the slope of activities allows managers to compare which critical activities to shorten. The less steep the cost slope of an activity, the less it costs to shorten one time period; a steeper slope means it will cost more to shorten one time unit.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

17. In selecting the best activity to reduce you would first select the activity with the
A. Earliest start time
B. Steepest slope
C. Least steep slope
D. Longest duration
E. Largest crash time

The less steep the cost slope of an activity, the less it costs to shorten one time period.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

18. The optimum duration for a project is at the point where:
A. Direct costs are the lowest
B. Indirect costs are the lowest
C. Direct costs equal indirect costs
D. Total project costs are the lowest
E. The project changes from time-constrained to resource-constrained

See Figure 9.6 on Page 318.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

19. Creating a Project Cost-Duration graph is useful:
A. During the pre-project planning phase
B. After the project has begun
C. After the completion of the project
D. Both A and B are correct
E. A, B, and C are all correct

Such a graph can be used before the project begins or while the project is in progress.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Medium

20. Crashing a project should occur:
A. As early as possible
B. As late as possible
C. Midway through the project
D. Both A and C are correct
E. Cannot be determined with the information given

Collecting crash times for even a moderate-size project can be difficult. The meaning of crash time is difficult to communicate. What is meant when you define crash time as "the shortest time you can realistically complete an activity"? Crash time is open to different interpretations and judgments.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Difficult

21. If a network has several critical or near-critical paths it is deemed to be:
A. Well planned
B. The lowest cost alternative
C. Resource-constrained
D. Sensitive
E. Insensitive

A network is sensitive if it has several critical or near-critical paths.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Practical Considerations
Level: Easy

22. The project direct-cost line near the normal point is usually:
A. Sloped steeply
B. Relatively flat
C. Rising
D. Falling
E. Gently sloped

The project direct-cost line near the normal point is usually relatively flat.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Medium

23. The relationship between cost and time for various durations is assumed to be:
A. Linear
B. Curvilinear
C. Variable
D. Conversely related
E. Exponentially related

The cost-time relationship is linear.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

24. A common method for shortening the project time is to:
A. Adding resources
B. Schedule overtime
C. Subcontract an activity
D. Both A and B are correct
E. A, B, and C are all correct

The most common method for shortening project time is to assign additional staff and equipment to activities.

25. A positive situation where moving toward the optimum time can result in very real, large savings—this occurs when the network is:
A. Insensitive
B. Sensitive
C. Ahead of schedule
D. Shifting to the critical chain
E. Implementing a fast-tracking system

A positive situation where moving toward the optimum time can result in very real, large savings—this occurs when the network is insensitive.

26. Which of the following is/are included in a Project Cost-Duration Graph?
A. Total indirect cost
B. Total direct cost
C. Total project cost
D. Both A and B are correct
E. A, B, and C are all correct

See list on Page 314.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

27. One way of reducing project costs is identifying tasks that _____ can do themselves.
A. Vendors
B. Suppliers
C. Customers
D. Company employees
E. Project teams

One way of reducing project costs is identifying tasks that customers can do themselves. Homeowners frequently use this method to reduce costs on home improvement projects. For example, to reduce the cost of a bathroom remodel, a homeowner may agree to paint the room instead of paying the contractor to do it. On IS projects, a customer may agree to take on some of the responsibility for testing equipment or providing in-house training.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Is the Issue?
Learning Objective: Not Time
Learning Objective: What if Cost
Level: Easy

28. The most common method for shortening project time is to
A. Subcontract activities
B. Compromise the quality
C. Add additional staff and equipment
D. Work overtime
E. Reduce the project scope

The most common method for shortening project time is to assign additional staff and equipment to activities.

29. Which of the following is <u>not</u> one of the more commonly used options for cutting project costs?
A. Reduce project scope
B. Have owner take more responsibility
C. Moving the completion date further out
D. Brainstorming cost savings options
E. Outsourcing project activities

Ways to cut costs are Reduce project scope, have the owner take more responsibility, outsourcing project activities or even the entire project, brainstorming cost savings options.

30. Which of the following is the most common method for shortening project time?
A. Assigning additional staff and equipment
B. Subcontract work
C. Schedule overtime
D. Reduce project scope
E. Reduce the quality

The most common method for shortening project time is to assign additional staff and equipment to activities.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Options for Accelerating Project Completion
Level: Easy

31. According to Brooks' Law, adding more people to a late project is most likely to have which of the following impact?
A. Keep the project from slipping any further
B. Get the project back on schedule
C. Make the project slips further
D. Both A and B are correct
E. None of these relate to Brooks' Law

Brooks' law: Adding manpower to a late project makes it later.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Options for Accelerating Project Completion
Level: Easy

32. Which of the following is the easiest method for shortening project time?
A. Assigning additional staff and equipment
B. Subcontract work
C. Schedule overtime
D. Reduce project scope
E. Reduce the quality

The easiest way to add more labor to a project is not to add more people, but to schedule overtime.

33. Which of the following is <u>not</u> one of the techniques for accelerating project completion?
A. Assigning additional staff and equipment
B. Establish a core team
C. Do it twice—fast and correctly
D. Reduce project scope
E. All of these are acceptable techniques

Adding resources, outsourcing project work, scheduling overtime, establishing a core project team, and the concept of do it twice - fast and correctly are options when resources are not constrained.

34. When the project team is salaried, which of the following is the preferred choice for accelerating project completion?
A. Assigning additional staff and equipment
B. Subcontract work
C. Schedule overtime
D. Work longer hours
E. Both C and D are preferred choices

Overtime and working longer hours is the preferred choice for accelerating project completion, especially when the project team is salaried.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Options for Accelerating Project Completion
Level: Easy

35. The Snapshot from Practice "Cell-Phone Wars" is an excellent example of reducing project duration due to:
A. Imposed project deadlines
B. Time to market
C. Unforeseen project delays
D. High overhead
E. Incentive contracts

There are many good reasons for attempting to reduce the duration of a project. One of the more important reasons today is time to market. Intense global competition and rapid technological advances have made speed a competitive advantage. To succeed, companies have to spot new opportunities, launch project teams, and bring new products or services to the marketplace in a flash. Perhaps in no industry does speed matter as much as in the electronics industry.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Rationale for Reducing Project Duration
Level: Easy

Fill in the Blank Questions

36. When a politician makes a public statement that a new building will be available in two years, a(n) _____ duration has reduced the project duration.
imposed

"Imposed deadlines" is another reason for accelerating project completion. For example, a politician makes a public statement that a new law building will be available in two years.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Rationale for Reducing Project Duration
Level: Easy

37. Intense global competition and rapid technological advances combine to create a(n) _____ imposed project duration date.
market

Intense global competition and rapid technological advances have made speed a competitive advantage. To succeed, companies have to spot new opportunities, launch project teams, and bring new products or services to the marketplace in a flash.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Rationale for Reducing Project Duration
Level: Easy

38. The Snapshot from Practice which detailed the Northridge earthquake demonstrated the importance of reducing a project's _____.
duration

The project duration time is set while the project is in its "concept" phase before or without any detailed scheduling of all the activities in the project. For each day that the schedule was beaten, a sizable bonus was to be awarded. Conversely, for each day over the deadline, the contractor would be penalized the same amount. The amount ($50,000 to $200,000) varied depending on the importance of the work.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Options for Accelerating Project Completion
Level: Easy

39. Sometimes very high _____ costs are recognized before a project begins and reducing these costs through shorter project durations becomes a high priority.
<u>overhead</u>

Sometimes very high overhead costs are recognized before the project begins. In these cases it is prudent to examine the direct costs of shortening the critical path versus the overhead cost savings.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Rationale for Reducing Project Duration
Level: Easy

40. The _____ project cost is the sum of the indirect and direct costs.
<u>total</u>

see Figure 9.5 on Page 318.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

41. Costs such as supervision, administration, consultants, and interest are examples of _____ project costs.
<u>indirect</u>

Indirect costs generally represent overhead costs such as supervision, administration, consultants, and interest.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Cost-Duration Graph
Level: Easy

42. Costs such as labor, materials, equipment, or contractors are examples of _____ project costs.
direct

Direct costs commonly represent labor, materials, equipment, and sometimes subcontractors.

43. Direct costs are assignable directly to a project _____.
work package

Direct costs are assigned directly to a work package and activity, hence the term.

44. Because direct costs are assumed to be developed from normal methods and time, any reduction in activity time should _____ the cost of the activity.
increase

Because direct costs are assumed to be developed from normal methods and time, any reduction in activity time should add to the costs of the activity.

45. To shorten the duration of a project the project manager should limit the choices of activities to just those which _____.
are on the critical path

Sometimes very high overhead costs are recognized before the project begins. In these cases it is prudent to examine the direct costs of shortening the critical path versus the overhead cost savings. Usually there are opportunities to shorten a few critical activities at less than the daily overhead rate. Under specific conditions (which are not rare), huge savings are possible with little risk.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Rationale for Reducing Project Duration
Level: Medium

46. The _____ time for an activity represents low-costs, realistic, efficient methods for completing the activity under typical conditions.
normal

Normal time assumes low-cost, efficient methods to complete the activity.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

47. Shortening an activity is called _____.
crashing

Shortening an activity is called crashing.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

48. The direct costs for completing an activity as early as possible is called its _____.
crash cost

The direct cost for completing an activity in its crash time is called crash cost. Both normal and crash times and costs are collected from personnel most familiar with completing the activity.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

49. An activity's _____ is calculated by dividing the rise by the run.
slope

Cost Slope = Rise/Run

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

50. Subtracting an activity's normal cost from the crash cost will calculate an activity's _____.
rise

Rise = Crash cost - Normal cost

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

51. Subtracting an activity's crash time from the normal time will calculate an activity's
_____.
<u>run</u>

Run = Normal time - Crash time

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

52. When considering whether to move the project to its optimum cost-time position, the
manager should also consider _____.
<u>risk</u>

Should the project owner or project manager go for the optimum cost-time? The answer is, "It
depends." Risk must be considered.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Medium

53. A network is considered to be _____ if it has a predominate critical path with no other
path close in terms of slack.
<u>insensitive</u>

There is a positive situation where moving toward the optimum time can result in very real,
large savings—this occurs when the network is insensitive. A project network is insensitive if
it has a dominant critical path, that is, no near-critical paths. In this project circumstance,
movement from the normal time point toward the optimum time will not create new or near-
critical activities.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Medium

54. The easiest way to add more resources to a project is not to add more people, but to schedule _____.
<u>overtime</u>

The easiest way to add more labor to a project is not to add more people, but to schedule overtime.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Options for Accelerating Project Completion
Level: Medium

55. According to _____, adding more manpower to a late software project makes it later.
<u>Brooks' law</u>

Brooks' law: Adding manpower to a late software project makes it later.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Options for Accelerating Project Completion
Level: Medium

56. The easiest way to add more labor to a project is not to add more people, but to add _____.
<u>overtime</u>

The easiest way to add more labor to a project is not to add more people, but to schedule overtime.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Options for Accelerating Project Completion
Level: Easy

57. _____ is the rearranging of the project network logic so that critical activities are done in parallel rather than sequentially.
Fast-tracking

Fast-Tracking Makes it possible to rearrange the logic of the project network so that critical activities are done in parallel (concurrently) rather than sequentially.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Options for Accelerating Project Completion
Level: Easy

58. _____ is probably the most common response for meeting unattainable deadlines.
Reducing project scope

Probably the most common response for meeting unattainable deadlines is to reduce or scale back the scope of the project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Options for Accelerating Project Completion
Level: Easy

59. In the "I'll Bet You..." Snapshot from Practice, the draftsman won _____ for making a very difficult deadline.
tickets to a basketball game

Brue Young tells Danny that he knows this is going to be a rush job, but he is confident that he can do it. When Danny balks, he responds, "I tell you what, I'll make a bet with you. If you are able to finish the design by 4:00, I'll make sure you get two of the company's tickets to tomorrow night's Celtics-Knicks basketball game." Danny accepts the challenge, works feverishly to complete the assignment, and is able to take his daughter to her first professional basketball game.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Easy

True / False Questions

60. A rule of thumb for moderate- to high-technology firms is that a six-month delay in bringing a product to market can result in a gross profit loss of about 35 percent.
TRUE

For example, a rule of thumb for moderate- to high-technology firms is that a six-month delay in bringing a product to market can result in a loss of market share of about 35 percent.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Rationale for Reducing Project Duration
Level: Medium

61. Imposed project durations almost always leads to a higher-cost project than one planned with detailed scheduling of all the project's activities.
TRUE

"Imposed deadlines" is another reason for accelerating project completion. The project duration time is set while the project is in its "concept" phase before or without any detailed scheduling of all the activities in the project. This phenomenon occurs very frequently in practice! Unfortunately, this practice almost always leads to a higher cost project than one that is planned using low-cost and detailed planning. In addition, quality is sometimes compromised to meet deadlines. More important, these increased costs of imposed duration dates are seldom recognized or noted by project participants.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Rationale for Reducing Project Duration
Level: Medium

62. Managers have several effective methods for crashing specific project activities when resources are not constrained.
TRUE

Managers have several effective methods for crashing specific project activities when resources are not constrained.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Options for Accelerating Project Completion
Level: Easy

63. Indirect costs generally represent overhead costs such as supervision, administration, consultants, and interest.
<u>TRUE</u>

Indirect costs generally represent overhead costs such as supervision, administration, consultants, and interest.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Cost-Duration Graph
Level: Easy

64. The total cost for each possible duration of a project is the sum of labor, materials, and equipment.
<u>FALSE</u>

Direct costs commonly represent labor, materials, equipment, and sometimes subcontractors.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Cost-Duration Graph
Level: Easy

65. Direct costs are so named because they can be assigned directly to a work package and activity.
<u>TRUE</u>

Direct costs are assigned directly to a work package and activity, hence the term. The ideal assumption is that direct costs for an activity time represent normal costs, which typically mean low-cost, efficient methods for a normal time.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Cost-Duration Graph
Level: Medium

66. Because direct costs are assumed to be developed from normal methods and time, any reduction in activity time should add to the costs of the activity.
TRUE

Because direct costs are assumed to be developed from normal methods and time, any reduction in activity time should add to the costs of the activity.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Cost-Duration Graph
Level: Medium

67. The sum of the costs of all the work packages represents the total direct costs for the project.
TRUE

The sum of the costs of all the work packages or activities represents the total direct costs for the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

68. Incentive contracts can make reduction of project time rewarding—usually for both the project contractor and owner.
TRUE

Incentive contracts can make reduction of project time rewarding—usually for both the project contractor and owner.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Rationale for Reducing Project Duration
Level: Medium

69. Shortening an activity's duration is termed *crashing*.
TRUE

Shortening an activity is called crashing.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

70. Expected time for an activity represents low-cost, realistic, efficient methods for completing the activity under anticipated conditions.
FALSE

Normal time for an activity represents low-cost, realistic, efficient methods for completing the activity under normal conditions.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

71. *Crash cost* is the incremental cost incurred when an activity is reduced in duration.
FALSE

The direct cost for completing an activity in its crash time is called crash cost.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

72. The cost slope of an activity is calculated by dividing the run by the rise.
FALSE

Cost Slope = Rise/Run

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

73. *Crash time* is the greatest time reduction possible under realistic conditions.
TRUE

The shortest possible time an activity can realistically be completed in is called its crash time.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Easy

74. The higher the slope of an activity the greater the cost to reduce its duration.
TRUE

A steeper slope means it will cost more to shorten one time unit.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

75. Creating a Project Cost-Duration Graph in the pre-project planning phase without an imposed duration is the best time to use this tool.
TRUE

Creating the graph in the preproject planning phase without an imposed duration is the first choice because normal time is more meaningful.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Medium

76. Crashing a more expensive activity may be wise if fewer inherent risks are involved.
TRUE

Crashing a more expensive activity may be wise if fewer inherent risks are involved.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Easy

77. A project network is classified as sensitive if it has a large number of interacting paths.
FALSE

A network is sensitive if it has several critical or near-critical paths.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Medium

78. Collecting crash times for a moderate-size project is relatively easy.
<u>FALSE</u>

Collecting crash times for even a moderate-size project can be difficult.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Practical Considerations
Level: Medium

79. While the relationship between normal and crash times is really curvilinear, the assumption that it is linear is seldom a concern for practicing managers.
<u>TRUE</u>

Because the accuracy of compressed activity times and costs is questionable, the concern of some theorists—that the relationship between cost and time is not linear but curvilinear—is seldom a concern for practicing managers.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Medium

80. The accuracy of crash times and costs is frequently rough at best, when compared with normal time and cost.
<u>TRUE</u>

Regardless of the comfort level, the accuracy of crash times and costs is frequently rough at best, when compared with normal time and cost.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Practical Considerations
Level: Easy

81. One of the advantages of using a Project Cost-Duration Graph is that it keeps the importance of indirect costs in the forefront of decision making.
<u>TRUE</u>

The creation of such a graph keeps the importance of indirect costs in the forefront of decision making.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Easy

Short Answer Questions

82. Identify and briefly describe five reasons for attempting to reduce the duration of a project.

1. imposed durations made by top management, 2. market demands created by competition and rapid technology advances, 3. incentive contracts that pay for early project completion, 4. recovery of unforeseen project delays, 5. to reduce project costs by reducing charges created by high overhead costs, 6. to reassign key resources to other projects.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Resource Allocation Methods
Level: Difficult

83. Identify and give an example for both of the major categories that make up project costs.

1. Indirect costs; supervision, administration, consultants, and interest, and 2. direct costs; labor, materials, and equipment.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Cost-Duration Graph
Level: Medium

84. Draw a typical Project Cost-Duration Graph and label the key elements.

See Figure 9-1 in your text.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Cost-Duration Graph
Level: Medium

85. Why is the project duration with the lowest direct costs seldom the optimum duration for a project?

Indirect costs, those accumulating each day, will at some point outweigh the reduction in direct costs leading to an increase in total costs. The Project Cost-Duration graph is a model that demonstrates this.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Practical Considerations
Level: Difficult

86. Given an equal level of risk and the need to reduce overall project duration, why would you not select the activity with the lowest slope in the entire project network to crash first?

If it is not on the critical path crashing it will not reduce project duration.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Practical Considerations
Level: Difficult

87. What is *crashing* and include a discussion of *crash time* and *crash cost*?

Crashing is shortening an activity's duration. Crash time is the shortest realistic time that an activity can be completed. Crash costs are the total costs associated with the crash time.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

88. How would you calculate an activity's slope and what does it represent?

An activity's slope is the cost per unit of time to reduce its duration. It is calculated by dividing the rise by the run.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

89. Given that an activity's normal time and cost are ten days and $400, and its crash time is five days and $800, what is the activity's slope?

(crash cost-normal cost)/(normal time-crash time) = ($800-$400)/(10-5) = $80 per day

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Medium

90. What do we mean when we say that a project network is *sensitive* and why is that important to a project manager?

A network is sensitive if it has several critical or near-critical paths. This is important because the PM cannot only focus on the critical path due to the possibilities of relatively small activity delays that will cause other paths to become critical.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Practical Considerations
Level: Medium

91. Identify options for accelerating a project schedule when resources are <u>not</u> constrained.

1. outsourcing project work, 2. scheduling overtime, 3. adding resources, 4. establish a core project team, and 5. do it twice.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Options for Accelerating Project Completion
Level: Difficult

92. Identify options for accelerating a project schedule when resources are constrained or the budget is severely constrained.

1. fast-tracking, 2. critical chain, 3. brainstorming time savers, 4. reducing project scope, 5. phase project delivery, and 6. compromise quality.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Options for Accelerating Project Completion
Level: Difficult

93. What are the benefits to using a Project Cost-Duration Graph to assist in comparing any proposed alternative or change with the current baseline?

One of the advantages of using a Project Cost-Duration Graph is that it keeps the importance of indirect costs in the forefront of decision making. Indirect costs are frequently forgotten when the pressure for action is intense.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Constructing a Project Cost-Duration Graph
Level: Difficult

94. What is Critical-chain (C-C) project management and why can it be of benefit to project managers?

C-C project management focuses on the activities that constrain the overall schedule and reapplies resources in these situations where speed is essential to a project.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Options for Accelerating Project Completion
Level: Difficult

Chapter 10 Leadership: Being an Effective Project Manager Answer Key

Multiple Choice Questions

1. Project success or failure often depends upon the contributions of all of the following except:
A. Customers
B. Suppliers
C. Contractors
D. Competitors
E. Top management

Project success does not just depend on the performance of the project team. Success or failure often depends on the contributions of top management, functional managers, customers, suppliers, contractors, and others.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Managing versus Leading a Project
Level: Easy

2. Project leadership is about coping with:
A. Formulating plans and objectives
B. Monitoring results against plans
C. Change
D. Taking corrective action when necessary
E. All of these are part of leadership

Project Managers often have to deviate from what was planned and introduce significant changes in the project scope and schedule to respond to unforeseen threats or opportunities.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing versus Leading a Project
Level: Medium

3. The difference between project management and project leadership is that project management includes:
A. Recognizing the need to alter direction
B. Aligning people to meet new directions
C. Monitoring results against plans
D. Motivating people to meet new objectives
E. All of these are leadership functions

Good management brings about order and stability by formulating plans and objectives, designing structures and procedures, monitoring results against plans, and taking corrective action when necessary. Leadership involves recognizing and articulating the need to significantly alter the direction and operation of the project, aligning people to the new direction, and motivating them to work together to overcome hurdles produced by the change and to realize new objectives.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing versus Leading a Project
Level: Medium

4. Well-defined projects that encounter no significant surprises require little:
A. Management
B. Leadership
C. Monitoring
D. Corrective action
E. All of these are only required to a minor extent

Well-defined projects that encounter no significant surprises require little leadership.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Managing versus Leading a Project
Level: Medium

5. Which of the following requires more management rather than leadership?
A. Taking corrective action
B. Changes in project scope
C. Technological stalemates
D. Breakdowns in coordination between people
E. All of these require the same level of management

Good management brings about order and stability by formulating plans and objectives, designing structures and procedures, monitoring results against plans, and taking corrective action when necessary.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Managing versus Leading a Project
Level: Medium

6. In conducting meetings an effective project manager will take the role of a:
A. Parliamentarian
B. Master of ceremonies
C. Conductor
D. Cattle herder
E. Teacher

A popular metaphor for the role of a project manager is that of conductor.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Managing Project Stakeholders
Level: Easy

7. Project managers often find themselves negotiating with all the following except:
A. Vendors
B. Functional managers
C. Consultants
D. Competitors
E. All of these are correct

During the course of a system integration project, a project manager was surprised by how much time she was spending negotiating and working with vendors, consultants, technical specialists, and other functional managers.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Managing Project Stakeholders
Level: Easy

8. Groups such as human resources, information systems, purchasing agents, and maintenance are typically classified as:
A. Project managers
B. Administrative support
C. Functional managers
D. Project sponsors
E. Customers

There are also other managers who provide resources and/or may be responsible for specific segments of the project, and administrative support services such as human resources, finance, etc.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Managing Project Stakeholders
Level: Easy

9. The closest relationships in a project network of relationships are with:
A. Other project managers
B. Project sponsors
C. Top management
D. Customers
E. Project team members

Refer to Figure 10.1on page 342.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing Project Stakeholders
Level: Easy

10. The second ring in the network of relationships for project managers includes all of the following except:
A. Other project managers
B. Customers
C. Functional managers
D. Top management
E. Project sponsors

Refer to Figure 10.1on page 342.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Managing Project Stakeholders
Level: Medium

11. The outer ring in the network of relationships for project managers includes all of the following except:
A. Other organizations
B. Customers
C. Contractors
D. Government agencies
E. Administrative support

Refer to Figure 10.1on page 342.

12. The old-fashion view of managing projects emphasized which of the following?
A. Planning
B. Directing
C. Controlling
D. Both B and C are correct
E. A, B, and C are all correct

The old-fashioned view of managing projects emphasized directing and controlling subordinates; the new perspective emphasizes managing project stakeholders and anticipating change as the most important jobs.

13. The new perspective of project management emphasizes which of the following?
A. Financial control
B. Managing project stakeholders
C. Schedule/cost tradeoffs
D. Both A and B are correct
E. A, B, and C are all correct

The new perspective emphasizes managing project stakeholders and anticipating change as the most important jobs.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing Project Stakeholders
Level: Medium

14. Networks are mutually beneficial alliances that are generally governed by the law of:
A. Supply-demand
B. Brooks's law
C. Reciprocity
D. A squeaky wheel
E. Risk-reward

Networks are mutually beneficial alliances that are generally governed by the law of reciprocity. The basic principle is that "one good deed deserves another, and likewise, one bad deed deserves another."

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Influence as Exchange
Level: Easy

15. In terms of commonly traded organizational currencies, vision, excellence, and ethical correctness are part of _____ related currencies.
A. Task
B. Position
C. Inspiration
D. Relationship
E. Personal

Refer to Table 10.1on page 345.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Influence as Exchange
Level: Medium

16. In terms of commonly traded organizational currencies, resources, assistance, cooperation, and information are part of _____ related currencies.
A. Task
B. Position
C. Inspiration
D. Relationship
E. Personal

Refer to Table 10.1on page 345.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Influence as Exchange
Level: Medium

17. In terms of commonly traded organizational currencies, acceptance, personal support, and understanding are part of _____ related currencies.
A. Task
B. Position
C. Inspiration
D. Relationship
E. Personal

Refer to Table 10.1on page 345.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Influence as Exchange
Level: Medium

18. In terms of commonly traded organizational currencies, advancement, recognition, visibility, and networks are part of _____ related currencies.
A. Task
B. Position
C. Inspiration
D. Relationship
E. Personal

Refer to Table 10.1on page 345.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Influence as Exchange
Level: Medium

19. In terms of commonly traded organizational currencies, learning, ownership, and gratitude are part of _____ related currencies.
A. Task
B. Position
C. Inspiration
D. Relationship
E. Personal

Refer to Table 10.1on page 345.

20. In mapping dependencies for a project, the project manager should:
A. Overestimate
B. Underestimate
C. Precisely estimate
D. Either B or C are correct
E. None of these are correct

It is always better to overestimate rather than underestimate dependencies. All too often, otherwise talented and successful project managers have been derailed because they were blindsided by someone whose position or power they had not anticipated.

21. Which of the following is used at Hewlett-Packard for building relationships with key players that will determine a project's success?
A. MBO
B. MBA
C. GIGO
D. MBWA
E. PMI

A management style employees at Hewlett-Packard refer to as "management by wandering around" (MBWA) to reflect that managers spend the majority of their time outside their offices. MBWA is somewhat of a misnomer in that there is a purpose/pattern behind the "wandering." Through face-to-face interactions, project managers are able to stay in touch with what is really going on in the project and build cooperation essential to project success.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Easy

22. In the Snapshot from Practice "Managing Expectations", one of the key aspects to project success was stated to be the managing of stakeholder:
A. Relations
B. Expectations
C. Involvement
D. Influence
E. Input

All stakeholders have expectations about the schedule, cost, and project benefits. Project managers need to listen for, understand, and manage these expectations.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Social Network Building
Level: Medium

23. In the Research Highlight, Ancona and Caldwell identified key patterns of activity which contribute to creating a high performance team. Which of the following is not one of those?
A. Negotiator
B. Ambassador
C. Task coordinator
D. Scouts
E. Guard

The four Key patterns are ambassador, task coordinator, scouts, and guard.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Social Network Building
Level: Medium

24. Which of the following is not one of the aspects of leading by example?
A. Priorities
B. Ethics
C. Urgency
D. Cooperation
E. Power

Refer to Figure 10.4on page 353.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Social Network Building
Level: Medium

25. The traits of successful project managers include all of the following except:
A. Pessimist
B. Proactive
C. Skillful politician
D. Effective time management
E. Personal integrity

See List on pages 360-361.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Qualities of an Effective Project Manager
Level: Easy

26. Unlike project leadership, project management is about coping with:
A. Change
B. Aligning people to any new directions
C. Monitoring results against plans
D. Recognizing the need to alter plans
E. All of these are part of project management

Good management brings about order and stability by formulating plans and objectives, designing structures and procedures, monitoring results against plans, and taking corrective action when necessary.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Managing versus Leading a Project
Level: Medium

27. In a survey of project managers, approximately what percentage reported that they encountered ethical issues in their work?
A. 22 percent
B. 40 percent
C. 65 percent
D. 81 percent
E. 100 percent

In a survey of project managers, 81 percent reported that they encounter ethical issues in their work.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Ethics and Project Management
Level: Easy

28. The key to exercising influence is:
A. To make few mistakes
B. To build trust
C. To build a network of top level people
D. To understand the political connections within the organization
E. To make friends with everyone

Conversely, trust is the "lubricant" that maintains smooth and efficient interactions. When you trust, people are more likely to take your actions and intentions at face value when circumstances are ambiguous.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Building Trust: The Key to Exercising Influence
Level: Easy

29. Which of the following is not one of the distinguishing traits of character?
A. Openness
B. Consistency
C. Empathetic
D. Sense of purpose
E. Hard work

One of the distinguishing traits of character is consistency. When people are guided by a core set of principles, they are naturally more predictable because their actions are consistent with these principles. Another feature of character is openness. When people have a clear sense of who they are and what they value, they are more receptive to others. This trait provides them with the capacity to empathize and the talent to build consensus among divergent people. Finally, another quality of character is a sense of purpose.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Building Trust: The Key to Exercising Influence
Level: Medium

30. Which of the following would be defined as the ability or skill to perceive, assess and manage the emotions of one 's self and others?
A. Emotional stability
B. Coolness under pressure
C. Emotional intelligence
D. Empathy
E. Management sensitivity

Emotional intelligence (EQ) describes the ability or skill to perceive, assess, and manage the emotions of one's self and others.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Qualities of an Effective Project Manager
Level: Medium

Fill in the Blank Questions

31. Management is about coping with complexity; _____ is about coping with change.
<u>leadership</u>

According to Kotter these two different activities represent the distinction between management and leadership. Management is about coping with complexity, while leadership is about coping with change.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing versus Leading a Project
Level: Easy

32. A popular metaphor for the role of a project manager is that of _____.
<u>conductor</u>

A popular metaphor for the role of a project manager is that of conductor.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Managing Project Stakeholders
Level: Easy

33. _____ naturally compete with each other for resources and the support of top management.
<u>Project managers</u>

Project managers naturally compete with each other for resources and the support of top management. At the same time they often have to share resources and exchange information.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing Project Stakeholders
Level: Easy

34. _____ champion the project and uses their influence to gain approval of the project.
Project sponsors

Project sponsors champion the project and use their influence to gain approval of the project. Their reputation is tied to the success of the project, and they need to be kept informed of any major developments. They defend the project when it comes under attack and are a key project ally.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing Project Stakeholders
Level: Easy

35. _____ define the scope of the project, and ultimate project success rests in their satisfaction.
Customers

Customers define the scope of the project, and ultimate project success rests in their satisfaction. Project managers need to be responsive to changing customer needs and requirements and to meeting their expectations. Customers are primarily concerned with getting a good deal and, as will be elaborated in Chapter 11, this naturally breeds tension with the project team.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Managing Project Stakeholders
Level: Easy

36. Networks are mutually beneficial alliances that are generally governed by the law of _____.
reciprocity

Networks are mutually beneficial alliances that are generally governed by the law of reciprocity. The basic principle is that "one good deed deserves another, and likewise, one bad deed deserves another."

