

## Chapter 1: The World of Project Management

### *True/False*

1. A primary purpose of forming projects is to assign the responsibility for accomplishing some organizational task to a specific person or small group.

Answer: True

Response: See section 1.1

Level: easy

2. One of the few similarities between project management and general management is that both exist in the well-defined organizational structure of superior/subordinates in the overall organization.

Answer: False

Response: See section 1.2

Level: medium

3. Many recent developments in project management are being driven by changes in the nature of the American workforce.

Answer: False

Response: See section 1.1

Level: medium

4. There has been a growing use of projects to achieve an organization's strategic goals

Answer: True

Response: See section 1.1

Level: medium

5. While general managers have their authority limited to specific areas in the overall organization, project managers have authority over any activity required by the project.

Answer: False  
Response: See section 1.2  
Level: medium

6. Projects are always carried out under conditions of uncertainty.

Answer: True  
Response: See section 1.3  
Level: easy

7. One can trade-off time and cost when managing a project, but the project's technical specifications must be maintained exactly as the client initially specifies.

Answer: False  
Response: See section 1.3  
Level: medium

8. Nonnumeric project selection methods are only suitable if numeric methods are not available.

Answer: False  
Response: See section 1.5  
Level: medium

9. When using financial methods for selecting projects, the payback period is the simplest and best method to use.

Answer: False  
Response: See section 1.5  
Level: medium

- 10 Rank-ordering a large number of projects can be done with a Q-sort.

Answer: True  
Response: See section 1.5  
Level: medium

11. A disadvantage of using the payback period method for selecting projects is that it cannot reflect the time-value of money.

Answer: True

Response: See section 1.5

Level: medium

12. A disadvantage of using the discounted cash flow method (or net present value) for selecting projects is that it ignores all non-monetary factors associated with the project except risk.

Answer: True

Response: See section 1.5

Level: medium

13. A disadvantage of using scoring models rather than financial models for selecting projects is that they cannot include the project's profitability.

Answer: False

Response: See section 1.5

Level: medium

14. A PM does not need to understand why a project is selected for funding because he did not initiate the process.

Answer: False

Response: See section 1.5

Level: medium

15. The main distinction between platform and breakthrough projects is that the former usually depend on existing technology.

Answer: True

Response: See section 1.6

Level: medium

16. The main distinction between platform and derivative projects is that the latter depend on existing technology.

Answer: False

Response: See section 1.6

Level: medium

17. One reason for the emphasis on project management is that tasks fit neatly into business-as-usual.

Answer: False

Response: See section 1.1

Level: easy

18. Programs are subdivisions of projects.

Answer: False

Response: See section 1.1

Level: easy

19. Projects are subdivisions of programs.

Answer: True

Response: See section 1.1

Level: easy

20. A similarity between project management and general management is the tendency to “manage by exception.”

Answer: False

Response: See section 1.2

Level: medium

21. Project budgets are primarily modifications of budgets for the same activity in the previous period.

Answer: False

Response: See section 1.2

Level: medium

22. In project management, superior-subordinate relationships are known and lines of authority are clear.

Answer: False

Response: See section 1.2

Level: medium

23. Having responsibility for the outcome of a project without the authority of rank or position is common in project management.

Answer: True

Response: See section 1.2

Level: medium

24. Negotiating the purchase of a new car would typically be characterized as win-win negotiation.

Answer: False

Response: See section 1.2

Level: medium

25. In project management, it is often necessary to trade-off one objective for another.

Answer: True

Response: See section 1.3

Level: easy

26. A project that is selected because it is necessary for continued operations exemplifies a sacred cow.

Answer: False

Response: See section 1.5

Level: medium

27. The comparative benefits method is considered a nonnumeric project selection method.

Answer: True

Response: See section 1.5

Level: medium

28. When using the weighted scoring model, the categories for each scale must be in equal intervals.

Answer: False

Response: See section 1.5

Level: medium

29. Scoring methods were developed to overcome some of the disadvantages of simple financial profitability methods.

Answer: True

Response: See section 1.5

Level: medium

30. One limitation of scoring methods is that they can only incorporate quantitative data.

Answer: False

Response: See section 1.5

Level: medium

31. As a rule of thumb, the number of factors included in a scoring model should be at least 10.

Answer: False

Response: See section 1.5

Level: medium

32. Projects success is not determined by the portfolio of projects in an organization.

Answer: False

Response: See section 1.6

Level: medium

33. R&D projects are oriented toward using newly developed technologies or existing technologies in a new manner.

Answer: True

Response: See section 1.6

Level: medium

34. Projects with deliverables that are incrementally different from existing offerings are classified as platform projects.

