

# 项目过程与管理 考试注意事项

## SPM GuideLines

### 考试题型[Sections]:

第 1 部分[Section 1]: 判断题 (20 \* 1 = 20 分)

第 2 部分[Section 2]: 单选题 (20 \* 1 = 20 分)

第 3 部分[Section 3]: 填空题 (20 \* 1 = 20 分)

第 4 部分[Section 4]: 简答题 (40 分)

### 答题规范[Answer format]:

第 1~3 部分, 在表格中填写答案, 如下所示[In Section 1 to 3, you need to write the answers in a table]:

Section 1				
1.	2.	3.	4.	5.
6.	7.	8.	9.	10.
11.	12.	13.	14.	15.
16.	17.	18.	19.	20.
Section 2				
1.	2.	3.	4.	5.
6.	7.	8.	9.	10.
11.	12.	13.	14.	15.
16.	17.	18.	19.	20.
Section 3				
1.	2.	3.	4.	5.
6.	7.	8.	9.	10.
11.	12.	13.	14.	15.
16.	17.	18.	19.	20.

第 4 部分, 在试卷上答题[answer in the answer sheet]

### 注意事项[Tips]:

- 不能带课本, PPT, 电子书, 小抄, 字典等进入考场。[Student must not carry textbooks, ppts, electronic dictionary, ipads, kindles,

printed notes and dictionary.]

- 课程名称[Course Name]: Software Process and Project Management
- 老师姓名[Teacher Name]: Angaj
- 试卷上自己的姓名用拼音, 并且需要标注自己的班级号(可以加组号), 例如: Zhangsan\_A1, Lisa\_B
- Student must write their name(pinyin) in the exam answer paper's along with their group number(A1, B1, C, D).

## Please complete the following exercises carefully!

### Section1: True and False

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There are answers at the end, please complete the exercise first and then check them.

1. ( ) Every project should have a well-defined objective.
2. ( ) A project manager's primary role is to provide the funding for a project. False
3. ( ) One of the main reasons why project management is challenging is because of the factor of uncertainty.
4. ( ) Managing the triple constraint primarily involves making trade-offs between resources and quality.
5. ( ) The only responsibility of a project manager is to meet the specific scope, time, and cost goals of a project.
6. ( ) The importance of stakeholders' needs and expectations is limited to the beginning of a project.
7. ( ) Project managers work with the project sponsors to define success for particular projects.
8. ( ) Individual projects always address strategic goals whereas portfolio management addresses tactical goals.
9. ( ) To be a successful manager, the only skills an IT project manager needs to possess are excellent technical skills.
10. ( ) Project managers in matrix organizations have staff from various functional areas working on their projects.
11. ( ) Project managers must take adequate time to identify, understand, and manage relationships with all project stakeholders.
12. ( ) It is much more expensive to make major changes to a project during the earlier phases.
13. ( ) The last phase of the traditional project life cycle is the implementation phase.
14. ( ) An organization usually commits more money as a project continues, therefore a management review should occur after each phase to evaluate progress, potential success, and continued compatibility with organizational goals.

15. ( ) The team members of a virtual team are all of the same nationality.
16. ( ) Decisions and actions taken in one knowledge area at a certain time rarely affect other knowledge areas.
17. ( ) Initiating processes take place during each phase of a project.
18. ( ) The level of activity and length of each process group varies for every project.
19. ( ) Initiating and closing tasks are usually the longest and require the most amount of resources and time.
20. ( ) The executing process group generally requires the most resources.
21. ( ) Monitoring and controlling processes overlap all of the other project management process groups.
22. ( ) Many project management activities occur as part of the planning process group.
23. ( ) Agile methods are used when deliverables have a low degree of change.
24. ( ) The Rational Unified Process (RUP) framework is incompatible with the PMBOK process.
25. ( ) The kick-off meeting is always held before the business case and project charter are completed.
26. ( ) A milestone list is an output associated with the Project Scope Management knowledge area.
27. ( ) In the Scrum method, team members work as a self-directed group coached by the ScrumMaster.
28. ( ) The burndown chart is a Scrum created artifact that provides a list of features prioritized by business value.
29. ( ) A sprint review is a meeting in which the team demonstrates to the product owner what it has completed during the sprint.
30. ( ) The pre-initiation phase of a project using the Scrum method does not involve project charters, stakeholder management strategy, and kick-off meetings.
31. ( ) The two main items for monitoring and controlling in the Scrum framework are the daily Scrum and the sprint retrospectives.