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Influence as Exchange
Level: Medium

37. In the organizational currency of _____ related influence comes directly from the project manager's ability to contribute to others accomplishing their work.
task

Refer to Table 10.1on page 345.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Influence as Exchange
Level: Medium

38. In the organizational currency of _____ related influence comes directly from the project manager's ability to enhance others' positions within the organization.
position

Refer to Table 10.1on page 345.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Influence as Exchange
Level: Medium

39. Perhaps the most powerful form of organization currency is based upon _____.
inspiration

Refer to Table 10.1on page 345.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Influence as Exchange
Level: Medium

40. The essence of the _____ related form of organization currency is forming a relationship that transcends normal professional boundaries and extends into the realm of friendship.
relationship

Refer to Table 10.1on page 345.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Influence as Exchange
Level: Medium

41. The _____ related form of organization currency deals with individual needs and an overriding sense of self-esteem.
personal

Refer to Table 10.1on page 345.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Influence as Exchange
Level: Medium

42. In building a social network it is always better to _____ the dependencies on which the success of a project is based.
overestimate

It is always better to overestimate rather than underestimate dependencies. All too often, otherwise talented and successful project managers have been derailed because they were blindsided by someone whose position or power they had not anticipated.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Medium

43. In the _____ style of management, managers spend the majority of their time outside their offices.
management by wandering around (MBWA)

A management style employees at Hewlett-Packard refer to as "management by wandering around" (MBWA) to reflect that managers spend the majority of their time outside their offices. MBWA is somewhat of a misnomer in that there is a purpose/pattern behind the "wandering." Through face-to-face interactions, project managers are able to stay in touch with what is really going on in the project and build cooperation essential to project success.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Medium

44. All stakeholders have _____ about the schedule, cost, and project benefits that the project manager needs to listen for, understand, and manage.
expectations

All stakeholders have expectations about the schedule, cost, and project benefits. Project managers need to listen for, understand, and manage these expectations.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Social Network Building
Level: Difficult

45. Research consistently points out that project success is strongly affected by the degree to which a project has the support of _____.
top management

Research consistently points out that project success is strongly affected by the degree to which a project has the support of top management. Such support is reflected in an appropriate budget, responsiveness to unexpected needs, and a clear signal to others in the organization of the importance of cooperation.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Medium

46. The Ancona and Caldwell research identified _____ activities as aimed at representing the team to others and protecting the team from interference.
ambassador

Ambassador activities are aimed at representing the team to others and protecting the team from interference. The project manager typically takes on this responsibility, which involves buffering the team from political pressures and building support.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Medium

47. The Ancon and Caldwell research identified _____ activities as those where the manager goes out from the team to bring back information about what else is going on in the organization.
scout

Scouts act as a scout on an expedition; that is, they go out from the team to bring back information about what is going on elsewhere in the organization. This is a much less focused task than task coordinator.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Medium

48. In the _____ management style, the project manager's behavior symbolizes how other people should work on the project.
leading by example

A project manager's behavior symbolizes how other people should work on the project.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Medium

49. In a survey of project managers, 81 percent reported that they encounter _____ issues in their work.
<u>ethical</u>

In a survey of project managers, 81 percent reported that they encounter ethical issues in their work.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Ethics and Project Management
Level: Medium

50. Successful project managers not only need to be influential, they also need to exercise influence in a manner that builds and sustains the _____ of others.
<u>trust</u>

Successful project managers not only need to be influential, they also need to exercise influence in a manner that builds and sustains the trust of others.

AACSB: Comprehension
Bloom's: Knowledge
Learning Objective: Building Trust: The Key to Exercising Influence
Level: Medium

51. We must have confidence in the _____ of individuals before we really trust them.
<u>competency</u>

We must also have confidence in the competency of individuals before we really trust them.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Building Trust: The Key to Exercising Influence
Level: Medium

52. Project managers have to see _____ and how their project fits within the larger strategy of their firm.
<u>the big picture</u>

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Qualities of an Effective Project Manager
Level: Easy

53. The ability or skill to perceive, assess and manage the emotions of one 's self and others is called _____.
<u>emotional intelligience</u>

Emotional intelligence (EQ) describes the ability or skill to perceive, assess, and manage the emotions of one's self and others.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Qualities of an Effective Project Manager
Level: Medium

True / False Questions

54. Strong leadership, while usually desirable, is not always necessary to successfully.
<u>TRUE</u>

Strong leadership, while usually desirable, is not always necessary to successfully complete a project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing versus Leading a Project
Level: Medium

55. The higher the degree of uncertainty encountered on a project, the more management is required.
<u>FALSE</u>

The higher the degree of uncertainty encountered on a project— whether in terms of changes in project scope, technological stalemates, breakdowns in coordination between people, and so forth—the more leadership is required.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Managing versus Leading a Project
Level: Medium

56. A popular metaphor for the role of a project manager is that of a sports coach.
<u>FALSE</u>

A popular metaphor for the role of a project manager is that of conductor.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing Project Stakeholders
Level: Easy

57. Successful project managers tend to adopt a hands-on approach to managing projects.
<u>FALSE</u>

Too often when new project managers do find time to work directly on the project, they adopt a hands-on approach to managing the project. They choose this style not because they are power-hungry egomaniacs but because they are eager to achieve results. They become quickly frustrated by how slowly things operate, the number of people that have to be brought on board, and the difficulty of gaining cooperation. Unfortunately, as this frustration builds, the natural temptation is to exert more pressure and get more heavily involved in the project. These project managers quickly earn the reputation of "micro managing" and begin to lose sight of the real role they play on guiding a project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Managing Project Stakeholders
Level: Medium

58. One of the things that distinguish project management from regular management is the sheer breadth and complexity of the relationships that need to be managed.
<u>TRUE</u>

The sheer breadth and complexity of stakeholder relationships distinguish project management from regular management.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Managing Project Stakeholders
Level: Medium

59. In some projects contractors may do all the work with the project team merely coordinating their contributions.
<u>TRUE</u>

Contractors may do all the actual work, in some cases, with the project team merely coordinating their contributions.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Managing Project Stakeholders
Level: Medium

60. One advantage of creating a dedicated project team is that it reduces dependencies, especially within the organization.
<u>TRUE</u>

One advantage of creating a dedicated project team is that it reduces dependencies, especially within the organization, because most of the resources are assigned to the project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing Project Stakeholders
Level: Medium

61. A successful project manager must build a cooperative, mutually beneficial network based on the age-old maxim: "Quid pro quo."
TRUE

The primary way to gain cooperation is to provide resources and services for others in exchange for future resources and services. This is the age-old maxim: "Quid pro quo (something for something)." Or in today's vernacular: "You scratch my back, I'll scratch yours."

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Influence as Exchange
Level: Medium

62. Relationship-related currencies include: resources, cooperation, assistance, and information.
Refer to Table 10.1
FALSE

Refer to Table 10.1on page 345.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Influence as Exchange
Level: Medium

63. Position-related currencies include: vision, excellence, and ethical correctness.
Refer to Table 10.1
FALSE

Refer to Table 10.1on page 345.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Influence as Exchange
Level: Medium

64. Personal-related currencies include: challenge/learning, ownership/involvement, and gratitude.
Refer to Table 10.1
TRUE

Refer to Table 10.1on page 345.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Influence as Exchange
Level: Medium

65. Position-related currencies include: advancement, recognition, visibility, and network/contacts.
Refer to Table 10.1
TRUE

Refer to Table 10.1on page 345.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Influence as Exchange
Level: Medium

66. The first step to building a social network is identifying those on whom the project depends for success.
TRUE

The first step to building a social network is identifying those on whom the project depends for success.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Social Network Building
Level: Easy

67. Many poor-performing project managers are guilty of management by wandering around.
FALSE

A management style employees at Hewlett-Packard refer to as "management by wandering around" (MBWA) to reflect that managers spend the majority of their time outside their offices. MBWA is somewhat of a misnomer in that there is a purpose/pattern behind the "wandering." Through face-to-face interactions, project managers are able to stay in touch with what is really going on in the project and build cooperation essential to project success.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Easy

68. Good time management for project managers includes initiating contact with key stakeholders only when there is a valid issue to deal with.
FALSE

Less-effective project managers who eschew MBWA and attempt to manage projects from their offices and computer terminals. Such managers proudly announce an open-door policy and encourage others to see them when a problem or an issue comes up. To them no news is good news. This allows their contacts to be determined by the relative aggressiveness of others.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Easy

69. "Guard" activities, as defined by Ancona and Caldwell, are aimed at representing the project team to others and protecting the team from interference.
Refer to Research Highlight Page 352
FALSE

Guard activities differ from the other activities in that they are intended to keep information and resources inside the team, preventing drainage out of the group. A key guard activity is keeping necessary information secret until it is appropriate to share it.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Difficult

70. "Ambassador" activities, as defined by Ancona and Caldwell, are aimed at going out from the team to bring back information about what is going on elsewhere in the organization.
Refer to Research Highlight on page 352
FALSE

Ambassador activities are aimed at representing the team to others and protecting the team from interference. The project manager typically takes on this responsibility, which involves buffering the team from political pressures and building support.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Social Network Building
Level: Difficult

71. When giving a status report to superiors, project managers must present the most positive image possible including, if necessary, stretching the truth.
FALSE

In a survey of project managers, 81 percent reported that they encounter ethical issues in their work. These dilemmas range from being pressured to alter status reports.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Ethics and Project Management
Level: Medium

72. To be effective, project managers must "walk the talk", i.e.; lead by example.
<u>TRUE</u>

To be effective, project managers must "walk the talk".

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Medium

73. In a survey of project managers, more than 81 percent reported that they encounter ethical issues in their work.
<u>TRUE</u>

In a survey of project managers, 81 percent reported that they encounter ethical issues in their work.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Ethics and Project Management
Level: Medium

74. Character alone will engender trust.
<u>FALSE</u>

Character alone will not engender trust. We must also have confidence in the competency of individuals before we really trust them. We all know well-intended managers whom we like but do not trust because they have a history of coming up short on their promises. Although we may befriend these managers, we don't like to work with or for them.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building Trust: The Key to Exercising Influence
Level: Easy

75. One problem new project managers experience is that it takes time to establish a sense of character and competency.
TRUE

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building Trust: The Key to Exercising Influence
Level: Medium

76. The ability or skill to perceive, assess and manage the emotions of one 's self and others is known as emotional intelligence.
Refer to Research Highlight on page 361
TRUE

Emotional intelligence (EQ) describes the ability or skill to perceive, assess, and manage the emotions of one's self and others.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Qualities of an Effective Project Manager
Level: Medium

Short Answer Questions

77. "Managing a project and leading a project is essentially the same thing." Agree or disagree and support your conclusion.

Disagree, they are very different. Managing is associated with the structure of the project (planning, organizing, controlling, and corrective action) where leading is needed when the objectives of the project require changing to meet outside demands.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Managing versus Leading a Project
Level: Medium

78. "Strong leadership is not always necessary to successfully complete a project." Agree or disagree and support your conclusion.

Agree. Well-defined projects that encounter no significant surprises require little leadership.

79. Identify at least five of the typical group dependencies that project managers must manage.

1. project team, 2. other project managers, 3. administrative support, 4. functional managers, 5. top management, 6. project sponsors, 7. subcontractors, 8. government agencies, and 9. customers.

80. Identify and briefly describe the five commonly traded organizational currencies.

1. Task-related; the ability to contribute to others accomplishing their work, 2. Position-related; the ability to enhance others' positions within their organization, 3. Inspiration-related; the ability to enhance people's desire to make a difference and add meaning to their lives, 4. Relationship-related; the ability to form relationships that transcend normal professional boundaries and extend into friendship, 5. Personal-related; the extent to which one can help others feel a sense of importance and personal worth.

81. What is "management by wandering around" and why would it be useful to project managers?

MBWA is the spending of time outside the office and making contact with key players to keep abreast of developments, anticipate potential problems, provide encouragement, and reinforce the objectives and vision of the project.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Medium

82. Identify and briefly describe the four patterns of activity identified by Ancona and Caldwell which lead to creating a high performance team.

1. Ambassador; aimed at representing the team to others and protecting the team from interference, 2. Task Coordinator; aimed at coordinating the team's efforts with other units and organizations, 3. Scouts; going out from the team to bring back information about what is going on elsewhere in the organization, 4. Guard; keeping information and resources inside the team.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Social Network Building
Level: Difficult

83. Identify five of the six aspects of leading by example.

1. standards of performance, 2. ethics, 3. urgency, 4. problem solving, 5. priorities, and 6. cooperation.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Social Network Building
Level: Medium

84. Identify and briefly discuss the key to exercising influence within an organization.

Trust. Trust is an elusive concept and may be seen as a function of character (doing the right thing) and competence (knowing the right things to do). Both are needed and take time to build.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Ethics and Project Management
Level: Difficult

85. Identify five of the six contradictions that an effective project manger must face.

1. innovate and ma0intain stability, 2. see the big picture while getting your hands dirty, 3. encourage individuals but stress the team, 4. hands-on/hands-off, 5. flexible but firm, 6. team versus organizational loyalties.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Qualities of an Effective Project Manager
Level: Difficult

86. Identify five of the eight traits associated with being a successful project manager.

1. systems thinker, 2. personal integrity, 3. proactive, 4. emotional intelligence, 5. general business perspective, 6. effective time management, 7. skillful politician, 8. optimist.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Qualities of an Effective Project Manager
Level: Difficult

87. Identify and compare and contrast The old-fashioned view of managing projects and the new perspective of managing projects.

The old-fashioned view of managing projects emphasized directing and controlling subordinates; the new perspective emphasizes managing project stakeholders and anticipating change as the most important jobs.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Managing Project Stakeholders
Level: Medium

88. "All the eight traits of being a good project manager can be trained." Agree or Disagree and support your conclusion.

Some can be trained or acquired but items such as being an optimist, personal integrity, and being proactive are not easily developed unless there is a predisposition to display them.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Qualities of an Effective Project Manager
Level: Difficult

Chapter 11 Managing Project Teams Answer Key

Multiple Choice Questions

1. The essence of positive synergy can be found in the phrase:
A. Front of ship sink---back of ship sink
B. There is no "I" in team
C. Two heads are better than one
D. The whole is greater than the sum of the parts
E. If it doesn't kill you, it makes you stronger

The essence of positive synergy can be found in the phrase "The whole is greater than the sum of the parts."

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Five-Stage Team Development Model
Level: Easy

2. Which of the following is commonly associated with high-performing project teams?
A. Risk taking is controlled and not allowed to jeopardize the overall project
B. Roles and specific responsibilities are well-defined
C. A degree of competition among team members is encouraged
D. Mistakes are viewed as opportunities for learning
E. All of these are associated with high-performing teams

To encourage risk taking and creativity, mistakes are treated as opportunities for learning rather than reasons for punishment.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

3. During which stage of team development do members accept that they are part of a project group but resist the constraints that the project and the group put on their individuality?
A. Norming
B. Storming
C. Performing
D. Adjourning
E. Forming

As the name suggests, this stage is marked by a high degree of internal conflict. Members accept that they are part of a project group but resist the constraints that the project and group put on their individuality.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

4. During which stage of team development do close relationships develop and the group demonstrates cohesiveness?
A. Norming
B. Storming
C. Performing
D. Adjourning
E. Forming

The norming stage is one in which close relationships develop and the group demonstrates cohesiveness.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

5. During which stage of team development is the team fully functional and accepted?
A. Norming
B. Storming
C. Performing
D. Adjourning
E. Forming

In the Performing stage, the team operating structure at this point is fully functional and accepted. Group energy has moved from getting to know each other and how the group will work together to accomplishing the project goals.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

6. During which stage of team development is high performance not a top priority and team member emotions run from upbeat to depressed?
A. Norming
B. Storming
C. Performing
D. Adjourning
E. Forming

For conventional work groups, performing is the last stage of their development. However, for project teams, there is a completion phase. During this stage, the team prepares for its own disbandment. High performance is no longer a top priority. Instead attention is devoted to wrapping up the project. Responses of members vary in this stage. Some members are upbeat, basking in the project team's accomplishments. Others may be depressed over loss of camaraderie and friendships gained during the project's life.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

7. During which stage of team development do team members try to find out what behaviors are acceptable and what performance expectations are?
A. Norming
B. Storming
C. Performing
D. Adjourning
E. Forming

During this initial stage the members get acquainted with each other and understand the scope of the project. They begin to establish ground rules by trying to find out what behaviors are acceptable with respect to both the project (what role they will play, what performance expectations are) and interpersonal relations (who's really in charge). This stage is completed once members begin to think of themselves as part of a group.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

8. Sam is the coach of a high school soccer team and has noticed that some close relationships have formed as well as feelings of camaraderie and shared responsibilities for the team's success. Which stage of development is the team in?
A. Norming
B. Storming
C. Performing
D. Adjourning
E. Forming

The norming stage is one in which close relationships develop and the group demonstrates cohesiveness. Feelings of camaraderie and shared responsibility for the project are heightened. The norming phase is complete when the group structure solidifies and the group establishes a common set of expectations about how members should work together.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

9. Roger is new-product project manager for a retail company. Recently the team has exhibited a high degree of conflict over who will control the group and how decisions will be made. Which stage of development is the team in?
A. Norming
B. Storming
C. Performing
D. Adjourning
E. Forming

Members accept that they are part of a project group but resist the constraints that the project and group put on their individuality. There is conflict over who will control the group and how decisions will be made. As these conflicts are resolved, the project manager's leadership becomes accepted, and the group moves to the next stage.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

10. Tom is managing a project team responsible for erecting a new office building. He notices that team members are trying out different behaviors to see what is acceptable to the project and personal relations. Which stage of development is the team in?
A. Norming
B. Storming
C. Performing
D. Adjourning
E. Forming

During forming stage, the members get acquainted with each other and understand the scope of the project. They begin to establish ground rules by trying to find out what behaviors are acceptable with respect to both the project (what role they will play, what performance expectations are) and interpersonal relations (who's really in charge). This stage is completed once members begin to think of themselves as part of a group.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

11. Experience and research indicate that high-performance project teams are much more likely to develop under all the following conditions <u>except</u>:
A. Members are assigned to the project full time
B. Members report solely to the project manager
C. There are 10 or fewer members per team
<u>D.</u> Team members are selected by their managers
E. The project involves a compelling objective

See List on Page 378.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Situational Factors Affecting Team Development
Level: Medium

12. In which of the following theories does the project group transition from a lower level to a higher level of performance about halfway through the project?
A. Nominal Group Technique
B. Five Stage Team Development Model
<u>C.</u> Punctuated Equilibrium Model of Group Development
D. Dysfunctional Transition Model
E. Synergistic Transition Development Model

Refer to Figure 11.2 on Page 379.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Situational Factors Affecting Team Development
Level: Medium

13. Which of the following are considered very important in the recruiting of project members?
A. The budget available
B. The importance of the project
C. The management structure for the project team
D. Both B and C are correct
E. A, B, and C are all correct

The process of selecting and recruiting project members will vary across organizations. Two important factors affecting recruitment are the importance of the project and the management structure being used to complete the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

14. Which of the following is <u>not</u> one of the considerations that need to be factored into the project team recruitment process?
A. Political connections
B. Problem-solving ability
C. Ambition, initiative, and energy
D. High degree of technological expertise
E. Availability

See list on pages 381-382.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Difficult

15. Which of the following is an objective of the first project team meeting?
A. Overview the project's scope and objectives
B. Address interpersonal interaction concerns
C. Model how the team will work together
D. Both A and C are correct
E. A, B, and C are all correct

There are typically three objectives project managers try to achieve during the first meeting of the project team. The first is to provide an overview of the project, including the scope and objectives, the general schedule, method, and procedures. The second is to begin to address some of the interpersonal concerns captured in the team development model: Who are the other team members? How will I fit in? Will I be able to work with these people? The third and most important objective is to begin to model how the team is going to work together to complete the project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Medium

16. Which of the following is <u>not</u> one of the major issues that successful project managers must address in the early stages of a project?
A. Relationship Decisions
B. Managing Change Decisions
C. Tracking Decisions
D. Planning Decisions
E. All of these need to be addressed

See list on Page 383-384.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

17. Researchers have found that high performance teams will have which of the following norms?
A. Hard work does not get in the way of having fun
B. No information is shared outside the team unless all agree to it
C. It is acceptable to be in trouble, but not to surprise others
D. Both B and C are correct
E. A, B, and C are all correct

See list on page 385.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

18. All of the following have been found to be good for running effective project meetings except:
A. Start meetings on time regardless of whether everyone is present
B. Identify an adjournment time
C. Thoroughly document all decisions
D. Prepare and distribute an agenda prior to the meeting
E. All of these are good for effective meetings

See list on page 387.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Medium

19. Establishing a team identity is facilitated by:
A. Team members working in a common space
B. Creation of a project team name
C. Effective use of meetings
D. Both A and B are correct
E. A, B, and C are all correct

See list on page 387-388.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Medium

20. The essential qualities of an effective vision include all of the following except:
A. All team members have the same vision
B. The vision should be communicated to all
C. The vision has to make strategic sense
D. There should be a passion for the vision
E. The vision should be a source of inspiration to others

Refer to Figure 11.4 on Page 390.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Medium

21. Which of the following would be considered the <u>most</u> effective project reward?
A. Individual member rewards
B. Lump-sum cash award
C. All-expenses-paid trip for team members and their families
D. Using negative reinforcement to motivate adequate performance
E. All of these are equally effective

To have more value, rewards need to have lasting significance. Many companies convert cash into vacation rewards, sometimes with corresponding time off. For example, there is one firm that rewarded a project team for getting the job done ahead of schedule with a four-day, all-expenses-paid trip to Walt Disney World for the members' entire families.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Difficult

22. Individual rewards for outstanding work would <u>not</u> include:
A. Letters of commendation
B. Public recognition
C. Desirable job assignments
D. Making exceptions to the rules
E. All of these can be used for individual rewards

See list on page 393.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

23. The first step in facilitating group decision making is to:
A. Call a meeting to discuss the problem
B. Identify the problem
C. Agree that there is a problem
D. Quantify the problem
E. Generate alternatives

The project manager needs to be careful not to state the problem in terms of choices (e.g., should we do X or Y?). Rather the project manager should identify the underlying problem to which these alternatives and probably others are potential solutions. This allows group members to generate alternatives, not just choose among them.

24. Strategies to manage dysfunctional conflict do <u>not</u> include _____ the conflict.
A. Control
B. Arbitrate
C. Mediate
D. Accept
E. Encourage

See list on page 398.

25. The biggest challenge to managing a virtual project team is:
A. Getting reports and technical information communicated
B. Developing trust
C. Establishing effective patterns of communication
D. Both B and C are correct
E. A, B, and C are all correct

Two of the biggest challenges involved in managing a virtual project team are developing trust and effective patterns of communication.

26. Which of the following is not one of the steps in facilitating group decision making?
A. Identifying the problem
B. Analyzing the situation
C. Generating alternatives
D. Reaching a decision
E. Follow-up

See list on pages 394-395.

27. During the delivery phase of a project's life cycle, the most significant source of conflict is:
A. Schedules
B. Priorities
C. Technical
D. Procedures
E. Costs

During the delivery phase, schedules continue as the biggest source of conflict as schedule slippages make it more difficult to meet target completion dates.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Easy

28. Two of the biggest challenges involved in managing a virtual project team are:
A. The language barriers and time management
B. Time management and developing trust
C. The language barriers and developing effective patterns of communication
D. Developing trust and effective patterns of communication
E. Time management and developing effective patterns of communication

Two of the biggest challenges involved in managing a virtual project team are developing trust and effective patterns of communication.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Managing Virtual Project Teams
Level: Medium

29. Symptoms of groupthink include:
A. The team thinking it is invincible
B. Opinions of those outside the team are considered to be irrelevant
C. Critical thinking disappears
D. Pressure is applied to any dissenter
E. All of these are symptoms of groupthink

See list on page 404.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Team Pitfalls
Level: Medium

30. Which of the following are ways to improve the performance of low-priority projects?
A. Creating a large time investment in the form of a lengthy meeting
B. Interject as much fun as possible into the project
C. Make the benefits of the project as real as possible to the team members
D. Both B and C are correct
E. A, B, and C are all correct

One project manager advocated orchestrating a large "time" investment upfront on such projects—either in the form of a lengthy meeting or a significant early assignment. He viewed this as a form of down payment that members would forfeit if they didn't carry the project to completion. Others emphasize interjecting as much fun into activities as possible. Her rituals discussed under building team identity come into play. People become committed because they enjoy working together on the project. One project manager even confided that the perfect attendance at her project meetings was due primarily to the quality of the doughnuts she provided. Another strategy is to make the benefits of the project as real to the team members as possible. One project manager escalated commitment to a mandated accidents prevention task force by bringing accident victims to a project meeting.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Medium

31. Which of the following is not one of the most significant sources of conflict during the project definition phase?
A. Priorities
B. Administrative procedures
C. Schedule
D. Workforce
E. Costs

During project definition, the most significant sources of conflict are priorities, administrative procedures, schedule, and workforce.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

32. Which of the following is not one of the most significant sources of conflict during the project planning phase?
A. Priorities
B. Procedures
C. Schedule
D. Technical requirements
E. Costs

During the planning phase, the chief source of conflict remains priorities, followed by schedules, procedures, and technical requirements.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Easy

33. Which of the following is not one of the most significant sources of conflict during the project execution phase?
A. Priorities
B. Staff issues
C. Schedule slippage
D. Technical problems
E. All of these are significant sources of conflict

During the execution phase, friction arises over schedule slippage, technical problems, and staff issues. Milestones become more difficult to meet because of accumulating schedule slippages.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Easy

34. Which of the following is not one of the tips for alleviating communication problems of virtual teams?
A. Include face-to-face time if at all possible
B. Keep team members informed on how well the overall project is going
C. Share the pain
D. Establish clear norms and protocols for surfacing assumptions and conflicts
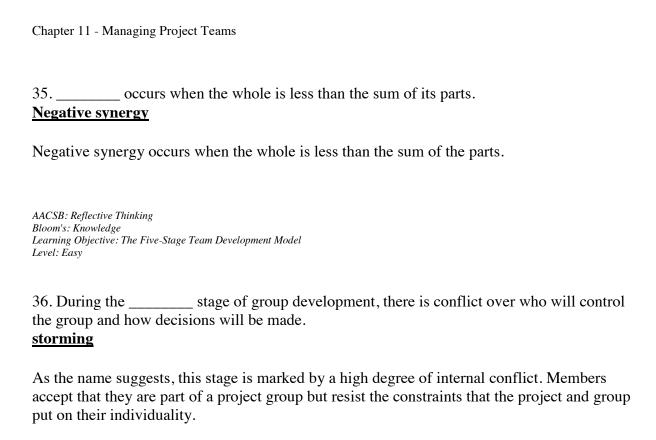E. Establish a code of conduct to avoid delays

See list on pages 402-403.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Managing Virtual Project Teams
Level: Difficult

Fill in the Blank Questions

35. _____ occurs when the whole is less than the sum of its parts.
Negative synergy

Negative synergy occurs when the whole is less than the sum of the parts.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Five-Stage Team Development Model
Level: Easy

36. During the _____ stage of group development, there is conflict over who will control the group and how decisions will be made.
storming

As the name suggests, this stage is marked by a high degree of internal conflict. Members accept that they are part of a project group but resist the constraints that the project and group put on their individuality.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: The Five-Stage Team Development Model
Level: Medium

37. During the _____ stage of group development, the members try to find out what behaviors are acceptable to the team and individual team members.
forming

During this initial stage the members get acquainted with each other and understand the scope of the project. They begin to establish ground rules by trying to find out what behaviors are acceptable with respect to both the project (what role they will play, what performance expectations are) and interpersonal relations (who's really in charge). This stage is completed once members begin to think of themselves as part of a group.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: The Five-Stage Team Development Model
Level: Medium

38. During the _____ stage of group development, the team prepares for its own disbandment.

<u>adjourning</u>

For conventional work groups, performing is the last stage of their development. However, for project teams, there is a completion phase. During this stage, the team prepares for its own disbandment. High performance is no longer a top priority. Instead attention is devoted to wrapping up the project. Responses of members vary in this stage. Some members are upbeat, basking in the project team's accomplishments. Others may be depressed over loss of camaraderie and friendships gained during the project's life.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: The Five-Stage Team Development Model
Level: Medium

39. During the _____ stage of group development, close relationships develop and the group demonstrates cohesiveness.

<u>norming</u>

The norming stage is one in which close relationships develop and the group demonstrates cohesiveness. Feelings of camaraderie and shared responsibility for the project are heightened. The norming phase is complete when the group structure solidifies and the group establishes a common set of expectations about how members should work together.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: The Five-Stage Team Development Model
Level: Medium

40. During the _____ stage of group development, the team is fully functional and working together to accomplishing the project goals.
performing

In the Performing stage, the team operating structure at this point is fully functional and accepted. Group energy has moved from getting to know each other and how the group will work together to accomplishing the project goals.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: The Five-Stage Team Development Model
Level: Medium

41. The _____ suggests that about midway through a project the team transitions into a different behavior pattern more focused on the successful completion of the project.
Punctuated Equilibrium Model of Group Development

Refer to Figure 11.2 on Page 379.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Situational Factors Affecting Team Development
Level: Medium

42. Experienced project managers stress the importance of _____ rather than appointing team members.
asking for volunteers

Experienced project managers stress the importance of asking for volunteers. However, this desirable step oftentimes is outside the manager's control. Still, the value of having team members volunteer for the project as opposed to being assigned cannot be overlooked. Agreeing to work on the project is the first step toward building personal commitment to the project. Such commitment will be essential to maintain motivation when the project hits hard times and extra effort is required.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

43. Too often when constrained by time, project managers try to accomplish too much during the first meeting, rather than use the _____ principle and not create information overload.
keep it simple stupid (KISS)

Many organizations do not have the luxury of holding elaborate retreats. In other cases the scope of project and level of involvement of different participants does not warrant such an investment of time. In these cases, the key operating principle should be KISS (keep it simple stupid!) Too often when constrained by time, project managers try to accomplish too much during the first meeting; in doing so, issues do not get fully resolved, and members come away with an information headache.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Easy

44. _____ are often considered anathema to productivity, yet they are critical to the success of any project.
Meetings

Meetings are often considered an anathema to productivity, but this does not have to be the case. The most common complaint is that meetings last too long. Establishing an agenda and adjournment time helps participants budget discussion time and provides a basis for expediting the proceedings.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Easy

45. Symbolic actions at the project level can contribute to a unique team subculture are called _____.
team rituals

Team rituals such as symbolic actions at the project level can contribute to a unique team subculture.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Easy

46. In the Snapshot from Practice involving the Tallahassee Democrat newspaper, the key turning point was the handling of an advertisement, eventually known as the _____ that had been sent to the newspaper over a fax machine.
rat fax

A key turning point came when one member produced what became known as "the rat tracks fax" and told the story behind it. It turns out a sloppily prepared ad arrived through a fax machine looking like "a rat had run across the page." Yet the ad passed through the hands of seven employees and probably would have been printed if it had not been totally unreadable.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Easy

47. The development of _____ is a common device for making a team more tangible.
project team name

The development of a team name such as the "A-Team" or "Casey's Crusaders" is a common device for making a team more tangible.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Medium

48. Expressing the design concept of a new car as a "pocket rocket" (a sports car in the mid-price range) is an example of a simplified _____.
vision

For example, the vision for a new car could be expressed as a "pocket rocket." Compare this vision with the more traditional product description—"a sports car in the midprice range." The "pocket rocket" vision provides a much clearer picture of what the final product should be.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Medium

49. Project managers are responsible for managing the _____ that encourage team performance and extra effort.
reward systems

Project managers are responsible for managing the reward system that encourages team performance and extra effort.

