

## Practice Taking the PMP® Certification Exam

--	--

1. **The project charter should always include:**

- a) A breakdown of the functions and activities to be performed on the project.
- b) A list of the project stakeholders and their areas of responsibilities.
- c) A schedule of project activities.
- ✓ d) A statement of project goals and authorization of the project manager to use organizational resources on the project.

--

2. **The term “progressive elaboration” refers to:**

- a) Constantly changing project scope.
- ✓ b) Adding detail to project deliverables as the project moves from phase to phase.
- c) Letting team members make scope changes without customer approval.
- d) None of the above.

--

3. **A common reason for an organization to undertake a new project is:**

- a) In order to meet a customer's needs.
- b) In order to gain a competitive advantage in the market.
- c) In order to meet regulatory requirements.
- ✓ d) All of the above are correct.

--

4. **The basic purpose of a feasibility study is:**

- a) To determine the major activities within the project and break them down into component work packages.
- ✓ b) To determine if the organization has the resources and capabilities required to do the project.
- c) To link the project to strategic goals.
- d) All of the above are correct.

--

5. **A formal feasibility study is likely to contain:**

- a) Estimate of the time and cost for each activity in a project.
- ✓ b) Estimate of the time for each of a number of project alternatives.
- c) Likelihood of the project to meet capital budgeting targets.
- d) All of the above are correct.

--

6. **Why is it important for the project charter to be signed by a highly placed person in the organization?**

- a) This indicates the relative importance and priority of the project within the organization.
- b) This provides authority for the project manager to cross functional boundaries when carrying out project plans and activities.
- c) This provides greater credibility with people outside of the project who may be asked to contribute resources or join the project team.
- ✓ d) All of the above are correct.

7. **In general, a project manager's technical skills:**

- ✓ a) Must be sufficiently high to understand technical issues and explain technical decisions to others.
- b) Must be equal to or higher than any other team member's technical skills.
- c) Should not be considered when selecting a project manager.
- d) Are the most important criterion for selecting a project manager.

8. **The purpose of a qualitative risk analysis is to:**

- ✓ a) Assess the impact and likelihood of the identified risks actually occurring.
- b) Analyze numerically the probability of each risk.
- c) Determine if the risk responses have been implemented as planned.
- d) Select alternative strategies for dealing with risks.

9. **Transference is the process of:**

- a) Reducing the probability of an adverse risk event to an acceptable level.
- b) Changing the project plan to eliminate the risk.
- ✓ c) Shifting the consequences of the risk to a third party.
- d) Developing a contingency plan.

10. **In which organizational structure is an individual assigned to report to a single manager?**

- a) Weak matrix.
- b) Strong matrix.
- ✓ c) Functional structure.
- d) All of the above are correct.

11. **Which project structure is likely to best leverage the parent organization's depth and breadth of technical experts?**
- a) Weak matrix
  - b) Strong matrix
  - c) Projectized structure
  - ✓ d) Functional structure
- 

12. **In a matrix structure:**
- a) Employees are assigned 50% of the time to functional tasks and 50% of the time to project tasks.
  - b) Employees are "owned" equally by both functional and project managers.
  - ✓ c) Employees are "owned" by the functional manager, but report both to the functional and project manager.
  - d) Employees are "owned" by the project manager, but report both to the functional and project manager.
- 

13. **Of the various organizational structure alternatives, which has the fastest response time?**
- a) Functional
  - b) Weak matrix
  - c) Strong matrix
  - ✓ d) Projectized project
- 

14. **A tool that is consistently used to document the roles and responsibilities on a project is:**
- ✓ a) Responsibility assignment matrix.
  - b) Role administration matrix.
  - c) Responsibility and role hierarchy.
  - d) Staffing management plan.
- 

15. **A document that shows the reporting structure within the project, as well as its relationship to the parent organization, is called the:**
- a) Responsibility assignment matrix.
  - b) Resource staffing histogram.
  - ✓ c) Organizational chart.
  - d) Staffing management plan.
- 

16. **According to Herzberg's Theory of Motivation, a base salary is:**
- a) A primary motivator.

- b) A secondary motivator.
- ✓ c) A hygiene factor.
- d) Not a consideration in employee motivation.

---

17. **When negotiating for resources, the project manager “horse-traded” for the loan of a particular technical expert by implicitly promising to raise the functional manager's visibility with executive stakeholders on the project. The project manager was using:**

- a) Task-related currency.
- b) Inspiration-related currency.
- ✓ c) Position-related currency.
- d) Relationship-related currency.

---

18. **The item at the lowest level of a WBS is called a:**

- a) Task
- b) Sub-task
- ✓ c) Work package
- d) Cost account

---

19. **The purpose of the scope management plan is:**

- a) To list all of the tasks that will be included in the project.
- b) To prevent scope creep by insisting that all changes to a project plan be reviewed by a review board.
- ✓ c) To explain the process by which scope changes will be proposed, reviewed, and documented.
- d) To archive all of the information in WBS, RBS, and PBS.

---

20. **The purpose of scope definition planning is to:**

- a) Create overall project strategy.
- b) Define which tasks are included in a project and which tasks are not included.
- ✓ c) Create a scope statement.
- d) All of the above are correct.

---

21. **Why should deliverables be broken down into work packages during the development of the work breakdown structure?**

- a) In order to make the activities easier to manage.
- b) In order to make the activities easier to track.
- c) In order to create activities that can be assigned to a single organizational unit.

- ✓ d) All of the above are correct.

22. **The four areas that risk can affect on a project are:**

- a) Methods, materials, metrics, and people.
- b) Initiation, planning, executing, and closing.
- ✓ c) Time, cost, quality, and scope.
- d) Design, supply chain, production, and marketing.

