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. Projects are characterized by conflict.

    Answer: True
    Response: See Section 1.1
    Level: Easy

3. The difference between a project and a nonproject is always crystal clear.

    Answer: False
    Response: See Section 1.1
    Level: Easy

4. Projects are usually large.

    Answer: False
    Response: See Section 1.1
    Level: Easy

5. 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

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

    Answer: True
    Response: See Section 1.1
    Level: Medium

7. 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

8. Programs are subdivisions of projects.

    Answer: False
    Response: See Section 1.1
    Level: Easy

9. Projects are subdivisions of programs.

    Answer: True
    Response: See Section 1.1
    Level: Easy

10. 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

11. Project budgeting differs from standard budgeting in regards to accounting techniques.

    Answer: False
    Response: See Section 1.2
    Level: Medium

12. 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

13. A similarity between project management and general management is the tendency to "manage by exception."

    Answer: False
    Response: See Section 1.2
    Level: Medium

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

    Answer: False
    Response: See Section 1.2
    Level: Medium

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

    Answer: False
    Response: See Section 1.2
    Level: Medium

16. 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

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

    Answer: False
    Response: See Section 1.2
    Level: Medium

18. 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

19. The group of 17 developed a list of 12 Agile Principles that support the values articulated in the Agile Manifesto. The following is one of those twelve principles: Avoiding changing requirements so that the project can be completed on time and within budget.

    Answer: False
    Response: See Section 1.2
    Level: Easy

20. The group of 17 developed a list of 12 Agile Principles that support the values articulated in the Agile Manifesto. The following is one of those twelve principles: On-time delivery is the primary measure of progress.

    Answer: False
    Response: See Section 1.2
    Level: Easy

21. The group of 17 developed a list of 12 Agile Principles that support the values articulated in the Agile Manifesto. The following is one of those twelve principles: Simplicity--the art of maximizing the amount of work not done--is essential.

    Answer: True
    Response: See Section 1.2
    Level: Easy

22. Scrum is the most popular Agile approach.

    Answer: True
    Response: See Section 1.2
    Level: Easy

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

    Answer: True
    Response: See Section 1.3
    Level: Easy

24. Six Sigma process improvement project usually follow a specific set of phases.

    Answer: True
    Response: See Section 1.3
    Level: Easy

25. 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

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

    Answer: True
    Response: See Section 1.3
    Level: Easy

27. Projects are complex and include interfaces, interdependencies, and many assumptions, any or all of which may turn out to be wrong.

    Answer: True
    Response: See Section 1.3
    Level: Easy

28. The first step in managing risk is to identify these potentially uncertain events and the likelihood that any or all may occur. This is called statistical analysis.

    Answer: False
    Response: See Section 1.3
    Level: Easy

29. The first duty of the project owner and project manager after project approval is to prepare a business case.

    Answer: False
    Response: See Section 1.4
    Level: Easy

30. As the project goes further into the execution stage, the PM's job becomes that of keeping the project on budget and schedule.

    Answer: True
    Response: See Section 1.4
    Level: Easy

31. There are three different life cycles along which projects progress from start to completion.

    Answer: False
    Response: See Section 1.4
    Level: Easy

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

    Answer: False
    Response: See Section 1.5
    Level: Medium

33. 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

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

    Answer: True
    Response: See Section 1.5
    Level: Medium

35. 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

36. 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

37. 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

38. A project manager 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

39. 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

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

    Answer: True
    Response: See Section 1.5
    Level: Medium

41. 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

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

    Answer: True
    Response: See Section 1.5
    Level: Medium

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

    Answer: False
    Response: See Section 1.5
    Level: Medium

44. 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

45. 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

46. For a project, the lower the NPV, the better.

    Answer: False
    Response: See Section 1.5
    Level: Easy

47. In the early years of a project, the outflows usually exceed the inflows.

    Answer: True
    Response: See Section 1.5
    Level: Easy

48. The discounted cash flow methods of calculation are fairly complex.

    Answer: False
    Response: See Section 1.5
    Level: Easy

49. Recent research has found that the most effective support from top management during the project front end is adding resources to the project.