50. The use of 6:30 A.M. meetings to get a project back on schedule is an example of _____ reinforcement to motivate project performance.
negative

The project manager does not have direct authority over many key people, especially the contractors from the other companies. They do, however, have the freedom to convene meetings at his convenience. So the project manager will institute daily "coordination meetings," which were required of all the principals involved, at 6:30 A.M. The meetings continued for about two weeks until the project got back on schedule. At that time the project manager announced that the next meeting was canceled, and no further sunrise meetings were ever scheduled.

51. _____ should be used when strong commitment to a decision is needed and there is a low probability of acceptance if the decision were to be made by one person.
Group decision making

Group decision making should be used when it will improve the quality of important decisions. This is often the case with complex problems that require the input of a variety of different specialists. Group decision making should also be used when strong commitment to the decision is needed and there is a low probability of acceptance if only one person makes the decision.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Easy

52. When the manager intervenes and tries to negotiate a resolution by using reasoning and persuasion, suggesting alternatives and the like the Project Manager is trying to _____.
mediate the conflict

The manager intervenes and tries to negotiate a resolution by using reasoning and persuasion, suggesting alternatives and the like.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Easy

53. In the _____ approach to managing conflict, the manager imposes a solution to the conflict after listening to each party.
arbitrate the conflict

The manager imposes a solution to the conflict after listening to each party. The goal is not to decide who wins but to have the project win. In doing so, it is important to seek a solution that allows each party to save face; otherwise the decision may provide only momentary relief.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

54. In a _____ project team the members are geographically situated so that they may seldom meet face-to-face as a team.
<u>virtual</u>

A virtual project team in where the team members are geographically situated so that they may seldom, if ever, meet face-to-face as a team.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Managing Virtual Project Teams
Level: Easy

55. _____ refers to whether a team has direct influence over the problem that needs to be resolved.
<u>Ownership</u>

Ownership refers to whether the team has direct influence over the issue. For example, a team probably has little influence over delivery of contracted supplies, but team members do control how quickly they inform each other of sudden changes in plans.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Easy

56. When a project team gets things done without having to go through normal protocols of the parent organization, it may fall into the _____.
<u>bureaucratic bypass syndrome</u>

Project teams are often licensed to get things done without having to go through normal protocols of the parent organization. Bypassing bureaucratic channels is appealing and invigorating. However, if bypassing becomes a way of life, it results in the rejection of bureaucratic policies and procedures, which provide the glue for the overall organization.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Team Pitfalls
Level: Easy

57. Project managers should encourage _____ conflict.
<u>functional</u>

If the team appears to be suffering from groupthink, then the project manager can encourage functional conflict by playing a devil's advocate role to encourage dissent or using a structured problem solving approach like the nominal group technique.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Team Pitfalls
Level: Easy

58. Project managers should manage _____ conflict.
<u>dysfunctional</u>

Project managers should recognize that conflict is an inevitable and even a desirable part of project work; the key is to encourage functional conflict and manage dysfunctional conflict.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Easy

59. In order to match technology to the communication need, 3M developed guidelines to be used on _____ projects.
<u>distributed or virtual</u>

A major challenge for managing a virtual project team is to establish effective patterns of communication. E-mail and faxes are great for communicating facts—but not the feelings behind the facts; nor do they allow for real-time communication. Conference calls and project chat rooms can help, but they also have their limitations. Videoconferencing is a significant improvement over nonvisual electronic forms of communication. Still, it is a very expensive medium, and realtime interaction is available on only the most advanced and expensive systems. The maxim is match technology to the communication need.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Managing Virtual Project Teams
Level: Easy

True / False Questions

60. Synergy can be both negative as well as positive.
TRUE

The essence of positive synergy can be found in the phrase "The whole is greater than the sum of the parts." Conversely, negative synergy occurs when the whole is less than the sum of the parts.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Five-Stage Team Development Model
Level: Easy

61. There is a high degree of internal conflict in the forming stage of team development.
FALSE

During this initial stage the members get acquainted with each other and understand the scope of the project. They begin to establish ground rules by trying to find out what behaviors are acceptable with respect to both the project (what role they will play, what performance expectations are) and interpersonal relations (who's really in charge). This stage is completed once members begin to think of themselves as part of a group.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Easy

62. The storming stage of team development is completed once members begin to think of themselves as part of a group.
<u>FALSE</u>

Members accept that they are part of a project group but resist the constraints that the project and group put on their individuality. There is conflict over who will control the group and how decisions will be made. As these conflicts are resolved, the project manager's leadership becomes accepted, and the group moves to the next stage.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

63. The performing stage of team development is characterized by the development of close relationships and group cohesiveness.
<u>FALSE</u>

In the Performing stage, the team operating structure at this point is fully functional and accepted. Group energy has moved from getting to know each other and how the group will work together to accomplishing the project goals.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

64. The norming stage of team development is complete when the group establishes a common set of expectations about how members should work together.
<u>TRUE</u>

The norming stage is one in which close relationships develop and the group demonstrates cohesiveness. Feelings of camaraderie and shared responsibility for the project are heightened. The norming phase is complete when the group structure solidifies and the group establishes a common set of expectations about how members should work together.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Five-Stage Team Development Model
Level: Medium

65. Regardless of the type of work group, the adjourning stage of team development is the final stage.
FALSE

For conventional work groups, performing is the last stage of their development. However, for project teams, there is a completion phase. During this stage, the team prepares for its own disbandment. High performance is no longer a top priority. Instead attention is devoted to wrapping up the project. Responses of members vary in this stage. Some members are upbeat, basking in the project team's accomplishments. Others may be depressed over loss of camaraderie and friendships gained during the project's life.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Five-Stage Team Development Model
Level: Medium

66. The Punctuated Equilibrium Model of group development has only two phases with a single transition joining them.
TRUE

Refer to Figure 11.2 on Page 379.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Situational Factors Affecting Team Development
Level: Easy

67. A project manager should always look for people with good problem-solving ability.
FALSE

If the project is complex and fuzzy, then a manager wants people who are good at working under uncertainty and have strong problem identification and solving skills. These same people are likely to be bored and less productive working on straightforward projects that go by the book.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

68. A project manager should be wary of people who know too much about a specific technology.
TRUE

Managers should be wary of people who know too much about a specific technology. They may be technology buffs who like to study but have a hard time settling down and doing the work.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Medium

69. Co-location of team members, team names, and team rituals are common vehicles for establishing a team identity.
TRUE

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Social Network Building
Level: Easy

70. A project vision is an image a project team holds in common about how the project will look upon completion, how they will work together, and how customers will accept the project.
TRUE

Just as corporate rituals help establish the unique identity of a firm, similar symbolic actions at the project level can contribute to a unique team subculture.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

71. Everyone on the project team should have the same vision of the project.
<u>FALSE</u>

Refer to Figure 11.4 on Page 390.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Medium

72. Most project managers advocate the use of group rewards rather than individual rewards.
<u>TRUE</u>

To have more value, rewards need to have lasting significance. Many companies convert cash into vacation rewards, sometimes with corresponding time off. For example, there is one firm that rewarded a project team for getting the job done ahead of schedule with a four-day, all-expenses-paid trip to Walt Disney World for the members' entire families.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Easy

73. Lump-sum cash bonuses are the preferred group reward for project teams.
<u>FALSE</u>

To have more value, rewards need to have lasting significance. Many companies convert cash into vacation rewards, sometimes with corresponding time off. For example, there is one firm that rewarded a project team for getting the job done ahead of schedule with a four-day, all-expenses-paid trip to Walt Disney World for the members' entire families.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

74. Letters of commendation, public recognition for outstanding work, and desirable job assignments are the preferred types of individual rewards.
TRUE

See list on page 393.

75. Group decision making should be used when strong commitment to the decision is needed and there is a low probability of acceptance if only one person makes the decision.
TRUE

Group decision making should be used when it will improve the quality of important decisions. This is often the case with complex problems that require the input of a variety of different specialists. Group decision making should also be used when strong commitment to the decision is needed and there is a low probability of acceptance if only one person makes the decision.

76. A project manager should identify a problem in terms of its alternate solutions so that team members can more easily reach a decision on how to solve the problem.
FALSE

The project manager needs to be careful not to state the problem in terms of choices (e.g., should we do X or Y?). Rather the project manager should identify the underlying problem to which these alternatives and probably others are potential solutions. This allows group members to generate alternatives, not just choose among them.

77. Team members can be upset and dissatisfied with conflict, but as long as the disagreement furthers the objectives of the project, then the conflict is functional.
TRUE

Members can be upset and dissatisfied with the interchange, but as long as the disagreement furthers the objectives of the project, then the conflict is functional. Project managers should recognize that conflict is an inevitable and even a desirable part of project work; the key is to encourage functional conflict and manage dysfunctional conflict.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Difficult

78. A project manager arbitrates conflict by intervening and attempting to negotiate a resolution by using reasoning and persuasion, suggesting alternatives and the like.
FALSE

The manager intervenes and tries to negotiate a resolution by using reasoning and persuasion, suggesting alternatives and the like.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

79. Groupthink refers to the tendency of members in highly cohesive groups to lose their critical evaluative capabilities resulting in quick decision making with little consideration of alternatives.
TRUE

Groupthink appears when pressures for conformity are combined with an illusion of invincibility to suspend critical discussion of decisions. As a result decisions are made quickly with little consideration of alternatives; often the practice leads to fiascoes that, after the fact, appear totally improbable.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Team Pitfalls
Level: Medium

80. Two of the biggest challenges involved in managing a virtual project team are developing trust and effective patterns of communication.
TRUE

Two of the biggest challenges involved in managing a virtual project team are developing trust and effective patterns of communication.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing Virtual Project Teams
Level: Easy

81. "Going native" is the ability that some project teams have to bypass the normal policies and procedures that everyone in the organization is supposed to follow.
FALSE

Bureaucratic bypass syndrome occurs when project teams are often licensed to get things done without having to go through normal protocols of the parent organization. Bypassing bureaucratic channels is appealing and invigorating. However, if bypassing becomes a way of life, it results in the rejection of bureaucratic policies and procedures, which provide the glue for the overall organization.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Team Pitfalls
Level: Easy

82. In order to match technology to the communication need, IBM developed a set of guidelines to be used on their virtual projects.
FALSE

A major challenge for managing a virtual project team is to establish effective patterns of communication. E-mail and faxes are great for communicating facts—but not the feelings behind the facts; nor do they allow for real-time communication. Conference calls and project chat rooms can help, but they also have their limitations. Videoconferencing is a significant improvement over nonvisual electronic forms of communication. Still, it is a very expensive medium, and realtime interaction is available on only the most advanced and expensive systems. The maxim is match technology to the communication need. 3M did this for their virtual projects.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Managing Virtual Project Teams
Level: Easy

Short Answer Questions

83. Identify the four major areas for establishing ground rules on how the project team will operate.

1. Planning decisions, 2. Tracking decisions, 3. Managing change decisions, and 4. Relationship decisions.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

84. Identify and briefly discuss the four elements to establishing a team identity.

1. Effective use of meetings, 2. Co-location of team members, 3. Create a project team name, and 4. Team rituals.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

85. Identify the four requirements for an effective project vision.

1. Communicate, 2. Strategic sense, 3. Passion, and 4. Inspires others.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

86. Identify and briefly discuss the four types of individual rewards recommended for project team members.

1. Letters of commendation, 2. Public recognition for outstanding work, 3. Job assignments, and 4. Flexibility.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

87. Identify and briefly discuss the four major steps in facilitating the group decision making process.

1. Problem identification, 2. Generate alternatives, 3. Reach a decision, and 4. Follow-up.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

88. What is functional conflict and why should it be encouraged?

As long as disagreements further the objectives of the project, then conflict is functional. It should be encouraged because honest professional differences of opinion often will lead to the best solutions. The challenge is to keep it from becoming dysfunctional.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Building High-Performance Project Teams
Level: Medium

89. Identify the five strategies to manage conflict.

1. Mediate the conflict, 2. Arbitrate the conflict, 3. Control the conflict, 4. Accept the conflict, and 5. Eliminate the conflict.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Building High-Performance Project Teams
Level: Medium

90. What is a virtual project team?

A virtual project team is one in which the team members are geographically situated so that they may seldom, if ever, meet face-to-face as a team. Electronic communications such as the Internet, e-mail, and teleconferencing are the primary means of communication.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Managing Virtual Project Teams
Level: Medium

91. What is meant by the term groupthink and identify four symptoms?

Groupthink refers to the tendency of members in highly cohesive groups to lose their critical evaluative capabilities resulting in quick decision making with little consideration of alternatives. Symptoms include 1. illusion of invulnerability, 2. whitewash of critical thinking, 3. negative stereotypes of outsiders, and 4. direct pressure.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Project Team Pitfalls
Level: Difficult

92. From the perspective of project management, what does the term going native reference?

The customer's interest takes precedence over the parent organization's interest, leading to scope creep and open defiance of corporate policy and interests.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Team Pitfalls
Level: Medium

93. What is the bureaucratic bypass syndrome and why is it to be avoided?

Project teams are often licensed to get things done without having to go through normal protocols of the parent organization. If bypassing the normal channels becomes a way of life, it results in rejecting policies and procedures. This may alienate other workers who must follow protocol and eventually may cause them to find ways to thwart the project team.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Team Pitfalls
Level: Difficult

94. Identify and briefly describe the four common pitfalls that project teams may be subjected to.

1. groupthink, 2. bureaucratic bypass syndrome, 3. team infatuation, and 4. going native.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Team Pitfalls
Level: Difficult

Chapter 12 Outsourcing: Managing Interorganizational Relations Answer Key

Multiple Choice Questions

1. ontracting project work has long been the norm in the _____ industry.
A. Telecommunications
B. Financial
C. Insurance
D. Construction
E. Retail

Contracting project work has long been the norm in the construction industry, where firms hire general contractors who, in turn, hire and manage cadres of subcontractors to create new buildings and structures.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Easy

2. The process for the transferring of business functions or processes to other, often foreign, companies has traditionally been known as:
A. Subcontracting
B. Downsizing
C. Partnering
D. Joint venture
E. Outsourcing

The term outsourcing has traditionally been applied to the transferring of business functions or processes (e.g., customer support, IT, accounting) to other, often foreign companies.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Easy

3. When you call your Internet provider to solve a technical problem and you end up talking to a technician in India or Romania, you have just experienced:
A. Telecommunications
B. Partnering
C. Outsourcing
D. Service shift
E. Bilingual customer service

When you call your Internet provider to solve a technical problem you are likely to talk to a technician in Bangalore, India, or Bucharest, Romania, a company has Outsourced the task.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Outsourcing Project Work
Level: Easy

4. Which of the following is not a potential part of the outsourcing concept?
A. Computers
B. Faxes
C. Computer-aided design systems
D. Video teleconferencing
E. All the above are correct

Many outsourced projects operate in a virtual environment in which people are linked by computers, faxes, computer-aided design systems, and video teleconferencing.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Medium

5. Advantages of outsourcing project work may likely include all of the following except
A. Shortened project completion
B. Reduced costs
C. Higher level of expertise
D. Reduced conflict
E. Increased flexibility

See list on page 421.

6. Disadvantages of outsourcing project work may likely include all of the following except
A. Increased conflict
B. Coordination breakdowns
C. Increased costs
D. Loss of control
E. More internal morale issues

See list on page 422.

7. The driving motive for increasing the use of outsourcing on projects was:
A. Reducing the trade deficit
B. Reducing costs
C. Improving international sales
D. Making products more international in design
E. Securing technology that was not available domestically

Companies can secure competitive prices for contracted services, especially if the work can be outsourced offshore. Furthermore, overhead costs are dramatically cut since the company no longer has to internally maintain the contracted services.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Outsourcing Project Work
Level: Medium

8. Recent outsourcing trends have shown an increasing emphasis on the suppliers for all of the following except:
A. Further cost reductions
B. Increased quality of work performed
C. Increased ability to collaborate
D. Increased ability to work together
E. All of these are recent trends

However, recent industry polls indicate a shift away from simply nailing the best low-cost deal to securing services from companies that provide the best value in terms of both cost and performance. Performance is not limited to simply the quality of specific work but also ability to collaborate and work together. Companies are doing their homework to determine "Can we work with these people?"

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Outsourcing Project Work
Level: Medium

9. Key practices in partnering relationships include:
A. Single project contracting
B. Goals and objectives are similar
C. Access to each other's organizational resources
D. Both B and C are correct
E. A, B, and C are all correct

See Table 12.1 on page 424.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

10. In the "Competing against the Giants" Snapshot from Practice, SATT Control uses which of the following to successfully compete against much larger competitors?
A. Excellent project management
B. Acts as a system integrator
C. Using the same subsystem vendors again and again
D. Both A and B are correct
E. A, B, and C are all correct

SC acts as system integrator. SC recruits a contracting syndicate by preparing a system description and dividing the system into various subsystems with each potential partner bidding for a part of the system. SC's ability to describe the system and divide it into subsystems that can be outsourced are two of its core competencies. Another core competence at SC is project management.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Outsourcing Project Work
Level: Medium

11. Which of the following is <u>not</u> a key to successful partnering relationships?
A. Mutual trust
B. Jointly shared risk
C. Total company involvement
D. Independent project teams
E. Long-term commitment

See Table 12.1 on page 424.

12. Which of the following is part of the traditional project process?
A. Structured communications
B. Long-term commitment
C. Total company involvement
D. Both A and B are correct
E. A, B, and C are all correct

See Table 12.1 on page 424.

13. The traditional project process includes all of the following <u>except</u>:
A. Independent project teams
B. Shared goals and objectives
C. Single project teams
D. Risk is transferred to the other party
E. Limited objectivity

See Table 12.1 on page 424.

14. Which of the following did the state of Ohio do before starting a bond-financed school construction project?
A. Create a specific RFP (request for proposal)
B. Have a dress rehearsal
C. Reviews the performance of contractors on past projects
D. Both A and C are correct
E. A, B, and C are all correct

Before starting a bond-financed school construction project, Ohio does what a theater company does before opening night—it holds a dress rehearsal. Just as a theatrical dress rehearsal can allow a company to find and fix glitches before they ruin a show, preconstruction partnering can find early solutions to problems before they become lawsuits. For example, during the discussions it becomes apparent that different parties are interpreting a key requirement differently. Instead of waiting for this difference to escalate into a major problem, the parties reach a shared understanding before work begins.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Easy

15. Best practices in outsourcing project work include all the following except:
A. Well defined requirements and procedures
B. Training and teambuilding activities
C. Well established conflict management processes
D. Frequent reviews and status updates
E. All of these are best practices

See Figure 12.2 on page 423.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

16. In the Snapshot from Practice "Strategies for Communicating with Outsourcers," which of the following was not one of the suggested strategies?
A. Recognize cultural differences
B. Use a translator to make sure everyone understands
C. Choose the right words
D. Confirm your requirements
E. Set deadlines

See List in Snapshot from Practice on page 425.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

17. To make sure that an outsourcer thoroughly understands your requirements you should:
A. Document your conversations in writing
B. Insist that the outsourcer write the requirements in their own words
C. Request they build a prototype
D. Both A and C are correct
E. A, B, and C are all correct

Document your requirements. Follow up your conversations in writing. Commit your requirements to paper for the outsourcer. Insist your outsourcer re-document your requirements. Leave nothing to chance. Require outsourcers to write the requirements in their own words. If outsourcers cannot relay to you what you explained to them, then they didn't understand. Request a prototype. After the requirements are written, ask the outsourcer to create a prototype for you. This is a safety net to ensure that your wants and needs are positively understood.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

18. The result of teambuilding among the project's participants is a:
A. Signed contract
B. Legal partnership agreement
C. Project plan
D. Partnering charter
E. Responsibility matrix

The team-building sessions often culminate with the creation of a partnering charter signed by all of the participants. This charter states their common goals for the project as well as the procedures that will be used to achieve these goals.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

19. To avoid problems with schedules and deadlines you should:
A. Develop detailed schedules
B. Hold frequent status reviews
C. Add a penalty clause to the contract
D. Hold frequent conversations with the outsourcer
E. Build extra time into the schedules that the outsourcer is not aware of

To ensure that outsourced work is completed on time it is imperative to add a penalty clause to your contract or enforce late fees.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

20. Among the many advantages for establishing long-term partnerships are:
A. Reduced administrative costs
B. Improved performance
C. Improved communication
D. B and C are both correct
E. A, B, and C are all correct

See list on page 431.

21. Long-term partnerships will provide all the following except:
A. Improved communication
B. More efficient utilization of resources
C. Reduced need for total number of partnerships
D. Lower administrative costs
E. Improved innovation

See list on page 431.

22. Teambuilding between partners should:
A. Include engineers, architects, lawyers, specialists and other staff
B. Be facilitated by an outside consultant
C. Not take more than one day
D. A and B are both correct
E. A, B, and C are all correct

Team-building workshops involve the key players from the different firms, for example, engineers, architects, lawyers, specialists, and other staff. In many cases, firms find it useful to hire an outside consultant to design and facilitate the sessions.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

23. Which of the following would be included in best practices in outsourcing project work?
A. Establishing long-term relationships
B. Include financial incentives
C. Reduce costs by using tried and true methods
D. A and B are both correct
E. A, B, and C are all correct

See Figure 12.2 on page 423.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

24. In the Snapshot from Practice dealing with the Value Engineering Awards program, which branch of the U.S. government was involved?
A. Department of Defense
B. Department of Commerce
C. Department of Transportation
D. N.A.S.A
E. Department of Education

As part of an effort to cut costs the United States Department of Defense (DoD) issues annual Value Engineering Awards.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

25. Which of the following is <u>not</u> one of the key points of *principled negotiation*?
A. Use objective criteria when possible
B. Be honest and forthright
C. Focus on interests, not positions
D. Separate the people from the problem
E. Invent options for mutual gain

See Table 12.2 on page 432.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Art of Negotiating
Level: Medium

26. Customer satisfaction can be quantitified by:
A. Perceived performance divided by actual performance
B. Actual performance divided by expected performance
C. Perceived performance divided by expected performance
D. Actual performance divided by perceived performance
E. Expected performance divided by actual performance

See Figure 12.5 on page 436.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: A Note on Managing Customer Relations
Level: Medium

27. Which of the following is a part of the noncompetitive view of negotiation?
A. Reaching an agreement
B. Implementation phase
C. Review of the completed project
D. Both A and B are correct
E. A, B, and C are all correct

Project managers accept a noncompetitive view of negotiation and realize that negotiation is essentially a two-part process: The first part deals with reaching an agreement; the second part is the implementation of that agreement.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Art of Negotiating
Level: Medium

28. Which of the following is suggested as the best target for a customer satisfaction ratio?
A. 1.00
B. 1.05
C. 1.10
D. 1.20
E. 1.50

Under most circumstances, the most profitable arrangement occurs when the customer's expectations are only slightly exceeded. Returning to the mathematical model, with all other things being equal, one should strive for a satisfaction ratio of 1.05, not 1.5!

29. In the research highlight on IT project managers, which of the following was not one of the roles taken by project managers?
A. Entrepreneur
B. Politician
C. Friend
D. Marketer
E. Auditor

See Table 12.3 on page 438.

30. Regarding customer relations, advice passed on by veteran project managers includes:
A. Speak with one voice
B. Speak in precise terms
C. Speak the language of the customer
D. Both A and B are correct
E. Both A and C are correct

Speak with one voice. Nothing erodes confidence in a project more than for a customer to receive conflicting messages from different project members. The project manager should remind team members of this fact and work with them to ensure that appropriate information is shared with customers. Also speak the language of the customer. Too often project members respond to customer inquiries with technical jargon that exceeds the customer's vocabulary. Project managers and members need to describe problems, trade-offs, and solutions in ways that the customer can understand.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: A Note on Managing Customer Relations
Level: Easy

31. Which of the following is not one of the elements of good negotiation?
A. Be hard on the problem, soft on the people
B. Conflict on a project can be good
C. Negotiation is not a contest
D. Seek first to understand, then to be understood
E. All of these are elements of good negotiation

Try to keep the focus on the problem to be resolved. In Fisher and Ury's words: Be hard on the problem, soft on the people. Also when focusing on interests, it is important to practice the communication habit: Seek first to understand, then to be understood. In addition it is beneficial to have a friendly rapport with the other person prior to negotiating. Friendly rapport is consistent with the social network tenet introduced in Chapter 10 of building a relationship before you need it. Lastly avoid personalizing the negotiation and framing the negotiation as a contest.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Art of Negotiating
Level: Difficult

32. Which of the following is reflected in the saying "Let anger fly out the window"?
A. Separate people from the problem
B. Be honest
C. Focus on interests, not positions
D. Invent options for mutual gain
E. When possible, use objective criteria

When people become emotional, negotiators should keep a cool head and remember the old German proverb, "Let anger fly out the window." In other words, in the face of an emotional outburst, imagine opening a window and letting the heat of the anger out the window. Avoid taking things personally, and redirect personal attacks back to the question at hand. Don't react to the emotional outburst, but try to find the issues that triggered it.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Art of Negotiating
Level: Easy

33. Which of the following is reflected in the saying "Seek first to understand, then to be understood"?
A. Separate people from the problem
B. Be honest
C. Focus on interests, not positions
D. Invent options for mutual gain
E. When possible, use objective criteria

When focusing on interests, it is important to practice the communication habit: Seek first to understand, then to be understood. This involves what Stephen Covey calls empathetic listening, which allows a person to fully understand another person's frame of reference—not only what that person is saying but also how he or she feels. Covey asserts that people have an inherent need to be understood. He goes on to observe that satisfied needs do not motivate human behavior, only unsatisfied needs do.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Art of Negotiating
Level: Easy

34. The dovetailing technique is used in which of the following keys to good negotiation?
A. Separate people from the problem
B. Be honest
C. Focus on interests, not positions
D. Invent options for mutual gain
E. When possible, use objective criteria

Clarifying interests and exploring mutual options create the opportunity for dovetailing interests. Dovetailing means one person identifies options that are of low cost to them but of high interest to the other party. This is only possible if each party knows what the other's needs are.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Art of Negotiating
Level: Easy

Fill in the Blank Questions

35. Contracting project work has long been the norm in the _____ industry.
construction

Contracting project work has long been the norm in the construction industry, where firms hire general contractors who, in turn, hire and manage cadres of subcontractors to create new buildings and structures.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Easy

36. The _____ project, which created a transportation tunnel between France and England, involved more than 250 organizations.
Chunnel

The Chunnel project, which created a transportation tunnel between France and England, involved more than 250 organizations.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Medium

37. In a partnering relationship, _____ is shared jointly among the partners, which encourages innovation and continuous improvement.
risk

Risk is shared jointly among the partners, which encourages innovation and continuous improvement.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

38. In a partnering relationship, _____ forms the basis for strong working relationships.
mutual trust

Mutual trust forms the basis for strong working relationships.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

39. In traditional project relationships, _____ is limited due to fear of reprisal and lack of continuous improvement opportunity.
objectivity

Objectivity is limited due to fear of reprisal and lack of continuous improvement opportunity.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

40. In traditional project relationships, _____ are structured and guarded.
communications

Communications are structured and guarded.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

41. In Ohio before starting a bond-financed _____, projects management consultants and the related parties get together to figure out how to talk to each others and how to handle problems.
school construction project

Before starting a bond-financed school construction project, Ohio does what a theater company does before opening night—it holds a dress rehearsal.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

42. The term _____ has traditionally been applied to the transferring of business functions or processes to other, often foreign, companies.
<u>outsourcing</u>

The term outsourcing has traditionally been applied to the transferring of business functions or processes (e.g., customer support, IT, accounting) to other, often foreign companies.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Outsourcing Project Work
Level: Medium

43. Many outsourced projects operate in a _____ environment in which people are linked by computers, faxes, computer-aided design systems, and video teleconferencing.
<u>virtual</u>

Many outsourced projects operate in a virtual environment in which people are linked by computers, faxes, computer-aided design systems, and video teleconferencing.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Medium

