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PART ONE: Choose the best answer from the given alternatives.

1. Which of the following is not a project management goal?

   A. Avoiding customer complaints

   B. Keeping overall costs within budget

   C. Delivering the software to the customer at the agreed time

   D. Maintaining a happy and well-functioning development team

2. What is the first step in project planning?

   A. Determine the budget

   B. Determine project constraints

   C. Inspect the deliverables

   D. Establish the objectives and scope

3. A project is anything which is

   A. Not implicitly expressed

   B. Not a physical objective

   C. Implicitly expressed

   D. Social acceptability

4. Process framework activities are populated with

   A. Milestones

   B. QA Points

   C. Work Products

   D. All of the above

5. Which of the following is not an effective software project management focus?

   A. People

   B. Popularity

   C. Product

   D. Process

6. The reason for software bugs and failures is due to

   A. Software developers

   B. Software companies

   C. Both (A) and (B)

   D. None of the above

7. According to the Project Management Institute (PMI), project management is defined as "the application of knowledge, _____, _____, and techniques to project activities to meet the project requirements".

   A. Skills, Tools

   B. Skills, Analysis

   C. Tools, Analysis

   D. Analysis, Theories

   E. Skills, Theories

8. During project estimation, project manager estimates following

   A. Project duration

   B. Project effort

   C. Project cost

   D. All of the above

9. Project managers have to assess the risks that may affect a project

   A. True   B. False

10. Different activity of a project management is

    A. Project planning   C. Project control

    B. Project monitoring   D. All of the above

11. Cultural implications of the project are examined by

    A. Cultural feasibility   C. Technical feasibility

    B. Economic feasibility   D. Marketing feasibility

12. Effective software project management focuses on

    A. People, Performance, Payoff, Product

    B. People, Product, Process, Project

    C. People, Process, Payoff, Product

    D. People, Product, Performance, Process

13. Which of these are not among the eight principles followed by Software Engineering
    Code of Ethics and Professional Practice?

    A. Public   C. Profession

    B. Product   D. Environment

14. The _____ is not an approach to software cost estimation?

    A. Analytical   C. Critical

    B. Heuristic   D. Empirical

15. Which of these does not account for software failure?

    A. Increasing demand   C. Increasing supply

    B. Less reliable and expensive   D. Low expectation

16. Which of the following is not considered as a risk in project management?

    A. Testing   C. Product competition

    B. Specification delays   D. Staff turnover

17. What are attributes of good software?

    A. Software maintainability

    B. Software maintainability & functionality

    C. Software functionality

    D. Software development

18. Risk management is one of the most important jobs for a

    A. Investor   C. Production team

    B. Client   D. Project manager

19. Capacity planning

    A. Increase cost   C. Increases waste

    B. Save time   D. Increase production

20. Which of the following is not considered a stakeholder in the software process?

    A. Project Managers   C. Customers

    B. End-Users   D. Sales People

21. Which paradigm structures a team loosely and depends on individual initiatives of the
    team members?

    A. Synchronous paradigm   C. Open paradigm

    B. Random paradigm   D. Closed paradigm

22. Which of these is true?

    A. Generic products are produced by organization and sold to open market

    B. Generic products and customized products are types of software products

    C. Customized products are commissioned by particular customer

    D. All of the above

23. The process each manager follows during the life of a project is known as

    A. Manager life cycle   C. Project Management Life Cycle

    B. Project Management   D. None of the above

24. The model serves as the basis for the creation of _____ for the Software.

    A. Specifications   C. Maintenance

    B. Testing   D. Design

25. Which of the following activity is undertaken immediately after feasibility study and
    before the requirement analysis and specification phase?

    A. Project Monitoring   C. Project Control

    B. Project Planning   D. Project Scheduling

26. A 66.6% risk is considered as

    A. High   C. Very Low

    B. Low   D. Moderate

27. Small agile teams have no place in modern software development

   A. True   B. False

28. Which one of the following is not a software process quality?

   A. Productivity   C. Visibility

   B. Timeliness   D. Portability

29. Which of the following is/are main parameters that you should use when computing the costs of a software development project?

   A. Travel and training costs

   B. Hardware and software costs

   C. Effort costs (the costs of paying software engineers and managers)

   D. All of the above

30. When can selected common process framework activities be omitted during process decomposition?

   A. When the project is extremely small in size

   B. Never the activities are invariant

   C. Anytime the software is mission critical

   D. Rapid prototyping does not require their use

31. The PERT in project management means program evaluation and _____ technique.

   A. Resource   C. Reconsideration

   B. Reconciliation   D. review

32. "Risk" is usually _____ as the project progresses.