Answer: False

Response: See section 1.6

Level: medium

35. The project manager depends on legitimate authority to gain the cooperation of the many departments in the organization that may be asked to supply technology, information, resources and personnel to the project.

Answer: False

Response: See section 1.2

Level: medium

36. In the early years of a project when outflows usually exceed inflows, the NPV of the project for those years will be positive.

Answer: False  
Response: See section 1.5  
Level: medium

### ***Multiple Choice***

37. Which of the following is not a trend in project management?
- a) achieving strategic goals
  - b) improving project effectiveness
  - c) quasi projects
  - d) reductive projects
  - e) achieving routine goals

Answer: d  
Response: See section 1.1  
Level: medium

38. Which of the following criteria can be included in scoring models for selecting projects?
- a) potential profitability of the project
  - b) potential impact on the firm's competitive position
  - c) the organization's ability to market the output of a project
  - d) All of the above can be included
  - e) only a and b above

Answer: d  
Response: See section 1.5  
Level: medium

39. If the initial investment in a project is \$100,000 and the expected annual net profit for the project is \$20,000, the payback period is:
- a) One fifth of a year
  - b) 4 years
  - c) 5 years
  - d) 10 years
  - e) insufficient information to determine the payback period



Answer: c

Response: See section 1.5

Level: medium

40. Which of the following is not a characteristic of a project?

- a) They are unique
- b) They are routine
- c) They have specific due date
- d) They have a specific deliverable
- e) They have a purpose

Answer: b

Response: See section 1.1

Level: medium

41. “Blue Sky” projects are

- a) R & D projects
- b) Platform projects
- c) Breakthrough projects
- d) Derivative projects
- e) High risk projects

Answer: a

Response: See section 1.6

Level: medium

42. Searching for the third alternative is most closely associated with

- a) win-win negotiation
- b) project planning
- c) project budgeting
- d) the three goals of a project
- e) the weighted scoring model

Answer: a

Response: See section 1.2

Level: medium

43. Which of the following is not related to the three goals of a project?
- a) time
  - b) data
  - c) schedule
  - d) cost
  - e) performance

Answer: b

Response: See section 1.3

Level: medium

44. Projects that begin with a slow start, have quick momentum in the middle, and have a slow finish are said to follow which type of lifecycle?
- a) J-shaped lifecycle
  - b) L-shaped lifecycle
  - c) an exponential growth lifecycle
  - d) an S-shaped lifecycle
  - e) an X-shaped lifecycle

Answer: d

Response: See section 1.4

Level: medium

45. Which of the following is a numeric project selection method?
- a) comparative benefits
  - b) payback period
  - c) Q-sort method
  - d) operating/competitive necessity
  - e) sacred cow

Answer: b

Response: See section 1.5

Level: medium

46. A matrix that illustrates the magnitude of both product and process changes resulting from a project is called
- a) the aggregate project plan
  - b) the product-process matrix
  - c) the aggregate master production schedule

- d) the balanced scorecard
- e) the R&D project portfolio

Answer: a

Response: See section 1.6

Level: medium

47. The \_\_\_\_\_ attempts to link the organization's projects directly to the goals and strategy of the organization.
- a) the product-process matrix
  - b) the balanced scorecard
  - c) the action plan
  - d) project portfolio process
  - e) the work breakdown structure

Answer: d

Response: See section 1.6

Level: medium

48. Rebus Inc., a game development company, had gained critical success with its video game Authority Online a year ago. The game's publisher wanted Rebus to undertake a project to revitalize the game's sales by updating the graphics and releasing it for a new platform. This type of project is an example of a(n) \_\_\_\_\_.
- a) derivative project
  - b) R&D project
  - c) platform project
  - d) breakthrough project
  - e) sacred cow project