32. ( ) Payback period is the amount of time it will take to recoup, in the form of net cash inflows, the total dollars invested in a project.
33. ( ) A project charter typically does not authorize the project manager to use organizational resources to complete the project.
34. ( ) A Gantt chart is the same as a project management plan.
35. ( ) Scope refers to all the work involved in creating the products of the project and the processes used to create them.
36. ( ) Deliverables are only product-related, such as a piece of hardware or software.
37. ( ) Project scope management includes the processes involved in defining and controlling what is or is not included in a project.
38. ( ) The project's size, complexity, importance, and other factors do not affect how much effort is spent on collecting requirements for scope planning.
39. ( ) Information from the project charter provides a basis for further defining the project scope.
40. ( ) Project scope statements must include the project boundaries, constraints, and assumptions.
41. ( ) The scope of a project is clear and specific from the start.
42. ( ) Many information technology projects also require detailed functional and design specifications for developing software, which also should be referenced in the detailed scope statement.
43. ( ) The project scope statement should reference supporting documents, such as product specifications that will affect what products are produced or purchased, or corporate policies, which might affect how products or services are produced.
44. ( ) The scope baseline includes the approved project scope statement and its associated WBS and WBS dictionary.
45. ( ) The main purpose of the WBS is to define all of the work required to complete a project.
46. ( ) A work package represents one component of the product that the project aims to deliver.
47. ( ) The tasks in a WBS must be developed as a sequential list of steps.

48. ( ) A unit of work should appear at only one place in the WBS.
49. ( ) Scope creep if not managed well can lead to the failure of information technology projects.
50. ( ) An activity or task is an element of work normally found on the work breakdown structure (WBS) that has expected duration, cost, and resource requirements.
51. ( ) In project schedule management, the primary output of defining activities is a schedule management plan.
52. ( ) It is important for the activity list and activity attributes to be in agreement with the work breakdown structure.
53. ( ) Milestones are easy to achieve and are always achieved through one main activity.F
54. ( ) After defining project activities, the next step in project schedule management is developing the schedule.
55. ( ) Network diagrams are the preferred technique for showing activity sequencing.
56. ( ) Start-to-finish relationships are the most frequently used dependencies between activities.
57. ( ) In a critical path analysis, the shortest path is what drives the completion date for the project.
58. ( ) A backward pass through the network diagram determines the early start and early finish dates for each activity.
59. ( ) The technique of fast tracking can result in lengthening the project schedule.
60. ( ) Critical chain scheduling assumes that resources multitask and maximizes multitasking.
61. ( ) Overrun is the additional percentage amount by which estimates exceed actual costs.
62. ( ) Project managers must conduct cash flow analysis to determine net present value.
63. ( ) Contingency reserves are also known as unknown unknowns.
64. ( ) Budgetary estimates are made even before a project is officially started.
65. ( ) Estimates should become more accurate as time progresses.

66. ( ) In a bottom-up estimate, the size of the individual work items is one of the factors that drives the accuracy of the estimates.
67. ( ) The formulas for variances and indexes start with EV, the earned value.
68. ( ) Project stakeholder management has only been identified as an entire knowledge area by the Project Management Institute since 2013.
69. ( ) Projects often do not cause any changes in an organization.
70. ( ) Stakeholders might change during a project due to employee turnover, partnerships, and other events.
71. ( ) Communication and interpersonal skills are important for successful project stakeholder management.
72. ( ) Issue logs can be used to address issues related to other knowledge areas like project scope management or project quality management.
73. ( ) Though stakeholders cannot be controlled, their level of engagement can be monitored
74. ( ) Risks can have both negative and positive effects on meeting project objectives
75. ( ) Unknown risks can be managed proactively.
76. ( ) Risk events refer to specific, certain events that may occur to the detriment or enhancement of the project.
77. ( ) A probability/impact matrix or chart lists the relative probability of a risk occurring on one side of a matrix or axis on a chart and the relative impact of the risk occurring on the other.
78. ( ) Top Ten Risk Item Tracking is a quantitative risk analysis tool.
79. ( ) Identified risks may not materialize, or their probabilities of occurrence or loss may diminish.

Answers:

1-5	TFTFF
6-10	FTFFT
11-15	TFFTf
16-20	FTTfT
21-25	TTFFF
26-30	FTFTF
31-35	TTFFT
36-40	FTFTF
41-45	FTTTT
46-50	FTTTT
51-55	FTFFT
56-60	FFFFF
61-65	FTFTT
66-70	TTTfT
71-75	TTTTF
76-79	FTFT