   A. Increased   C. remained same

   B. Reduced   D. become negligible

33. Assembling project team and assigning their responsibilities are done during which phase of a project management?

   A. Initiation   C. Execution

   B. Planning   D. Closure

34. The basic nature of a project is a/an _____ one.

   A. Permanent   C. (A) or (B)

   B. Temporary   D. Both (A) and (B)

35. A process that involves continuously improving and detailing a plan as more detail become available is termed as:

    A. project analysis   C. progressive deliberation

    B. project enhancing   D. progressive elaboration

36. A program is usually a group of

    A. Plans   C. related projects

    B. people and work   D. unrelated projects

37. Which from the following statement(s) is/are NOT true?

I. Projects have defined objectives

II. Programs have a larger scope than projects

III. The projects and programs in a portfolio must be directly related

    A. I only   C. III only

    B. II only   D. II and III only

38. Projects management is divided in _____ process groups.

    A. 5   B. 7   C. 9   D. 11

39. What are the five basic parameters of software economics?

    A. Size, process, personnel, environment, required quality

    B. Size, customer satisfaction, Operating system, environment, and the technology used

    C. Model of the project, customer satisfaction, Operating system, environment, and the technology used

    D. Process, customer satisfaction, Operating system, environment, and the technology used

40. Choose the correct option which depicts the relationships between the five parameters of software economics?

    A. $Project=(effort)(environment)(quality)(size)^{process}$

    B. $effort=(personnel)(environment)(quality)(size)^{process}$

    C. $effort=(Process)(environment)(quality)(size)^{personnel}$

    D. $quality=(Process)(environment)(process)(size)^{personnel}$

41. What is the diseconomy of the scale of software development?

    A. The diseconomy of the scale of software development is a result of the process exponent being greater than 1

B. The diseconomy of the scale of software development is a result of the process exponent being greater than 0

C. The diseconomy of the scale of software development is a result of the process exponent being greater than 1.0

D. The diseconomy of the scale of software development is a result of the process exponent being less than 1

42. What is the most significant way to improve affordability and return on investment?

A. Producing a product that achieves the design goals with a minimum amount of human-generated source materials

B. Producing a product that achieves the design goals

C. Producing a product that achieves the design goals that satisfy the customer

D. All of the above

43. _____ are the useful estimators for language-independent, early life cycle estimates.

A. Universal language points (ULP)   C. Function points (FP)

B. Universal functions points (UFP)   D. All of the above

44.   What limits the options of the project team?

A. Constraints   C. Technology

B. Assumptions   D. Deliverables

45. The work breakdown that covers the acquisition of a specific defense material item and is related to contractual effort, is called_____

A. Contract WBS   C. Program WBS

B. Contract Program WBS   D. None of these

46. Work Breakdown Structure how many types…

A. Three   B. Two   C. Four   D. None of these

47. Requirements management **is** Important? because of the changes…

A. in technology   D. in all of the mentioned.

B. to the environment   E. none of these

C. in customer's expectations

48. The following costs are not part of the total effort cost_____

A. Costs of lunch time food   C. Costs of networking

B. Costs of providing heating   D. Costs of support

49. Which of the following is related to the overall <u>functionality</u> of the delivered software?

    A. Product-related metrics   C. Size-related metrics

    B. Function-related metrics   D. None of the mentioned

50. Whenever evaluating current problems and desired information the analyst begins to..

    A. Model   C. Specification

    B. Synthesize solutions   D. None of these

51. What is the research-oriented software development_____

    A. Product-related problems   C. People-related problems

    B. Process-related problems   D. Technology-related problems

52. What type of reviews conducted at each of these phases_____

    A. Analysis   C. Coding   E. None of these

    B. Design   D. All of given

53. Technical kernel of software engineering_____

    A. Testing   C. Design

    B. Requirement Analysis   D. Implementation

54. . What is the preferred order for performing testing on information technology projects?

    A. unit testing, integration testing, system testing, user acceptance testing

    B. unit testing, system testing, integration testing, user acceptance testing

    C. unit testing, system testing, user acceptance testing, integration testing

    D. unit testing, integration testing, user acceptance testing, system testing

55. _____ is the degree to which a set of inherent characteristics fulfils requirements.

    A. Quality   C. Fitness for use

    B. Conformance to requirements   D. Reliability

56. What is the purpose of project quality management?

    A. to produce the highest quality products and services possible

    B. to ensure that appropriate quality standards are met

    C. to ensure that the project will satisfy the needs for which it was undertaken

    D. All of the above

57. Which of the following is not part of project human resource management?

    A. resource estimating   C. acquiring the project team

    B. developing the project team   D. managing the project team

58. _____ causes people to participate in an activity for their own enjoyment.