23. **A specific occurrence that may impact the project in the future, either positively or negatively, is called a(n):**

- ✓ a) Project risk.
- b) Risk factor.
- c) Risk-opportunity dichotomy.
- d) Expected value.

24. **Residual risks are:**

- a) The same as secondary risks.
- b) A direct result of implementing a risk response.
- ✓ c) Those that remain after risk responses have been taken.
- d) Those risks that have no impact on the project budget or schedule.

25. **Risk identification:**

- a) Is no longer needed during the closing phase of a project.
- b) Is done during the implementation and planning phases only.
- c) Is done during the planning phase only.
- ✓ d) Should take place during each project phase.

26. **Flowcharting is used in risk identification to:**

- a) Determine the root cause of a project risk.
- ✓ b) Show the effect of a particular risk on a project.
- c) Indicate areas of the WBS that should be redrawn as a result of risk identification.
- d) Both a. and b. are correct.

27. **The Delphi technique Analogy is often used during risk identification to:**

- a) Emphasize the potential impact of risk by telling stories that illustrate the consequences of ignoring the risk.
- b) Motivate stakeholders to invest in the risk identification process.
- ✓ c) Solicit ideas from experts as to potential risks.
- d) Both a. and b. are correct.

28. **Activity A has a start-to-start precedence relationship with Activity B, with a two-day lag. If A's duration is eight days, and B's duration is five days, what is the total amount of time it will take to complete both A and B?**

- ✓ a) 8 days
- b) 13 days
- c) 15 days
- d) 5 days

29. **Project schedules may be required for:**

- a) Sponsor reporting.
- b) Customer reporting.
- c) Functional reporting.
- ✓ d) All of the above are correct.

30. **Decomposition is a process used to:**

- a) Document results of lessons learned.
- b) Break down project deliverables into component activities.
- ✓ c) Estimate costs and duration for each sub-project.
- d) Both b. and c. are correct.

31. **The major disadvantage of a Gantt bar chart is that it:**

- a) Cannot be related to calendar dates.
- ✓ b) Does not typically show interrelationships.
- c) Lacks time-phasing.
- d) Cannot be related to resource allocation or cost estimates.

32. **Near-critical activity is an activity:**

- ✓ a) That has low total float.
- b) That is on the critical path.
- c) That has a finish-to-start relationship.
- d) All of the above are correct.

33. **In a finish-to-start precedence relationship with a one-day lead:**

- ✓ a) The subsequent activity can start one day before the precedent activity is completed.
- b) The precedent activity can start one day before the subsequent activity.
- c) The subsequent activity cannot start until one day after the precedent activity finishes.
- d) The precedent activity must start within one day of when the precedent activity starts.

---

34. **Which of the following statements is True?**

- ✓ a) Both ADM and PDM charts PERT and CPM show the critical path.
- b) ADM does not show the critical path, but PDM CPM does.
- c) PDM CPM provides more accurate duration estimates than ADM.
- d) ADM PERT allows for looping that PDM CPM cannot provide.

---

35. **Which of the following is not true for the critical path?**

- a) It is the longest path through the network.
- b) It shows the shortest amount of time required for completing the project.
- c) It has the minimum amount of total float.
- ✓ d) None of the above.

---

36. **Which of the following is an example of a FS (finish-to-start) interactivity relationship?**

- a) Activity B can't finish until Activity A is completed.
- ✓ b) Activity B can't start until Activity A is completed.
- c) Activity B can't finish until Activity A starts.
- d) Activity B can't start until Activity A starts.

---

37. **What is the most commonly used formula for Three-Point Estimates?**

- ✓ a)  $[\text{Optimistic time} + 4(\text{most likely time}) + \text{pessimistic time}]/6$ .
- b)  $[\text{Optimistic time} + \text{most likely time} + \text{pessimistic time}]/6$ .
- c)  $[\text{Optimistic time} + \text{most likely time} + \text{pessimistic time}]/3$ .
- d)  $[\text{Optimistic time} - \text{pessimistic time}]/2$ .

---

38. **Activity A has a start-to-finish precedence relationship with Activity B. If A's duration is two days, and B's duration is eight days, what is the shortest total duration for completing both A and B?**

- ✓ a) 8 days
  - b) 10 days
  - c) 12 days
  - d) 6 days
- 

39. **Activity A has a start-to-start precedence relationship with Activity B, with a four-day lag. If A's duration is two days, and B's duration is 12 days, what is the total amount of time it will take to complete both A and B?**

- a) 18 days
  - b) 14 days
  - ✓ c) 16 days
  - d) 12 days
- 

40. **A backward pass calculates:**

- a) Early start and early finish times for each activity.
  - ✓ b) Late start and late finish times for each activity.
  - c) Early start and late start times for each activity.
  - d) Late start and early finish times for each activity.
- 

41. **Free float is:**

- ✓ a) The amount of time an activity can be delayed without delaying the early start of a Subsequent activity.
  - b) The amount of time an activity can be delayed without delaying the finish date of the project.
  - c) The amount of lead time for activities that are not on the critical path.
  - d) Calculated by subtracting early finish time from late finish time (LF-EF).
- 

42. **Activity duration estimating should be done by:**

- a) The project management team.
  - b) The project schedule manager.
  - c) The project manager alone.
  - ✓ d) The work package owner.
-



43. **Analogous estimating is also known as:**

- a) Heuristics.
- ✓ b) Top-down estimating.
- c) Bottom-up estimating.
- d) Simulation.

---

44. **Fast tracking and crashing are two common techniques used for:**

- a) Developing an activity schedule.
- b) Planning activity sequence.
- c) Estimating activity duration.
- ✓ d) Shortening activity duration.

---

45. **Statistical variance is:**

- ✓ a) The standard deviation squared.
- b) The square root of the standard deviation.
- c) The mean point between the optimistic and the pessimistic duration estimate.
- d) The difference between the weighted average estimate and the most likely estimate.