Answer: a

Response: See section 1.6

Level: difficult

49. Ultor is a media company that specializes in creating print advertisements for local businesses. Lately, it has been undertaking requests for multimedia projects that are new to it. In this scenario, Ultor is most likely accepting \_\_\_\_\_.
- a) derivative projects
  - b) R&D projects
  - c) platform projects
  - d) breakthrough projects
  - e) sacred cow projects

Answer: c

Response: See section 1.6

Level: difficult

50. Restrum Corp. is a company that delivers lunch to working professionals through delivery drivers. It has recently undertaken a project that will allow it to use drones to deliver meals to its customers. Restrum's new project can be categorized as a(n) \_\_\_\_\_.  
a) derivative project  
b) R&D project  
c) blue-sky project  
d) breakthrough project  
e) sacred cow project

Answer: d

Response: See section 1.6

Level: difficult

51. Alchemax Inc. is looking to undertake a project that requires an initial fixed investment of \$200,000 and is expected to return a net cash inflow of \$50,000 each year. The payback period for this project will be \_\_\_\_\_ years.  
a) 2  
b) 7  
c) 4  
d) 9  
e) 5

Answer: c

Response: See section 1.5

Level: difficult

52. Ouroboros Construction started the construction of a house for a client. The initial planning of the project took longer than expected. Once plans were finalized, it did not take long to erect the structure, and it was done much before schedule. However, it took a lot of time to give the finishing touches to the house, and it was a long time before the house was completed. The project in this scenario has a(n) \_\_\_\_\_.  
a) J-shaped life cycle  
b) X-shaped life cycle  
c) S-shaped life cycle  
d) L-shaped life cycle  
e) O-shaped life cycle

Answer: c

Response: See section 1.5  
Level: difficult

53. Omicore Softworks, a software development firm, undertook a project that involved developing a bespoke accounting software for a firm. The project initiated with the project manager spending some time to identify the correct resources. Once this was done, the process of writing the program began. Most of the time was spent on debugging and ensuring that the software worked to the client's specification. The project in this scenario has a(n) \_\_\_\_\_.  
a) J-shaped life cycle  
b) X-shaped life cycle  
c) S-shaped life cycle  
d) L-shaped life cycle  
e) O-shaped life cycle

Answer: a  
Response: See section 1.5  
Level: difficult

54. Baketolife, a small bakery that specializes in wedding cakes, undertook a project that required the creation of a large five-tier cake. While the mixture for the cake was easy to make and took less than half a day to prepare, the size of the cake meant that a lot of time was spent ensuring that each cake was cooked all the way through. The project in this scenario has a(n) \_\_\_\_\_.  
a) L-shaped life cycle  
b) X-shaped life cycle  
c) S-shaped life cycle  
d) J-shaped life cycle  
e) O-shaped life cycle

Answer: d  
Response: See section 1.5  
Level: difficult

55. Which of the following is an example of win-lose negotiation?  
a) Buying a car from a second-hand car dealership at the asking price.  
b) Discussing a problem with all parties concerned and finding a middle ground  
c) Carrying on an argument over a petty issue that can be easily resolved  
d) Agreeing to share resources for the benefit of all involved in different projects  
e) Disagreeing with a project idea while not providing an alternative

Answer: a  
Response: See section 1.2

Level: difficult

56. Which of the following is an example of win-win negotiation?
- a) Buying a car from a second-hand car dealership at the asking price
  - b) Forcibly using resources allocated to another department
  - c) Keeping resources that could be used by another team busy in unnecessary tasks
  - d) Agreeing to share resources for the benefit of all involved in different projects
  - e) Carrying on an argument over a petty issue that can be easily resolved

Answer: d

Response: See section 1.2

Level: difficult

57. Which of the following is an example of lose-lose negotiation?
- a) Buying a car from a second-hand car dealership at the asking price
  - b) Taking time off from a project to help another team
  - c) Disagreeing with a project idea while not providing an alternative
  - d) Agreeing to share resources for the benefit of all involved in a project
  - e) Discussing a problem with all parties concerned and finding a middle ground

Answer: c

Response: See section 1.2

Level: difficult

### ***Short Answer***

58. Briefly explain what a project is.

Answer: A project is a temporary endeavor undertaken to create a unique product or service. It is specific, timely, usually multidisciplinary, and typically conflict ridden. Projects are parts of overall programs and may be broken down into tasks, subtasks, and further if desired. Current trends in project management include achieving strategic goals, achieving routine goals, improving project effectiveness, virtual projects, and quasi-projects.