44. _____ is a major advantage of outsourcing project work because companies can secure competitive prices for contracted services, especially if the work can be outsourced offshore.
<u>Cost reduction</u>

Cost reduction is where companies can secure competitive prices for contracted services, especially if the work can be outsourced offshore. Furthermore, overhead costs are dramatically cut since the company no longer has to internally maintain the contracted services.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Easy

45. Not only can contracted project work be cheaper, it can also be done _____.
faster

Not only can work be done more cheaply, but it can also be done faster. Competitive pricing means more resources for the dollar.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Medium

46. High levels of _____ and technology can be brought to bear on a project by using contracted services.
expertise

A high level of expertise and technology can be brought to bear on the project. A company no longer has to keep up with technological advances. Instead, it can focus on developing its core competencies and hire firms with the knowhow to work on relevant segments of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Medium

47. Contracting project services can increase a firm's _____ by no longer being constrained by their own resources.
flexibility

In terms of flexibility, organizations are no longer constrained by their own resources but can pursue a wide range of projects by combining their resources with talents of other companies. Small companies can instantly go global by working with foreign partners.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Medium

48. Breakdowns in _____ of professionals from different organizations can occur if the project work requires close collaboration and mutual adjustment.
coordination

Coordination of professionals from different organizations can be challenging, especially if the project work requires close collaboration and mutual adjustment. Breakdowns are exacerbated by physical separation with people working in different buildings, different cities, if not different countries.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

49. In the Snapshot from Practice involving SATT Control, a Swedish electronics firm, the company referred to one of its competencies as being a _____ who subcontracts the subsystems to other firms.
system integrator

In the words of Hedberg and his coauthors, SC does so by acting as system integrator. In this role SC recruits a contracting syndicate by preparing a system description and dividing the system into various subsystems with each potential partner bidding for a part of the system.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

50. There is a potential loss of _____ over a project when the core team depends on other organizations that they do not have direct authority over.
control

There is potential loss of control over the project. The core team depends on other organizations that they have no direct authority over. While long-term survival of participating organizations depends on performance, a project may falter when one partner fails to deliver.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Easy

51. Projects are more prone to interpersonal _____ because the different participants do not share the same values, priorities, and culture.
conflict

Projects are more prone to interpersonal conflict since the different participants do not share the same values, priorities, and culture.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

52. There is little disagreement that _____ was the primary motive behind outsourcing project work.
reducing costs

Few people disagree that reducing costs is the primary motive behind outsourcing project work.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

53. Fisher and Ury champion the _____ approach to negotiation because it emphasizes win/win solutions while protecting yourself against those who would take advantage of your forthrightness.
principled negotiation

Fisher and Ury from the Harvard Negotiation Project champion an approach to negotiating that embodies these goals. It emphasizes developing win/win solutions while protecting yourself against those who would take advantage of your forthrightness. Their approach is called principled negotiation.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Art of Negotiating
Level: Medium

54. _____ satisfaction is measured by the ratio of perceived performance to expected performance.
Customer

Customer satisfaction is a function of the extent to which perceived performance (or outcome) exceeds expectations.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Note on Managing Customer Relations
Level: Medium

55. The best defense against unreasonable, win/lose negotiators is having what Fisher and Ury call a strong _____.
BATNA

The best defense against unreasonable, win/lose negotiators is having what Fisher and Ury call a strong BATNA (best alternative to a negotiated agreement). They point out that people try to reach an agreement to produce something better than the result of not negotiating with that person.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Art of Negotiating
Level: Medium

56. As part of an effort to cut costs the United States Department of Defense issues annual _____.
Value Engineering Awards

As part of an effort to cut costs the United States Department of Defense (DoD) issues annual Value Engineering Awards. Value engineering is a systematic process to analyze functions to identify actions to reduce cost, increase quality, and improve mission capabilities across the entire spectrum of DoD systems, processes, and organizations.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Easy

57. "Let anger fly out of the window" is an example of the _____ key point of negotiation.
separate the people from the problem

When people become emotional, negotiators should keep a cool head and remember the old German proverb, "Let anger fly out the window." In other words, in the face of an emotional outburst, imagine opening a window and letting the heat of the anger out the window.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: The Art of Negotiating
Level: Medium

58. Explaining why a critical task must be done by a specific time is an example of the _____ key point of negotiation.
focus on interests, not position

The key is to focus on the interests behind your positions (what you are trying to achieve) and separate these goals from your ego as best you can. Not only should you be driven by your interests, but you should try to identify the interests of the other party.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Art of Negotiating
Level: Medium

59. Dividing perceived performance by expected performance will calculate _____.
customer satisfaction

See Table 12.5 on page 436.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: A Note on Managing Customer Relations
Level: Medium

True / False Questions

60. Toyota and Daimen-Chrysler collaborating with suppliers to develop new automobile platforms is an example of outsourcing.
TRUE

Outsourcing is now being applied to contracting significant chunks of project work. For example, HP and Dell work closely with hard drive manufacturers to develop next-generation laptops. Toyota and DaimlerChrysler collaborate with suppliers to develop new automobile platforms.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Easy

61. Participants from different organizations working close together at the construction site or in shared office space is an example of a virtual team.
FALSE

In a virtual team participants from different organizations work closely together, for example, at a construction site or in shared office space.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Outsourcing Project Work
Level: Easy

62. Working in outsourcing teams, projects can be completed faster and more cheaply.
TRUE

Not only can work be done more cheaply, but it can also be done faster. Competitive pricing means more resources for the dollar.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Easy

63. Increased conflict and loss of coordination are typical disadvantages of outsourcing project work.
TRUE

See list on page 422.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Outsourcing Project Work
Level: Medium

64. Trust can be difficult to forge when interactions are limited and people come from different organizations.
TRUE

Trust, which is essential to project success, can be difficult to forge when interactions are limited and people come from different organizations.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Easy

65. In partnering, access to each other's organization resources is available.
TRUE

Access to each other's organization resources is available.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Easy

66. In the traditional method of managing projects, total company involvement requires commitment from CEO to team members.
FALSE

In the traditional method of independent project teams; teams are spatially separated with managed interactions.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Easy

67. In partnering, each party's goals and objectives are similar but geared to what is best for them.
FALSE

In partnering, access to each other's organization resources is available.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Easy

68. As part of an effort to cut costs, the United States Department of Defense issues annual Value Engineering Awards.
TRUE

As part of an effort to cut costs the United States Department of Defense (DoD) issues annual Value Engineering Awards. Value engineering is a systematic process to analyze functions to identify actions to reduce cost, increase quality, and improve mission capabilities across the entire spectrum of DoD systems, processes, and organizations.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Easy

69. In some countries, laws are considered to be guidelines that are not necessarily followed.
TRUE

As an American, you likely assume that laws are generally obeyed. Believe it or not, that's generally not true in most of the world, where laws are guidelines that are not necessarily followed. This can lead to major communication problems! You think if you write a contract, everybody is going to adhere to it. For many people, a contract is merely a suggestion.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

70. For people in some countries, a written, signed contract is merely a suggestion.
TRUE

As an American, you likely assume that laws are generally obeyed. Believe it or not, that's generally not true in most of the world, where laws are guidelines that are not necessarily followed. This can lead to major communication problems! You think if you write a contract, everybody is going to adhere to it. For many people, a contract is merely a suggestion.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

71. Because English is the language of business, it is not necessary to speak in a direct manner using short sentences made of basic, simple words as this may taken as an insult.
FALSE

For many outsourcers, English is still a foreign language—even in India, where both outsourcing and the English language are common. No matter how prevalent English has become, your outsourcer might have a basic understanding of each word you utter yet be not completely clear on the exact meaning of the message you're trying to convey. This is why you should speak in a direct manner using short sentences made of basic, simple words.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

72. All conversations with outsourcers should be followed up with commitments documented in writing since they are likely to understand written English better than spoken English.
TRUE

Follow up your conversations in writing. Commit your requirements to paper for the outsourcer. Many people understand written language better than spoken language, probably because they have more time to process the message.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

73. Experience indicates that co-location of project teams is not worth the extra costs.
FALSE

One of the best ways to overcome interorganizational friction is to have people from each organization working side by side on the project. Smart companies rent or make available the necessary accommodations so that all key project personnel can work collectively together.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

74. A partnering charter states the common goals for the project as well as the procedures that will be used to achieve these goals.
TRUE

The team-building sessions often culminate with the creation of a partnering charter signed by all of the participants. This charter states their common goals for the project as well as the procedures that will be used to achieve these goals.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

75. It is a good idea to add a penalty clause to an outsourcing agreement because deadlines are often taken as a suggestion rather than a commitment.
TRUE

Another important cultural difference relates to schedules and deadlines. To most Americans, a deadline is a set completion date. In many other cultures, a deadline is a suggestion that maybe something will be finished by that indicated date. To ensure that outsourced work is completed on time it is imperative to add a penalty clause to your contract or enforce late fees.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Easy

76. A prime consideration in choosing outsourcing vendors is to assess the fit with their project management system.
TRUE

The best companies address this issue up front instead of waiting for problems to emerge. First they assess "fit" between providers' project management methods and their own project management system. This is a prime consideration in choosing vendors.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

77. Team-building workshops with outsourcing vendors is usually led by an outside consultant who is an expert in designing and facilitating such workshops.
TRUE

The training is augmented by interorganizational team-building sessions designed to forge healthy relationships before the project begins. Team-building workshops involve the key players from the different firms, for example, engineers, architects, lawyers, specialists, and other staff. In many cases, firms find it useful to hire an outside consultant to design and facilitate the sessions. Such a consultant is typically well-versed in interorganizational team building and can provide an impartial perspective to the workshop.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

78. In project negotiation each negotiator is out to win as much as he or she can for their side.
FALSE

Many people approach negotiating as if it is a competitive contest. Each negotiator is out to win as much as he or she can for his or her side. Success is measured by how much is gained compared with the other party. While this may be applicable when negotiating the sale of a house, it is not true for project management. Project management is not a contest!

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Art of Negotiating
Level: Easy

79. Principled Negotiation emphasizes developing win/win solutions while protecting yourself against those who would take advantage of your forthrightness.
TRUE

Fisher and Ury from the Harvard Negotiation Project champion an approach to negotiating that embodies these goals. It emphasizes developing win/win solutions while protecting yourself against those who would take advantage of your forthrightness. Their approach is called principled negotiation.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Art of Negotiating
Level: Easy

80. By keeping the focus on the issues and not the personalities, negotiators are better able to let the other person blow off steam.
TRUE

By keeping the focus on the issues and not the personalities, negotiators are better able to let the other person blow off steam.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Art of Negotiating
Level: Easy

81. The best defense against unreasonable, win/lose negotiators is having what Fisher and Ury call a strong BATNA.
TRUE

The best defense against unreasonable, win/lose negotiators is having what Fisher and Ury call a strong BATNA (best alternative to a negotiated agreement). They point out that people try to reach an agreement to produce something better than the result of not negotiating with that person.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Art of Negotiating
Level: Easy

82. A value of 1.5 is the accepted target for the Met-Expectations model of customer satisfaction.
<u>FALSE</u>

Under most circumstances, the most profitable arrangement occurs when the customer's expectations are only slightly exceeded. Returning to the mathematical model, with all other things being equal, one should strive for a satisfaction ratio of 1.05, not 1.5!

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: A Note on Managing Customer Relations
Level: Easy

Short Answer Questions

83. What is partnering and why has it become popular for managing projects?

Partnering is a method of transforming contractual relationships into a cohesive, cooperative project team with a single set of goals and established procedures for resolving disputes in a timely manner. It is popular because the old way, built on an adversarial premise, was not working.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

84. Identify the four advantages to outsourcing project work.

1. cost reduction, 2. shorten project completion, 3. increased flexibility, 4. higher level of expertise.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Outsourcing Project Work
Level: Medium

85. Discuss how key practices in partnering relationships vary with those in traditional practice for 1. working relationships, 2. goals, and 3. communications.

1. With partnering, mutual trust forms the basis for strong working relationships while in traditional approaches there is suspicion and distrust with each party wary of the motives for actions by the other. 2. With partnering, goals and objectives are shared and ensure common direction while traditionally each party's goals and objectives are similar but geared to what is best for them. 3. With partnering, communications are open to avoid misdirection and thus bolster effective working relationships while in traditional approaches communications are structured and guarded.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Best Practices in Outsourcing Project Work
Level: Difficult

86. Discuss how key practices in partnering relationships vary with those in traditional practice for 1. risk, 2. length of commitment, and 3. structure of project teams.

1. In partnering, risk is shared jointly among the partners, which encourages innovation and continuous improvement while traditionally risk is to be avoided and transferred to the other party. 2. In partnering, long-term commitments are made while traditionally single project contracting is the norm. 3. In partnering, project teams are composed of all participating organizations and result in a high level of interaction while traditionally each organization has its own spatially separated teams.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Best Practices in Outsourcing Project Work
Level: Difficult

87. Identify the four strategies offered by Dr. Adam Kolawa for overcoming poor communication with outsourcers.

1. recognize cultural differences, 2. choose the right words, 3. confirm your requirements, and 4. set deadlines.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

88. Identify the three steps you should take to confirm that the outsourcer thoroughly understands your requirements.

1. document your requirements, 2. insist that the outsourcer re-document your requirements, and 3. request a prototype.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

89. "Team-building is nice to have for a project, but we really need to concentrate on the planning and technical challenges—that is the make-or-break point for this project." Agree or disagree? Support your answer.

Smart firms recognize that people issues are as important, if not more important, than technical issues. They train their personnel to work effectively with people from other organizations and countries.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Best Practices in Outsourcing Project Work
Level: Medium

90. What is principled negotiation and what are the four key points it is based upon?

Principled negotiation is an approach to negotiation that emphasizes developing win/win solutions while protecting yourself against those who would take advantage of your forthrightness. 1. separate the people from the problem, 2. focus on interests, not positions, 3. invent options for mutual gain, and 4. when possible use objective criteria.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: The Art of Negotiating
Level: Difficult

91. What is *negotiation jujitsu*?

It is a technique for negotiating with unreasonable people. When someone adamantly sets forth a position, neither accept it nor reject it—treat it as a possible option and then look for the interests behind it.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Art of Negotiating
Level: Medium

92. Describe the Met-Expectations Model of Customer Satisfaction including the formula to calculate it.

Customer satisfaction is a function of the extent to which perceived performance exceeds expected performance and can be represented by dividing the perceived performance by the expected performance. A result less than one indicates dissatisfaction where a result over one indicates satisfaction.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: A Note on Managing Customer Relations
Level: Medium

93. In the research highlight on IT project managers, different roles that are critical to the success of the project manager were discussed. Identify each of the five roles and briefly discuss them.

1. Entrepreneur, 2. Politician, 3. Friend, 4. Marketer, and 5. Coach.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: A Note on Managing Customer Relations
Level: Difficult

94. In terms of Fisher and Ury's approach to negotiation, what is a BATNA and why is it important?

It is a <u>best alternative to a negotiated agreement</u> and it is the true benchmark for determining whether you should accept an agreement. It is the best tool to deal with unreasonable people.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: The Art of Negotiating
Level: Difficult

Chapter 13 Progress and Performance Measurement and Evaluation Answer Key

Multiple Choice Questions

1. A project monitoring system involves all of the following except:
A. Determining what date to collect
B. Determining how, when, and who will collect the data
C. Adjusting the data
D. Analysis of the data
E. Reporting current progress

A project monitoring system involves determining what data to collect; how, when, and who will collect the data; analysis of the data; and reporting current progress.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Structure of a Project Monitoring Information System
Level: Easy

2. Adequate project controls have the advantage(s) of:
A. Holding people accountable
B. Prevents small problems from getting large
C. Keeping focus
D. Both A and B are correct
E. A, B, and C are all correct

See list on page 453.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Structure of a Project Monitoring Information System
Level: Medium

3. A typical project progress report would contain all of the following sections except:
A. Progress since last report
B. Problems and issues since last report
C. Current status of project
D. Corrective action planned
E. All of these are typical sections

See list on page 454.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Structure of a Project Monitoring Information System
Level: Easy

4. The first step in the project control process of the measurement and evaluation of project performance is to
A. Set a baseline plan
B. Determine the project objectives
C. Determine the project deliverables
D. Analyze the project budget
E. Review the project priority matrix

See list on page 454.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Project Control Process
Level: Easy

5. The second step in the project control process of the measurement and evaluation of project performance is to:
A. Review the baseline plan with top management
B. Analyze inputs to control system
C. Compare plan against actual
D. Measure progress and performance
E. Review spending with team members

See list on page 454.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Project Control Process
Level: Easy

6. The third step in the project control process of the measurement and evaluation of project performance is to:
A. Review the baseline plan with top management
B. Analyze inputs to the control system
C. Compare the plan against actual performance
D. Measure both progress and performance
E. Review spending with team members

See list on page 454.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Project Control Process
Level: Easy

7. The last step in the project control process of the measurement and evaluation of project performance is to:
A. Take appropriate action
B. Prepare a report to top management
C. Follow up on corrective action
D. Measure progress and performance
E. Review spending with team members

See list on page 454.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Project Control Process
Level: Easy

8. In monitoring project time (schedule) performance actual performance should be compared to:
A. Budgets for the current year
B. Top management's targets
C. Project network schedule derived from the WBS/OBS
D. Progress on similar past projects
E. Previous status reports

A major goal of progress reporting is to catch any negative variances from plan as early as possible to determine if corrective action is necessary. Fortunately, monitoring schedule performance is relatively easy. The project network schedule, derived from the WBS/OBS, serves as the baseline to compare against actual performance.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Monitoring Time Performance
Level: Easy

9. A typical tool used to communicate project status is a:
A. Project network diagram
B. Gantt Chart
C. A PERT chart
D. Both A and B are correct
E. A, B, and C are all correct

Gantt charts (bar charts) and control charts are the typical tools used for communicating project schedule status.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Monitoring Time Performance
Level: Easy

10. A tool used to monitor past project schedule performance, current performance, and to estimate future schedule trends is a simple line chart known as a:
A. Project schedule control chart
B. Gantt chart
C. PERT chart
D. Network diagram
E. Milestone chart

This chart is another tool used to monitor past project schedule performance and current performance and to estimate future schedule trends.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Monitoring Time Performance
Level: Easy

11. n *Earned Value System* used to monitor project progress includes comparison of
A. Actual costs versus budget
B. Schedule progress versus plan
C. Quality progress versus plan
D. Both A and B are correct
E. A, B, and C are all correct

The earned value system starts with the time-phased costs that provide the project budget baseline, which is called the planned budgeted value of the work scheduled (PV). Given this time-phased baseline, comparisons are made with actual and planned schedule and costs using earned value. The earned value approach provides the missing links not found in conventional cost-budget systems.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

12. he earned value of a project is the:
A. Project cost to date adjusted for project scope changes
B. Total project cost to date
C. Cost incurred minus the planned cost
D. Percent of the original budget that has been earned by actual work
E. None of these are correct

Earned value for a task is simply the percent complete times its original budget. Stated differently, EV is the percent of the original budget that has been earned by actual work completed.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

13. The cost variance for a project is calculated by:
A. EV-AC
B. AC-SV
C. PV-EV
D. CU-EV
E. EU-PV

See Table 13.1 on page 459.

14. The schedule variance for a project is calculated by:
A. EV-AC
B. AC-SV
C. PV-EV
D. CU-EV
E. EV-PV

See Table 13.1 on page 459.

15. Baseline project budgets are derived from:
A. The organization's overall budget
B. Time-phasing the work packages
C. Top management directions
D. Both A and C are correct
E. A, B, and C are all correct

The earned value system starts with the time-phased costs that provide the project budget baseline, which is called the planned budgeted value of the work scheduled (PV). Given this time-phased baseline, comparisons are made with actual and planned schedule and costs using earned value. The earned value approach provides the missing links not found in conventional cost-budget systems.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

16. Of the following costs, which are not included in baseline?
A. Materials
B. Equipment
C. Labor
D. A and C but not B
E. All of these are usually included

The baseline (PV) is the sum of the cost accounts, and each cost account is the sum of the work packages in the cost account. Three direct costs are typically included in baselines—labor, equipment, and materials.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

17. The method most frequently used in measuring project progress is the
A. 0/100 percent rule
B. 75/25 percent rule
C. 50/50 percent rule
D. 25/75 percent rule
E. Percent complete rule

This rule is the heart of any earned value system. The best method for assigning costs to the baseline under this rule is to establish frequent checkpoints over the duration of the work package and assign completion percentages in dollar terms.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Easy

18. Generally the method for measuring accomplishments centers on comparing
A. Earned value with the expected schedule value
B. Earned value with the actual costs
C. Actual costs with budgeted costs
D. Both A and B are correct
E. A, B, and C are all correct

Generally the method for measuring accomplishments centers on two key computations: 1. Comparing earned value with the expected schedule value. And 2. Comparing earned value with the actual costs.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

19. Which of the following are required to assess the current status of a project using the earned-value cost/schedule system?
A. BAC, EAC, and ETC
B. VAC, EAC, and BAC
C. CV, SU, and BAC
D. PV, EV, and AC
E. TCPI, EV, and PV

Assessing the current status of a project using the earned value cost/schedule system requires three data elements—planned cost of the work scheduled (PV), budgeted cost of the work completed (EV), and actual cost of the work completed (AC).

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Difficult

20. Which of the following methods of variance analysis is the best indicator of how far off the budget a project will be at completion?
A. BAC
B. EAC
C. ETC
D. VAC
E. TCPI

Cost variance at completion. VAC indicates expected actual over- or underrun cost at completion.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Difficult

21. Which of the following methods will measure the cost efficiency of the work accomplished to date?
A. SV/CV
B. EV/PV
C. EV/AC
D. AC/SV
E. AC/CV

Cost performance index (CPI) = EV/AC.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Indexes to Monitor Progress
Level: Difficult

22. Which of the following methods will measure the *scheduling* efficiency of the work accomplished to date?
A. SV/CV
B. EV/PV
C. EV/AC
D. AC/SV
E. AC/CV

Scheduling performance index (SPI) = EV/PV.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Indexes to Monitor Progress
Level: Difficult

23. An index value less than one indicates that the project is
A. Under cost or behind schedule
B. Over cost or ahead of schedule
C. Under cost or ahead of schedule
D. Over cost or behind schedule
E. On cost or on schedule

See Table 13.3 on page 469.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Indexes to Monitor Progress
Level: Difficult

24. Scope creep affects:
A. The organization
B. The project team
C. The project suppliers
D. Both A and B are correct
E. A, B, and C are all correct

Scope creep affects the organization, project team, and project suppliers.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Other Control Issues
Level: Medium

25. Small refinements that eventually build to be major changes are known as:
A. Project erosion
B. Scope creep
C. Specification adjustments
D. Specification refinements
E. Continuous improvements

Large changes in scope are easily identified. It is the "minor refinements" that eventually build to be major scope changes that can cause problems. These small refinements are known in the field as scope creep.

26. The percent complete index that looks at percent complete in terms of <u>budgeted</u> amounts is calculated by which of the following?
A. EV/BAC
B. (EV-PV)/BAC
C. AC/EAC
D. (EV-AC)/BAC
E. (EV-PV)/EAC

Percent complete index PCIB = EV/BAC.

27. The percent complete index that looks at percent complete in terms of <u>actual</u> amounts is calculated by which of the following?
A. EV/BAC
B. (EV-PV)/BAC
C. AC/EAC
D. (EV-AC)/BAC
E. (EV-PV)/EAC

Percent complete index PCIC = AC/EAC.

28. Which of the following will calculate the estimated cost to complete the project?
A. (VAC-EV)/(PV/AC)
B. (BAC-EV)/(EV/AC)
C. (PV/AC)/(VAC-EV)
D. (EV/AC)/(BAC-EV)
E. (BAC-EV)/(BAC-AC)

A method used in large projects where the original budget is less reliable. This method uses the actual costs to date plus an efficiency index (CPI 5 EV/AC) applied to the remaining project work.

29. Which of the following will calculate the To Complete Performance Index?
A. (VAC-EV)/(PV/AC)
B. (BAC-EV)/(EV/AC)
C. (PV/AC)/(VAC-EV)
D. (EV/AC)/(BAC-EV)
E. (BAC-EV)/(BAC-AC)

TCPI = (BAC-EV)/(BAC-AC).

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Forecasting Final Project Cost
Level: Difficult

30. Which of the following is not true regarding scope creep?
A. It is common late in projects
B. It is frequently unnoticed until time delays or cost overruns are observed
C. It wears down team motivation and cohesiveness
D. Project suppliers resent frequent changes
E. All of these are true

Scope creep is common early in projects—especially in new-product development projects. Customer requirements for additional features, new technology, poor design assumptions, etc., all manifest pressures for scope changes. Frequently these changes are small and go unnoticed until time delays or cost overruns are observed. Scope creep affects the organization, project team, and project suppliers. Scope changes alter the organization's cash flow requirements in the form of fewer or additional resources, which may also affect other projects. Frequent changes eventually wear down team motivation and cohesiveness. Clear team goals are altered, become less focused, and cease being the focal point for team action. Starting over again is annoying and demoralizing to the project team because it disrupts project rhythm and lowers productivity. Project suppliers resent frequent changes because they represent higher costs and have the same effect on their team as on the project team.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Other Control Issues
Level: Difficult

Fill in the Blank Questions

31. _____ holds people accountable, prevents small problems from mushrooming into large problems, and keeps focus.
Control

Control holds people accountable, prevents small problems from mushrooming into large problems, and keeps focus.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Structure of a Project Monitoring Information System
Level: Easy

32. The first step in creating a project control system for measuring and evaluating project performance is to _____.
set up a baseline plan

See list on page 454.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Project Control Process
Level: Easy

33. A concept of _____ is necessary to get a realistic estimate of performance against a time-phased budget.
earned value

Earned value is necessary to provide a realistic estimate of performance against a time-phased budget. Earned value (EV) is defined as the budgeted cost of the work performed.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Project Control Process
Level: Medium

34. Usually status reports should take place every _____ weeks to be useful and allow for proactive correction.
<u>one to four</u>

Usually status reports should take place every one to four weeks to be useful and allow for proactive correction.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Project Control Process
Level: Medium

35. Because of their easy-to-understand visual format, _____ are the most favored, used, and understandable tool used to report project status.
<u>Gantt charts</u>

Gantt and control charts serve well as a means for tracking and trending schedule performance. Their easy-to-understand visual formats make them favorite tools for communicating project schedule status—especially to top management, who do not usually have time for details.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Monitoring Time Performance
Level: Easy

36. Control charts are frequently used to monitor progress toward _____, which mark events and as such have zero duration.
<u>milestones</u>

Control charts are also frequently used to monitor progress toward milestones, which mark events and as such have zero duration. Milestones are significant project events that mark major accomplishments.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Monitoring Time Performance
Level: Medium

37. The _____ is a tool used to monitor past project schedule performance and current performance and to estimate future schedule trends.
project schedule control chart

Control charts are also frequently used to monitor progress toward milestones, which mark events and as such have zero duration.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Monitoring Time Performance
Level: Medium

38. The _____ is the difference between the earned value and the actual costs for the work completed to date.
cost variance

Cost variance is the difference between the earned value and the actual costs for the work completed to date where $CV = EV - AC$.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

39. The _____ is the difference between the earned value to date and the baseline schedule.
schedule variance

Schedule variance is the difference between the earned value and the baseline line to date where $SV = EV - PV$.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

40. _____ is simply the percent complete, times the original budget.
Earned value

Earned value for a task is simply the percent complete times its original budget.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

41. The best method for assigning costs to the baseline is to establish frequent _____ over the duration of the work package.
checkpoints

The best method for assigning costs to the baseline under this rule is to establish frequent checkpoints over the duration of the work package and assign completion percentages in dollar terms.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

42. When measuring percent complete in the monitoring phase of the project, it is common to limit the amount earned to _____ until the work package is 100 percent complete.
80 or 90 percent

When measuring percent complete in the monitoring phase of the project, it is common to limit the amount earned to 80 or 90 percent until the work package is 100 percent complete.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

43. The _____ is the rule most frequently used by practicing project managers to both assign costs to the baseline and to measure progress using earned value.
percent complete

In practice, the integration is accomplished by using the same rules in assigning costs to the baseline as those used to measure progress using earned value. You may find several rules in practice, but percent complete is the workhorse most commonly used.

44. Cost variance tells us if the _____ costs are more or less than was planned at any point over the life of the project.
work accomplished

Cost variance tells us if the work accomplished costs more or less than was planned at any point over the life of the project.

45. A positive variance in SV or CV indicates a _____ condition.
desirable

A positive variance in SV or CV indicates a desirable condition.

46. The units of measure for SV or CV is in terms of _____.
dollars

Schedule variance measures progress in dollars rather than time units.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

47. CPI and SPI are two types of indexes that measure _____.
performance efficiency

There are two indexes of performance efficiency. The first index measures cost efficiency of the work accomplished to date (CPI). The second index is a measure of scheduling efficiency to date (SPI).