---

46. **Activity Resource estimating planning is:**

- a) Developing cost estimates for each resource required for project work.
- b) Apportioning resource cost estimates across all the work packages.
- ✓ c) Identifying and describing all the resources required to complete schedule activities.
- d) Documenting product requirements and identifying potential sources.

---

47. **Earned value (EV):**

- a) Measures project performance to date.
- b) Integrates schedule, scope, and resources.
- c) Is useful only on large government projects.
- ✓ d) Both a. and b. are correct.

---

48. **In shortening the project duration, the first action to take is to:**

- a) Change the project scope.
- b) Crash as many activities as possible.
- ✓ c) Fast-track activities on the critical path.
- d) None of the above.

49. **Cost estimate information can be drawn from:**

- a) Trade organizations.
- b) Project team members.
- c) Vendors and suppliers.
- ✓ d) All of the above are correct.

50. **Lessons learned during the project:**

- a) Should be documented only in the closeout report.
- b) Should consist of only project data.
- ✓ c) Should be documented throughout the project.
- d) Should consist of only things that went well during project execution.

51. **The chart of accounts is a:**

- a) Numbering system used to define activities in the statement of work.
- b) Numbering system that rates activity durations for each work package.
- c) Numbering system for analyzing cost based on expert opinion.
- ✓ d) Numbering system that identifies the specific accounting category for each element of project work.

52. **The precedence diagram method (PDM) is used to show which of the following?**

- a) Task duration.
- b) Significant points in time.
- ✓ c) Relationships.
- d) Resource allocation.

53. **Bottom-up estimating is:**

- a) The most costly and time-consuming estimating method.
- b) The most accurate estimating method.
- c) The most challenging estimating method.
- ✓ d) All of the above are correct.

54. **The learning curve theory states that:**

- a) As cumulative production time decreases, time and costs associated with that production lower at a constant and predictable rate.
- b) As cumulative production time doubles, time and costs associated with that production increase at a constant and

predictable rate.

- c) As cumulative production time doubles, time and costs associated with that production increase randomly.
- ✓ d) As cumulative production time doubles, time and costs associated with that production lower at a constant and predictable rate.

---

55. **A cost baseline should include:**

- a) Estimates of the most likely project costs.
- b) Contingency cost.
- c) Assumptions for the estimates.
- ✓ d) All of the above are correct.

---

56. **Range of estimate is often used as an alternative to which of the following:**

- a) Approximate estimate.
- b) Definitive estimate.
- ✓ c) Order of magnitude estimate.
- d) Phased estimate.

---

57. **Disadvantages of bottom-up estimating include:**

- a) Accuracy.
- b) Timeliness.
- c) Cost-effectiveness.
- ✓ d) Both b. and c. are correct.

---

58. **The term “Total Quality Management Control” is based on the following concept:**

- ✓ a) Quality is an integral and continuous system for obtaining quality improvements.
- b) Quality planning is the most integral part of the quality system.
- c) Quality standards should be established universally in every industry.
- d) Quality issues should be supervised and controlled by a quality management team.

---

59. **Quality planning is the process of:**

- a) Systematically evaluating project quality.
- b) Establishing a communications plan between stakeholders and work package owners for quality updates.
- c) Evaluating quality results and planning improvement strategies.
- ✓ d) Identifying the quality standards that apply to the project and

determining how to  
meet those standards.

60. **A cost performance index (CPI) of 0.8 suggests that the project is:**

- a) Under-budget to date.
- ✓ b) Over-budget to date.
- c) On budget.
- d) None of the above are correct.

61. **Benchmarking can help determine:**

- a) What product or services to offer and what features to include.
- b) Marketing costs associated with a specific product.
- c) What processes are used by other organizations to achieve customer satisfaction.
- ✓ d) Both a. and c. are correct.

62. **Gantt charts are useful for reporting project progress because:**

- ✓ a) Both b. and c. are correct.
- b) They are easy to read.
- c) They are available on most project management software packages.
- d) They provide detailed analysis for making adjustments.

63. **Milestone charts:**

- a) Provide the project team with detail for decision making.
- ✓ b) Show overall project schedule and performance to date.
- c) Show inter-relationships.
- d) Are excellent planning and scheduling tools.

64. **The project plan is used to manage:**

- a) The early stages of the planning phase of the project.
- ✓ b) The processes of executing and controlling during the project.
- c) The project management information system.
- d) Approved scope changes.

65. **A program is considered to be:**

- a) A strategy for dealing with project risks.
- ✓ b) A collection of related projects.
- c) Two or more phases of a project.
- d) None of the above are correct.

66. **A project life cycle:**

- a) Has a fixed number of phases.
- b) Always includes a control phase.
- c) Has phases with the same amount of time allocated to each.
- ✓ d) Has phases that are customized to suit project needs.

67. **A “Time and Materials” contract is one in which:**

- a) The buyer pays the seller one fixed price.
- ✓ b) The buyer pays the seller for time and expenses of project work.
- c) The buyer pays the seller a fee, plus a percentage of profit.
- d) None of the above are correct.

68. **A quick and objective method for evaluating proposals is the:**

- a) Screening system.
- ✓ b) Weighting system.
- c) Team-based evaluation system.
- d) Voting system.

69. **The communications management plan:**

- a) Should not be shared with the project team.
- ✓ b) Should be incorporated into the overall project plan.
- c) Should be reviewed at project team meetings.
- d) Should be maintained and updated by the project sponsor.

70. **A project that has a negative cost variance and an SPI less than 1.0 means that the project is:**

- a) Over-budget and ahead of schedule.
- b) Under-budget and behind schedule.
- ✓ c) Over-budget and behind schedule.
- d) Under-budget and ahead of schedule.