Response: See section 1.1

Level: medium

59. What are the major trends in project management?

Answer: Many recent developments in project management are being driven by

quickly changing global markets, technology, and education. The most important of these recent developments are covered below.

**Achieving Strategic Goals:** There has been a growing use of projects to achieve an organization's strategic goals, and existing major projects are screened to make sure that their objectives support the organization's strategy and mission. Projects that do not have clear ties to the strategy and mission are not approved.

**PMOs for Improving Project Effectiveness:** A variety of efforts are being pursued to improve the process and results of project management, whether strategic or routine. These efforts are typically being led by a formal Project Management Office that provides training in project management skills and techniques such as the use of phase gates, agile management, earned value, critical ratios, and other such approaches; continually evaluates and helps improve the organization's project management "maturity"; educates project managers about the evolving ancillary goals of the organization; and generally helps oversee the organization's portfolio of programs and projects.

**Virtual Projects:** With the rapid increase in the globalization of industry, many projects now involve global teams whose members operate in different countries and different time zones, each bringing a unique set of talents to the project. These are known as virtual projects because the team members may never physically meet before the team is disbanded and another team is reconstituted. Advanced telecommunications and computer technology allow such virtual projects to be created, and helps team members complete their work and projects successfully.

**Quasi-Projects:** Led by the demands of the information technology/systems departments, project management is being extended into areas where the project's objectives are not well understood, time deadlines unknown, and/or budgets undetermined. This ill-defined type of project is extremely difficult to conduct and to date has often resulted in setting an artificial due date and budget, and then specifying project objectives to meet those limits. However, new tools for these quasi-projects are now being developed—agile management, prototyping, phase-gating, and others—to help these projects achieve results that satisfy the customer in spite of the unknowns.

Response: See section 1.1

Level: medium

60. To what extent can the three goals of a project be traded-off for one another?

**Answer:** The two primary roles of a project manager (PM) are to manage trade-offs among three interrelated objectives and to manage risks. The three interrelated objectives are: (1) meet the budget, (2) finish on schedule, and (3) generate deliverables that satisfy the client. Since we live in an uncertain world, as work on the project proceeds, unexpected problems are bound to arise. These

chance events will threaten the project's schedule, budget or scope. The PM must then decide how to trade off one project goal against another (e.g., to stay on schedule by assigning extra resources to the project may mean it will run over the predetermined budget). If the schedule, budget, and scope are rigidly predetermined, the project is probably doomed to failure unless the preset schedule and budget are overly generous or the difficulty in meeting the specifications has been seriously overestimated.

Response: See section 1.3

Level: medium

61. Briefly highlight the difference between win-win and win-lose negotiation strategies.

Answer: In win-win negotiation, both parties must try to understand what the other party needs. The problem one faces as a negotiator is how to help other parties meet their needs in return for their help in meeting the needs of one's project.

When negotiation takes place repeatedly between the same individuals, win-win negotiation is the only sensible procedure. When one negotiates the purchase of a car or a home, one is usually engaging in win-lose negotiation. The less one pays for a home or car, the less profit the seller makes. This is an example of win-lose negotiation. This type of negotiation is never appropriate when dealing with other members of one's organization.

Response: See section 1.2

Level: medium

62. Why is having a negotiation skill in win-win negotiation necessary for a project manager?

Answer: Within an organization, win-win negotiation is mandatory. In essence, in win-win negotiation, both parties must try to understand what the other party needs. The problem one face as a negotiator is how to help other parties meet their needs in return for their help in meeting the needs of one's project. When negotiation takes place repeatedly between the same individuals, win-win negotiation is the only sensible procedure. Project managers spend a great deal of their time negotiating, while general managers spend relatively little. Win-win negotiating skills is required for successful project management.