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Indexes to Monitor Progress
Level: Medium

48. The _____ indexes compare the to-date progress to the end of the project.
percent complete

Two project percent complete indexes are used, depending on your judgment of which one is most representative of your project. The first index assumes the original budget of work complete is the most reliable information to measure project percent complete. The second index assumes the actual costs-to-date and expected cost at completion are the most reliable for measuring project percent complete. These indexes compare the to-date progress to the end of the project.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Indexes to Monitor Progress
Level: Medium

49. An SPI index of 1.22 indicates that the project is _____ schedule.
<u>behind</u>

See Table 13.3 on page 469.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Indexes to Monitor Progress
Level: Medium

50. Although it is very difficult to measure, measuring _____ performance is as important as measuring schedule and cost performance.
<u>technical</u>

It is very difficult to specify how to measure technical performance because it depends on the nature of the project. Suffice it to say, measuring technical performance must be done. Technical performance is frequently where quality control processes are needed and used. Project managers must be creative in finding ways to control this very important area.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Indexes to Monitor Progress
Level: Medium

51. The best defense against scope creep is a _____.
<u>well-defined scope statement</u>

The best defense against scope creep is a well-defined scope statement.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Other Control Issues
Level: Medium

True / False Questions

52. The PCIB index measures the project percent complete in relation to the resources that were budgeted.
TRUE

The PCIB index assumes the original budget of work complete is the most reliable information to measure project percent complete. The PCIB index looks at percent complete in terms of budget amounts.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Indexes to Monitor Progress
Level: Medium

53. The PCIC index measures the project percent complete in relation to the resources that have actually been used so far on the project.
TRUE

The PCIC index assumes the actual costs-to-date and expected cost at completion are the most reliable for measuring project percent complete. These indexes compare the to-date progress to the end of the project. The PCIC index views percent complete in terms of actual dollars spent to accomplish the work to date and the actual expected dollars for the completed project (EAC).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Indexes to Monitor Progress
Level: Medium

54. Control is one of the most neglected areas of project management.
TRUE

Control is one of the most neglected areas of project management.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Structure of a Project Monitoring Information System
Level: Easy

55. Measuring performance against budget is simply a case of comparing actual versus budget.
<u>FALSE</u>

Measuring performance against budget (e.g., money, units in place, labor hours) is more difficult and is not simply a case of comparing actual versus budget.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Project Control Process
Level: Medium

56. Earned value is defined as the budgeted cost of the work performed.
<u>TRUE</u>

Earned value (EV) is defined as the budgeted cost of the work performed.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: The Project Control Process
Level: Medium

57. The baseline is derived from merging information from the work packages with the project network.
<u>TRUE</u>

The baseline is derived from the cost and duration information found in the work breakdown structure (WBS) database and time-sequence data from the network and resource scheduling decisions.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: The Project Control Process
Level: Difficult

58. The network chart is the most favored, used, and understandable option for reporting project progress to upper management.
<u>FALSE</u>

The Gantt chart is the most favored, used, and understandable. This kind of chart is commonly referred to as a tracking Gantt chart. Gantt and control charts serve well as a means for tracking and trending schedule performance. Their easy-to-understand visual formats make them favorite tools for communicating project schedule status—especially to top management, who do not usually have time for details.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Monitoring Time Performance
Level: Medium

59. In a project control chart, four observations trending in one direction indicate there is a very high probability that there is an identifiable cause.
<u>TRUE</u>

Four observations trending in one direction indicate there is a very high probability that there is an identifiable cause.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Monitoring Time Performance
Level: Medium

60. Milestones are significant project events that mark major accomplishments.
<u>TRUE</u>

Milestones are significant project events that mark major accomplishments.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Monitoring Time Performance
Level: Easy

61. The best method for assigning costs to the baseline under this rule is to establish frequent checkpoints over the duration of the work package and assign completion percentages in dollar terms.
TRUE

The best method for assigning costs to the baseline under this rule is to establish frequent checkpoints over the duration of the work package and assign completion percentages in dollar terms.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

62. The original earned value cost/schedule system was pioneered by the U.S. Department of Defense in the 1960s.
TRUE

The original earned value cost/schedule system was pioneered by the U.S. Department of Defense (DOD) in the 1960s.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

63. Earned value is calculated by taking the percent complete times the original budget.
TRUE

Earned value for a task is simply the percent complete times its original budget. Stated differently, EV is the percent of the original budget that has been earned by actual work completed.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Easy

64. Baseline costs typically include labor, equipment, materials and direct overhead cost.
FALSE

The baseline (PV) is the sum of the cost accounts, and each cost account is the sum of the work packages in the cost account. Three direct costs are typically included in baselines—labor, equipment, and materials.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Easy

65. Overhead costs and profit are typically included in the project baseline.
FALSE

Overhead costs and profit are typically added later by accounting processes.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Easy

66. The major reasons for creating a baseline are to monitor and report progress and to estimate cash flow.
TRUE

The major reasons for creating a baseline are to monitor and report progress and to estimate cash flow.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

67. In calculating schedule variance and cost variance, a negative variance indicates a desirable condition, and a positive variance suggests problems.
<u>FALSE</u>

A positive variance indicates a desirable condition, while a negative variance suggests problems or changes that have taken place.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

68. An undesirable schedule variance indicates that the project is running behind schedule.
<u>FALSE</u>

A negative schedule variance suggests problems or changes that have taken place.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Difficult

69. Cost variance tells us the different estimates among vendors needed to complete the project over the life of the project.
<u>FALSE</u>

Cost variance tells us if the work accomplished costs more or less than was planned at any point over the life of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Difficult

70. A CPI index of 0.97 indicates that the project has spent less money than budgeted.
FALSE

See Table 13.3 on page 469.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Indexes to Monitor Progress
Level: Medium

71. One method of estimating the costs to complete a project is to divide the work remaining by the CPI.
TRUE

EAC = Work remaining/CPI.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Forecasting Final Project Cost
Level: Difficult

72. All scope changes that result in increased costs should be avoided.
FALSE

Although scope changes are usually viewed negatively, there are situations when scope changes result in positive rewards. Scope changes can represent significant opportunities. In product development environments, adding a small feature to a product can result in a huge competitive advantage. A small change in the production process may get the product to market one month early or reduce product cost.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Other Control Issues
Level: Medium

73. *Scope Creep* refers to any significant changes made in the project once it is underway.
<u>FALSE</u>

Large changes in scope are easily identified. It is the "minor refinements" that eventually build to be major scope changes that can cause problems. These small refinements are known in the field as scope creep.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Other Control Issues
Level: Medium

74. The key to managing scope creep is change management.
<u>TRUE</u>

The key to managing scope creep is change management.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Other Control Issues
Level: Easy

75. The best defense against scope creep is accepting only major changes.
<u>FALSE</u>

The best defense against scope creep is a well-defined scope statement.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Other Control Issues
Level: Easy

76. The rule of using subjective estimated percent complete in combination with hard, tangible monitoring points works well on long-duration activities that can be broken into short discrete work packages.
TRUE

This is regarding percent complete with weighted monitoring gates. This more recent rule uses subjective estimated percent complete in combination with hard, tangible monitoring points. This method works well on long-duration activities that can be broken into short, discrete work packages of no more than one or two report periods.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Indexes to Monitor Progress
Level: Easy

Short Answer Questions

77. Identify the steps in creating a control process that measure and evaluate project performance.

1. Set the baseline plan, 2. Measure the progress and performance, 3. Compare plan against actual, 4. Take action as indicated by the results.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: The Project Control Process
Level: Medium

78. What is the difference between a baseline Gantt chart and a Tracking Gantt chart?

The baseline chart is created during the project planning phase and lays out the logic and timing for major activities. The tracking chart shows progress against that plan by using various graphical techniques to display progress.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Monitoring Time Performance
Level: Medium

79. Identify and briefly describe the three percent complete rules for placing costs in baselines.

1. 0/100 percent rule; credit is earned when activity is complete and not before, 2. 50/50 percent rule; 50 percent of the value is applied when the activity is started and the other 50 percent when it is completed, and 3. Percent complete rule; frequent checkpoints are established with predetermined earned values and credit is given when those checkpoints are achieved.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Indexes to Monitor Progress
Level: Medium

80. Conducting an earned value analysis requires three data elements. Identify the acronyms for each and describe what they are.

1. PV; budgeted cost of work scheduled, 2. EV; budgeted cost of the work performed, and 3. AC; actual cost of the work performed.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

81. In reviewing the budget report of a project, you notice that spending on the project is running about ten percent over plan. Is the project in trouble? Why or why not?

You don't know for sure. The project may be in trouble however the cost overrun could be due to the project being ahead of schedule. You would need to have an earned value analysis run before you could tell.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Development of An Earned Value Cost/Schedule System
Level: Medium

82. Interpret the results of calculating the performance indexes based on a range of possible calculated values.

If the index is less than one then the cost is under target or the project is ahead of schedule. If the index is equal to one then either the cost or the schedule are on target. If the index is greater than one the project is overspending or behind schedule.

83. Identify the four indexes used in project management control and identify the formulas for calculating the indexes.

1) Cost Performance Index (CPI) = EV/AC, 2) Schedule Performance Index (SPI) = EV/PV, 3) Percent Complete Index (PCIB) = EV/BAC, and 4) Percent Complete Index (PCIC) = AC/EAC

84. Identify and briefly discuss the two methods to revise estimates of future project costs.

1. Revision by Experts; changes are made by experts because new information indicates that the original estimates were not accurate, usually used on small projects, and 2. Revision based on CI; changes are made by using Cost Productivity Index as a basis for reforecasting the project costs ETC. (BAC-EV)/(EV/AC).

85. What are Weighted Monitoring Gates and why would you need them?

Weighted Monitoring Gates work well with long duration activities that can be broken into short discrete work packages. For example, establishing monitoring gates at 30%, 50%, and 100% would serve as a check on overly optimistic estimates of work progress.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Indexes to Monitor Progress
Level: Medium

86. What is scope creep and why should a project manager be concerned about it?

Scope creep is small refinements that eventually build into a major change in the scope of the project. A project manager should be concerned in that the project was put together and the resources assembled to achieve specific objectives and while the motives can be well intended the result is that sacrifices may be required to the other two key areas of schedule and/or costs.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Other Control Issues
Level: Medium

87. Typically, project progress reports are designed and communicated in written or oral form. Identify the common topic format for such progress reports.

1. progress since last report, 2. current status of project, 3. cumulative trends, 4. problems and issues since last report, and 5. corrective action planned.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Structure of a Project Monitoring Information System
Level: Difficult

88. Briefly describe the general structure of a project monitoring information system for control.

A project monitoring system involves 1. determining what data to collect; 2. how, when, and who will collect the data; 3. analysis of the data; and 4. reporting current progress.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Structure of a Project Monitoring Information System
Level: Difficult

Chapter 14 Project Closure Answer Key

Multiple Choice Questions

1. The most common circumstance for project closure is simply a _____ project.
A. Completed
B. Overdue
C. Overbudget
D. Under achiveing
E. All the above are correct

The most common circumstance for project closure is simply a completed project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Easy

2. What is not a wrap-up closure activity?
A. Facilities
B. Vendors
C. Customer
D. Profit report
E. Report

See Figure 14.1 on page 505.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Types of Project Closure
Level: Medium

3. _____ of lessons learned are designed to improve performance on current and future projects.
A. Retrospectives
B. Corrective action plans
C. Introspective
D. Culmination
E. Evolution

Retrospectives of lessons learned are designed to improve performance on current and future projects.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Types of Project Closure
Level: Easy

4. The content of the final report typically includes the following topics:
A. Lessons learned
B. Review and analysis
C. Recommendations
D. Executive summary
E. All the above are correct

The content of the final report typically includes the following topics: executive summary, review and analysis, recommendations, lessons learned, and appendix.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Easy

5. When the project may be completed early with some parts of the project eliminated this is considered to be _____ closure.
A. Normal
B. Premature
C. Perpetual
D. Changed Priority
E. Failed Project

For a few projects, the project may be completed early with some parts of the project eliminated. For example, in a new-product development project, a marketing manager may insist on production models before testing.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Types of Project Closure
Level: Easy

6. This type of closure occurs when the project may never seem to end. This is considered to be _____ closure.
A. Normal
B. Premature
C. Perpetual
D. Changed Priority
E. Failed Project

Some projects never seem to end. The major characteristic of this kind of project is constant "add-ons," suggesting a poorly conceived project scope. At some point the review group should recommend methods for bringing final closure to this type of project or the initiation of another project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Easy

7. Many projects will fail because of circumstances beyond the control of the project team is called:
A. Normal
B. Premature
C. Perpetual
D. Failed Project
E. Changed Priority

Failed projects are usually easy to identify and easy for a review group to close down, However, every effort should be made to communicate the technical (or other) reasons for termination of the project; in any event project participants should not be left with an embarrassing stigma of working on a project that failed. Many projects will fail because of circumstances beyond the control of the project team.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Easy

8. When a project may start with a high priority but see its rank erode or crash during its project life cycle as conditions change this is an example of:
A. Normal
B. Premature
C. Perpetual
D. Failed Project
E. Changed Priority

Organizations' priorities often change and strategy shifts directions. For example, during the 2008-10 financial crisis organizations shifted their focus from money making projects to cost savings projects. The oversight group continually revises project selection priorities to reflect changes in organizational direction. Projects in process may need to be altered or canceled. Thus, a project may start with a high priority but see its rank erode or crash during its project life cycle as conditions change. When priorities change, projects in process may need to be altered or canceled.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Easy

9. Implementing closedown includes the following major activities except:
A. Getting delivery acceptance from the customer.
B. Shutting down resources and releasing to new uses.
C. Closing accounts and seeing all bills are paid.
D. E-mail the project team that the project is complete.
E. Creating a final report.

See list on page 508

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Wrap-up Closure Activities
Level: Medium

10. Which is not part of the team portion of the Wrap-up closure checklist?
A. Has a schedule for reducing project staff been developed and accepted?
B. Has staff been offered outplacement services and career counseling activities?
C. Have performance reviews for team members been conducted?
D. Has staff been released or notified of new assignments?
E. All are included.

See Table 14.1 on page 508.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

11. Under which heading of the Wrap-up closure checklist should the question "Has an in-depth project review and evaluation interview with the customer been conducted?" be answered.
A. Team
B. Vendors/contractors
C. Customer/Users
D. Equipment and facilities
E. Profit and loss statement

See Table 14.1 on page 508.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

12. Under which heading of the Wrap-up closure checklist should the question "Have project accounts been finalized and all billing closed?" be answered.
A. Team
B. Vendors/contractors
C. Customer/Users
D. Equipment and facilities
E. Profit and loss statement

See Table 14.1 on page 508.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

13. Releasing the project team typically occurs _____ during the closure phase.
A. Gradually
B. Rarely
C. Without bombast
D. Rapidly
E. All at once

Releasing the project team typically occurs gradually during the closure phase. For many people, termination of their responsible activities ends before the project is delivered to the customer or user.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Wrap-up Closure Activities
Level: Medium

14. In the Snapshot from Practice, New Balls Goes Flat in NBA, is an example of a project gone wrong when the _____ is/are not consulted.
A. Manufacture
B. Equipment and facilities managers
C. End-users
D. Project manager
E. The Fans

The failure to check with the players (the end-users) and get buy-in for the new basketball was loudly criticized by the press. "How they could actually even get it that far and not have run it by the players is just an amazing, amazing exercise in ineptitude."

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Easy

15. Closing out _____ is often messy and filled with untied ends.
A. Project review meetings
B. Reports
C. Invoices
D. Teams
E. Contracts

Since many work invoices are not submitted until after the project is officially over, closing out contracts is often messy and filled with untied ends.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

16. Information on the project type, size, number of staff, and technology level would be included in which section of the audit report?
A. Analysis
B. Recommendations
C. Classification of project
D. Lessons learned
E. Strategic objectives

See list on page 524.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Retrospectives
Level: Medium

17. Project mission and objectives, procedures and systems used, and organization resources used typically appear in the _____ section of the final project report.
A. Analysis
B. Recommendations
C. Classification of project
D. Lessons learned
E. Strategic objectives

The analysis section includes succinct, factual review statements of the project—for example, project mission and objectives, procedures and systems used, and organizational resources used.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Wrap-up Closure Activities
Level: Medium

18. Items technical in nature and focus on solutions to problems that surfaced would typically appear in the _____ section of the final project report.
A. Analysis
B. Recommendations
C. Classification of project
D. Lessons learned
E. Strategic objectives

Usually, review recommendations represent major improvement actions that should take place. They are often technical in nature and focus on solutions to problems that surfaced.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Wrap-up Closure Activities
Level: Medium

19. The section of the final project report that new project teams are likely to find most useful is the:
A. Analysis
B. Recommendations
C. Classification of project
D. Lessons learned
E. Strategic objectives

In practice, new project teams studying past project reports similar to the project they are about to start have found past review reports very useful.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Easy

20. Corrective actions that should take place (such as shifting to more resilient building material) would typically appear in the _____ section of the final project report.
A. Analysis
B. Recommendations
C. Classification of project
D. Lessons learned
E. Strategic objectives

For example, to avoid rework, the report for a construction project recommended shifting to more resilient building material. In other cases, they may include terminating or sustaining vendor or contractor relationships.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Wrap-up Closure Activities
Level: Medium

21. In the Snapshot from Practice, the results of analyzing the Katrina hurricane resulted in a new evaluation plan from:
A. The state legislature
B. The governor of Louisiana
C. The city of New Orleans
D. The Red Cross
E. The national guard

Lessons learned from Katrina disaster are not limited to the military. Almost every agency and support group, such as individuals, communities, churches, and other groups, has developed lessons learned from their project response experience. For example, the Red Cross and state guard have better plans for handling thousands of people problems involving shelter, evacuation, and medical assistance.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Post-Implementation Evaluation
Level: Difficult

22. The most common circumstance for project closure is:
A. Premature completion with some features eliminated
B. Project completion meeting costs, schedule, and quality
C. Project completion after modification of costs, schedule, or quality
D. Project termination due to technical difficulties
E. Perpetual projects that seem to go on and on before completion

The most common circumstance for project closure is simply a completed project. For many development projects, the end involves handing off the final design to production and the creation of a new product or service line. Some modifications in scope, cost, and schedule probably occurred during implementation.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Types of Project Closure
Level: Medium

23. Project closures can fall into all of the following categories except:
A. Premature
B. Perpetual
C. Failed
D. Changed priority
E. All of these are categories for project closure

See list on Pages 506-507

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Medium

24. In the Research Highlight, Chaos: Software Projects, the criterion which was deemed the most important for project success was
A. Realistic expectations
B. Hard-working, focused staff
C. User involvement
D. Proper planning
E. Clear vision and objectives

The success criteria were weighted based on the input from the surveyed IT managers. The most important criterion, "user involvement," was given 19 success points, while the least important, "hard-working, focused staff," was given 3 success points.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Retrospectives
Level: Medium

25. _____ begins with a review of the strategic intent of the project, selection criteria, project charter, project objectives, project scope, and acceptance criteria.
A. Process Review
B. Project Overview
C. Analysis
D. Recommendations
E. Directing

Process review begins with a review of the strategic intent of the project, selection criteria, project charter, project objectives, project scope, and acceptance criteria.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Retrospectives
Level: Medium

26. The typical mechanism for evaluation of teams is normally:
A. A survey completed by the team members
B. A personal interview of each team member
C. An analysis by an outside consultant
D. A survey completed by members of top management
E. A survey completed by the internal or external customers

With survey information in hand, the facilitator then visits one-on-one with project team members, the project manager, and other stakeholders to dive deeper into cause-effect impacts. Fundamentally, the attempt is to isolate "the lack of x resulted in y."

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Retrospectives
Level: Difficult

27. More and more companies are discarding the traditional superior-subordinate performance feedback process and replacing it with:
A. Critical incidences review
B. Management by objectives
C. The 360-degree feedback
D. Both B and C are correct
E. A, B, and C are all correct

More and more companies are discarding the traditional superior-subordinate performance feedback process and replacing it with 360-degree feedback systems. The 360-degree feedback approach gathers behavioral observations from many sources within the organization and includes employee self assessment.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Easy

28. The project closure process includes all of the following except:
A. Shutting down resources and releasing to new uses
B. Reassigning project team members
C. Conduct an audit
D. Getting delivery acceptance from the customer
E. Closing accounts and seeing all bills are paid

Releasing the project team typically occurs gradually during the closure phase. For many people, termination of their responsible activities ends before the project is delivered to the customer or user. Reassignment for these participants needs to take place well before the final finish date. In addition, for the remaining team members (full or part time), termination may result in a new project or returning to their functional job. Also reassignment for these participants needs to take place well before the final finish date. Since many work invoices are not submitted until after the project is officially over, closing out contracts is often messy and filled with untied ends. Finally getting delivery acceptance by the customer is a major and critical closure activity.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Wrap-up Closure Activities and LO: Types of Project Closure
Level: Medium

29. In organizations where projects are managed within a _____, the team member's area manager, not the project manager, is responsible for assessing performance.
A. Functional organization
B. Matrix organization
C. Flat organization
D. Both A and C are correct
E. A, B, and C are all correct

In organizations where projects are managed within a functional organization, the team member's area manager, not the project manager, is responsible for assessing performance.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Easy

30. Performance evaluations of project teams should:
A. Provide the basis for individual development
B. Provide the basis for participation on future projects
C. Provide the basis for salary increases
D. Both A and C are correct
E. A, B, and C are all correct

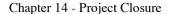The first is developmental in nature: the focus is on identifying individual strengths and weaknesses and developing action plans for improving performance. The second is evaluative and involves assessing how well the person has performed in order to determine salary or merit adjustments.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Easy

Fill in the Blank Questions

31. _____ is the most common circumstance for project closure is simply a completed project.

<u>Normal</u>

Normal is the most common circumstance for project closure is simply a completed project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Easy

32. The project may be completed early with some parts of the project eliminated is known as _____.

<u>premature</u>

Premature for a few projects, the project may be completed early with some parts of the project eliminated.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Easy

33. _____ are usually easy to identify and easy for a review group to close down.

<u>Failed project</u>

Failed projects are usually easy to identify and easy for a review group to close down, however, every effort should be made to communicate the technical (or other) reasons for termination of the project; in any event project participants should not be left with an embarrassing stigma of working on a project that failed.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Types of Project Closure
Level: Medium

34. Projects in process may need to be altered or canceled. Thus, a project may start with a high priority but see its rank erode or crash during its project life cycle as conditions change. This is called _____.
changed priority

The oversight group continually revises project selection priorities to reflect changes in organizational direction. Projects in process may need to be altered or canceled. Thus, a project may start with a high priority but see its rank erode or crash during its project life cycle as conditions change. When priorities change, projects in process may need to be altered or canceled.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Medium

35. A schedule for reducing project staff been developed and accepted is a question that is asked in the completion of the _____.
wrap-up closure checklist

See Table 14.1 on page 508.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Difficult

36. The summary simply highlights the key findings and facts relating to the project implementation is called the _____.
executive summary

Executive Summary is the summary that simply highlights the key findings and facts relating to the project implementation.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Wrap-up Closure Activities
Level: Easy

37. Some organizations have project closure checklists of over _____ wrap-up tasks!
<u>100</u>

Some organizations have project closure checklists of over 100 wrap-up tasks!

38. The _____ section of the final project report includes succinct, factual review statements of the project such as, project mission and objectives, procedures and systems used, and organizational resources used.
<u>analysis</u>

The analysis section includes succinct, factual review statements of the project—for example, project mission and objectives, procedures and systems used, and organizational resources used.

39. Perhaps _____ are the most valuable contribution of the closure process.
<u>lessons learned</u>

Perhaps lessons learned are the most valuable contribution of the closure process.

40. The _____ section of the final project report are often technical in nature and focus on solutions to problems that surfaced.
<u>recommendations</u>

Recommendations are often technical in nature and focus on solutions to problems that surfaced.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Wrap-up Closure Activities
Level: Medium

41. A completed _____ is a good example of the need to work out the details in advance.
<u>software program</u>

A completed software program is a good example of the need to work out the details in advance.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

42. A project closure is considered _____ if it never seems to end due to constant "add-ons" in attempt to improve the project outcome.
<u>perpetual</u>

Some projects never seem to end. The major characteristic of this kind of project is constant "add-ons," suggesting a poorly conceived project scope.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Types of Project Closure
Level: Medium

43. The purpose of _____ is to assess how well the project team, team members, and project manager performed.
<u>performance evaluation</u>

The purpose of project evaluation is to assess how well the project team, team members, and project manager performed.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Post-Implementation Evaluation
Level: Medium

44. The _____ feedback approach gathers anonymous feedback solicited from others is compared with the individual's self-evaluations, the individual may form a more realistic picture of her strengths and weaknesses.
<u>360-degree</u>

When anonymous feedback solicited from others is compared with the individual's self-evaluations, the individual may form a more realistic picture of her strengths and weaknesses.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Medium

45. In some _____, project managers conduct the performance reviews, while area managers are responsible for pay reviews.
<u>matrix organizations</u>

In some matrix organizations, project managers conduct the performance reviews, while area managers are responsible for pay reviews.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Post-Implementation Evaluation
Level: Easy

46. Project managers should be _____ giving team members feedback throughout the project so that individual team members can have a pretty good idea how well they have performed and how the manager feels before the formal meeting.
constantly

Project managers should be constantly giving team members feedback throughout the project so that individual team members can have a pretty good idea how well they have performed and how the manager feels before the formal meeting.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Medium

47. The _____ of projects by characteristics allows prospective readers, teams, and project managers to be selective in the search and use of report content.
Classification

The classification of projects by characteristics allows prospective readers, teams, and project managers to be selective in the search and use of report content.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Medium

48. The most common reason given for not creating lessons learned is _____.
lack of time

The most common reason given for not creating lessons learned is lack of time.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Medium

49. A _____ is a methodology that analyzes a past project event to determine what worked and what didn't, develops lessons learned, and creates an action plan that ensures lessons learned are used to improve management of future projects.
<u>retrospective</u>

A retrospective is a methodology that analyzes a past project event to determine what worked and what didn't, develops lessons learned, and creates an action plan that ensures lessons learned are used to improve management of future projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Medium

50. _____ are binary; either you have reached requirements completion or you have not.
<u>Milestones</u>

Milestones are binary; either you have reached requirements completion or you have not.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Retrospectives
Level: Medium

51. The Standish Group International's market research on software projects, called Chaos showed that ___ percent of all software projects are cancelled before completion.
<u>31</u>

The Standish Group International is a market research and advisory firm specializing in mission critical software and electronic commerce. They have conducted and published extensive research on the success and failure of software development/application projects. Their research, code name "Chaos," shows that a staggering 31 percent of software projects will be canceled before they are ever completed.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Medium

52. A _____ is a guide who leads the project team through an analysis of project activities that went well, what needs improvement, and development of a follow-up action plan with goals and accountability.
project facilitator

A project facilitator is a guide who leads the project team through an analysis of project activities that went well, what needs improvement, and development of a follow-up action plan with goals and accountability.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Retrospectives
Level: Easy

53. _____ represent an analysis carried out during and shortly after the project life cycle; they attempt to capture positive and negative project learning.
Lessons learned

Lessons learned represent an analysis carried out during and shortly after the project life cycle; they attempt to capture positive and negative project learning.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Easy

54. An upbeat, festive celebration brings closure to the enjoyable experiences everyone has had and the need to say good-bye is considered to be a _____.
celebration

A final wrap up activity for the facilitator is the project closure celebration. An upbeat, festive celebration brings closure to the enjoyable experiences everyone has had and the need to say good-bye. Celebration is an opportunity to recognize the effort project stakeholders contributed.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Easy

True / False Questions

55. In a Perpetual project the most common circumstance for project closure is simply a completed project.
<u>FALSE</u>

Normal project is where the most common circumstance for project closure is simply a completed project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Easy

56. In a Premature projects, the project may be completed early with some parts of the project eliminated.
<u>TRUE</u>

Premature for a few projects, the project may be completed early with some parts of the project eliminated.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Medium

57. Retrospectives of lessons learned are designed to improve performance on current and future projects.
<u>TRUE</u>

Retrospectives of lessons learned are designed to improve performance on current and future projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Easy

58. When a project may start with a high priority but see its rank erode or crash during its project life cycle as conditions change this is an example of change changed priority.
TRUE

Organizations' priorities often change and strategy shifts directions. For example, during the 2008-10 financial crisis organizations shifted their focus from money making projects to cost savings projects. The oversight group continually revises project selection priorities to reflect changes in organizational direction. Projects in process may need to be altered or canceled. Thus, a project may start with a high priority but see its rank erode or crash during its project life cycle as conditions change. When priorities change, projects in process may need to be altered or canceled.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Medium

59. Part of the content of the final report typically includes profit made on the project.
FALSE

The content of the final report typically includes the following topics: executive summary, review and analysis, recommendations, lessons learned, and appendix.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

60. The project manager's challenge is to keep the project team focused on the remaining project activities and delivery to the customer until the project is complete.
TRUE

The project manager's challenge is to keep the project team focused on the remaining project activities and delivery to the customer until the project is complete.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

61. Implementing closedown includes getting delivery acceptance from the customer.
TRUE

See List on page 508.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

62. Project Summary is the summary that simply highlights the key findings and facts relating to the project implementation.
FALSE

Executive Summary is the summary that simply highlights the key findings and facts relating to the project implementation.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

63. Analysis examines in detail the underlying causes of problems, issues, and successes.
TRUE

Analysis examines in detail the underlying causes of problems, issues, and successes.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

64. The ideal scenario is to have the team member's next assignment ready when project completion is announced.
TRUE

The ideal scenario is to have the team member's next assignment ready when project completion is announced.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Easy

65. The maximum items on a checklist for closing a project are 50.
FALSE

Closing out a project can be intimidating. Some organizations have checklists of over 100 wrap-up tasks!

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Difficult

66. Lessons learned from the Katrina disaster are not limited to the military. Almost every agency and support group, such as individuals, communities, churches, and other groups, has developed lessons learned from their project response experience.
TRUE

Lessons learned from the Katrina disaster are not limited to the military. Almost every agency and support group, such as individuals, communities, churches, and other groups, has developed lessons learned from their project response experience.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Easy

67. Evaluation of individuals implies measurement against all team members.
FALSE

Evaluation implies measurement against specific criteria.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Easy

68. Performance evaluations of project team members are typically well done because the evaluations are conducted by the team member's home department.
FALSE

In a macro sense, the evidence today suggests that performance evaluation is not done well. The major reasons cited by practitioners are twofold: 1. Evaluations of individuals are still left to supervisors of the team member's home department. 2. Typical measures of team performance center on time, cost, and specifications.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Medium

69. The most common circumstance for project closure is simply a completed project such as building a new facility or creating a customized information system.
TRUE

Normal is the most common circumstance for project closure is simply a completed project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Easy

70. A project closure where the project is completed early with some parts of the project eliminated would be classified as project failure.
FALSE

For a few projects, the project may be completed early with some parts of the project eliminated. For example, in a new-product development project, a marketing manager may insist on production models before testing. This is a premature closing project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Medium

71. The key requirement in selection of the facilitator is one who is the end-user.
FALSE

The key requirement in selection of the facilitator is independence.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Easy

72. Performance appraisals generally fulfill five important functions.
TRUE

Performance appraisals generally fulfill two important functions. The first is developmental in nature: the focus is on identifying individual strengths and weaknesses and developing action plans for improving performance. The second is evaluative and involves assessing how well the person has performed in order to determine salary or merit adjustments.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Medium

73. Some organizations rely simply on an informal discussion between the project manager and the project member while other organizations require project managers to submit written evaluations that describe and assess an individual's performance on a project.
TRUE

Some organizations rely simply on an informal discussion between the project manager and the project member while other organizations require project managers to submit written evaluations that describe and assess an individual's performance on a project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Medium

74. A 360-degree performance evaluation includes feedback from peers, project managers, subordinates, and even customers.
TRUE

One process that appears to be gaining wider acceptance is the multirater appraisal or "360-degree feedback," which involves soliciting feedback concerning team members' performance from all the people their work affects. This would include not only project and area managers, but also peers, subordinates, and even customers.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Medium

75. Project managers should, when possible, draw comparisons to other team members when conducting individual team member reviews.
FALSE

Avoid, when possible, drawing comparisons with other team members; rather, assess the individual in terms of established standards and expectations. Comparisons tend to undermine cohesion and divert attention away from what the individual needs to do to improve performance.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Easy

76. Retrospective methodology is one positive step toward ensuring lessons learned are developed and implemented.
TRUE

Retrospective methodology is one positive step toward ensuring lessons learned are developed and implemented.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Medium

Short Answer Questions

77. What are the six major activities implementing project closedown?

1. Getting delivery acceptance from the customer, 2. Shutting down resources and releasing to new uses, 3. Reassigning project team members, 4. Closing accounts and seeing all bills are paid, 5. Delivering the project to the customer, 6. Creating a final report.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

78. Identify the four areas of the project closure checklist.

1. Team, 2. Vendors/contactors, 3. Customers/users, 4. Equipment and facilities.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Medium

79. Identify the three major deliverables for project closure.

1. Wrapping up the project, 2. Evaluation of performance and management of the project.3. Retrospectives.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Types of Project Closure
Level: Medium

80. How does the project managers meet the challenge to keep the project team focused on the remaining project activities and delivery to the customer until the project is complete?