## Section2: Multiple Choice

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1-5 BCDBD 6-10 C\_ACA

1. During which phase must project teams address important considerations for managing information (and often end up updating business processes through improved communications)?
  - a. closing
  - b. execution
  - c. planning
  - d. monitoring and controlling
2. An example of push communication is \_\_\_\_\_.
  - a. meetings
  - b. video conferencing
  - c. voice mails
  - d. blogs
3. An example of pull communication is \_\_\_\_\_.
  - a. meetings
  - b. video conferencing
  - c. voice mails
  - d. blogs
4. Which document addresses where the project stands in terms of meeting scope, time, and cost goals?
  - a. technical reports
  - b. status reports
  - c. progress reports
  - d. lessons-learned reports
5. Which process involves numerically estimating the effects of risks on project objectives?
  - a. performing qualitative risk analysis
  - b. planning risk responses
  - c. identifying risks
  - d. performing quantitative risk analysis
6. \_\_\_\_\_ are predefined actions that the project team will take if an identified risk event occurs.
  - a. Secondary risks
  - b. Workarounds
  - c. Contingency plans
  - d. Management reserves
7. Which is a fact-finding technique that can be used for collecting information in face-to-face, phone, e-mail, or instant-messaging discussions?
  - a. brainstorming
  - b. Monte Carlo analysis
  - c. the Delphi technique
  - d. interviewing
8. Which document contains results of various risk management processes; it is often displayed in a table or spreadsheet format?
  - a. risk register
  - b. influence diagram
  - c. process flow chart
  - d. work breakdown structure

9. The \_\_\_\_\_ lists the relative probability of a risk occurring and the relative impact of the risk occurring.

- a. Top Ten Risk Item Tracking chart      b. requirements traceability matrix
- c. probability/impact matrix              d. expectations management matrix

10. Which diagramming technique is used to help select the best course of action in situations in which future outcomes are uncertain?

- a. decision tree    b. activity-on-arrow
- c. workaround    d. backward pass

11-15 AADCA

11. Which action involves eliminating a specific threat, usually by eliminating its causes?

- a. risk avoidance      b. risk acceptance
- c. risk transference    d. risk mitigation

12. \_\_\_\_\_ are unplanned responses to risk events used when project teams do not have contingency plans in place.

- a. Workarounds      b. Fallback plans
- c. Contingency plans    d. Triggers

13. In project procurement management, which is an output of the planning process?

- a. change requests    b. selected sellers
- c. resource calendars    d. make-or-buy decisions

14. A(n) \_\_\_\_\_ is a document used to solicit proposals from prospective suppliers.

- a. RFQ    b. WBS
- c. RFP    d. SOW

15. A document used to solicit quotes or bids from prospective suppliers is known as a(n) \_\_\_\_\_.

- a. RFQ    b. RFP
- c. WBS    d. SOW

16-20 DABAB

16. After planning for procurement management, the next process involves \_\_\_\_\_.

- a. determining the evaluation criteria for the contract award
- b. developing procurement statements of work
- c. using expert judgement in planning purchases and acquisitions

- d. sending appropriate documentation to potential sellers

17. What process involves determining everyone involved in the project or affected by it, and determining the best ways to manage relationships with them?

- a. identifying stakeholders
- b. planning stakeholder management
- c. managing stakeholder engagement
- d. controlling stakeholder engagement

18. The main output of which process is the stakeholder register?

- a. planning stakeholder management
- b. identifying stakeholders
- c. managing stakeholder engagement
- d. controlling stakeholder engagement

19. Which is true about identifying stakeholders?

- a. External project stakeholders include the project's customers.
- b. It is not very difficult to identify stakeholders.
- c. Stakeholders with indirect ties to the project need not be engaged with.
- d. Stakeholders do not change during a project.

20. The project team must take corrective action if stakeholders with \_\_\_\_\_ are categorized as resistant or unaware.

- a. high interest/low power
- b. high interest and high power
- c. low interest/ low power
- d. low interest/high power

21-25 \_\_ACC

21. Scope, time and cost goals in order of importance can be ranked on a(n) \_\_\_\_\_.

- a. requirements traceability matrix
- b. expectations management matrix
- c. responsibility assignment matrix
- d. probability matrix

22. A(n) \_\_\_\_\_ is a tool used to document, monitor, and track problems that need resolution.

- a. requirements traceability matrix
- b. Gantt chart
- c. power/interest grid
- d. issue log

23. Which process involves allocating the overall cost estimate to individual work items to establish a baseline for measuring performance?

- a. determining the budget
- b. finalizing policies for project costs
- c. controlling costs
- d. estimating costs

24. Which process results in a cost baseline as a main output?

- a. cost controlling
- b. cost estimating

- c. cost budgeting                      d. cost planning

25. Which process helps develop an accurate projection of a project's financial expenses and benefits?

- a. critical path analysis              b. fast tracking
- c. life cycle costing                  d. crashing

26-30 BABDC

26. Which method is used for determining the estimated annual costs and benefits for a project?

- a. Critical path analysis              b. Cash flow analysis
- c. Present value analysis            d. Requirements analysis

27. Which statement is true of contingency reserves?

- a. They allow for future situations that can be partially planned for.
- b. They are also known as unknown unknowns.
- c. They are not included in a cost baseline.
- d. They allow for dollar amounts to be used to cover existing, fixed costs.