    A. Intrinsic motivation   C. Extrinsic motivation

    B. Self-motivation   D. Social motivation

59. _____ maps the work of a project, as described in the WBS, to the people responsible for performing the work.

    A. project organizational chart

    B. resource histogram

    C. work definition and assignment process

    D. responsibility assignment matrix

60. A staffing management plan often includes a resource _____, which is a column chart that shows the number of resources assigned to the project over time.

    A. Chart   C. histogram

    B. graph   D. timeline

61. What are the five stages in Tuckman's model of team development, in chronological order?

    A. forming, storming, norming, performing, and adjourning

    B. storming, forming, norming, performing, and adjourning

    C. norming, forming, storming, performing, and adjourning

    D. forming, storming, performing, norming, and adjourning

62. Which of the following is not a tool or technique for managing project teams?

    A. observation and conversation   C. project performance appraisals

    B. conflict management   D. Social Styles Profile

63. What do many experts agree is the greatest threat to the success of any project?

    A. lack of proper funding   C. poor listening skills

    B. a failure to communicate   D. inadequate staffing

64. Which of the following is not a process in project communications management?

    A. planning communications management

    B. controlling communications

    C. managing communications

    D. managing stakeholders

65. If you add three more people to a project team of five, how many more communication channels will you add?

A. 2   B. 12   C. 15   D. 18

66. _____ report describes where a project stands at a specific point in time.

     A. Status   C. forecast

     B. performance   D. earned value

67. What term describes information that is sent to recipients at their request via Web sites, bulletin boards, e-learning, knowledge repositories like blogs, and other means?

     A. push communications   C. interactive communications

     B. pull communications   D. customer communications

68. Which of the following is not a recommendation for improving project communications?

     A. You cannot over communicate.

     B. Project managers and their teams should take time to develop their communications skills.

     C. Do not use facilitators or experts outside of the project team to communicate important information.

     D. Use templates to help prepare project documents.

69. A _____ report is a reflective statement that documents important information learned from working on the project.

     A. final project   C. project archive

     B. lessons-learned   D. progress

70. _____ is an uncertainty that can have a negative or positive effect on meeting project objectives

     A. Risk utility   C. Risk management

     B. Risk tolerance   D. Risk

71. Which risk management process involves prioritizing risks based on their probability and impact of occurrence?

   A. planning risk management   C. performing qualitative risk analysis

   B. identifying risks   D. performing quantitative risk analysis

72. Your project involves using a new release of a common software application, but if that release is not available, your team has _____ plans to use the current release.

     A. Contingency   C. reserve

     B. fallback   D. mitigation

73. A risk _____ is a document that contains results of various risk management processes, and is often displayed in a table or spreadsheet format.
    A. management plan
    B. register
    C. breakdown structure
    D. probability/impact matrix

74. _____ are indicators or symptoms of actual risk events, such as a cost overrun on early activities being a symptom of poor cost estimates.
    A. Probabilities
    B. Impacts
    C. Watch list items
    D. Triggers

75. Your project team has decided not to use an upcoming release of software because it might cause your schedule to slip. Which negative risk response strategy are you using?
    A. avoidance
    B. acceptance
    C. transference
    D. mitigation

76. Which of the following comprehends the project life cycle?
    A. Milestones
    B. Phases
    C. Estimates
    D. Activities

77. During project execution, a team member comes to the project manager, as he is not sure of what work he needs to accomplish on the project. Which of the following documents contain detailed descriptions of work packages?
    A. Scope management plan
    B. Project scope statement
    C. WBS
    D. Activity list

78. _____ are a formal group of people responsible for approving or rejecting changes on a project.
    A. Change Control Board
    B. Client
    C. Senior management
    D. Project manager

79. Which one of the following is true about project scope?
    A. It is the combination of the cost and the schedule, which is required to complete the project work.
    B. It is the description of the required work that is necessary to complete the project.
    C. t is the design of experiments that are used to complete the project work.
    D. It is the description of the required work and resources that are needed to complete the project.

80. WBS is an excellent and most effective tool that is used for tracking of:

    A. Project Resources   C. Project Scope

    B. Project Schedule   D. Project Risks

81. What is the role of the change control board?

    A. Doing performance appraisal for team members involved in implementing changes

    B. Encouraging team members to raise more change requests

    C. Assessing the impact of the change on Project objectives

    D. Defining requirements for the customer

82. Which one of the following knowledge areas of project management does not lead to the specific objectives of the project?