Communicating a closure and review plan and schedule early allows the project team to (1) accept the psychological fact the project will end and (2) prepare to move on. The ideal scenario is to have the team member's next assignment ready when project completion is announced. Project managers need to be careful to maintain their enthusiasm for completing the project and hold people accountable to deadlines, which are prone to slip during the waning stages of the project.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Wrap-up Closure Activities
Level: Difficult

81. Identify the five common parts to the final project report.

1. Executive Summary, 2. analysis of information gathered, 3. recommendations, 4. lessons learned, and 5. appendix.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Medium

82. Identify and briefly describe the five most common classifications for the way that projects end.

1. normal; project ended as planned, 2. premature; project ended early with some parts eliminated, 3. perpetual; project extend due to increases in scope, 4. failed; project could not be completed, and 5. changed priority; shifts in organization priorities due to changes in market or technology.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Types of Project Closure
Level: Difficult

83. List the five, distinguishing characteristics to ensure Retrospectives methodology embedded effectiveness and value?

1. Uses an independent facilitator. 2. Includes a minimum of three in-process learning gates during the life project cycle. 3. Has an owner. 4. Develops a repository that is easy to use. 5. Mandates a discipline that ensures retrospectives are used.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Medium

84. How does Norman Kerth define retrospective in his text Project Retrospectives?

A retrospective is a methodology that analyzes a past project event to determine what worked and what didn't, develops lessons learned, and creates an action plan that ensures lessons learned are used to improve management of future projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Retrospectives
Level: Difficult

85. What guidelines should a project manager follow in conducting performance reviews?

1. Have the individual prepare a self-evaluation, 2. compare with standards not other people, 3. focus on specific behaviors rather than the individual, 4. be consistent and fair with all team members, and 5. treat the review as a point in an ongoing process.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Post-Implementation Evaluation
Level: Medium

86. What is a *360-degree feedback* and how is it used?

A 360-degree feedback is a performance evaluation technique that is gaining popularity in project management. It solicits feedback from all the people that the team member's work affects, e.g., project managers, peers, subordinates and customers.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Medium

87. In the Research Highlight "Measures of Team Performance," what was the major finding of the research survey?

1. too few teams (52%) received a collective evaluation of their performance and 2. of the 22% who said they did receive an evaluation, it lasted only approximately 20 minutes.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Post-Implementation Evaluation
Level: Difficult

88. Explain what Lessons learned represent.

Lessons learned represent an analysis carried out during and shortly after the project life cycle; they attempt to capture positive and negative project learning. That is, "what worked and what didn't?" Lessons learned (postmortems, post-project review, or whatever name you choose to use) have long been part of project management.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Retrospectives
Level: Difficult

Chapter 15 International Projects Answer Key

Multiple Choice Questions

1. If a construction company in Dallas builds a bridge in Houston, the project would be classified as
A. Global
B. Overseas
C. Local
D. Domestic
E. Foreign

A domestic project is one performed in its native country for a resident firm (a construction firm building a bridge in its state).

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Medium

2. If the Lincoln Log Construction Co. (based in Chicago) built an assembly plant for General Motors in Nigeria, the project would be classified as
A. Global
B. Overseas
C. Local
D. Domestic
E. Foreign

An overseas project is one executed in a foreign country for a native firm (a Swedish company building a truck factory in the United States for their native company).

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Medium

3. If IBM built a computer system for Outback Barbie Inc. (based in Australia) at their corporate headquarters in Sydney, the project would be classified as
A. Global
B. Overseas
C. Local
D. Domestic
E. Foreign

A foreign project is executed in a foreign country for a foreign firm (a U.S. firm developing an information system in Malaysia for Malaysian banks).

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Medium

4. McDonald's is creating a multinational distribution system for all of its foreign and domestic subsidiaries. The project manager is from the corporate headquarters and he manages teams from each of the countries involved. The project would be classified as
A. Global
B. Overseas
C. Local
D. Domestic
E. Foreign

A global project consists of teams formed from professionals spanning multiple countries, continents, and cultures with their work integrated for the entire enterprise (e.g., multinational enterprise developing a global distribution system).

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

5. Which of the following is <u>not</u> one of the potential results for the international project manager?
A. Personal risk
B. Absence from home
C. Missed career opportunities
D. Adverse conditions
E. All of these are potential results

Project managers typically face a difficult set of problems—for example, absence from home, friends, and sometimes family; personal risks; missed career opportunities; foreign language, culture, and laws; adverse conditions.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

6. The major issues dealing with international project management include all of the following <u>except</u>:
A. Selection and training of personnel for international projects
B. Foreign currency exchange rates
C. Location of international expansion
D. Environmental factors
E. Challenge of working in a foreign culture

There are four major issues surrounding the management of international projects. First, major environmental factors that impact project selection and implementation are briefly highlighted. Second, an example of how organizations decide where to expand globally is provided. Third, the challenge of working in a strange and foreign culture is addressed. Finally, how companies select and train professionals for international projects is discussed.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

7. Concern about the local restrictions on toxic waste is classified as which of the following environmental factors?
A. Economic
B. Geographic
C. Legal/political
D. Infrastructure
E. Culture

The constraints imposed by national and local laws need to be identified and adhered to.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Medium

8. The growing presence of the Russian Mafia has discouraged many foreign firms from setting up operations in the former Soviet Union. This is an example of which of the following environmental factors?
A. Security
B. Economic
C. Cultural
D. Legal/political
E. Infrastructure

The growing presence of the Russian Mafia has discouraged many foreign firms from setting up operations in the former Soviet Union. Kidnapping of American professionals is also a very real threat in many parts of the world.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Medium

9. As a response to the events of September 11, 2001, the moving of personnel, materials, and equipment across international borders has created border congestion with increased costs and time. This is an example of which of the following environmental factors?
A. Cultural
B. Infrastructure
C. Geographic
D. Security
E. Legal/political

Another real cost associated with international terrorism is the ease of commerce across borders. Heightened security measures have created border congestions that have expanded the time and cost of moving personnel, materials, and equipment across countries. These constraints need to be factored into the budget and schedule of projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

10. An information systems specialist reported that his performance on a project in Northern Sweden declined due to sleep deprivation during the summer months in which there was 20 hours of daylight each day. This is an example of which of the following environmental factors?
A. Cultural
B. Legal/political
C. Geographic
D. Economic
E. Infrastructure

Geography does not just affect outdoor projects. It can have an indirect effect on "indoor" projects. For example, one information systems specialist reported that his performance on a project in northern Sweden declined due to sleep deprivation. He attributed his problems to the 20 hours of daylight this part of the world experiences during summer months.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

11. Import quotas and tariffs, and education level of the workforce are examples of which of the following environmental factors?
A. Legal/political
B. Security
C. Cultural
D. Infrastructure
E. Economic

A faltering economy may indicate fewer sources of capital funding. For example, changes in protectionist strategies of a host country, such as import quotas and tariffs, can quickly alter the viability of projects.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

12. Needs for a project could include telecommunications, transportation, power, and availability of technically skilled talent. This is an example of which of the following environmental factors?
A. Geographic
B. Infrastructure
C. Economic
D. Legal/political
E. Cultural

Infrastructure needs for a project could be communication, transportation, power, technology, and education systems. For example, developing an electric steel plant to be near a major market requires a reliable supply of electric power.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

13. Communications difficulties because of different languages are examples of which of the following environmental factors?
A. Geographic
B. Security
C. Cultural
D. Legal/political
E. Infrastructure

Communication problems—because of language differences—often become a major problem in carrying out even simple tasks. Although the use of translators can help tremendously, their use does not solve the communication problem completely because something is lost in translation.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

14. Which of the following can help a project manager to digest, clarify, and understand the factors leading to the selection of a specific project?
A. Risk matrix
B. Priority matrix
C. Responsibility matrix
D. Gantt chart
E. Contingency matrix

One approach for the project manager to digest, clarify, and understand the factors leading to the selection of a specific project is to use a risk matrix similar to those found in Chapter 7. The major difference lies in the selection of the risk factors for different project sites.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Site Selection
Level: Medium

15. Culture is a concept that encompasses all of the following <u>except</u>:
A. Shared norms
B. Beliefs
C. Values
D. Economic level
E. Customs

More specifically, culture was defined as a system of shared norms, beliefs, values, and customs that bind people together, creating shared meaning and a unique identity.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

16. American project managers have earned a reputation abroad for being very good at understanding technology but not good at understanding:
A. Cultures
B. People
C. Local traditions
D. Local business practices
E. Laws

Americans are often criticized for being parochial; that is, they view the world solely through their own eyes and perspectives. People with a parochial perspective do not recognize that other people have different ways of living and working effectively.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

17. The biggest adjustment Americans typically have to make in working abroad is:
A. Language differences
B. Adapting to the general pace of life
C. Punctuality of people
D. Both B and C are correct
E. A, B, and C are all correct

Two of the biggest adjustments Americans typically have to make in working abroad are adapting to the general pace of life and the punctuality of people.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

18. Kluckhohn-Strodtbeck's cross-cultural framework includes all of the following <u>except</u>:
A. Perception of God
B. Relation to nature
C. Time orientation
D. Basic nature of people
E. Activity orientation

See Research Highlight on page 543.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Difficult

19. The Hofstede framework includes all of the following dimensions <u>except</u>:
A. Masculinity-feminity
B. Uncertainty avoidance
C. Power distance
D. Individualism versus collectivism
<u>E.</u> All of these are included in the Hofstede framework

See Research Highlight on page 543.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Difficult

20. In the Snapshot from Practice "Project Management X-files," a key success factor which is held in much higher regard by cultures outside the U.S. is:
A. Family ties
B. Luck
C. Hard work
D. Social status
E. Patience

Americans tend to discount the significance of luck and believe that good fortune is generally a result of hard work. In other cultures, luck takes on greater significance and has supernatural ramifications.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

21. The significance of personal relationships has created a system in which Mexicans are obligated to give preference to relatives and friends when hiring, contracting, procuring, and sharing business opportunities. This system is referred to as:
A. Manana
B. Gringo
C. Compadre
D. Quid pro quo
E. Nepotism

The significance of personal relationships has created a compadre system in which Mexicans are obligated to give preference to relatives and friends when hiring, contracting, procuring, and sharing business opportunities.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

22. In France, which of the following factors is considered much more important than in the U.S?
A. Social class
B. Agreement on issues
C. Professional accomplishments
D. Being open during negotiations
E. Dedication to project completion

In France, one's social class is very important. Social interactions are constrained by class standing, and during their lifetimes most French people do not encounter much change in social status.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

23. Working in the Saudi Arabia culture would include major shifts in the area of:
A. Bragging or calling attention to oneself
B. Importance of business connections
C. Increase in use of administrative channels
D. Both B and C are correct
E. A, B, and C are all correct

See list on pages 548-549.

24. In dealing with the Chinese, it is important to realize that they
A. Tend to be slow in formulating a plan
B. Will change decisions quickly
C. Value time and moving forward
D. Both B and C are correct
E. A, B, and C are all correct

Once the Chinese decide who and what is best, they tend to stick to their decisions. So while they may be slow in formulating a plan, once they get started they make good progress.

25. The stages of *culture shock* include all of the following <u>except</u>:
A. Gradual adjustment
B. Irritability and hostility
C. Honeymoon
D. Repatriation
E. Adaptation

See list on page 553-554.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

26. Which of the following is not contained in the Assessment Matrix Project Site Selection?
A. Political stability
B. Worker skill, supply
C. Infrastructure
D. Culture compatibility
E. Utilities

See Figure 15.2 on page 540.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Site Selection
Level: Easy

27. Which of the following is not contained in the Evaluation Matrix Breakdown for Infrastructure?
A. Transportation
B. Government support
C. Educated workforce
D. Telecommunications
E. Vendor suppliers

See Figure 15.3 on page 541.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Site Selection
Level: Easy

28. A major difference between working in Mexico and working in the United States is the perception of deadlines. This is referred to as:
A. Manana
B. Gringo
C. Compadre
D. Quid pro quo
E. Nepotism

The mañana syndrome reflects another cultural difference between Americans and Mexicans. Mexicans have a different concept of time than Americans do. Mexicans feel confined and pressured when given deadlines; they prefer open-ended schedules. They generally consider individuals to be more important than sticking to a schedule. If a friend drops in at work, most Mexicans will stop and talk, regardless of how long it takes, and even if chatting makes their work late.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

29. Which of the following is not true for French values?
A. They value punctuality
B. Great importance is placed on neatness and taste
C. The French is easy to negotiate with
D. French managers see work as an intellectual exercise
E. The French consider managers to be experts

See list on page 547

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

30. Which of the following is not one of the forms that stress-related culture shock takes?
A. Fatigue
B. Sleeplessness
C. Headaches
D. Hyperactivity
E. All of these are symptoms

Stress-related culture shock takes many forms: disappointment, frustration, withdrawal, anxiety, and physiological responses such as fatigue, sleeplessness, and headaches. Stress is induced by the senses being overwhelmed by foreign stimuli and the inability to function effectively in a strange land.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

31. A sense of frustration in not being understood is typical of which of the following stages of culture shock?
A. Honeymoon
B. Gradual adjustment
C. Irritability and hostility
D. Repatriation
E. Adaptation

The Honeymoon is where you start your overseas assignment with a sense of excitement. The new and the unusual are welcomed. At first it is amusing not to understand or be understood. Soon a sense of frustration begins to set in.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

32. When you begin to lose confidence in your abilities to communicate and work effectively in the different culture, you are in which of the following stages of culture shock?
A. Honeymoon
B. Gradual adjustment
C. Irritability and hostility
D. Repatriation
E. Adaptation

Irritability and hostility regards your initial enthusiasm is exhausted, and you begin to notice that differences are greater than you first imagined. You become frustrated by your inability to get things done as you are accustomed to. You begin to lose confidence in your abilities to communicate and work effectively in the different culture.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

33. When you recover from your sense of psychological disorientation and begin to function and communicate, you are in which of the following stages of culture shock?
A. Honeymoon
B. Gradual adjustment
C. Irritability and hostility
D. Repatriation
E. Adaptation

Adaptation is when you recover from your sense of psychological disorientation and begin to function and communicate in the new culture.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

34. Which film project was reviewed in a Snapshot from Practice?
A. The Godfather
B. Star Wars
C. Hearts of Darkness
D. Apocalypse Now
E. Rambo

In February 1976, Francis Ford Coppola took his Hollywood film crew to the Philippines to shoot Apocalypse Now, a film adaptation of Joseph Conrad's Heart of Darkness within the context of the Vietnam conflict.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Easy

Fill in the Blank Questions

35. A(n) _____ project consists of teams formed from professionals spanning multiple countries, continents, and cultures with their work integrated for the entire enterprise.
<u>global</u>

A global project consists of teams formed from professionals spanning multiple countries, continents, and cultures with their work integrated for the entire enterprise (e.g., multinational enterprise developing a global distribution system).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Easy

36. A(n) _____ project is one executed in a foreign country for a native firm.
<u>overseas</u>

An overseas project is one executed in a foreign country for a native firm (a Swedish company building a truck factory in the United States for their native company).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Easy

37. A(n) _____ project is executed in a foreign country for a foreign firm.
<u>foreign</u>

A foreign project is executed in a foreign country for a foreign firm (a U.S. firm developing an information system in Malaysia for Malaysian banks).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Easy

38. The degree to which local regulations favor local workers and suppliers is an example of the environmental factor termed _____.
legal/political

Political stability and local laws strongly influence how projects will be implemented. Typically, these laws favor protection of local workers, suppliers, and environment.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

39. The need to hire tribal bodyguards in such places as Angola and Uzbekistan is an example of the environmental factor termed _____.
security

Security nationally involves the capacity of a country's military and police forces to prevent and respond to attacks. In many foreign countries, American firms will have to augment the countries' security system. For example, it is common practice to hire tribal bodyguards in such places as Angola and Uzbekistan.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

40. Construction projects in Southeast Asia having to accommodate the monsoon season when rainfall can be as high as 50 inches per month is an example of the environmental factor termed _____.
geography

The planning and implementation of a project must take into account the impact the country's geography will have on the project. For example, a salvage operation off the coast of Greenland can only be scheduled one month out of the year because the waterway is frozen over during the remainder of the year. Construction projects in Southeast Asia have to accommodate the monsoon season when rainfall can be as high as 50 inches per month.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

41. Bartering is a form of compensation that is still used by some countries and organizations and is an example of the _____ environmental factor.
economic

Bartering is a form of compensation that is still used by some countries and organizations. For example, one project in Africa was paid in goat skins. The goat skins were eventually sold to an Italian manufacturer of gloves.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

42. A project that depends upon a high ratio of vendor suppliers, good roads, and other transportation modes, such as air and seaports is an example of the _____ environmental factor.
infrastructure

If the project depends on a high ratio of vendor suppliers, good roads, and other transportation modes such as air and seaports, a good infrastructure will be imperative.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

43. The requirement for women to cover head, arms, and legs and to be accompanied by another woman or man is an example of the environmental factor termed _____.
culture

Religious factors touched the spouse of a Scandinavian project manager responsible for building a water desalination plant from sea water in a Middle East country. She was restricted to the living compound for families of foreign guest workers. Going outside the compound to a nearby city meant covering her head, arms, and legs and being accompanied by another woman or, preferably, a man. A physical altercation in the city concerning her clothing was traumatic for her. This was due to culture.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

44. _____ is a system of shared norms, beliefs, values, and customs that bind people together, creating shared meaning and a unique identity.
<u>Culture</u>

Culture was defined as a system of shared norms, beliefs, values, and customs that bind people together, creating shared meaning and a unique identity.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

45. In the Kluckhohn-Strodtbeck Cross-Cultural Framework, the cultural issue that is measured in terms of good, evil or mixed is nature of _____.
<u>people</u>

See Figure 15.4 on page 543.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Difficult

46. In the Kluckhohn-Strodtbeck Cross-Cultural Framework, the cultural issue that is measured in terms of domination, harmony, and subjugation is relationship to _____.
<u>nature</u>

See Figure 15.4 on page 543.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Difficult

47. In the Hofstede Framework, _____ describes the degree to which the culture emphasizes competitive and achievement oriented behavior or displays concerns for relationships.
Masculinity-feminity

Masculinity-femininity describes the degree to which the culture emphasizes competitive and achievement- oriented behavior or displays concerns for relationships.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

48. In the Hofstede Framework, _____ identifies whether a culture holds individuals or the group responsible for each member's welfare.
Individualism versus collectivism

Individualism versus collectivism identifies whether a culture holds individuals or the group responsible for each member's welfare.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

49. The length of training required for an overseas stay of 1-3 years would be around _____.
1-2 months

See Figure 15.7 on page 557.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

50. Americans tend to be impersonal and practical when making an argument; however, _____ can be very passionate and emotional when arguing because they enjoy a lively debate.
<u>Mexicans</u>

Americans tend to be impersonal and practical when making arguments; Mexicans can be very passionate and emotional when arguing. They enjoy a lively debate.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

51. The _____ place great importance upon neatness and taste; therefore, when interacting with them you should pay close attention to your appearance.
<u>French</u>

Great importance is placed on neatness and taste. When interacting with French businesspeople, pay close attention to your own professional appearance and appear cultured and sophisticated.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

52. When working with the _____, it is important never to display feelings of superiority because this makes the other party feel inferior.
<u>Saudi Arabians</u>

When working with the Saudi Arabians, it is important never to display feelings of superiority because this makes the other party feel inferior. No matter how well someone does something, the individual should let the action speak for itself and not brag or draw attention to himself.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

53. Although they may be slow to formulate a plan, once the _____ decide who and what is best, they tend to stick to their decisions and make good progress.
<u>Chinese</u>

Once the Chinese decide who and what is best, they tend to stick to their decisions. So while they may be slow in formulating a plan, once they get started they make good progress.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

54. Decision-making with _____ is results-oriented and tends to be based on facts and expected outcomes, not on social impact.
<u>Americans</u>

American decision making is results oriented. Decisions tend to be based on facts and expected outcomes, not social impact.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

55. _____ have a reputation for not being able to work effectively in foreign cultures.
<u>Americans</u>

Right or wrong, Americans have a reputation for not being able to work effectively in foreign cultures.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

56. In many _____ cultures certain numbers are considered lucky, while others are considered unlucky.
<u>Asian</u>

In many Asian cultures certain numbers are considered lucky, while others are unlucky. In Hong Kong the numbers 7, 3, and especially 8 (which sounds like the word for prosperity) are considered lucky, while the number 4 is considered unlucky (because it is pronounced like the word "death").

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

57. The natural psychological disorientation that most people suffer when they move into a different culture than their own is called _____.
<u>culture shock</u>

Culture shock is a natural psychological disorientation that most people suffer when they move into a culture different from their own.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

58. It typically takes _____ months before managers operate again at full effectiveness after a lengthy foreign assignment.
<u>6-12 months</u>

It typically takes six months to a year before managers operate again at full effectiveness after a lengthy foreign assignment.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

59. In the Snapshot from Practice, the mapping of the "River of Doubt" occured in the country of _____.
<u>Brazil</u>

After his crushing election defeat in 1912 as a third-party candidate, former president Theodore ("Teddy") Roosevelt set his sights on a grand adventure, the first descent of an unmapped rapids-choked tributary of the Amazon aptly titled the "River of Doubt." Together with Brazil's most famous explorer, Candido Mariano da Silva Rondon, Roosevelt accomplished a feat that belongs in the annals of great expeditions.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Easy

True / False Questions

60. A local project is one performed in its native country for a resident firm.
<u>FALSE</u>

A domestic project is one performed in its native country for a resident firm (a construction firm building a bridge in its state).

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Easy

61. The constraints imposed by national and local laws are part of the environmental factors termed infrastructure.
<u>FALSE</u>

The constraints imposed by national and local laws need to be identified and adhered to this is part of the legal/political factor.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Easy

62. The environmental factor labeled security involves the capacity of a country's military and police forces to prevent and respond to attacks.
TRUE

Security nationally involves the capacity of a country's military and police forces to prevent and respond to attacks.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Easy

63. One factor that is often underestimated until the project personnel actually arrive at a foreign destination is the culture environmental factor.
FALSE

One factor that is often underestimated until project personnel actually arrive at a foreign destination is the geography of the country.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Easy

64. The example of one project in Africa being paid in goat skins is an example of the environmental factor of infrastructure.
FALSE

Bartering is a form of compensation that is still used by some countries and organizations. For example, one project in Africa was paid in goat skins. This is part of the economic factor.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

65. Infrastructure refers to a country's or community's ability to provide services such as power, technology, communication, or transportation required for a project.
TRUE

Infrastructure refers to a country or community's ability to provide the services required for a project. Infrastructure needs for a project could be communication, transportation, power, technology, and education systems.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

66. For most project managers, the biggest difference in managing an international project is operating in a national culture where projects are done differently, using different project management techniques and tools.
FALSE

For most project managers, the biggest difference in managing an international project is operating in a national culture where things are done differently. For example, most developed nations use the same project management techniques (CPM, risk analysis, trade-off analysis). However, how activity work is performed can be very different in the host country.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

67. One approach for the project manager to digest, clarify, and understand the factors leading to the selection of a specific project is to use a risk matrix similar to those used to evaluate other types of risks.
<u>TRUE</u>

As the project manager studies the factors contributing to site selection, he will see that inherent in all of these factors is the risk level senior management and directors are willing to accept for the potential rewards of a successful international project. One approach for the project manager to digest, clarify, and understand the factors leading to the selection of a specific project is to use a risk matrix similar to those found in Chapter 7. The major difference lies in the selection of the risk factors for different project sites.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Site Selection
Level: Easy

68. Americans have a reputation for not being able to work effectively in foreign cultures.
<u>TRUE</u>

Right or wrong, Americans have a reputation for not being able to work effectively in foreign cultures.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

69. Americans tend to underestimate the importance that relationship building plays in conducting business in other countries.
TRUE

American project managers have earned a reputation abroad for being very good at understanding technology but not good at understanding people. As one Indonesian engineer put it, "Americans are great at solving technical problems, but they tend to ignore the people factor." For example, Americans tend to underestimate the importance that relationship building plays in conducting business in other countries.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

70. Two of the biggest adjustments Americans typically have to make in working abroad is adapting to the general pace of life and the punctuality of people.
TRUE

Two of the biggest adjustments Americans typically have to make in working abroad are adapting to the general pace of life and the punctuality of people.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

71. The Kluckhohn-Strodtbeck Cross-Cultural Model includes a factor called Uncertainty Avoidance that is related to a culture's willingness to accept uncertainty and ambiguity about the future.
FALSE

Uncertainty avoidance is in the Hofstede framework.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

72. The Hofstede framework includes a factor called Activity Orientation where cultures were classified as being, doing, or controlling.
<u>FALSE</u>

Activity Orientation is part of the Kluckhohn-Strodtbeck Cross-Cultural Model.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

73. Hong Kong is a place where business people often call *Feng shui* practitioners to construction sites to make sure that the building is aligned correctly on the site.
<u>TRUE</u>

Hong Kong is also a place where the ancient art of Feng shui (literally "wind water") is practiced. This involves making sure a site and buildings are aligned in harmony with the earth's energy forces so that the location will be propitious. Feng shui practitioners are often called in on construction projects to make sure that the building is aligned correctly on the site.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

74. Mexicans tend to perceive Americans as being cold and that most Americans look down upon them.
<u>TRUE</u>

Mexicans tend to perceive Americans as being "cold." They also believe that most Americans look down on them.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

75. Saudi Arabians can be difficult to negotiate with because they often ignore facts no matter how convincing they may be and they also tend to be quite secretive about their positions.
FALSE

The French can be very difficult to negotiate with. Often, they ignore facts, no matter how convincing they may be. They can be quite secretive about their position. It is difficult to obtain information from them, even in support for their position. Patience is essential for negotiating with them.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

76. In dealing with the French, a lot of what get done is a result of going through administrative channels, which involves a lot of red tape and efforts to avoid sidestep this can be regarded as disrespect for legal and governmental institutions.
FALSE

In dealing with Saudi Arabians, a lot of what gets done is a result of going through administrative channels in the country. It is often difficult to sidestep a lot of this red tape, and efforts to do so can be regarded as disrespect for legal and governmental institutions.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

77. Many outsiders consider the Chinese system of guanxi to be like nepotism where decisions are made based on family ties instead of an objective assessment of ability.
TRUE

Trust is transmitted via guanxi. That is, a trusted business associate of yours must pass you along to his trusted business associates. Many outsiders criticize guanxi, considering it to be like nepotism where decisions are made regarding contracts or problems based on family ties or connections instead of an objective assessment of ability.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

78. The initial stage of culture shock is irritability and hostility.
Refer to Figure 15.6
FALSE

The initial stage of culture shock is Honeymoon, where you start your overseas assignment with a sense of excitement. The new and the unusual are welcomed. At first it is amusing not to understand or be understood. Soon a sense of frustration begins to set in.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Medium

79. If the length of stay in another culture is to be in the range of 2 to 12 months, the experiential approach to training is advisable.
Refer to Figure 15.7
FALSE

See Figure 15.7 on page 557.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Selection and Training for International Projects
Level: Difficult

80. Mexicans tend to be more cautious and want to spend more time discussing risks and potential problems that Americans might dismiss as improbable or irrelevant.
TRUE

Mexicans tend to be more cautious and want to spend more time discussing risks and potential problems that Americans might dismiss as improbable or irrelevant.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

81. Saudis attach little importance to status and rank with the bypassing of legal channels and red tape a common occurrence.
FALSE

When working with the Saudis a lot of what gets done is a result of going through administrative channels in the country. It is often difficult to sidestep a lot of this red tape, and efforts to do so can be regarded as disrespect for legal and governmental institutions.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Easy

82. The former U.S. President who got involved with the River of Doubt project was Teddy Roosevelt.
TRUE

After his crushing election defeat in 1912 as a third-party candidate, former president Theodore ("Teddy") Roosevelt set his sights on a grand adventure, the first descent of an unmapped rapids-choked tributary of the Amazon aptly titled the "River of Doubt." Together with Brazil's most famous explorer, Candido Mariano da Silva Rondon, Roosevelt accomplished a feat that belongs in the annals of great expeditions.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Environmental Factors
Level: Easy

Short Answer Questions

83. Identify and briefly describe the four possible classifications for international projects.

1. domestic; performed in its native country for a resident firm, 2. overseas; executed in a foreign country for a native company, 3. foreign; executed in a foreign country for a foreign firm, and 4. global; executed by and for several cultures in several countries.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Difficult

84. Identify and briefly describe the six environmental factors affecting international projects.

1. Legal/Political, 2. Security, 3. Geography, 4. Economic, 5. Infrastructure, 6. Culture.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Environmental Factors
Level: Medium

85. What is the Kluckhohn-Strodtbeck Cross-Cultural Framework and identify the five major cultural issues it addresses?

The framework asserts that cultural variations reflect how different societies have responded to common issues or problems. 1. Relation to nature, 2. Time orientation, 3. Activity orientation, 4. Basic nature of people, 5. Relationships among people.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Difficult

86. Identify and discuss three guidelines/cautions in working with Mexicans on projects.

1. tend to be passionate and emotional when arguing, 2. meetings ratify what was agreed to in private, 3. avoid direct confrontation or criticism, 4. value managers who treat them in a friendly but dignified manner, 5. titles are extremely important.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Difficult

87. Identify and discuss three guidelines/cautions in working with the French on projects.

1. they value punctuality, 2. neatness and taste are very important, 3. difficult to negotiate with as they ignore facts, 4. work is an intellectual exercise, 5. managers are experts.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Difficult

88. Identify and discuss three guidelines/cautions in working with Saudi Arabians on projects.

1. never display feelings of superiority, 2. heavy use of administrative channels, 3. connections are important; 4. patience is critical, 5. important decisions are made in person.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Difficult

89. Identify and discuss three guidelines/cautions in working with Chinese on projects.

1. slow in formulating plan but good progress, 2. reciprocity is important in negotiations, 3. they are less animated and avoid open displays and physical contact, 4. less significance on time, 5. obligated to assist the disadvantaged.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Cross-Cultural Considerations: A Closer Look
Level: Difficult

90. Identify and discuss three guidelines/cautions in working with Americans on projects.

1. influence of women professionals, 2. no business gifts, 3. friendly and open when first meeting, 4. non-contact culture, 5. results-oriented decision making.