28. Which is most likely to be a reason for inaccuracies in information technology cost estimates?

- a. Estimates take a long time to be worked out.
- b. People lack estimating experience.
- c. Human beings are biased toward overestimation.
- d. Only software development provides the scope for estimates to be accurate.

29. What is another term used for budget?

- a. earned value                      b. actual cost
- c. indirect cost                      d. planned value

30. Which is true of earned value?

- a. It is the actual cost plus the planned cost.
- b. It is based solely on the total cost estimate to be spent on an activity.
- c. It is an estimate of the value of the physical work actually completed.
- d. It is also known as the planned value.

31-35 ADABB

31. During which relationship is the "from" activity unable to start until the "to" activity is started?

- a. start-to-start                      b. finish-to-finish

- c. finish-to-start      d. start-to-finish

32. After working with key stakeholders to define activities and calculate their resources, what is the next process in project schedule management?

- a. develop the schedule.      b. control the schedule.
- c. determine their dependencies.      d. estimate the duration of activities.

33. Which provide a standard format for displaying project schedule information by listing project activities and their corresponding start and finish dates in a calendar format?

- a. Gantt charts      b. Critical path analysis
- c. Arrow diagramming method      d. PERT analysis

34. Which technique involves network diagramming and is used primarily to predict total project duration?

- a. Gantt chart      b. critical path analysis
- c. resource breakdown structure      d. arrow diagramming method

35. The critical path is the \_\_\_\_\_ path through a network diagram, and it represents the \_\_\_\_\_ amount of slack or float.

- a. longest; longest      b. longest; shortest
- c. shortest; longest      d. shortest; shortest

36-40 DACBB

36. What term is used for the amount of time an activity can be delayed without delaying the early start date of any immediately following activities?

- a. forward pass      b. backward pass
- c. fast tracking      d. free slack

37. What term is used for the amount of time an activity can be delayed from its early start without delaying the planned project finish date?

- a. total slack      b. free float
- c. backward passd. forward pass

38. Which technique involves doing activities in parallel that one would normally do in sequence?

- a. Critical chain scheduling      b. Crashing
- c. Fast tracking      d. PERT analysis

39.Which technique is used for making cost and schedule trade-offs to obtain the greatest amount of schedule compression for the least incremental cost?

- a. dependency                      b. crashing
- c. critical chain scheduling d. feeding buffers

40.How does critical chain scheduling protect tasks on the critical chain from being delayed?

- a. critical paths              b. feeding buffers
- c. dummy activities d. fast tracking

41-45 CCCD\_

41.Which law states that work expands to fill the time allowed?

- a. Murphy's Law      b. Miller's Law
- c. Parkinson's Law      d. Einstein's Law

42.Which is a similarity between scope control and schedule control?

- a. Both are initial processes of project time management.
- b. Both of their primary goals is to define project goals and milestones.
- c. Both are portions of the integrated change control process under project integration management.
- d. Both of these processes should occur before estimating activity durations.

43.Which term describes a product produced as part of a project?

- a. variance                      b. scope
- c. deliverable                  d. work package

44.Which statement best describes scope?

- a. each level of work that is outlined in a work breakdown structure
- b. end product created as part of a project that is delivered to the client
- c. tasks that are decomposed into smaller tasks in a work breakdown structure
- d. work involved in creating the products and the processes used to create them

45.Which task is at the lowest level of the WBS?D

- a. variance                      b. objective
- c. deliverable                  d. work package

46-50 BAAAB

46.Which is recommended for the creation of a good WBS?

- a. Any WBS item should be the responsibility of all the people working on it.
- b. A unit of work should appear at only one place in the WBS.
- c. Each WBS item should be created assuming that the requirements are inflexible.
- d. The work content of a WBS item is independent of the WBS items below it.

47. Which process involves working with stakeholders to create the document that formally authorizes a project?

- a. Developing the project charter
- b. Developing the preliminary project scope statement
- c. Developing the project management plan
- d. Performing integrated change control

48. What is the first step in the planning process?

- a. tie the information technology strategic plan to the organization's overall strategic plan
- b. perform a business area analysis
- c. start defining potential IT projects in terms of their scope, benefits, and constraints
- d. choose which projects to do and assigning resources to work on them

49. Which process includes defining project scope, benefits, and constraints?

- a. project planning    b. business area analysis
- c. resource allocation    d. information technology strategy planning

50. What type of analysis involves calculating the expected net monetary gain or loss from a project by discounting all expected future cash inflows and outflows to the present point in time?