71. **The Communications Management Plan is an importing input to managing stakeholders because:**

- a) It keeps the stakeholder involved with the day-to-day management of the project.
- b) It helps identify all stakeholder needs and objectives for the project.
- c) It gets stakeholders involved in the planning process.
- ✓ d) It helps the project manager to understand stakeholder expectations for project communications.

---

72. **Which of these is a constraint to communications planning?**

- ✓ a) All project documents must be stamped Top Secret and maintained in a secure environment.
- b) The virtual team will use the company intranet to transmit documents.
- c) The team is collocated in a trailer behind the main plant.
- d) The customer wants its technical manager to review project data monthly.

---

73. **What can a project manager do to prevent cash flow problems?**

- a) Keep project activities on schedule.
- b) Request additional funding from project sponsors.
- c) Make sure customers are financially stable.
- ✓ d) Both a. and c. are correct.

---

74. **Which is not true for network diagrams?**

- a) They provide a consistent framework for project planning, scheduling, and budgeting.
- b) They facilitate communications among all project stakeholders.
- c) They show dependencies among project activities.
- ✓ d) Each node shows a deliverable from the WBS.

---

75. **Dummy activities may be used in:**

- a) Activity on node networks.
- ✓ b) Activity on arrow networks.
- c) Activity on node and activity on arrow networks.
- d) CPM and GERT networks.

---

76. **In a PDM network, the slack for an activity can be calculated with the formula:**

- a) Earliest time when the event can start, minus the latest time when the event can finish.

- b) Earliest start date minus the earliest finish date for that activity.
- ✓ c) Latest time when the event can start, minus the earliest time when the event start.
- d) Total project duration minus total duration on the critical path.

77. **Lead allows you to:**

- ✓ a) Accelerate a successor task.
- b) Delay a successor task.
- c) Delay a predecessor task.
- d) Accelerate a predecessor task.

78. **A hammock activity cannot:**

- a) Include activities that are non-sequential.
- b) Include activities performed by different resources.
- ✓ c) Have a duration longer than that of the critical path.
- d) Have an estimated duration.

79. **The project completion date will slip if:**

- ✓ a) Total float < 0.
- b) Total float = 0.
- c) Total float > 0.
- d) Total float > 1.

80. **The process concerned with obtaining formal stakeholder acceptance of project scope is:**

- a) Project plan execution.
- b) Scope management.
- ✓ c) Scope verification.
- d) Quality assurance.

81. **The process concerned with collecting information and getting it to the right stakeholders is:**

- a) Communications management.
- ✓ b) Information distribution.
- c) Communications systems planning.
- d) Feedback system management.

82. **The process concerned with managing supplier relationships is:**

- ✓ a) Contract administration
- b) Solicitation management

- c) Supplier selection
- d) Procurement planning

83. **Senior management may waive standard policies in some project organizations:**

- a) In order to foster an entrepreneurial spirit.
- b) In order to eliminate red tape and expedite project work.
- ✓ c) Both a. and b. are correct.
- d) Neither a. nor b. is correct.

84. **A Change Control Board (CCB) is:**

- a) Charged with making sure no changes are made to project baselines.
- b) A group of experts capable of judging the merits of change requests.
- ✓ c) Both b. and d. are correct.
- d) A group of stakeholders responsible for approving or rejecting changes.

85. **Cost of quality is frequently categorized as:**

- ✓ a) Cost of conformance.
- b) Cost of rework.
- c) Prevention.
- d) Inspection.

86. **Process flow diagrams show relationships between steps in a process. A common format for flowcharts is:**

- a) Top-down.
- b) Detailed.
- c) Deployment.
- ✓ d) All of the above are correct.

87. **Examples of training of project employees are:**

- a) Classroom and on-the-job.
- b) Mentoring and coaching.
- c) Computer based.
- ✓ d) All of the above

88. **When correcting a scheduling problem, what is the first technique a project manager should consider?**

- a) Crashing.
- b) Reducing project scope.



- ✓ c) Fast-tracking.
- d) Out-sourcing.

89. **When a project is terminated before its scheduled completion date due to shifting priorities, loss of a sponsor, or other reason, the first action of the project manager is to:**

- a) Call the team members together for a project review meeting.
- ✓ b) Immediately stop any further expenditures.
- c) Investigate the reasons for termination.
- d) Find other projects for team members to work on.

90. **The project manager commonly needs to use motivational skills:**

- a) To help the team get over a temporary setback.
- b) To help the team to overcome overconfidence.
- c) After the team has seen some interim success.
- ✓ d) All of the above are correct.

91. **The system that notifies work package owners when to begin work is known as the:**

- a) Project schedule.
- b) Status review system.
- ✓ c) Work authorization system.
- d) PMIS.

92. **A description of the work authorized to be performed by a supplier is found in the:**

- a) Project plan.
- ✓ b) Statement of work (SOW).
- c) Responsibility assignment matrix (RAM).
- d) Work breakdown system (WBS).

93. **Items to be included in a work authorization notice to a supplier should include:**

- a) Work description.
- b) Consideration to be paid.
- c) Contract terms.
- ✓ d) All of the above are correct.

94. **Inputs to contract administration include:**

- a) Work performance information.
- b) Performance reporting.
- c) Change requests.

- ✓ d) All the above are correct

95. **A contract where the buyer pays all of the seller's costs and overhead, plus a fixed fee is called a:**

- a) Firm fixed price plus incentive contract.  
b) Cost plus incentive fee contract.  
c) Time and materials contract.  
✓ d) Cost plus fixed fee contract.

96. **Operational definitions are also known as:**

- ✓ a) Metrics.  
b) Control Limits.  
c) PCIs.  
d) None of the above are correct.