91. Identify and briefly describe the four stages of culture shock.

1. Honeymoon; start with excitement, the new and unusual are welcomed, 2. Irritability and hostility; begin to notice greater differences, frustration sets in, 3. Gradual adjustment; overcome sense of isolation and figure out how to get things done, 4. Adaptation; recover from psychological disorientation and begin to function and communicate in new culture.

92. Identify and briefly describe the cross-cultural training approach to be taken as related to the length of stay in the foreign culture.

1. Information-giving approach; for stays of 1 month or less, learning of information or skills from a lecture-type orientation 2. Affective approach; for stays of 2-12 months, learning of information/skills that raise the affective responses on the part of the trainee and result in cultural insights, and 3. Experiential approach; for stays of 1-3 years, provides the trainee with realistic simulations or scenarios.

93. How would one use a risk matrix to aide in the site selection for an international operation?

The project manager should digest, clarify, and understand the factors leading to a decision by using a risk matrix and selecting the risk factors for different project sites.

94. Identify the major areas in which project professionals assigned to foreign countries should have a minimal understanding.

1. religion, 2. dress codes, 3. education system, 4. holidays, 5. daily eating patterns, 6. family life, 7. business protocols, 8. social etiquette, 9. equal opportunity.

Chapter 16 Oversight Answer Key

Multiple Choice Questions

1. The term that is used to reflect how organizations oversee their project management systems is:
A. Project administration
B. Fiduciary responsibility
C. Management
D. Oversight
E. Project regulation

Project oversight can be defined as a set of principles and processes to guide and improve the management of projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

2. Which of the following is not one of the techniques to insure that projects meet the needs of the organization?
A. Standards
B. Procedures
C. Accountability
D. Controls
E. All of these are correct

The intent is to ensure projects meet the needs of the organization through standards, procedures, accountability, efficient allocation of resources, and continuous improvement in the management of projects. A second purpose is to support the project manager.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

3. Which of the follow percentages is the authors' estimate of project-driven organizations that have been implementing some form of oversight for several years?
A. 95%
B. 90%
C. 85%
D. 80%
E. 75%

The authors estimate over 95 percent of project-driven organizations have been implementing some form of oversight for several years.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Medium

4. Typical activities of project oversight cover which of the following dimensions?
A. Organization
B. Project
C. Customer
D. Both A and B are correct
E. All the above are correct

See list on page 565

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Medium

5. Organizational options to cover every aspect of managing projects in the organization are currently achieved by all of the following except:
A. Executive committee
B. Oversight group
C. Project office
D. Both B and C are correct
E. All the above are correct

Project oversight, through an executive committee, oversight group, or a project office, covers every aspect of managing projects in the organization.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

6. The importance of the increase in project oversight to today's project manager includes all of the following except:
A. Increase in expected profits from projects
B. Increased interest in supporting and helping the project manager
C. Impact on the environment in which the project will be implemented
D. Impact on how the project manager's performance will be measured
E. The reporting of project progress to an oversight group

First, in almost all cases oversight is interested in supporting and helping the project manager where needed. This is an improvement over the past. Second, the oversight function determines the environment in which the project manager will implement his or her project. This can affect the management of a project in a positive or negative manner. Third, depending on the size and complexity of the project, methods used to hold the project manager responsible and accountable will influence how performance is measured. Finally, the project manager, who is responsible for day-to-day management, will probably be reporting to this oversight group at predetermined phases in the project. In short, project oversight supports project management at the organization and project levels.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Medium

7. The centralized management of projects to ensure that the allocation of resources to projects is directed toward projects that contribute the greatest value to organization goals is known as:
A. Portfolio Project Management
B. Project Office Management
C. Project Management Optimization
D. Project Priority Matrix Management
E. Resource Allocation Optimization

Portfolio project management is the centralized management of projects to ensure that the allocation of resources to projects is directed toward projects that contribute the greatest value to organization goals.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Medium

8. Which of the following is responsible for the continued support of consistent application of selection criteria, standards, processes, training, and general assistance to project managers and continued improvement and use of best practices?
A. Portfolio Project Management
B. Project Office Management
C. Project Management Optimization
D. Project Priority Matrix Management
E. Resource Allocation Optimization

The project office (PO) is the unit responsible for the continued support of consistent application of selection criteria, standards, and processes; training of and general assistance to project managers; and continued improvement and use of best practices.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

9. Which of the following firms use project offices to coordinate projects and to ensure best practices are being used to manage projects?
A. Hewlett Packard
B. International Business Machines
C. Dell
D. Both A and B are correct
E. All the above are correct

High-tech firms such as Hewlett-Packard (HP), International Business Machines (IBM), and Dell all use project offices to coordinate projects and to ensure best practices are being used to manage projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Medium

10. Project Management Office functions typically include all of the following except:
A. Create and maintain the internal project management information system
B. Recruit and select project managers
C. Train personnel in project management techniques
D. Develop risk management programs
E. All of these are typically included

See list on page 567 in Snap Shot from Practice.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

11. Project Management Office functions typically include all of the following except:
A. Establish standardized project planning and reporting methodologies
B. Audit ongoing and recently completed projects
C. Provide in-house project management consulting
D. Select which projects to undertake
E. All of these are typically included

See list on page 567 in Snap Shot from Practice.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Medium

12. Project offices are known to result in positive benefits such as:
A. A bridge between senior management and project managers
B. Support integration of all project management processes
C. Training to support a higher level of project management maturity
D. Both A and B are correct
E. All of these are correct

See list on page 568.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Medium

13. The in-depth review of individual projects at specific phases in the project life cycle is known as:
A. Project Assessment Checkpoint Reviews
B. Go/Kill Decision Review Methodology
C. Phase Gate Methodology
D. Stargate Review Methodology
E. None of these are correct

Phase gate, provide an in-depth review of individual projects at specific phases in the project life cycle. These reviews cover assessments to continue or kill the project, reassess resource allocation, reassess prioritization, and evaluate execution progress, as well as strategic alignment decisions.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

14. The original Stage-Gate^{TM} model included all the following stages except:
A. Preliminary investigation
B. Detailed investigation
C. Testing and validation
D. Production and market launch
E. All of these were included

The original Stage-Gate™ model was pioneered by Robert G. Cooper several decades ago to improve management of new-product development. The original model incorporates five stages: preliminary investigation, detailed investigation, development, testing and validation, and full production and market launch.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

15. The abridged, generic phase gated process includes how many Go/Kill decision points?
A. Three
B. Four
C. Five
D. Six
E. Seven

See Figure 16.3 on page 571.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

16. During which of the following phase gates would the question of "Does this project align with our strategic direction?" be answered?
A. Proposal
B. Screening and selection
C. Implementation
D. Progress
E. Closure

This proposal phase answers a fundamental question: Is the project a good idea and does it solve a business problem or issue?

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

17. During which of the following phase gates would the question of "What are the project's ROI and/or non-financial benefits?" be answered?
A. Proposal
B. Selection
C. Implementation
D. Progress
E. Closure

The selection review includes a thorough analysis based on selection criteria. The gating group uses weighted scoring model criteria, which typically include project risks, costs, resource needs, urgency, financial analysis, benefits, identified sponsor, and other criteria found in selection models. In this phase one of the questions is "What are the project's ROI and/or nonfinancial benefits"?

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

18. During which of the following phase gates would the question of "Are the resources needed identified and available?" be answered?
A. Proposal
B. Screening and selection
C. Implementation
D. Progress
E. Closure

The implementation plan review information should include the planning document developed in earlier chapters. In this phase one of the questions is "Are the resources needed identified and available?"

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

19. During which of the following phase gates would the question of "Are time, costs, and scope performances within acceptable limits?" be answered?
A. Proposal
B. Screening and selection
C. Implementation
D. Progress evaluation
E. Closure

Your progress evaluation review covers the control activities of tracking progress, identifying variances from your plan, and taking corrective action. A major chunk of the data requirements for the phase review are simply measures against the project plan. Tracking progress and identifying variances against scope, time, budget, and control of changes and identified risks are easily accomplished using available software. In this phase one of the questions is "Are time, costs, and scope performances within acceptable limits?"

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Medium

20. Which of the following is not one of the growth levels in the Organizational Project Maturity Model (OPM3^{TM})?
A. Repeatable
B. Defined
C. Managed
D. Expanded
E. Optimized

Typically, these models are divided into a continuum of growth levels: initial, repeatable, defined, managed, and optimized.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Organization Project Management in the Long Run
Level: Medium

21. The first appearance of standard approaches to managing projects including scope statements and WBS occurs in which of the following Maturity Model Levels?
A. Ad Hoc Project Management
B. Formal Application of Project Management
C. Institutionalization of Project Management
D. Management of Project Management System
E. Optimization of Project Management System

In Level 2: Formal Application of Project Management, the organization applies established project management procedures and techniques. This level is often marked by tension between project managers and line managers who need to redefine their roles. Standard approaches to managing projects, including scope statements, WBS, and activity lists, are used.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Medium

22. Risk assessment derived from WBS and technical analyses and customer input is in place occurs in which of the following Maturity Model Levels?
A. Ad Hoc Project Management
B. Formal Application of Project Management
C. Institutionalization of Project Management
D. Management of Project Management System
E. Optimization of Project Management System

In Level 3: Institutionalization of Project Management, An organization wide project management system, tailored to specific needs of the organization with the flexibility to adapt the process to unique characteristics of the project, is established. Risk assessment derived from WBS and technical analyses and customer input is in place is one of the characteristics of this level.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Organization Project Management in the Long Run
Level: Medium

23. Project audits are performed on all significant projects and lessons learned are recorded and used on subsequent projects occurs in which of the following Maturity Model Levels?
A. Ad Hoc Project Management
B. Formal Application of Project Management
C. Institutionalization of Project Management
D. Management of Project Management System
E. Optimization of Project Management System

In Level 4: Management of Project Management System, the organization develops a system for managing multiple projects that are aligned with strategic goals of the organization. Project audits are performed on all significant projects and lessons learned are recorded and used on subsequent projects is one of the characteristics of this level.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Medium

24. An informal culture that values improvement drives the organization, not policies and procedures occurs in which of the following Maturity Model Levels?
A. Ad Hoc Project Management
B. Formal Application of Project Management
C. Institutionalization of Project Management
D. Management of Project Management System
E. Optimization of Project Management System

In Level 5: Optimization of Project Management System, the focus is on continuous improvement through incremental advancements of existing practices and by innovations using new technologies and methods. An informal culture that values improvement drives the organization, not policies and procedures is one of the characteristics of this level.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Medium

25. The use of an organization-wide project management system tailored to specific needs of the organization is established in which of the following Maturity Model Levels?
A. Ad Hoc Project Management
B. Formal Application of Project Management
C. Institutionalization of Project Management
D. Management of Project Management System
E. Optimization of Project Management System

In Level 3: Institutionalization of Project Management, An organization wide project management system, tailored to specific needs of the organization with the flexibility to adapt the process to unique characteristics of the project, is established.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Medium

26. The development of a system for managing multiple projects that are aligned with strategic goals is established in which of the following Maturity Model Levels?
A. Ad Hoc Project Management
B. Formal Application of Project Management
C. Institutionalization of Project Management
D. Management of Project Management System
E. Optimization of Project Management System

In Level 4: Management of Project Management System, the organization develops a system for managing multiple projects that are aligned with strategic goals of the organization.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Medium

27. The focus is on continuous improvement through incremental advancements of existing practices and by innovations using new technologies and methods is established in which of the following Maturity Model Levels?
A. Ad Hoc Project Management
B. Formal Application of Project Management
C. Institutionalization of Project Management
D. Management of Project Management System
E. Optimization of Project Management System

In Level 5: Optimization of Project Management System, the focus is on continuous improvement through incremental advancements of existing practices and by innovations using new technologies and methods.

28. The balanced scorecard model differs from selection models by reviewing projects over
A. 1-3 years
B. 2-4 years
C. 4-7 years
D. 5-10 years
E. e.10-15 years

The balanced scorecard model differs from selection models by reviewing projects over a longer horizon—5 to 10 years after the project is implemented.

29. Which of the following is not one of the four performance goals measures in the scorecard model?
A. customer
B. internal
C. financial measures
D. industry standards
E. innovation and learning

The scorecard model limits measures of performance to goals in four main areas: customer, internal, innovation and learning, and financial measures.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

Fill in the Blank Questions

30. _____ can be defined as a set of principles and processes to guide and improve the management of projects.
Project oversight

Project oversight can be defined as a set of principles and processes to guide and improve the management of projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

31. Project selection and portfolio management are typical activities at the _____ level of project oversight.
organization

See list on page 565.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

32. Reviewing project's objectives and resolving project bottlenecks are typical activities at the _____ level of project oversight.
project

See list on page 565.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

33. The centralized management of projects to ensure that the allocation of resources to projects is directed toward projects that contribute the greatest value to organization goals is known as _____.
Portfolio Project Management

Portfolio project management is the centralized management of projects to ensure that the allocation of resources to projects is directed toward projects that contribute the greatest value to organization goals.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

34. The _____ is responsible for the continued support of consistent application of selection criteria, standards, processes, training, and general assistance to project managers.
Project Office

The project office (PO) is the unit responsible for the continued support of consistent application of selection criteria, standards, and processes; training of and general assistance to project managers; and continued improvement and use of best practices.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

35. High tech firms such as HP, IBM, and Dell all use _____ to coordinate projects and to ensure best practices are being used to manage projects.
Project Offices

High-tech firms such as Hewlett-Packard (HP), International Business Machines (IBM), and Dell all use project offices to coordinate projects and to ensure best practices are being used to manage projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

36. The use of _____ provides an in-depth review of individual's projects at specific phases in the project life cycle.
phase gate methodology

Phase gate methodology provides an in-depth review of individual projects at specific phases in the project life cycle.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

Short Answer Questions

37. The original _____ model was pioneered by Robert G. Cooper several decades ago to improve management of new product development.

Stage-Gate™

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

38. "Go, Kill, Hold, or Recycle" decisions are made by the oversight team at each _____ of a project.
phase gate

The original Stage-Gate™ model was pioneered by Robert G. Cooper several decades ago to improve management of new-product development. The original model incorporates five stages: preliminary investigation, detailed investigation, development, testing and validation, and full production and market launch. Stages precede gates and represent information developed to enable gatekeepers to make the right decision at the next gate. These decision points at each gate are known as go, kill, hold, or recycle decisions. Given the information developed for each stage, the gatekeepers (the oversight team) can decide to continue with the project, abort the project, or revise/recycle.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

39. The _____ process can be defined as a structured process to review, evaluate, and document outcomes in each project phase and to provide management with information to guide resource deployment toward strategic goals.
phase gate review

The phase gate review process can be defined as a structured process to review, evaluate, and document outcomes in each project phase and to provide management with information to guide resource deployment toward strategic goals. This oversight activity begins with project selection and tracking the project life cycle through closure and lessons learned.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

40. Phase 1 of the abridged, generic phase gated process is known as the _____ phase.
<u>Proposal</u>

The proposal phase answers a fundamental question: Is the project a good idea and does it solve a business problem or issue?

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

41. Phase 2 of the abridged, generic phase gated process is known as the _____ phase.
<u>Selection</u>

The selection review includes a thorough analysis based on selection criteria. The gating group uses weighted scoring model criteria, which typically include project risks, costs, resource needs, urgency, financial analysis, benefits, identified sponsor, and other criteria found in selection models.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

42. Phase 3 of the abridged, generic phase gated process is known as the _____ phase.
<u>Implementation Plan</u>

The implementation plan review information should include the planning document developed in earlier chapters. For example, what are the specific goals for the project and what are the major deliverables (scope)?

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

43. Phase 4 of the abridged, generic phase gated process is known as the _____ phase.
<u>Progress evaluation</u>

Your progress evaluation review covers the control activities of tracking progress, identifying variances from your plan, and taking corrective action. A major chunk of the data requirements for the phase review are simply measures against the project plan.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

44. Phase 5 of the abridged, generic phase gated process is known as the _____ phase.
<u>Closure</u>

The closure and lessons learned activities closely follow the closure activities found in the audit chapter. Some organizations have wrapped phases 5 and 6—closure and lessons learned—into a single gate.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

45. Phase 6 of the abridged, generic phase gated process is known as the _____ phase.
<u>Post Project Review and Lessons Learned</u>

The last phase is the Post Project Review and Lessons Learned some of the questions asked in this phase are. Have we identified what went wrong and what contributed to success? Have changes to improve delivery of future projects been communicated and archived?

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

46. _____ is used to identify opportunities for improvement.
Benchmarking

Benchmarking is used to identify opportunities for improvement.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Organization Project Management in the Long Run
Level: Medium

47. Level 1 of the authors' Project Maturity Model is named _____.
Ad Hoc Project Management

In Level 1 Ad Hoc Project Management, no consistent project management process is in place. How a project is managed depends upon the individuals involved.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Easy

48. Level 2 of the authors' Project Maturity Model is named _____.
Formal Application of Project Management

In Level 2: Formal Application of Project Management, the organization applies established project management procedures and techniques. This level is often marked by tension between project managers and line managers who need to redefine their roles.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Easy

49. Level 3 of the authors' Project Maturity Model is named _____.
Institutionalization of Project Management

In Level 3: Institutionalization of Project Management, An organization wide project management system, tailored to specific needs of the organization with the flexibility to adapt the process to unique characteristics of the project, is established.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Easy

50. Level 4 of the authors' Project Maturity Model is named _____.
Management of Project Management System

In Level 4: Management of Project Management System, the organization develops a system for managing multiple projects that are aligned with strategic goals of the organization.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Easy

51. Level 5 of the authors' Project Maturity Model is named _____.
Optimization of Project Management System

In Level 5: Optimization of Project Management System, the focus is on continuous improvement through incremental advancements of existing practices and by innovations using new technologies and methods.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Easy

52. The _____ model limits measures of performance to goals in four main areas: customer, internal, innovation and learning, and financial measures.
scorecard

The scorecard model limits measures of performance to goals in four main areas: customer, internal, innovation and learning, and financial measures.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Organization Project Management in the Long Run
Level: Easy

53. The balanced scorecard model differs from selection models by reviewing projects over _____.
5-10 years

The balanced scorecard model differs from selection models by reviewing projects over a longer horizon—5 to 10 years after the project is implemented.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Organization Project Management in the Long Run
Level: Easy

54. _____ such as ROI, cash flow, and projects on budget reflect improvement and actions that contribute value to the bottom line.
Financial measures

Financial measures such as ROI, cash flow, and projects on budget reflect improvement and actions that contribute value to the bottom line.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Medium

True / False Questions

55. Project Management Control is the term that has emerged to reflect how organizations oversee their project management systems.
<u>FALSE</u>

Project oversight can be defined as a set of principles and processes to guide and improve the management of projects. At the organizational level it assessing and elevates the maturity level of the organization's project management system.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

56. Project oversight can be defined as a set of principles and processes to.
<u>TRUE</u>

Project oversight can be defined as a set of principles and processes to guide and improve the management of projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

57. The phase gate review process can be defined as a structured process to review, evaluate, and document outcomes in each project phase and to provide management with information to guide resource deployment toward strategic goals.
<u>TRUE</u>

The phase gate review process can be defined as a structured process to review, evaluate, and document outcomes in each project phase and to provide management with information to guide resource deployment toward strategic goals.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

58. The phase gate review process is the centralized management of projects to ensure that the allocation of resources to projects is directed toward projects that contribute the greatest value to organization goals.
<u>FALSE</u>

Portfolio project management is the centralized management of projects to ensure that the allocation of resources to projects is directed toward projects that contribute the greatest value to organization goals.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

59. The appearance of a project office frequently follows the implementation of project portfolio management efforts.
<u>TRUE</u>

The appearance of a project office frequently follows the implementation of project portfolio management efforts.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

60. When project effort moves from tactical to strategic, project selection, project process.
<u>TRUE</u>

When project effort moves from tactical to strategic, project selection, project processes, and resources are brought under one system known as portfolio project management.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

61. Portfolio Project Management is responsible for the continued support of consistent application of selection criteria, standards, processes, training, and general assistance to project managers.
FALSE

The project office (PO) is the unit responsible for the continued support of consistent application of selection criteria, standards, and processes; training of and general assistance to project managers; and continued improvement and use of best practices.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

62. The appearance of a project office frequently follows the implementation of project portfolio management efforts.
TRUE

Most project-driven organizations have set up project offices. The appearance of a project office frequently follows the implementation of project portfolio management efforts.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

63. Project offices are known to result in positive benefits such as serving as a bridge between senior management and project managers.
TRUE

Most project-driven organizations have set up project offices. The appearance of a project office frequently follows the implementation of project portfolio management efforts.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

64. Phase gate methodology was originally developed for the construction industry.
<u>FALSE</u>

Phase gate methodology was originally developed for product development, but the application of the methodology has grown beyond new product development to include all projects in the portfolio.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

65. The phase gate methodology was developed before the emergence of the project office and project portfolios.
<u>FALSE</u>

The growth in the application of portfolio project management and project offices will continue. Portfolio management and project offices strongly influence how a project manager will manage his or her respective project. A more recent oversight activity has been the quick implementation of phase gate reviews.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

66. One study by Morris showed 45 percent of those surveyed use phase review gates.
<u>FALSE</u>

One study by Morris and Jamieson showed 85 percent of those surveyed use phase review gates, while 85 percent who did not thought they should.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

67. The decision points at each phase gate are known as "Go, Kill, Hold, or Recycle" decisions.
TRUE

The original Stage-Gate™ model was pioneered by Robert G. Cooper several decades ago to improve management of new-product development. The original model incorporates five stages: preliminary investigation, detailed investigation, development, testing and validation, and full production and market launch. Stages precede gates and represent information developed to enable gatekeepers to make the right decision at the next gate. These decision points at each gate are known as go, kill, hold, or recycle decisions. Given the information developed for each stage, the gatekeepers (the oversight team) can decide to continue with the project, abort the project, or revise/recycle.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

68. The Portfolio Project Management methodology can be defined as a structured process to review, evaluate, and document outcomes in each project phase and to provide management with information to guide resource deployment toward strategic goals.
FALSE

The phase gate review process can be defined as a structured process to review, evaluate, and document outcomes in each project phase and to provide management with information to guide resource deployment toward strategic goals.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

69. It is extremely rare that a project that is executing on time, on budget, and meeting project goals will be "killed".
FALSE

If the priorities of the organization have changed, a project that is executing on time, on budget, and meeting the project goals may have to be "killed."

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

70. The first phase of the generic phase gated process in the text is called the Screening and Selection phase.
FALSE

The first phase is the proposal phase which answers a fundamental question: Is the project a good idea and does it solve a business problem or issue?

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

71. The last phase of the generic phase gated process in the text is called the Closure phase.
FALSE

The last Phase 6 is called post project review and lessons learned.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

72. The Proposal phase answers the fundamental question: Is the project a good idea and does it solve a business problem or issue?
<u>TRUE</u>

The first phase is the proposal phase which answers a fundamental question: Is the project a good idea and does it solve a business problem or issue?

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Easy

73. The Implementation Plan phase answers the question: What are the major risks for this project?
<u>FALSE</u>

The selection review includes a thorough analysis based on selection criteria. The gating group uses weighted scoring model criteria, which typically include project risks, costs, resource needs, urgency, financial analysis, benefits, identified sponsor, and other criteria found in selection models. In this phase one of the questions is "What are the major risks for this project?"

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Easy

74. Gate 1 provides information at a minimal expenditure of cost and resources and in a short time, so the project can be reevaluated more thoroughly if it is perceived to have merits.
<u>TRUE</u>

Gate 1 provides information at a minimal expenditure of cost and resources and in a short time, so the project can be reevaluated more thoroughly if it is perceived to have merits.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Project Oversight
Level: Medium

75. In the authors' Project Maturity Model, the Ad Hoc Project Management level has no consistent project management process in place.
TRUE

In an Ad Hoc Project Management no consistent project management process is in place. How a project is managed depends upon the individuals involved.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Easy

76. In the authors' Project Maturity Model, the highest level is Management of Project Management System.
FALSE

The highest level in the authors' Project Maturity Model is Optimization of Project Management System where the focus is on continuous improvement through incremental advancements of existing practices and by innovations using new technologies and methods.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Easy

Short Answer Questions

77. Briefly describe what "Project Oversight" is and why it is important to Project Management.

Project oversight is a set of principles and processes to guide and improve the management of projects. It is important because of the profound paradigm shift that has occurred over the last few years.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Difficult

78. The typical activities of project oversight cover two dimensions. Identify those two dimensions and give two examples of activities for each of those dimensions.

1. organization level Examples: project selection, portfolio management, improving project management, assessing the project management system maturity and using the Balance Score Card. 2. project level Examples: review project objectives, decide on issues raised by PM, and track and assist in resolving bottlenecks.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Difficult

79. What is Portfolio Project Management?

It is the centralized management of projects to ensure that the allocation of resources to projects is directed toward projects that contribute the greatest value to organization goals.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Difficult

80. What is the Project Office and what is its relationship to oversight?

It is the unit responsible for the continued support of consistent application of selection criteria, standards, processes, training, and general assistance to project managers, and continued improvement and use of best practices. The project office is used as the vehicle to support and manage oversight activities.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Difficult

81. What is Phase Gate Methodology and what does it do?

It is the in-depth review of individual projects at specific phases in the project life cycle. These reviews cover assessments to continue or kill the project, reassess resource allocation, reassess prioritization, evaluate execution progress, and strategic alignment decisions.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Difficult

82. Identify the six phases of the authors' generic phase gated process.

1. proposal, 2. screening and selection, 3. implementation, 4. progress evaluation, 5. Closure, and 6. post project review and lessons learned.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Project Oversight
Level: Difficult

83. What is an Organization Project Management Maturity model?

It focuses on guiding and assessing organizations in implementing concrete best practices of managing projects and continuously move to improvement.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Organization Project Management in the Long Run
Level: Difficult

84. Identify the five growth levels contained in the Project Management Institute's organizational project maturity model, OPM3.

1. Initial, 2. Repeatable, 3. Defined, 4. Managed, and 5. Optimized.

85. Identify and briefly describe the five levels in the authors' Project Maturity Model.

1. Ad Hoc Project Management: no consistent project management process, 2. Formal Application of Project Management: the organization applies established project management procedures and techniques, 3. Institutionalization of Project Management: an organization-wide project management system tailored to its specific needs is established, 4. Management of Project Management System: the organization develops a system for managing multiple project that are aligned with strategic goals, and 5. Optimization of Project Management System: the focus is on continuous improvement through incremental advances of existing practices and innovations using new technologies and methods.

86. What is the Balanced Scorecard Model and how is it different from selection models?

The balanced scorecard model differs from selection models by reviewing projects over a longer horizon—5 to 10 years after the project is implemented. It is more "macro" in perspective than project selection models. This model measures the results of major activities taken to support the overall vision, mission, and goals of the organization. It helps answer two questions: Did we select the right projects? Did the projects contribute to long-range strategic direction of the firm?