    Answer: False
    Response: See Section 1.5
    Level: Medium

50. 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

51. 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

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

    Answer: False
    Response: See Section 1.6
    Level: Medium

53. 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

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

    Answer: False
    Response: See Section 1.6
    Level: Medium

Multiple Choice

1. 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

2. 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

3. 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

4. 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

5. 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

6. 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

7. When you negotiate the purchase of a new car, you are usually engaged in what type of negotiation?

    a. Win-win negotiation
    b. Win-lose negotiation
    c. Lose-lose negotiation
    d. Minimize-loss negotiation

    Answer: b
    Response: See Section 1.2
    Level: Easy

8. 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 1.2
    Level: Medium

9. Which of the following is not one of the values from the Manifesto for Agile Software Development?

    a. Individuals and interactions over processes and tools
    b. Working software over comprehensive documentation
    c. Customer collaboration over contract negotiation
    d. Finishing on time over keeping within the budget
    e. Responding to change over following a plan

    Answer: d
    Response: See Section 1.2
    Level: Medium

10. In addition to the Agile Manifesto, the group of 17 also developed a list of 12 Agile Principles that support the values articulated in the Agile Manifesto. Which of the following is not one of those 12 principles?

    a. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
    b. The budget is our highest priority.
    c. Welcome changing requirements, even late in development.
    d. Deliver working software frequently.
    e. Business people and developers must work together daily throughout the project.

    Answer: b
    Response: See Section 1.2
    Level: Medium

11. In addition to the Agile Manifesto, the group of 17 also developed a list of 12 Agile Principles that support the values articulated in the Agile Manifesto. Which of the following is not one of those 12 principles?

    a. Build projects around motivated individuals.
    b. The most efficient and effective method of conveying information to and within a development team is a detailed email.
    c. Working software is the primary measure of progress.
    d. Agile processes promote sustainable development.
    e. Business people and developers must work together daily throughout the project.

    Answer: b
    Response: See Section 1.2
    Level: Medium

12. In addition to the Agile Manifesto, the group of 17 also developed a list of 12 Agile Principles that support the values articulated in the Agile Manifesto. Which of the following is not one of those 12 principles?

    a. Continuous attention to technical excellence and good design enhances agility.
    b. Simplicity--the art of maximizing the amount of work not done--is essential.
    c. The best architectures, requirements, and designs emerge from self-organizing teams.
    d. At regular intervals, the team reflects on how to become more effective.
    e. Complex problems require complex solutions.

    Answer: e
    Response: See Section 1.2
    Level: Medium

13. While there are a number of different Agile approaches, they are all based on the Agile Manifesto and the 12 Principles and they all share the following general characteristics except for which one?

    a. Time-to-completion is the most important aspect of managing the project.
    b. The project is divided into iterations most commonly called sprints.
    c. Based on its roots in lean management, there is an emphasis on simplicity.
    d. Project teams are self-managing.
    e. Progress on the project is measured in terms of working product functionality.

    Answer: a
    Response: See Section 1.2
    Level: Easy

14. With scrum, the project work is completed in sprints that typically last how long?

    a. Three to five days
    b. One week
    c. One to two weeks
    d. Exactly two weeks
    e. Three to four weeks

    Answer: c
    Response: See Section 1.2
    Level: Medium

15. The performance of a project is assessed based on three criteria known as the "triple constraints." Which of the following is not one of those constraints?

    a. Time
    b. Budget
    c. Efficiency
    d. Scope

    Answer: c
    Response: See Section 1.3
    Level: Easy

16. Projects that begin with a slow start, have quick momentum in the middle, and then 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

17. 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

18. 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

    Answer: d
    Response: See Section 1.5
    Level: Medium

19. If the initial investment is 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

20. Alchemax Inc. is looking to undertake a project that has an initial fixed investment of $200,000. It 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

21. 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

22. 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

23. 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

24. "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

25. 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

26. 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

27. 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

28. 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

29. 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

30. These projects with objectives or deliverables are only incrementally different in both product and process from existing offerings.

    a. Derivative project
    b. R&D project
    c. Blue-sky project
    d. Breakthrough project
    e. Platform project

    Answer: a
    Response: See Section 1.6
    Level: difficult

31. The planned outputs of these projects represent major departures from existing offerings in terms of the product/service either itself or the process used to make and deliver it, or both.

    a. Derivative project
    b. R&D project
    c. Blue-sky project
    d. Breakthrough project
    e. Platform project

    Answer: e
    Response: See Section 1.6
    Level: difficult

32. These projects are "blue-sky," visionary endeavors, oriented toward using newly developed technologies or existing technologies in a new manner.

    a. Derivative project
    b. R&D project
    c. High-sky project
    d. Breakthrough project
    e. Platform project

    Answer: b
    Response: See Section 1.6
    Level: difficult

33. These projects typically involve a newer technology than platform projects.

    a. Derivative project
    b. R&D project
    c. Blue-sky project
    d. Breakthrough project
    e. High-sky project

    Answer: d
    Response: See Section 1.6
    Level: difficult

Short Answer

1. 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

2. 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

3. 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

4. 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

5. 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

6. 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

7. 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 is not a disaster.

   Response: See Section 1.4
   Level: Medium

8. 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

9. 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. In addition, 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

10. 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