- a. Cost of capital    b. Net present value
- c. Cash flow    d. Payback

51-55 CCB(AB)A

51. In a weighted scoring model, what percent must the sum of the weights of all the criteria total?

- a. 10                      b. 50
- c. 100                    d. 150

52. Which information is included in a business case?

- a. business need for the project

- b. relevant government or industry standards
- c. project objective, high-level requirements, and time and cost goals
- d. policies, procedures, guidelines, and systems that influence a project's success

53. Which section of the project management plan provides the planned cost of deliverables?

- a. objectives                      b. budget
- c. risk                              d. technical

54. The scrum approach originated with agile software development as practitioners looked for ways to \_\_\_\_\_

- A) improve communication                      B) increase throughput
- C) increase risk                                      D) All of Above

55. Although Scrum was intended for management of software development projects, it can be used to run software maintenance teams, or as a general project/program management approach.

- A) True                              B) False

56-60 (ABC) ABCB

56. The main roles in Scrum are:

- A) ScrumMaster                      B) Product Owner
- C) Team                                D) Person

57. Scrum eliminates many of the tasks required of a lead because teams become self-organizing.

- A) True                                B) False

58. In scrum the team activity is monitored and coordinated on ..... basis.

- A) hourly                              B) daily
- C) weekly                              D) monthly

59. Scrum is iterative. The iteration is called .....

- A) sprite                                B) IT1
- C) sprint                                D) sprinte

60. The ..... is responsible for maximizing return on investment (ROI) by identifying product features, translating these into a prioritized feature list, deciding which should be at the top of the list for the next Sprint, and continually re-prioritizing and refining the list.

- A) Scrum Master                      B) Product Owner



C) Manager

D) Team

61-65 ABCCD

61.The team in Scrum is seven plus or minus two people.

A) True

B) False

62.The ScrumMaster and the Product Owner can be the same individual;

A) True

B) False

63.The first step in Scrum is for the Product Owner to articulate the product vision. Eventually, this evolves into a refined and prioritized list of features called the .....

A) Sprint Backlog

B) Whiteboard

C) Product Backlog

D) All of above

64.The team meets daily for ..... minutes, where each member of the team discusses the work they've completed since the last meeting

A) 10

B) 12

C) 15

D) 20

65. \_\_\_are of scrum principles.

A) Time-boxes

B) Cross-functional teams

C) Open communications within team.

D) All of above

E) Both A & B

66-70 BABD\_

66.Users & Stakeholders in scrum are Interested in results but not responsible for deliverables.

A) True

B) False

67.The organization recognizes that a new project exists and completes a project charter during which processes for a new project?

a. initiating

b. planning

c. opening

d. controlling

68.What is developed in the Project Integration Management knowledge area?

a. schedule management plan

b. project management plan

c. WBS

d. quality management

69.What is the main purpose of project plans?

a. schedule management plans

b. define project scope

c. estimate activity resources

d. guide project execution

70.Which process includes measuring progress toward project objectives and taking corrective action to match progress with the plan?

- a. Planning
- b. Monitoring and controlling
- c. Executing
- d. Initiating

71-75 CDDAA

71. Which is true about the agile method?

- a. It is often used when a project team can express the scope early in the product life cycle.
- b. It is used when a project team wants to provide a potentially shippable product earlier rather than later.
- c. It uses several iterations or deliveries of software instead of waiting until the end of the project to provide a product.
- d. It is used when project teams want to use the predicative approach to a project.

72.Which project would be compatible with the use of the agile approach?

- a. Projects with inexperienced and dispersed teams
- b. Projects that have a fairly rigid completion date
- c. Projects with clear-up front requirements
- d. Projects that have more flexible scheduling

73.Which activity is a part of the Scrum planning process?

- a. Determining how many sprints will compose each release
- b. Demonstrating the product during a sprint review meeting
- c. Completing tasks each day during sprints
- d. Creating sprint backlog

74.In the Scrum method, during which meeting is the improvement of the product and process discussed?

- a. sprint retrospective
- b. sprint review
- c. kick-off
- d. daily Scrum

75.A \_\_\_\_\_ is usually not necessary to the Scrum method, because Scrum implies that team members work as a self-directed group.

- a. team charter
- b. velocity estimate
- c. Gantt chart
- d. product backlog

76-80 CBCAA

76.What important Scrum artifact is used to graphically display progress on each sprint during the monitoring and controlling process?

- a. WBS
- b. sprint backlog
- c. burndown chart
- d. product backlog

77.In what type of organizational structure do project managers have the most authority?

- a. Functional
- b. Project
- c. Matrix
- d. Circular

78.In which product life cycle the scope, schedule, and cost are determined early, and changes to scope are carefully managed?

- a. Iterative
- b. Incremental
- c. Predictive
- d. Adaptive

79.In which development life cycle do stakeholders define and approve the detailed scope before the start on an iteration?

- a. Adaptive
- b. Hybrid
- c. Incremental
- d. Iterative

80.Which observation is true of the agile approach to software development?