Chapter 17 An Introduction to Agile Project Management Answer Key

Multiple Choice Questions

1. Traditional approaches to project management concentrate firmly on thorough planning _____.
A. Up front
B. With the customer
C. With the project team
D. Of the WBS
E. None of the above

Traditional approaches to project management concentrate firmly on thorough planning up front.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Traditional versus Agile Methods
Level: Easy

2. Once the project scope has been firmly established, every detail of the project is defined through the _____.
A. Deliverables
B. Job tickets
C. WBS
D. Estimates
E. Risks

Once the project scope has been firmly established, every detail of the project is defined through the WBS.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Traditional versus Agile Methods
Level: Easy

3. Project _____ varies according to the extent the project scope is known and stable and the technology to be used is known and proven.
A. Stability
B. Certainty
C. Unity
D. Uncertainty
E. Degree

Project uncertainty varies according to the extent the project scope is known and stable and the technology to be used is known and proven.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Traditional versus Agile Methods
Level: Medium

4. In many cases, _____ only begin to understand what they actually desire when they are provided with someone's impression of what they want.
A. Project Managers
B. Customers
C. Sponsers
D. Team Leaders
E. All of the above are correct

In many cases, customers only begin to understand what they actually desire when they are provided with someone's impression of what they want.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Traditional versus Agile Methods
Level: Easy

5. _____ can be a source of unpredictability.
A. Technology
B. Clients
C. Vendors
D. Sponsers
E. WBS

Technology can be a source of unpredictability.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Traditional versus Agile Methods
Level: Medium

6. All of the following are part of the Traditional Project Management model except:
A. Fixed scope
B. Deliverables
C. Continuous Design
D. Low uncertainty
E. Conventional Project Teams

See Table 17.1 on page 585.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Traditional versus Agile Methods
Level: Medium

7. All of the following are part of the Agile Project Management model except:
A. Flexibility
B. High uncertainty
C. Embrace change
D. Design up front
E. Self organized project teams

See Table 17.1 on page 585.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Traditional versus Agile Methods
Level: Medium

8. _____ represents a fundamental shift away from the traditional plan-driven project management approach by adopting a more experimental and adaptive approach to managing projects.
A. Agile project management
B. Hybrid project management
C. Uncertain project management
D. Focused project management
E. Interactive project management

Agile PM represents a fundamental shift away from the traditional plan-driven project management approach by adopting a more experimental and adaptive approach to managing projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

9. Iterations are short time frames ("time boxes") that typically last from _____.
A. 1-4 days
B. 1-2 weeks
C. 1-4 weeks
D. 4-7 weeks
E. 7-12 weeks

Iterations are short time frames ("time boxes") that typically last from one to four weeks.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Agile PM
Level: Easy

10. In the Snap Shot From Practice IDEO: Masters of Design, one of the product innovations is:
A. First Apple Mouse
B. Head's Airflow Tennis Racket
C. Zyliss Salad Spinner
D. Nokia N-Gage Smart phones
E. All of the above are correct

IDEO, headquartered in Palo Alto, California, is one of the premier design firms in the world. They are responsible for a wide range of product innovations including the first Apple mouse, Head's Airflow Tennis Racket, Zyliss Salad Spinner, and Nokia N-Gage Smart phones.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM
Level: Difficult

11. In the Snap Shot From Practice IDEO: Masters of Design. CEO Tim Brown recommends that _____ should only take as much time and effort needed to generate useful feedback and evolve an idea.
A. Projects
B. Prototypes
C. Experiments
D. Product Design
E. Development

Brown recommends that prototypes should only take as much time and effort needed to generate useful feedback and evolve an idea.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

12. Iterative development processes provide the which important advantages:
A. Continuous integration, verification, and validation of the evolving product.
B. Frequent demonstration of progress to increase the likelihood that the end product will satisfy customer needs.
C. Early detection of defects and problems.
D. A, B and C are correct
E. None of the above is correct

See List on Page 586.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

13. In the Research Highlight: Product Development practices that Work: The waterfall method is the name used in what industry?
A. Automotive
B. Tool and Dye
C. Publishing
D. Renewable Energy
E. Software

The waterfall model is the name used in the software industry for the traditional approach to project management in which a process breakdown structure (PBS) is used to first define all the requirements up front and then initiate a design, build, integrate, test, deploy sequence.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

14. Which is not part of a family of methods designed to respond to the challenges of unpredictable projects?
A. Agile modeling
B. Lean development
C. RUP (Rational Unified Process)
D. Crystal clear
E. Fixed scope

See List on page 587.

15. Which each of these Agile principles: Employ business-driven prioritizations of requirements and features?
A. Focus on customer value
B. Iterative and incremental delivery
C. Experimentation and adaptation
D. Self-organization
E. Continuous improvement

Focus on customer value—Employ business-driven prioritizations of requirements and features.

16. Which each of these Agile principles: create a flow of value to customers by "chunking" project delivery into small, functioning increments?
A. Focus on customer value
B. Iterative and incremental delivery
C. Experimentation and adaptation
D. Self-organization
E. Continuous improvement

Iterative and incremental delivery—Create a flow of value to customers by "chunking" project delivery into small, functioning increments.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

17. hich each of these Agile principles: Test assumptions early and build working prototypes to solicit customer feedback and refine product requirements?
A. Focus on customer value
B. Iterative and incremental delivery
C. Experimentation and adaptation
D. Self-organization
E. Continuous improvement

Experimentation and adaptation—Test assumptions early and build working prototypes to solicit customer feedback and refine product requirements.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

18. Which each of these Agile principles: is where team members decide amongst themselves who and what should be done?
A. Focus on customer value
B. Iterative and incremental delivery
C. Experimentation and adaptation
D. Self-organization
E. Continuous improvement

Self-organization—Team members decide amongst themselves who and what should be done.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

19. Which each of these Agile principles: is where Teams reflect, learn, and adapt to change; work informs the plan?
A. Focus on customer value
B. Iterative and incremental delivery
C. Experimentation and adaptation
D. Self-organization
E. Continuous improvement

Continuous improvement—Teams reflect, learn, and adapt to change; work informs the plan.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

20. A new holistic approach in new commercial product development efforts is known as:
A. Scrum
B. Specific project management
C. Traditional project management
D. Prioritized WBS
E. Functional teams

Scrum can be traced back to the work of Hirotaka Takeuchi and Ikujiro Nonaka who in 1986 described a new holistic approach in new commercial product development efforts.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM
Level: Medium

21. A _____ is defined as a piece of a product that delivers some useful functionality to a customer.
A. Scrum
B. Value
C. Spirit
D. Feature
E. Priority

A feature is defined as a piece of a product that delivers some useful functionality to a customer.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM in action: Scrum
Level: Medium

22. In the Scrum Development Process a specific feature is:
A. Analysis
B. Design
C. Build
D. Trust
E. All of the above are correct.

See Figure 17.3 on page 588.

23. A person who acts on behalf of customers to represent their interests is called a:
A. Customer service representive
B. Project champion
C. Customer liaison
D. Product owner
E. Production coordinator

A product owner acts on behalf of customers to represent their interests. They are responsible for ensuring that the development team focuses their efforts on developing a product that will fulfill the business objective of the project.

24. A Development Team typically made up of _____ people with cross-functional skill sets.
A. 5-9
B. 7-10
C. 8-12
D. 12-14
E. 15-20

A Development Team typically made up of five-nine people with cross-functional skill sets.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM in action: Scrum
Level: Easy

25. What are the questions asked at the daily scrum?
A. What have you done since the last Scrum?
B. What will you do between now and the next Scrum?
C. What is getting in the way (blocks) you from performing your work as effectively as possible?
D. What is the newest schedule changes?
E. A, B, and C are all questions

See list on page 590.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM in action: Scrum
Level: Medium

26. How long does the daily scrum last?
A. 5 min
B. 10 min
C. 15 min
D. 20 min
E. 25 min

The Scrum, which typically lasts 15 minutes, is held next to a whiteboard, at which time all tasks and blocks are recorded. The Scrum Master erases blocks once they have been removed.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM in action: Scrum
Level: Easy

27. The _____ is the customer's prioritized list of key features desired when the project is completed.
A. Project master
B. Spirit backlog
C. Creative backlog
D. Product backlog
E. Project list

The product backlog is the customer's prioritized list of key features desired when the project is completed.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM in action: Scrum
Level: Easy

28. _____ represents the amount of work the team commits to complete during the next sprint.
A. Spirit backlog
B. Product backlog
C. Project backlog
D. Schedule backlog
E. Task backlog

The sprint backlog is developed and controlled by the team. It represents the amount of work the team commits to complete during the next sprint.

AACSB: Comprehension
Bloom's: Knowledge
Learning Objective: Agile PM in action: Scrum
Level: Easy

29. Which of the following is not part of the Agile Alliance manifesto that declared four core values?
A. Individuals and interactions over processes and tools.
B. Working software over comprehensive documentation.
C. Creating an end user survey.
D. Customer collaboration over contract negotiation.
E. Responding to change over following a plan.

See list on page 594.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Limitations and Concerns
Level: Difficult

30. _____ are the maximum budget that should not be exceeded in the development of a given product or service.
A. Project account
B. Contingencies
C. Agile account
D. Ceilings
E. None of the above are correct.

In response to the financial concerns, many organizations establish "ceilings", which is the maximum budget that should not be exceeded in the development of a given product or service.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Limitations and Concerns
Level: Easy

Fill in the Blank Questions

31. Traditional approaches to project management concentrate firmly on thorough planning _____.

up front

Traditional approaches to project management concentrate firmly on thorough planning up front.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Traditional versus Agile Methods
Level: Easy

32. Once the project scope has been firmly established, every detail of the project is defined through the _____.
WBS

Once the project scope has been firmly established, every detail of the project is defined through the WBS.

33. Project _____ varies according to the extent the project scope is known and stable and the technology to be used is known and proven.
uncertainty

Project uncertainty varies according to the extent the project scope is known and stable and the technology to be used is known and proven.

34. In many cases, _____ only begin to understand what they actually desire when they are provided with someone's impression of what they want.
customers

In many cases, customers only begin to understand what they actually desire when they are provided with someone's impression of what they want.

35. _____ can be a source of unpredictability.
Technology

Technology can be a source of unpredictability.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Factors Influencing the Quality of Estimates
Level: Medium

36. _____ represents a fundamental shift away from the traditional plan-driven project management approach by adopting a more experimental and adaptive approach to managing projects.
Agile project management

Agile PM represents a fundamental shift away from the traditional plan-driven project management approach by adopting a more experimental and adaptive approach to managing projects.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Traditional versus Agile Methods
Level: Medium

37. Iterations are short time frames ("time boxes") that typically last from _____.
one to four weeks

Iterations are short time frames ("time boxes") that typically last from one to four weeks.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Easy

38. In the Snap Shot From Practice IDEO: Masters of Design. CEO Tim Brown recommends that _____ should only take as much time and effort needed to generate useful feedback and evolve an idea.
prototypes

Brown recommends that prototypes should only take as much time and effort needed to generate useful feedback and evolve an idea.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

39. In the Research Highlight: Product Development practices that Work: The waterfall method is the name used in the _____ industry.
Software

The waterfall model is the name used in the software industry for the traditional approach to project management in which a process breakdown structure (PBS) is used to first define all the requirements up front and then initiate a design, build, integrate, test, deploy sequence.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

40. _____ employs business-driven prioritizations of requirements and features.
Focus on customer value

Focus on customer value—Employs business-driven prioritizations of requirements and features.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

41. _____ create a flow of value to customers by "chunking" project delivery into small, functioning increments.
Iterative and incremental delivery

Iterative and incremental delivery—Create a flow of value to customers by "chunking" project delivery into small, functioning increments.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

42. _____ test assumptions early and build working prototypes to solicit customer feedback and refine product requirements.
Experimentation and adaptation

Experimentation and adaptation—Test assumptions early and build working prototypes to solicit customer feedback and refine product requirements.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

43. _____ team members decide amongst themselves who and what should be done.
Self-organization

Self-organization—Team members decide amongst themselves who and what should be done.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

44. _____ teams reflect, learn, and adapt to change; work informs the plan.
Continuous improvement

Continuous improvement—Teams reflect, learn, and adapt to change; work informs the plan.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

45. _____ is a new holistic approach in new commercial product development efforts.
Scrum

Scrum can be traced back to the work of Hirotaka Takeuchi and Ikujiro Nonaka who in 1986 described a new holistic approach in new commercial product development efforts.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM in action: Scrum
Level: Medium

46. A _____ is defined as a piece of a product that delivers some useful functionality to a customer.
feature

A feature is defined as a piece of a product that delivers some useful functionality to a customer.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM in action: Scrum
Level: Medium

47. A _____ is a person who acts on behalf of customers to represent their interests.
product owner

A Product owner acts on behalf of customers to represent their interests. They are responsible for ensuring that the development team focuses their efforts on developing a product that will fulfill the business objective of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM in action: Scrum
Level: Easy

48. A _____ typically made up of five-nine people with cross-functional skill sets.
development team

A Development Team typically made up of five-nine people with cross-functional skill sets.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM in action: Scrum
Level: Easy

49. The daily scrum last _____ minutes.
15

The Scrum, which typically lasts 15 minutes, is held next to a whiteboard, at which time all tasks and blocks are recorded. The Scrum Master erases blocks once they have been removed.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Agile PM in action: Scrum
Level: Easy

50. The customer's prioritized list of key features desired when the project is completed is the
_____.
product backlog

The product backlog is the customer's prioritized list of key features desired when the project
is completed.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM in action: Scrum
Level: Medium

51. The _____ backlog is developed and controlled by the team. It represents the amount of
work the team commits to complete during the next sprint.
sprint

The sprint backlog is developed and controlled by the team. It represents the amount of work
the team commits to complete during the next sprint.

AACSB: Comprehension
Bloom's: Knowledge
Learning Objective: Agile PM in action: Scrum
Level: Easy

52. The maximum budget that should not be exceeded in the development of a given product
or service are called _____.
ceilings

In response to the financial concerns, many organizations establish "ceilings", which is the
maximum budget that should not be exceeded in the development of a given product or
service.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Limitations and Concerns
Level: Easy

53. Many of the Agile principles, including _____ and intense collaboration, are incompatible with corporate cultures.
self-organizing teams

Many of the Agile principles, including self-organizing teams and intense collaboration, are incompatible with corporate cultures.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Limitations and Concerns
Level: Medium

54. Agile methods appear to work best on _____ projects that require only five-nine dedicated team members to complete the work.
small

Agile methods appear to work best on small projects that require only five-nine dedicated team members to complete the work.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Limitations and Concerns
Level: Easy

55. _____ frameworks, like Scrum are used exclusively to complete software development projects from beginning to end.
Agile PM

Agile PM frameworks, like Scrum are used exclusively to complete software development projects from beginning to end.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Limitations and Concerns
Level: Medium

True / False Questions

56. Traditional approaches to project management concentrate firmly on thorough planning up front.
TRUE

Traditional approaches to project management concentrate firmly on thorough planning up front.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Traditional versus Agile Methods
Level: Medium

57. Once the project scope has been firmly established, every detail of the project is defined through the project doctrine.
FALSE

Once the project scope has been firmly established, every detail of the project is defined through the WBS.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Traditional versus Agile Methods
Level: Easy

58. Traditional project management requires a fairly high degree of predictability to be effective.
TRUE

Traditional project management requires a fairly high degree of predictability to be effective.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Traditional versus Agile Methods
Level: Medium

59. Project unity varies according to the extent the project scope is known and stable and the technology to be used is known and proven.
<u>FALSE</u>

Project uncertainty varies according to the extent the project scope is known and stable and the technology to be used is known and proven.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Traditional versus Agile Methods
Level: Medium

60. When the project scope and/or technology are not fully known, things become much less predictable.
<u>TRUE</u>

When the project scope and/or technology are not fully known, things become much less predictable.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Traditional versus Agile Methods
Level: Medium

61. In many cases, customers only begin to understand what they actually desire when they are provided with someone's impression of what they want.
<u>TRUE</u>

In many cases, customers only begin to understand what they actually desire when they are provided with someone's impression of what they want.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Traditional versus Agile Methods
Level: Medium

62. Fixed Scope is part of the Traditional Project Management model.
<u>TRUE</u>

See Table 17.1 on page 585.

AACSB: Difficult
Bloom's: Comprehension
Learning Objective: Traditional versus Agile Methods
Level: Medium

63. Conventional project teams are part of the Agile Project Management model.
<u>FALSE</u>

See Table 17.1 on page 585.

AACSB: Difficult
Bloom's: Comprehension
Learning Objective: Traditional versus Agile Methods
Level: Medium

64. Agile PM represents a fundamental shift away from the traditional plan-driven project management approach by adopting a more experimental and adaptive approach to managing projects.
<u>TRUE</u>

Agile PM represents a fundamental shift away from the traditional plan-driven project management approach by adopting a more experimental and adaptive approach to managing projects.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Traditional versus Agile Methods
Level: Easy

65. Iterations are short time frames ("time boxes") that typically last from two to five weeks.
FALSE

Iterations are short time frames ("time boxes") that typically last from one to four weeks.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Easy

66. Fundamentally, Agile PM is related to the rolling wave planning and scheduling project methodology.
TRUE

Fundamentally, Agile PM is related to the rolling wave planning and scheduling project methodology.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM
Level: Easy

67. Each new iteration replaces the work of the previous iterations and adds new capabilities to the evolving to produce a next expanded version of the product.
FALSE

Each new iteration subsumes the work of the previous iterations and adds new capabilities to the evolving to produce a next expanded version of the product.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM
Level: Easy

68. In the Snap Shot From Practice IDEO: Masters of Design. CEO Tim Brown recommends that projects should only take as much time and effort needed to generate useful feedback and evolve an idea.
FALSE

Brown recommends that prototypes should only take as much time and effort needed to generate useful feedback and evolve an idea.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

69. In the Research Highlight: Product Development practices that Work: The waterfall method is the name used in the automotive industry.
FALSE

The waterfall model is the name used in the software industry for the traditional approach to project management in which a process breakdown structure (PBS) is used to first define all the requirements up front and then initiate a design, build, integrate, test, deploy sequence.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

70. Lean Development is not part of a family of methods designed to respond to the challenges of unpredictable projects.
FALSE

See List on page 587.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

71. Focus on customer value employs business-driven prioritizations of requirements and features.
<u>TRUE</u>

Focus on customer value—Employ business-driven prioritizations of requirements and features.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

72. Self-organization are team members who decide amongst themselves who and what should be done.
<u>TRUE</u>

Self-organization—Team members decide amongst themselves who and what should be done.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

73. Iterative and incremental deliver creates a flow of value to customers by "chunking" project delivery into large, functioning increments.
<u>FALSE</u>

Iterative and incremental delivery—Create a flow of value to customers by "chunking" project delivery into small, functioning increments.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Medium

74. Experimentation and adaptation tests assumptions that the project manager's interpretation of the project is correct.
<u>FALSE</u>

Experimentation and adaptation—Test assumptions early and build working prototypes to solicit customer feedback and refine product requirements.

AACSB: Analytic
Bloom's: Reflective Thinking
Learning Objective: Agile PM
Level: Medium

75. Continuous improvement teams reflect, learn, and adapt to change; work informs the plan.
<u>TRUE</u>

Continuous improvement—Teams reflect, learn, and adapt to change; work informs the plan.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM
Level: Easy

76. Priorities are re-evaluated before each iteration.
<u>FALSE</u>

Priorities are re-evaluated after each iteration.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM in action: Scrum
Level: Medium

77. The goal of each sprint is to produce fully functional features.
<u>TRUE</u>

The goal of each sprint is to produce fully functional features. This forces the team to tackle tough decisions early in order to create a workable demo.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Agile PM in action: Scrum
Level: Medium

78. The third phase of the Scrum Development Process is to build the feature so that it is functional.
<u>TRUE</u>

The third phase of the Scrum Development Process is to build the feature so that it is functional.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Agile PM in action: Scrum
Level: Medium

79. The product owner has the option to change features and priorities at the end of each sprint if desired.
<u>TRUE</u>

The product owner has the option to change features and priorities at the end of each sprint if desired. However, no changes should be made once a sprint has started.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Agile PM in action: Scrum
Level: Easy

80. Agile PM satisfies top management's need for budget, scope, and schedule control.
<u>FALSE</u>

Agile PM does not satisfy top management's need for budget, scope, and schedule control.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Limitations and Concerns
Level: Easy

Short Answer Questions

81. From the Research Highlight: Product Development practices that Work: list the practices that were statistically correlated with the most successful projects.

1. An iterative lifecycle with early release of the evolving product to stakeholders for review and feedback. 2. Daily incorporation of new software and rapid feedback on design changes. 3. A team with a broad based experience in shipping multiple projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Agile PM
Level: Difficult

82. List the Agile principles: designed to respond to the challenges of unpredictable projects.

1. Focus on customer value—Employs business-driven prioritizations of requirements and features. 2. Iterative and incremental delivery—Create a flow of value to customers by "chunking" project delivery into small, functioning increments. 3. Experimentation and adaptation—Test assumptions early and build working prototypes to solicit customer feedback and refine product requirements. 4. Self-organization—Team members decide amongst themselves who and what should be done. 5. Continuous improvement—Teams reflect, learn, and adapt to change; work informs the plan.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Agile PM
Level: Difficult

83. Identify the three key roles to the scrum process

1. product owner, 2. development team, 3. Scrum Master.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Agile PM in action: Scrum
Level: Medium

84. Describe the Spirit planning concept.

At the start of each sprint, the product owner and development team negotiate which product backlog items the Team will attempt this sprint. The product owner is responsible for identifying which features are most important, and the team is responsible for determining what is possible within the sprint. If it is impossible to complete a certain key item within four weeks the team works with the product owner to break the feature down into doable pieces. All committed items are recorded in a product backlog. The team uses this backlog to prioritize specific work to be done and assign initial responsibilities. These tasks are recorded in the sprint backlog. Once the meeting has adjourned the goals for the Sprint cannot be changed.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Agile PM in action: Scrum
Level: Difficult

85. What is the daily scrum and what are the key question that are addressed?

The heartbeat of an Agile project is the daily meetings which are commonly referred to as the "Scrum." The Scrum, which typically lasts 15 minutes, is held next to a whiteboard, at which time all tasks and blocks are recorded. The Scrum Master erases blocks once they have been removed. Each work day at the same time and place, team members stand in a circle and take turns answering the following key questions:
1. What have you done since the last Scrum?
2. What will you do between now and the next Scrum?
3. What is getting in the way (blocks) you from performing your work as effectively as possible?

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Agile PM in action: Scrum
Level: Difficult

Chapter 18 Project Management Career Paths Answer Key

Multiple Choice Questions

1. People find that their project management responsibilities _____ as they move up the organization's hierarchy.
A. Contracts
B. Advances
C. Simplifies
D. Expands
E. Specializes

People find that their project management responsibilities expand as they move up the organization's hierarchy.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Career Paths
Level: Easy

2. In Snapshot from practice: Rod Gwinn What does Rod Gwinn say he likes about project management?
A. The sense of accomplishment
B. The opportunity to work with people
C. The chance to work on different products
D. Making clients happy with exceptional customer service
E. Being able to train people to be a successful Project manager

Gwinn says "One of the things I enjoy most about this type of work is the sense of accomplishment in delivering a project that is useful, useable, and meets, or even exceeds, expectations."

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Career Paths
Level: Easy

3. One aspect of project managing that is unique is the _____ nature of assignments.
A. Permanent
B. Fluid
C. Temporary
D. Variety
E. Changing

One aspect of project managing that is unique is the temporary nature of assignments.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Temporary Assignments
Level: Easy

4. If you are considering pursuing a career in project management, you should first find out what specific project job opportunities exist _____.
A. In your field
B. In your schools job bank
C. With your peers
D. With your customers
E. In your company

If you are considering pursuing a career in project management, you should first find out what specific project job opportunities exist in your company.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Pursuing a Career
Level: Easy

5. Project managers mastered the job through _____, buttressed by occasional workshops on specific project topics such as project scheduling or negotiating contracts.
A. Intense schooling
B. On-the-job training
C. An apprentice program
D. Observation of another project manager
E. None of the above

They mastered the job through on-the-job training, buttressed by occasional workshops on specific project topics such as project scheduling or negotiating contracts.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Professional Training and Certification
Level: Medium

6. PMI membership entitles members to subscriptions to the following publication(s).
A. Project Management Journal
B. Project Management Today
C. PM Network
D. A, B and C are correct
E. A and C are correct

Many professionals find it beneficial to join the Project Management Institute (PMI). Membership entitles you to subscriptions to PMI publications including the academic Project Management Journal and the PM Network, a trade magazine. PMI sponsors workshops and national forums on project management.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Professional Training and Certification
Level: Medium

7. There are more than ____ local PMI chapters across North America.
A. 50
B. 100
C. 200
D. 300
E. 500

When you join PMI you also become a member of one of the more than 300 local chapters across North America.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Professional Training and Certification
Level: Medium

8. Many project managers' careers began by _____ for task forces and small projects.
A. Volunteering
B. Applying
C. Working
D. All the above is correct
E. None of the above is correct

Many project managers' careers began by volunteering for task forces and small projects.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Gaining Visibility
Level: Easy

9. In pursuing your ambition you should continually be on the lookout for _____.
A. New projects
B. A mentor
C. Better career opportunities
D. Project management workshops
E. New project management oriented Websites

In pursuing your ambition you should continually be on the lookout for a mentor.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Mentors
Level: Medium

10. Be careful to be involved in projects commensurate with your _____ as you are starting your project management career.
A. Abilities
B. Plans
C. Goals
D. Experience
E. All of the above

Top-down estimates are only a rough cut and typically occur in the "conceptual" stage of the project.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Mentors
Level: Easy

Fill in the Blank Questions

11. People find that their project management responsibilities _____ as they move up the organization's hierarchy.
<u>expand</u>

People find that their project management responsibilities expand as they move up the organization's hierarchy.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Career Paths
Level: Easy

12. One aspect of project managing that is unique is the temporary nature of _____.
<u>assignments</u>

One aspect of project managing that is unique is the temporary nature of assignments.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Temporary Assignments
Level: Easy

13. If you are considering pursuing a career in project management, you should first find out what specific project job opportunities exist _____.
<u>in your company</u>

If you are considering pursuing a career in project management, you should first find out what specific project job opportunities exist in your company.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Pursuing a Career
Level: Medium

14. _____ mastered the job through on-the-job training, buttressed by occasional workshops on specific project topics such as project scheduling or negotiating contracts.
<u>Project managers</u>

They mastered the job through on-the-job training, buttressed by occasional workshops on specific project topics such as project scheduling or negotiating contracts.

AACSB: Analytic
Bloom's: Knowledge
Learning Objective: Professional Training and Certification
Level: Medium

15. Many professionals find it beneficial to join the _____.
<u>Project Management Institute (PMI)</u>

Many professionals find it beneficial to join the Project Management Institute (PMI). Membership entitles you to subscriptions to PMI publications including the academic Project Management Journal and the PM Network, a trade magazine. PMI sponsors workshops and national forums on project management.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Professional Training and Certification
Level: Medium

16. PMI has more than _____ local chapters across North America.
<u>300</u>

When you join PMI you also become a member of one of the more than 300 local chapters across North America.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Professional Training and Certification
Level: Medium

17. Many project managers' careers began by volunteering for task forces and
_____.
<u>small projects</u>

Many project managers' careers began by volunteering for task forces and small projects.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Gaining Visibility
Level: Medium

18. In pursuing your ambition you should continually be on the lookout for a _____.
<u>mentor</u>

In pursuing your ambition you should continually be on the lookout for a mentor.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Top-Down versus Bottom-Up Estimating
Level: Medium

19. Attending conferences, trade fairs, and workshops provides good opportunities to
_____.
<u>network</u>

Attending conferences, trade fairs, and workshops provides good opportunities to "network".

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Mentors
Level: Easy

20. As you are starting your project management career, be careful to be involved in projects commensurate with your _____.
abilities

Be careful to be involved in projects commensurate with your abilities.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

True / False Questions

21. There is no set career path for becoming a project manager.
TRUE

There is no set career path for becoming a project manager. Career avenues vary from industry to industry, organization to organization, and from profession to profession.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Career Paths
Level: Easy

22. People find that their project management responsibilities contract as they move up the organization's hierarchy.
FALSE

People find that their project management responsibilities expand as they move up the organization's hierarchy.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Career Paths
Level: Easy

23. One aspect of project managing that is unique is the temporary nature of assignments.
TRUE

One aspect of project managing that is unique is the temporary nature of assignments.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Temporary Assignments
Level: Easy

24. Once the project is complete tenure is granted to project managers.
FALSE

Tenure is rarely granted to project managers. Once the project is completed, the manager may return to his previous department, even to a lesser position.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Methods for Estimating Project Times and Costs
Level: Medium

25. Due to the difficulty of the position, project managers will not lose their position due to a unsuccessful project.
FALSE

A promising career can be derailed by one unsuccessful project.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Temporary Assignments
Level: Medium

26. If you are considering pursuing a career in project management, you should first find out what specific project job opportunities exist in your company.
<u>TRUE</u>

If you are considering pursuing a career in project management, you should first find out what specific project job opportunities exist in your company.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Pursuing a Career
Level: Medium

27. Most project managers have received formal training in project management.
<u>FALSE</u>

Most project managers have never received formal training in project management.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Professional Training and Certification
Level: Easy

28. Most fast-track managers acknowledge that experience played a significant role in their advancement.
<u>FALSE</u>

Most fast-track managers acknowledge that mentors played a significant role in their advancement.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Mentors
Level: Medium

29. Since much project work is temporary and contractual in nature, it is important to develop professional contacts that may lead to future work.
TRUE

Since much project work is temporary and contractual in nature, it is important to develop professional contacts that may lead to future work.

AACSB: Reflective Thinking
Bloom's: Knowledge
Learning Objective: Mentors
Level: Easy

30. It is important to pick projects more for the quality of the people working on them than for the scope of the projects.
TRUE

Pick projects more for the quality of the people working on them than for the scope of the projects.

AACSB: Reflective Thinking
Bloom's: Comprehension
Learning Objective: Success in Key Projects
Level: Medium

Short Answer Questions

31. Describe the PMI certification eligibility requirements for the CAPM.

Eligibility Requirements: High school diploma/global equivalent AND 1,500 hours experience OR 23 hours pm education.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Professional Training and Certification
Level: Medium

32. Explain the PMI certification eligibility requirements for the PMP.

Eligibility Requirements: High school diploma/global equivalent **5** years project management experience **35** hours project management education **OR** Bachelor's degree/global equivalent **3 years** project management experience **35** hours project management education.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Professional Training and Certification
Level: Medium

33. Who are mentors and why are they important?

Mentors are typically superiors who take a special interest in you and your career. They use their clout to champion your ambitions and act as a personal coach, teaching you "the ropes to skip and the ropes to know." This special treatment does not come without a price. Mentors typically require fervent loyalty and superior performance; after all, the mentor's reputation rests on your performance.

AACSB: Analytic
Bloom's: Comprehension
Learning Objective: Mentors
Level: Medium

34. What are formal mentoring programs?

Many organizations have instituted formal mentoring programs in which experienced project managers are assigned to promising young managers. Although the relationship may not evolve to the personal level experienced with an informal mentor, designated mentors play a very similar role in coaching and championing one's professional progress.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Mentors
Level: Medium

35. What should be your goal be as a project manager?

Ultimately your goal is to accumulate a portfolio of project management experiences that broaden your skill base and reputation. Early on you should choose, when possible, projects with the greatest learning opportunities. Pick projects more for the quality of the people working on them than for the scope of the projects. There is no better way to learn how to be an effective project manager than by watching one at work. Keep a diary of your observations and review and refine lessons learned. Later, as your confidence and competency grow, you should try to get involved in projects that will enhance your reputation within the firm. Remember the comments about customer satisfaction. You want to exceed your superior's expectations. Avoid run-of-the-mill projects or assignments. Seek high-profile projects that have some risks and tangible payoffs. At the same time, be careful to be involved in projects commensurate with your abilities.

AACSB: Analytic
Bloom's: Synthesis
Learning Objective: Success in Key Projects
Level: Difficult