97. **A common problem with the use of an automated PMIS:**

- a) Is the tendency to over-rely on it to point out problems.  
b) Is the tendency to provide too much information.  
c) Is the tendency to use it in place of other forms of communication.  
✓ d) All of the above are correct.

98. **System documentation:**

- ✓ a) Should be included as part of the automated PMIS.  
b) Is not considered necessary in a manual PMIS.  
c) Both a. and b. are correct.  
d) Neither a. nor b. is correct.

99. **All of the manual or automated tools and techniques used to collect, archive, and distribute project information on a project is known as the:**

- ✓ a) Project management information system.  
b) Communications plan.  
c) Project management enterprise software.  
d) Communications and feedback system.

100. **Insisting on all team members and suppliers using standard organizational procedures and terminology:**

- a) Is bad management practice because it stifles creativity.  
b) Is bad management practice because it dictates practices that may not be industry standard best practices.

- ✓ c) Is good management practice because it provides the most predictable results.
- d) Is good management practice because it highlights the project manager's absolute authority over the project.

---

101. **Work performance information:**

- a) Includes only the actual product created by the project.
- b) Includes both the actual product created by the project and information about the product created.
- c) Might include summaries of how the planned project quality compares to the actual quality.
- ✓ d) Both b. and c. are correct.

---

102. **Life cycle costs include:**

- a) Project costs.
- ✓ b) Costs incurred including acquisition, operating, and disposal costs.
- c) Only costs for maintaining a product or system.
- d) None of the above are correct.

---

103. **The four stages of team development are:**

- ✓ a) Forming, storming, norming, and performing.
- b) Initiation, sharing, bonding, and performing.
- c) Forming, communicating, acceptance, and recognition.
- d) Creation, conflict, communicating, and completion.

---

104. **Formal recognition and reward systems need to be:**

- a) Deployed only at the end of the project.
- b) Based on a subjective evaluation process.
- ✓ c) Tied to performance.
- d) Monetary-based.

---

105. **The groundwork for formal acceptance is:**

- ✓ a) Laid at the start of the project in the form of a needs analysis to determine deliverable requirements.
- b) Created at the end of the project, as stakeholders are forced to confront the cost of making changes.
- c) Created at the end of the project, because stakeholders have probably changed over

the course of the project.

- d) Established when the stakeholders approve the quality management plan.

---

106. **The product audit should contain:**

- a) Project baseline and current project status.
- b) Audit methodology.
- c) Future change recommendations.
- ✓ d) All of the above are correct.

---

107. **Quality assurance is:**

- a) Strategizing how to create products that meet quality requirements.
- b) Conforming product specifications to customer requirements.
- c) A set of tactics used to determine if goods meet quality requirements.
- ✓ d) A pattern of activities which achieve a state of confidence that the product meets quality requirements.

---

108. **Inspection:**

- ✓ a) Is not a cost-effective way to build quality into a product.
- b) Is the best method to create quality products.
- b) Is the best method to create quality products.
- c) Is only effective if it is done at random intervals in a production process.
- d) Is never an appropriate tactic during quality assurance.

---

109. **Collocation means:**

- a) That the team members are distributed geographically.
- ✓ b) That the team is located in one physical location.
- c) That the team uses a war room.
- d) None of the above are correct.

---

110. **Quality audits or inspections should take place:**

- a) At the end of every process cycle.
- b) At random intervals within a process cycle.
- c) At random intervals over the course of the project.
- ✓ d) All of the above are correct.

---

111. **Cost of quality is used during quality assurance to:**

- a) Determine if the cost of the product will meet budget requirements.
- ✓ b) Determine the most effective proportion among prevention, inspection, and repair. rework costs.
- c) Persuade management to invest in quality product methods.
- d) Assess the cost of implementing quality improvements.

---

112. **The Quality guru associated with “breakthrough improvement” is:**

- a) Deming
- b) Crosby
- c) Taguchi
- ✓ d) Juran

---

113. **ADA is:**

- a) A project network diagram.
- b) A technique that uses finish-to-start network logic.
- c) A technique that uses probabilistic networking sequencing.
- ✓ d) Both a. and b. are correct.

---

114. **A team has 20 people on it. How many potential communication channels exist on this team?**

- a) 20
- b) 19
- ✓ c) 190
- d) 380

---

115. **Version control is:**

- a) Required so that team members do not over-write one another's work.
- b) Required to create a reliable record of the work that occurred in a project.
- c) Not a problem for project managers who use adequate backup systems.
- ✓ d) Both a. and b. are correct.

---

116. **The project office is:**

- a) The same as the office of the CEO.
- ✓ b) An organization that may provide project support functions.
- c) Another term for the war room.
- d) Only used for government projects.

117. **Project intranets and home pages are:**

- ✓ a) An effective way to provide a lot of information to a variety of users.
- b) Limited because only large organizations have access to these tools.
- c) A security risk because there is no way to restrict access to them.
- d) None of the above is correct.

118. **Contract performance milestones can be:**

- a) Partial deliveries.
- b) Completion of selected portions of the project work.
- c) Delivery of preliminary versions of the product.
- ✓ d) All of the above are correct.

119. **Production surveillance:**

- a) Is illegal monitoring of a supplier's performance.
- b) Is a good way to mitigate risk of supplier non-performance.
- c) May include making site visits.
- ✓ d) Both b. and c. are correct.

120. **As a buyer, your position during an on-site visit to a supplier is that of:**

- ✓ a) An invited guest.
- b) Supervisor of your supplier's employees.
- c) Both a. and b. are correct.
- d) Neither a. nor b. is correct.

121. **Value engineering is a term used to describe:**

- ✓ a) A creative approach to optimize life cycle costs.
- b) Total quality management.
- c) A cost reduction program.
- d) A technique to save project costs and time.