Response: See section 1.2

Level: medium

63. Briefly describe each of the three fundamental goals of a project.

Answer: The performance of a project, commonly called its "efficiency," is



assessed on the basis of three criteria, variously known as the "triple constraints," the "iron triangle," the "golden constraints," etc. Is the project on time or early? Is the project on or under budget? Does the project deliver the scope to the agreed-upon specifications? The performance of the project and the project manager is measured by the degree to which these goals are achieved.

Response: See section 1.3

Level: medium

64. Briefly describe the two different life cycles of projects.

Answer: A house-building project starts slowly with a lot of discussion and planning. Then construction begins, and progress is rapid. When the house is built, but not finished inside, progress appears to slow down and it seemingly takes forever to finish painting the house, to finish all the trim, and to assemble and install the built-in appliances. Progress is slow-fast-slow. It used to be thought that the S-shaped curve represented the life cycle for all projects. While this is true of many projects, there are important exceptions. Anyone who has baked a cake has dealt with a project that approaches completion through a very different route than the traditional S-curve. The process of baking a cake is straightforward. The ingredients are mixed while the oven is preheated, usually to 350°F. The mixture (technically called "goop") is placed in a greased pan, inserted in the oven, and the baking process begins. Assume the finished cake requires about 15 to 45 minutes for assembling materials and mixing and 30 minutes for the cake to bake. At the end of 15 minutes we have cake mix. Even after 40 minutes, having baked for 25 minutes, the cake may still be soft on the inside. In the last few minutes of the process, the cake is finally cooked. If left a few minutes too long after that in the oven, the cake will begin to burn at its base. The project of cooking a cake follows a J-shaped path to completion where initial steps and goals can be achieved quickly, but needs to be carefully watched at the end to ensure it isn't a disaster.

Response: See section 1.4

Level: medium

65. Explain what the third alternative is in negotiation.

Answer: Successful win-win negotiation often involves taking a synergistic approach by searching for the "third alternative." For example, consider a product development project focusing on the development of a new printer. A design engineer working on the project suggests adding more memory to the printer. The project manager (PM) initially opposes this suggestion, feeling that the added memory will make the printer too costly. Rather than rejecting the suggestion, however, the PM tries to gain a better understanding of the design engineer's concern. Based on their discussion, the PM learns that the engineer's purpose of requesting additional memory is to increase the printer's speed. After

benchmarking the competition, the design engineer feels that the printer will not be competitive as it is currently configured. The PM explains his fear that adding the extra memory will increase the cost of the printer to the point that it also will no longer be cost competitive. Based on this discussion, the design engineer and PM agree that they need to search for another (third) alternative that will increase the printer's speed without increasing its costs. A couple of days later, the design engineer identifies a new ink that can simultaneously increase the printer's speed and actually lower its total and operating costs.

Response: See section 1.2

Level: medium

66. Briefly explain the advantages of using scoring models to evaluate and select projects rather than using financial models.

Answer: Financial assessment methods of project selection ignore all nonmonetary factors except risk. Also, because of the nature of discounting, all the discounted methods of selection bias the selection system by favoring short-run projects.

Scoring methods were developed to overcome some of the disadvantages of the simple financial profitability methods, especially their focus on a single criterion. The simplest scoring approach, the unweighted 0–1 factor method, lists multiple criteria of significant interest to management. Given a list of the organization's goals, a selection committee that usually comprises senior managers familiar with both the organization's criteria and potential project portfolio, check off which of the criteria would be satisfied with respect to each project. Those projects that exceed a certain number of criteria may be selected for funding.

Response: See section 1.5

Level: medium

67. Briefly explain the project portfolio process.

Answer: The Project Portfolio Process (PPP) attempts to link an organization's projects directly to the goals and strategies of the organization. This occurs not only in the project's initiation and planning phases, but also throughout the life cycle of the projects as they are managed and eventually brought to completion. Thus, the PPP is also a means to monitor and control the organization's strategic projects. On occasion, this will mean shutting down projects prior to their completion because their risks have become excessive, their costs have escalated beyond their expected benefits, another (or a new) project does a better job of supporting the goals, or any of a variety of similar reasons.

Response: See section 1.6

Level: medium