    A. Scope management   C. Schedule management

    B. Risk management   D. Quality management

83. A _____ is a product or service produced or provided as part of a project.

    A. Deliverable   C. Schedule

    B. Process   D. Quality

84. Which one of the following is a deliverable from development phase of project life cycle?

    A. Performance report   C. Definitive cost estimate

    B. Budgetary cost estimate   D. Customer acceptance

85. Top managers can help project managers by_____.

    A. Providing adequate resources

    B. Approving unique project needs in a timely manner

    C. Mentoring and coaching on leadership issues

    D. All

86. The application area or the project directly affects the _____.

    A. Project Plan   C. Project Execution

    B. Project Change   D. All

87. Cost baseline is the output of which of the following?

    A. Determine budget   C. Plan cost management

    B. Estimate costs   D. Control costs

88. Which is NOT true about tools and techniques of Perform Integrated Change Control?

    A. They include project plan updates

B. They include change control meetings

C. A change control board (CCB) is responsible for meeting and reviewing the change requests and approving, rejecting, or other disposition of those changes

D. They include expert judgment

89. Being the project manager of the ABC Project, you have allowed subsequent project phase to begin even before the predecessor phase completes. Which of the following relates to this scenario?

    A. Crashing   C. Risk management

    B. Fast-tracking   D. Tandem scheduling

90. What is the SPI of a software development project where EV = Birr 6,000, PV = Birr 5,000, AC = Birr 4,000?

    A. 0.73   B. 1.2   C. 0.8   D. 1

91. All of the following are always inputs to the risk management process EXCEPT:

    A. Historical information   C. Work breakdown structure

    B. Lessons learned   D. Project status reports

92. Which of the following represents a set of conditions that should be satisfied before deliverables are accepted?

    A. Deliverables list   C. Acceptance criteria

    B. Test plan   D. Punch list

93. The best project organization structure for a small but highly technical project will be:

    A. Mixed organization   C. Matrix organization

    B. Functional organization   D. Projectized organization

94. You find that activity in your project is very risky. How will you estimate the duration of this activity when your team member has given the optimistic, most likely and pessimistic duration for the activity?

    A. Using variance analysis   C. Using PERT formula

    B. Using sensitivity analysis   D. Using performance reports

95. The project manager meets with the project team to review lessons learned from previous projects. In what activity is the team involved?

    A. Performance management   C. Risk identification

    B. Scope identification   D. Project team status meeting

96. During which risk management process is a determination to transfer a risk made?

    A. Identify Risks

    B. Perform Quantitative Risk Analysis

    C. Plan Risk Response

    D. Monitor and Control Risks

97. Schedule Variance is:

    A. A negative value means that the project will likely be delayed

    B. This always affects the CV

    C. A positive value means that the project will likely be delayed

    D. This never affects the CV

98. If SPI = 0.75 and CPI = 0.8, then which of the following reports is correct?

    A. SV = Birr 3750

    B. CV = Birr 4000

    C. TCPI = 0.8

    D. The project likely needs more money than planned to complete

99. Parametric estimating entails:

    A. Estimating the cost of the present project based on the actual cost of a prior similar project

    B. Defining project life cycle cost and duration parameters

    C. Creating a cost estimate for project work by using a statistical link between relevant historical data and other variables

    D. Creating independent cost estimates for each work package and combining them to determine the final project cost

100.   What are the three 'I's' of stakeholders?

    A. Interest, influence, and involvement

    B. Interest, influence, and impact

    C. Interest, influence, and importance

    D. Importance, inquiry, and influence

101.   A road project was planned to be completed in 8 months. Calculate the SV when the earned value information at the end of six months is given as: BAC = Birr 8000, AC = Birr12000, % complete = 100%.

A. Birr 4,000   C. Birr 8,000

B. Birr 2,000   D. Birr 6,000

102. Which one of the following reasons to manage software projects is incorrect?

A. Software development is highly unpredictable.

B. Most of projects are delivered within initial budget and on schedule.

C. Management has a greater effect on the success or failure of a project than technology advances.

D. Too often there is too much scrap and rework.

E. The entire process is very immature, not enough reuse.

103. Which one of the following can be considered as a cause of project failure?

A. Unrealistic or unarticulated project goals

B. Inaccurate estimates of needed resources

C. Badly defined system requirements

D. Poor reporting of the project's status

E. All

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105. _____ is a temporary endeavor undertaken to accomplish a unique purpose.

A. Project   C. Research

B. Operation   D. Work