122. **A graphical representation of the deliverables included in the project is known as:**

- a) Resource assignment matrix.
- ✓ b) Work breakdown structure.
- c) Organizational breakdown structure.
- d) Project schedule.

123. **Abraham Maslow is best known for his:**

- a) Theory X and Theory Y.
- b) Motivator Hygiene Theory.
- ✓ c) Hierarchy of Needs.
- d) Reinforcement Theory.

124. **Quality audits:**

- a) Are only done at the end of the project.
- b) Checks the fitness of the project's output or the fitness of the quality plan.
- c) Are best done at random intervals over the course of the project.
- ✓ d) Both b. and c. are correct.

125. **The project controlling process:**

- a) Is used only in the control phase of the project.
- ✓ b) Is used by the project team throughout the project.
- c) Is used strictly to control scope changes.
- d) None of the above are correct.

126. **The contract change control system:**

- a) Belongs to the seller rather than the project organization.
- b) Does not feed information into the project's change control system.
- ✓ c) Contains all of the forms, performance tracking, and procedural information needed to deal with contract changes.
- d) All of the above are correct.

127. **The process concerned with creating confidence that quality requirements are being met is:**

- a) Quality planning
- b) Quality control
- ✓ c) Quality assurance
- d) Quality management

128. **A quality audit can:**
- a) Evaluate whether the project output is fit for the purpose it was intended.
  - b) Evaluate whether the quality management plan is still appropriate after quality improvements have been made.
  - c) Evaluate how statistical process control may be used to improve the capability of a process.
  - ✓ d) All of the above are correct.
- 

129. **Suggestions for quality improvements that result from quality assurance:**
- a) Should be assessed for risk to project success.
  - b) May be subject to trade-off analysis.
  - ✓ c) Both a. and b. are correct.
  - d) Neither a. nor b. is correct.
- 

130. **Quality assurance, introduced during the quality movement of the mid 1900s, is based on the idea of:**
- a) Creating a margin of error for product specifications.
  - b) Establishing upper and lower specifications for products.
  - ✓ c) Preventing problems, rather than fixing them.
  - d) Increasing production rates by providing training for quality control inspectors.
- 

131. **Effort is:**
- a) The number of work-days required to complete an activity.
  - ✓ b) The number of person-hours required to complete an activity.
  - c) The elapsed time to complete an activity.
  - d) An earned value item.
- 

132. **The following are among the six processes of risk management:**
- a) Risk management planning and risk recovery.
  - ✓ b) Qualitative risk analysis and quantitative risk analysis.
  - c) Risk documentation and risk monitoring.
  - d) Risk identification and risk avoidance.
- 

133. **Because the control processes are repeated throughout the project life cycle, they are said to be:**
- a) Integrative
  - ✓ b) Iterative
  - c) Facilitative



- d) Core processes

---

134. **The motivational theory that employees avoid responsibility and, therefore, need close supervision is known as:**

- a) Theory Y.
- ✓ b) Theory X.
- c) Hierarchy of Needs.
- d) Hygiene theory.

---

135. **When leveling resources on a project:**

- a) It is preferred to let project management software do the job for you.
- ✓ b) It is preferred that the project manager manually determine how to avoid peak and valley problems with resource usage.
- c) The project manager needs to add resources.
- d) A change in project scope is usually required.

---

136. **An effective tool for communicating forecasting analysis is:**

- ✓ a) Trend analysis.
- b) Performance reviews.
- c) Variance reporting.
- d) Change requests.

---

137. **The purpose of a forward pass is to:**

- ✓ a) Determine early start and early finish dates for each activity.
- b) Determine early start and late start dates for each activity.
- c) Determine late finish and late start dates for each activity.
- d) Determine early start and late finish dates for each activity.

---

138. **An essential first step in the schedule control process is:**

- a) Making changes to the project schedule.
- b) Computing the SPI.
- ✓ c) Making sure schedule requirements are clear.
- d) Making sure schedule requirements are clear.

---

139. **Total float is:**

- a) The amount of time that an activity can be delayed without delaying the early start of any immediately following activities.
- ✓ b) The amount of time that an activity can be delayed without

delaying the completion  
date of the project.

- c) The amount of float on the critical path.
- d) Calculated by subtracting late start from late finish.

140. **The difference between the earned value (EV) and the planned value (PV) is the:**

- a) Cost variance.
- ✓ b) Schedule variance.
- c) Unearned value.
- d) All of the above are correct.

141. **Performance reports supply information regarding:**

- a) Activities completed to date.
- b) Activities started to date.
- c) Percentage of activity work completed to date.
- ✓ d) All of the above are correct.

142. **A schedule performance index (SPI) of 1.2 suggests that the project is performing:**

- ✓ a) Ahead of schedule.
- b) According to schedule.
- c) Behind schedule.
- d) None of the above are correct.

143. **During the schedule control process, the project schedule serves as the:**

- a) Schedule baseline.
- b) Basis for measuring project performance.
- c) Time management component of the project.
- ✓ d) All of the above are correct.

144. **If the planned value (PV) is \$275,000 and the earned value (EV) is \$300,000, the schedule variance (SV) is:**

- ✓ a) \$25,000
- b) -\$25,000
- c) \$125,000
- d) \$575,000

145. **Changes made to keep project activities on schedule are called:**

- ✓ a) Corrective actions.
- b) Change requests.

- c) Performance measurements.
- d) Schedule baselines.

146. **When adjusting time performance, two of the most common project conditions are:**

- a) Fixed time.
- b) Fixed cost.
- ✓ c) Both a. and b. are correct.
- d) Neither a. nor b. is correct.

147. **Scope creep is:**

- a) A type of residual risk.
- b) An activity that needs to be included in the project schedule.
- ✓ c) Unmanaged changes to the project scope.
- d) None of the above.