- a. In the agile method, requirements and solutions evolve through collaboration.
- b. An agile approach sets scope goals, but leaves time and cost goals flexible.
- c. Agile is a predictive model of software development.
- d. In the agile approach, requirements must be clearly expressed early in the life cycle.

81-85 BABDB

81.Which objective is true of projects?

- a. They have an indefinite beginning and end.
- b. They have a unique purpose.
- c. They are developed using regressive elaboration.
- d. They are permanent in nature.

82.The role of a \_\_\_\_\_ is to provide direction and funding for a project.

- a. project sponsor
- b. project manager
- c. support staff member
- d. project team

83.Which knowledge area involves defining and managing all the work required to complete the project successfully?

- a. Project resource management      b. Project scope management
- c. Project time management          d. Project cost management

84.Which project management knowledge area ensures that the project will satisfy the stated or implied needs for which it was undertaken?

- a. Project cost management      b. Project time management
- c. Project risk management      d. Project quality management

85.Project procurement management mainly involves:

- a. making effective use of the people involved with the project.
- b. buying goods and services for a project from outside the performing organization.
- c. generating, collecting, disseminating, and storing project information.
- d. identifying and analyzing stakeholder needs while managing and controlling their

engagement.

86-88 DAC

86.An important tool for project scope management is \_\_\_\_.

- a. fast tracking                      b. a kickoff meeting
- c. a Gantt chart                    d. a work breakdown structure

87.Fast tracking is an example of a tool used in \_\_\_\_ management.

- a. schedule                          b. quality
- c. communication                d. risk

88.Which organization provides certification as a Project Management Professional?

- a. PMS b. PMC
- c. PMI d. PMP

### Section3: Fill in the blanks

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- 1.A project's sponsor is also known as a(n) \_\_\_\_\_.
- 2.In project management, the three limitations of scope, time, and cost are referred to as the \_\_\_\_\_.
- 3.The \_\_\_\_\_ of project management includes quality, scope, time, and cost constraints.
- 4.Project management \_\_\_\_\_ describe the key competencies that project managers must develop.
- 5.A(n) \_\_\_\_\_ refers to a product or service, such as a report, a training session, a piece of hardware, or a segment of software code, produced or provided as part of a project.
- 6.A(n) \_\_\_\_\_ is a framework for describing the phases of developing information systems.
- 7.The \_\_\_\_\_ life cycle model is suitable for projects in which changes can be incorporated with reasonable cost increases or acceptable time delays.
- 8.\_\_\_\_\_ software development can be used for software development or in any environment in which the requirements are unknown or change quickly.
- 9.Sprint planning is part of the basic \_\_\_\_\_.
- 10.\_\_\_\_\_ progress from initiation activities to planning activities, executing activities, monitoring and controlling activities, and closing activities.
- 11.The ideal outcome of the \_\_\_\_\_ process group is to complete a project successfully by delivering the agreed-upon project scope within time, cost, and quality constraints.
- 12.A(n) \_\_\_\_\_ describes how things should be done.  
\_\_\_\_\_ is a project management methodology that defines 45 separate subprocesses and organizes these into eight process groups.
- 13.The \_\_\_\_\_ is a very important tool in project management because it provides the basis for deciding how to do the work.
- 14.A(n) \_\_\_\_\_ is the person responsible for the business value of the project and for deciding what work to do and in what order when using a Scrum method.
- 15.A(n) \_\_\_\_\_ is a set period of time, normally two to four weeks, during which specific work must be completed and made ready for review when using Scrum methods.

16.A(n) \_\_\_\_\_ is the person who ensures that the team is productive, facilitates the daily Scrum, enables close cooperation across all roles and functions, and removes barriers that prevent the team from being effective.

17.A(n) \_\_\_\_\_ is a cross-functional team of five to nine people who organize themselves and the work to produce the desired results for each sprint.

18.In Scrum, a(n) \_\_\_\_\_ is a useful object created by people.

19.A(n) \_\_\_\_\_ is a Scrum artifact and consists of the highest-priority items from the product backlog to be completed in a sprint.

20.\_\_\_\_\_ are short descriptions written by customers of what they need a Scrum system to do for them.

21.If done well, the \_\_\_\_\_ can produce several releases of useful software.

22.\_\_\_\_\_ involves determining long-term objectives by analyzing the strengths and weaknesses, studying opportunities and threats, predicting future trends, and projecting the need for new products and services.

23.\_\_\_\_\_ is a technique that uses branches radiating from a core idea to structure thoughts and ideas.

24.\_\_\_\_\_ analysis is a method of calculating the expected net monetary gain or loss from a project by discounting all expected future cash inflows and outflows to the present point in time.

25.A(n) \_\_\_\_\_ is a tool that provides a systematic process for selecting projects based on many criteria.

26.A \_\_\_\_\_ is a starting point, a measurement, or an observation that is documented so that it can be used for future comparison. changes.