148. **An analytical tool useful to the project manager for controlling the project cost and schedule performance is the:**

- a) Gantt chart.
- b) The project budget.
- ✓ c) Earned value analysis.
- d) All of the above are correct.

149. **The cost performance index (CPI) is calculated as follows:**

- ✓ a) Divide the earned value (EV) by the actual cost (AC).
- b) Divide the earned value (EV) by the planned value (PV).
- c) Subtract the actual cost (AC) from the earned value (EV).
- d) Subtract the planned value (PV) from the earned value (EV).

150. **Based on the performance measures indicated in the following table, what is the cost variance (CV) for Case 3?**

- a) -1,000
- ✓ b) 1,000
- c) 2,000
- d) -2,000

---

151. **Based on the performance measures indicated in the following table, what is the schedule variance (SV) for Case 2?**

- ✓ a) -1,000
- b) 1,000
- c) 2,000
- d) -2,000

152. In the cumulative cost curve shown in the following figure, Height A represents:

- a) Cost variance
- b) Schedule variance
- c) Earned value
- ✓ d) Budget at completion (BAC)

---

153. **Variance that is sporadic, unusual, and difficult to predict is the result of:**

- a) Random causes
- b) Common causes
- ✓ c) Special causes
- d) External causes

---

154. **The statistical limits for process or product variation are called:**

- a) Specification limits
- b) Tolerances
- ✓ c) Control limits
- d) Quality standards

---

155. **Which of the following is an example of a cost of nonconformance?**

- a) Training
  - b) Product design
  - c) Planning
  - ✓ d) Rework
-

156. **Which of the following is an example of a cost of nonconformance:**

- a) Training
- b) Product design
- c) Planning
- d) Rework

157. **“500 rejected parts” is an example of:**

- a) Attribute sampling
- b) Variable sampling
- c) Random sampling
- d) Stratified sampling

158. **Most quality problems:**

- a) Originate on the shop floor because of waste and rework.
- b) Are the result of management inattention to potential quality improvement ideas.
- c) Could be eliminated if supervisors monitored their work more closely.
- d) Originate in the QA organization where the ultimate responsibility for quality rests.

159. **A 3-sigma limit will include approximately what percentage of the population:**

- a) 30
- b) 80
- c) 68
- d) 99

160. **A chart that ranks causes of poor quality performance according to overall influence is called:**

- a) A control chart.
- b) A fishbone diagram.
- c) A Pareto diagram.
- d) A trend analysis.

161. **The following chart is an example of:**



- ✓ a) A control chart.
- b) A fishbone diagram.
- c) A Pareto diagram.
- d) A trend analysis.

---

162. **What effect does increasing sample size have on the standard deviation?**

- a) It increases standard deviation.
- ✓ b) It decreases standard deviation.
- c) It has no effect on standard deviation.
- d) It eliminates the need to measure the standard deviation.

---

163. **An action taken to bring a product or service into compliance with customer specifications is called:**

- a) Scrap
- b) Audit
- c) Recall
- ✓ d) Rework

164. **The following chart is an example of:**

- a) A control chart.
- ✓ b) A fishbone diagram.
- c) A Pareto diagram
- d) A trend analysis.

---

165. **A Pareto diagram is a tool used to determine the relative impact each quality problem has on project performance. Which of the following statements best describes the philosophy of the Pareto Principle:**

- a) In general, 80% of the quality problems can be justified as correctable using a cost benefit analysis. The remaining 20% are not financially worth fixing.
- b) To achieve zero defects, all quality problems, including those that do not have a direct cost, should be corrected.
- ✓ c) The vast majority of defects are caused by a small percentage of the identifiable problems. Improvement efforts therefore should be reserved for these vital few

problems.

- d) To minimize financial loss to the firm from quality problems, all problems, which have a measurable cost, should be corrected.

166. **A tool used to verify that the steps in a process are being followed is called:**

- ✓ a) A checklist.
- b) An inspection.
- c) A performance review.
- d) A trend analysis.

167. **A tool for analyzing and communicating the relationships between process steps is called:**

- ✓ a) A flowchart.
- b) A scatter diagram.
- c) A control chart.
- d) A trend analysis.

168. **In analyzing project trade-offs between cost, time, and quality, where cost must be controlled in order to meet the cost baseline, the following should be considered:**

- a) The impact on schedule and quality.
- b) Additional risk may be introduced.
- c) The impact on quality only.
- ✓ d) Both a. and b. are correct.

169. **Which of the following is a useful technique for identifying corrective action alternatives:**

- a) Changing the project scope.
- b) Requesting additional funds immediately.
- ✓ c) Holding a brainstorming session with the project team.
- d) Leaving decision-making to the functional managers.

170. **The technique for overlapping project activities to shorten project duration is referred to as:**

- ✓ a) Fast-tracking.
- b) Risk conversion.
- c) Parallel management.
- d) Synchronous manufacturing.

171. **When crashing a task, the project team needs to focus on:**

- a) Non-critical tasks.
- b) As many tasks as possible.
- ✓ c) Accelerating performance of those tasks on the critical path.
- d) Accelerating performance by minimizing costs.

---

172. **A project to build a new world headquarters for your company would most likely require this form of project organizational structure:**

- a) Functional.
- b) Matrix.
- ✓ c) Projectized organizations.
- d) None of the above are correct.

---

173. **The overall process of managing changes that affect the function or characteristics of the deliverable is known as:**

- a) Managing by exception.
- ✓ b) Configuration management.
- c) Change control management.
- d) Managing by objective.

---

174. **Projects arise out of:**

- a) Customer needs.
- b) Senior management directives.
- c) Personal interest.
- ✓ d) Both a. and b. are correct.