27.A(n) \_\_\_\_\_ is a formal group of people responsible for approving or rejecting changes to a project.

28.\_\_\_\_\_ costing helps to see a big-picture view of the cost of a project throughout its life cycle.

29.Project managers must conduct cash flow analysis to determine \_\_\_\_\_.

30.A(n) \_\_\_\_\_ estimate is done very early in a project or even before a project is officially started.

31.\_\_\_\_\_ are a means of measuring software size based on what the software does for end users.

32.A(n) \_\_\_\_\_ is a time-phased budget that project managers use to measure and monitor cost performance.

33.\_\_\_\_\_ is a project performance measurement technique that integrates scope, time, and cost data.

34.The \_\_\_\_\_ is the measure of work performed expressed in terms of the budget authorized for that work.

**Answer:**

1. A project's sponsor is also known as a(n) primary customer.
2. In project management, the three limitations of scope, time, and cost are referred to as the triple constraint.
3. The quadruple constraint of project management includes quality, scope, time, and cost constraints.
4. Project management knowledge areas describe the key competencies that project managers must develop.
5. A(n) deliverable refers to a product or service, such as a report, a training session, a piece of hardware, or a segment of software code, produced or provided as part of a project.
6. A(n) SDLC/systems development life cycle/systems development life cycle (SDLC) is a framework for describing the phases of developing information systems.
7. The spiral life cycle model is suitable for projects in which changes can be incorporated with reasonable cost increases or acceptable time delays.
8. Agile software development can be used for software development or in any environment in which the requirements are unknown or change quickly.
9. Sprint planning is part of the basic Scrum framework.
10. Project management process groups progress from initiation activities to planning activities, executing activities, monitoring and controlling activities, and closing activities.
11. The ideal outcome of the monitoring and controlling process group is to complete a project successfully by delivering the agreed-upon project scope within time, cost, and quality constraints.
12. A(n) methodology describes how things should be done.  
Projects IN Controlled Environments, PRINCE2 is a project management methodology that defines 45 separate subprocesses and organizes these into eight process groups.
13. The WBS/work breakdown structure/work breakdown structure (WBS) is a very important tool in project management because it provides the basis for deciding how to do the work.
14. A(n) product owner is the person responsible for the business value of the project and for deciding what work to do and in what order when using a Scrum method.



- 15.A(n) sprint is a set period of time, normally two to four weeks, during which specific work must be completed and made ready for review when using Scrum methods.
- 16.A(n) ScrumMaster is the person who ensures that the team is productive, facilitates the daily Scrum, enables close cooperation across all roles and functions, and removes barriers that prevent the team from being effective.
- 17.A(n) Scrum team development team is a cross-functional team of five to nine people who organize themselves and the work to produce the desired results for each sprint.
- 18.In Scrum, a(n) artifact is a useful object created by people.
- 19.A(n) sprint backlog is a Scrum artifact and consists of the highest-priority items from the product backlog to be completed in a sprint.
- 20.User stories are short descriptions written by customers of what they need a Scrum system to do for them.
- 21.If done well, the agile approach/agile method can produce several releases of useful software.
- 22.Strategic planning involves determining long-term objectives by analyzing the strengths and weaknesses, studying opportunities and threats, predicting future trends, and projecting the need for new products and services.
- 23.Mind mapping is a technique that uses branches radiating from a core idea to structure thoughts and ideas.
- 24.Net present value analysis is a method of calculating the expected net monetary gain or loss from a project by discounting all expected future cash inflows and outflows to the present point in time.
- 25.A(n) weighted scoring model is a tool that provides a systematic process for selecting projects based on many criteria.
- 26.A baseline is a starting point, a measurement, or an observation that is documented so that it can be used for future comparison. changes.
- 27.A(n) change control board/change control board (CCB)/CCB change control board is a formal group of people responsible for approving or rejecting changes to a project.
- 28.Life cycle costing helps to see a big-picture view of the cost of a project throughout its life cycle.

29. Project managers must conduct cash flow analysis to determine net present value.

30. A(n) rough order of magnitude (ROM)/ROM/rough order of magnitude estimate is done very early in a project or even before a project is officially started.

31. Function points are a means of measuring software size based on what the software does for end users.

32. A(n) cost baseline is a time-phased budget that project managers use to measure and monitor cost performance.

33. Earned value management/EVM/Earned value management (EVM) is a project performance measurement technique that integrates scope, time, and cost data.

34. The earned value/EV/earned value (EV) is the measure of work performed expressed in terms of the budget authorized for that work.

#### Section4: Writing Part

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You can write your answer in the blanks.

This section does not provide reference answers.