---

175. **A collection of formal, documented procedures that defines how project performance will be monitored and evaluates and includes the steps by which official project documents may be changed is known as:**

- a) Managing by exception.
- b) Configuration management.
- ✓ c) Change control system.
- d) Managing by objective.

---

176. **Jennifer is a publisher. In order to make sure that her writer delivers on time, she inserts a penalty clause for late delivery into her writer's contract. Jennifer is using which risk response?**

- a) Risk avoidance
  - b) Risk mitigation
  - c) Risk acceptance
  - ✓ d) Risk transference
-

177. **The risk response that can be categorized as either passive or active is:**

- a) Risk avoidance
- b) Risk mitigation
- ✓ c) Risk acceptance
- d) Risk transference

178. **During risk response control, when is additional response development needed?**

- a) When the organization is restructuring.
- b) When the project objectives change.
- c) When the contingency reserves are used up.
- ✓ d) When the original risk response is not working as expected.

179. **A project scope statement includes these elements:**

- a) Project justification and deliverables.
- b) Detailed project risks.
- c) Project description and objectives.
- ✓ d) Both a. and c. are correct.

180. **WBS templates are:**

- ✓ a) Time savers for the project team.
- b) Worthless because no two projects are the same.
- c) Only useful for high technology projects.
- d) Used only when all of the work packages are identical to the project.

181. **What document is used to measure the baseline for scope changes?**

- a) Schedule.
- b) Project charter.
- ✓ c) Work breakdown structure.
- d) Statement of work.

182. **All updates to project performance and control documents should be reflected in which of the following:**

- ✓ a) Project plan.
- b) Work breakdown structure.
- c) Integrated change control system.
- d) Cost baseline.

183. **A WBS dictionary consists of:**

- a) Terms used by project managers.

- ✓ b) Information about each work package in the WBS.
- c) Who's who on the project team.
- d) All of the above are correct.

---

184. **Creeping scope is a major concern of any project. The person responsible for safeguarding customer change requests is the:**

- a) Functional manager
- ✓ b) Project manager
- c) Project sponsor
- d) President

---

185. **Activities included in an orderly close-out process include:**

- a) Return of all resources and equipment to the functional organizations.
- b) Closure of all contracts.
- c) Administrative closure and final reporting.
- ✓ d) All of the above are correct.

---

186. **Issues relating to the customer's installation and support requirements should be:**

- a) No concern of the project manager's.
- ✓ b) Ascertained through a cut-over needs analysis.
- c) Always addressed as a separate project.
- d) None of the above are correct.

---

187. **A formal project handoff:**

- a) Is a bad idea because it embroils the project in the customer's political intrigues.
- ✓ b) Can positively shape perceptions of the product by highlighting product benefits.
- c) Should only be held if the customer pays extra for this service.
- d) All of the above are correct.

---

188. **Self-actualization is a term coined by:**

- a) Frederick Taylor
- b) Joseph Juran
- ✓ c) Abraham Maslow
- d) Frederick Herzberg

---

189. **Change requests:**

- a) Can come from anyone.

- b) Must be documented.
- c) Must be subjected to an integrated change control process.
- ✓ d) All of the above are correct.

190. **Administrative closure occurs:**

- a) At the end of the project.
- b) At the end of each project phase.
- c) Upon delivery of pre-specified milestone deliverables.
- ✓ d) All of the above are correct.

191. **A project archive:**

- a) Should never contain computerized records, because they may not be retrievable in later software.
- ✓ b) Should include baselines and performance data.
- c) Should be handed to the sponsor at the end of the project.
- d) All of the above are correct.

192. **Tools used in administrative closure include:**

- ✓ a) Performance reviews, variance analysis, earned value analysis.
- b) Contract audits, quality audits, performance audits.
- c) Both a. and b. are correct.
- d) Neither a. nor b. is correct.

193. **Contract close-out can occur:**

- a) At the end of a project only.
- ✓ b) Whenever a contract is completed and accepted.
- c) At the end of a project only, unless the project is terminated early.
- d) Whenever the supplier submits an invoice.

194. **The goal(s) of contract close-out is (are):**

- a) To arrange for final settlement of supplier payments and claims.
- b) To verify that work was done and delivered to specification.
- c) To update contract records and documents.
- ✓ d) All of the above are correct.

195. **The purpose of a procurement audit is:**

- ✓ a) To evaluate both the supplier's performance and the procurement process.

- b) To evaluate the procurement process only.
- c) To evaluate the supplier's performance only.
- d) To provide a formal performance evaluation of supplier's staff members.

---

196. **The content of the final project report should include:**

- a) Administrative performance and recommendations.
- b) Project structure and recommendations.
- c) Project management performance and recommendations.
- ✓ d) All of the above are correct.

---

197. **The project team's final report:**

- a) Should focus only on the positive aspects and accomplishments of the project.
- ✓ b) Is a chronicle of life on the project and how issues were managed on the team.
- c) Is an effective tool for senior management to use in strategic planning.
- d) Both b. and c. are correct.

---

198. **The activity duration estimating technique that uses optimistic, pessimistic, and most likely calculations is:**

- a) CPM
- ✓ b) Three-Point Estimates
- c) GERT
- d) Gantt

---

199. **Publishing a project close-out schedule is a good idea because:**

- a) It helps keep people motivated by imposing a deadline.
- b) It provides a sense of order in a time of fluctuating team membership.
- c) It helps team members who are leaving to understand what they must accomplish or hand off before they can move to a different position.
- ✓ d) All of the above are correct.

---

200. **Activities included in an orderly close-out process include:**

- a) Return of all resources and equipment to the functional organizations.
- b) Closure of all contracts.
- c) Administrative closure and final reporting.
- ✓ d) All of the above are correct.