1. What are the triple constants?
2. What are 8 project management techniques
3. difference project phase and 5 project management process groups.
4. What are the phases in a traditional project life cycle?
5. What is performance reporting? What are some methods used for performance reporting?
6. What are the 5 stages of the Tuckman model?
7. List and describe each of the 10 project management knowledge areas.
8. What are the phases in a traditional project life cycle?
9. What are the 4 scrum ceremonies?
10. What is performance reporting? What are some methods used for performance reporting?
11. What are the 12 principles behind the Agile Manifesto?
12. What are the 5 stages of the Tuckman model?

These videos are important for section 4. You can find some answers in videos and others you can make your own answers by looking at the PPT.

压缩包中有学习的视频，是针对第四部分的，剩下一些问题的答案在PPT中可以找到。

these 3 questions are very important so learn them well

这三个知识点非常重要，需要掌握

**"5 PROCESS GROUPS" / "5个过程组"**

KA/PG	Initiating	Planning	Executing	Monitoring & Controlling	Closing
<b>Integration</b>	Develop Project Charter	Develop Project Mgmt Plan	<ul style="list-style-type: none"> <li>Direct and Manage Project Work</li> <li>Manage Project Knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Monitor and Control Project Work</li> <li>Perform Integrated Change Control</li> </ul>	Close Project or Phase
<b>Scope</b>		<ul style="list-style-type: none"> <li>Plan Scope Management</li> <li>Collect Requirements</li> <li>Define Scope</li> <li>Create WBS</li> </ul>		<ul style="list-style-type: none"> <li>Validate Scope</li> <li>Control Scope</li> </ul>	
<b>Schedule</b>		<ul style="list-style-type: none"> <li>Plan Schedule Mgmt</li> <li>Define Activities</li> <li>Sequence Activities</li> <li>Estimate Activity Durations</li> <li>Develop Schedule</li> </ul>		Control Schedule	
<b>Cost</b>		<ul style="list-style-type: none"> <li>Plan Cost Mgmt</li> <li>Estimate Costs</li> <li>Determine Budget</li> </ul>		Control Costs	
<b>Quality</b>		Plan Quality Mgmt	Manage Quality	Control Quality	
<b>Resource</b>		<ul style="list-style-type: none"> <li>Plan Resource Mgmt</li> <li>Estimate Activity Resources</li> </ul>	<ul style="list-style-type: none"> <li>Acquire Resources</li> <li>Develop Team</li> <li>Manage Team</li> </ul>	Control Resources	
<b>Communications</b>		Plan Communications Mgmt	Manage Communications	Monitor Communications	
<b>Risk</b>		<ul style="list-style-type: none"> <li>Plan Risk Mgmt</li> <li>Identify Risks</li> <li>Perform Qualitative Risk Analysis</li> <li>Perform Quantitative Risk Analysis</li> <li>Plan Risk Responses</li> </ul>	Implement Risk Responses	Monitor Risks	
<b>Procurement</b>		Plan Procurement Mgmt	Conduct Procurements	Control Procurements	
<b>Stakeholder</b>	Identify Stakeholders	Plan Stakeholder Engagement	Manage Stakeholder Engagement	Monitor Stakeholder Engagement	

10 PROJECT MANAGEMENT KNOWLEDGE AREAS  
10个项目管理知识领域

49  
process  
table

PROJECT PROCESS GROUPS and ASSOCIATED ACTIVITIES & DELIVERABLES				
INITIATING	PLANNING	EXECUTING	MONITORING/ CONTROLLING	CLOSING
<b>ACTIVITIES</b>  Gather high-level information and requirements about project.	<b>ACTIVITIES</b>  Build WBS Create project schedule Identify purchases Get quotes Define scope Identify risks Determine communications	<b>ACTIVITIES</b>  Hold Kickoff Meeting Resources execute plan PM manage team / project Make purchases Ensure scope is adhered to Communicate Deliver product	<b>ACTIVITIES</b>  Status meetings / reporting Change control activities	<b>ACTIVITIES</b>  Transition to support Store documents Collect final invoices Finalize budgeted & actual costs Conduct Lessons Learned Write closeout report
<b>DELIVERABLES</b>  • Project Charter	<b>DELIVERABLES</b>  • WBS • Project Schedule • Budget • Scope Document • Risk Plan • Communication Plan	<b>DELIVERABLES</b>  • Work to be completed • Product and documents • Product / service	<b>DELIVERABLES</b>  • Status Reports, metrics, information • Change Control documents	<b>DELIVERABLES</b>  • Closeout Reports • Final budget • Support documents

A small project has 8 activities and time in days for each activity is given below:

- a. Draw the network diagram.
- b. Compute Early Start, Late Start times.
- c. Calculate float for each activity.
- d. Determine critical activities and critical path.
- e. Find the project duration

Activity	Time in Days	Immediate Predecessor
A	6	-
B	4	-
C	3	A
D	4	B
E	3	B
F	10	-
G	3	E, F
H	2	C, D