Multiple Choice

1. Which of the following demonstrates the quality of realism required of a project selection model?
   a) It does not require special interpretation, data that are difficult to acquire, or excessive personnel.
   b) It gives valid results within the range of conditions that the firm might experience.
   c) It reflects the multiple objectives of both the firm and its managers.
   d) It deals with situations both internal and external to the project.

   Ans: c
   Section Reference: 2.2 Project Selection Criteria and Models
   Level: easy
   Bloom’s: Comprehension

2. Which of the following demonstrates the quality of flexibility required of a project selection model?
   a) It does not require special interpretation, data that are difficult to acquire, or excessive personnel.
   b) It gives valid results within the range of conditions that the firm might experience.
   c) It reflects the multiple objectives of both the firm and its managers.
   d) It deals with situations both internal and external to the project.

   Ans: b
   Section Reference: 2.2 Project Selection Criteria and Models
   Level: easy
   Bloom’s: Comprehension

3. The two basic types of project selection models identified in the text are ________.  
   a) biased and unbiased  
   b) numeric and nonnumeric  
   c) active and passive  
   d) numeric and qualitative

   Ans: b
   Section Reference: 2.3 Types of Project Selection Models
   Level: intermediate
   Bloom’s: Comprehension
4. A project selected using the sacred cow model is likely to be maintained until successfully completed or until __________.
   a) the project exceeds its budget
   b) the project falls behind schedule
   c) the boss recognizes the project as a failure and terminates it
   d) the project manager is terminated

   Ans: c
   Section Reference: 2.3 Types of Project Selection Models
   Level: easy
   Bloom's: Comprehension

5. If a system is being updated due to operating necessity, the project was selected because __________.
   a) the system is worth saving at any cost
   b) the system is worth saving at the estimated cost of the project
   c) the dimension of cost is not relevant to execution of the project
   d) the cost overruns can be hidden in someone else's budget

   Ans: b
   Section Reference: 2.3 Types of Project Selection Models
   Level: easy
   Bloom's: Comprehension

6. For a project selected using nonnumeric models, identify the true statement regarding relative priorities for project selection.
   a) Operating necessity projects have priority over competitive necessity projects.
   b) Competitive necessity projects have priority over operating necessity projects.
   c) Operating necessity and competitive necessity projects have equal priority.
   d) Product line extension projects have priority over operating necessity projects.

   Ans: a
   Section Reference: 2.3 Types of Project Selection Models
   Level: easy
   Bloom's: Comprehension

7. The drawback of the __________ model is that it fails to consider cash flows obtained once the initial investment has been recovered.
   a) payback period
   b) average rate of return
   c) discounted cash flow
   d) profitability index

   Ans: a
   Section Reference: 2.3 Types of Project Selection Models
Level: intermediate  
Bloom’s: Comprehension

8. If the NPV for a project is < 0, it indicates that the project will __________.
   a) report a profit loss  
   b) report a profit gain  
   c) fail to cover its required rate of return  
   d) fail to generate cash inflows

   Ans: c
   Section Reference: 2.3 Types of Project Selection Models  
   Level: advanced  
   Bloom’s: Application

9. Scoring models are most often used to overcome this disadvantage of profitability models.
   a) The inability to account for the time value of money.
   b) The inability to account for project results beyond the payback period.
   c) The inability to account for multiple decision criteria.
   d) The inability to account for cash flow.

   Ans: c
   Section Reference: 2.3 Types of Project Selection Models  
   Level: intermediate  
   Bloom’s: Comprehension

10. Which of the following is NOT an advantage that favors the use of weighted scoring models?
    a) Multiple objectives can be considered.
    b) Decision makers are compelled to stick with the decision once it has been made.
    c) The models can be adapted to changes in managerial philosophy.
    d) They can help avoid a short-term focus on profitability.

    Ans: b
    Section Reference: 2.3 Types of Project Selection Models  
    Level: easy  
    Bloom’s: Comprehension

11. Real options seek to reduce which of the following risks in projects?
    a) political  
    b) environmental  
    c) technological and commercial  
    d) sociological
Ans: c
Section Reference: 2.3 Types of Project Selection Models
Level: easy
Bloom’s: Knowledge

12. The Åstebro study (2004) of R&D projects found that all the characteristics below were excellent predictors of project commercial success, EXCEPT __________.
   a) technological opportunity
   b) managerial support
   c) expected profitability
   d) development risk

Ans: b
Section Reference: 2.2 Project Selection Criteria and Models
Level: easy
Bloom’s: Comprehension

13. The typical project proposal should include all of the following, EXCEPT a(n) __________.
   a) section describing the past experience of the proposing group
   b) executive summary
   c) description of the ability of the proposer to supply the facilities needed during the project
   d) list of the top executives in the proposing firm

Ans: d
Section Reference: 2.6 Project Bids and RFPs
Level: intermediate
Bloom’s: Comprehension

14. Firms usually have two or more projects and this collection of projects is referred to as __________.
   a) a portfolio
   b) an initiation
   c) a program
   d) a stochastic model

Ans: a
Section Reference: 2.2 Project Selection Criteria and Models
Level: easy
Bloom’s: Knowledge
15. The __________ is also called the benefit-cost ratio.
a) Q-sort method  
b) profitability index  
c) internal rate of return  
d) payback period  

Ans: b  
Section Reference: 2.3 Types of Project Selection Models  
Level: easy  
Bloom’s: Knowledge

16. A technique useful for developing numeric values that are equivalent to subjective, verbal measures of relative value is the __________.  
a) Delphi system  
b) expert system  
c) portfolio  
d) simulation  

Ans: a  
Section Reference: Glossary  
Level: easy  
Bloom’s: Knowledge

17. Which of the following is a type of numeric model?  
a) the sacred cow  
b) the operating necessity  
c) payback period  
d) the product line extension  

Ans: c  
Section Reference: 2.3 Types of Project Selection Models  
Level: easy  
Bloom’s: Comprehension

18. The __________ is the value of an opportunity foregone.  
a) real option  
b) profit  
c) opportunity cost  
d) revenue  

Ans: c  
Section Reference: 2.3 Types of Project Selection Models  
Level: easy  
Bloom’s: Knowledge
19. The underlying premise of the real options approach is that __________.
   a. delaying an investment may lead to greater returns or may lead to elimination of marginal projects
   b. rushing into an investment more quickly may lead to lower returns or may lead to elimination of marginal projects
   c. delaying an investment may lead to increased costs due to delays
   d. rushing into an investment more quickly may lead to less risk

   Ans: a
   Section Reference: 2.3 Types of Project Selection Models
   Level: intermediate
   Bloom’s: Comprehension

20. The __________ is the interest rate set by an organization as the minimum acceptable rate of return for a project.
   a. hurdle rate
   b. acceptable rate
   c. internal rate of return
   d. net present value

   Ans: a
   Section Reference: 2.3 Types of Project Selection Models
   Level: easy
   Bloom’s: Comprehension

21. The mastery of the skills required to manage projects competently is referred to in the literature as __________.
   a. project management conformance
   b. project management maturity
   c. project success
   d. project portfolio management

   Ans: b
   Section Reference: 2.3 Types of Project Selection Models
   Level: easy
   Bloom’s: Knowledge

22. __________ is the process of evaluating individual projects or groups of projects, and then choosing to implement some set of them so that the objectives of the parent organization will be achieved.
   a. Project selection
   b. Project initiation
c. Project management
d. Project control

Ans: a
Section Reference: 2.2 Project Selection Criteria and Models
Level: easy
Bloom’s: Knowledge

23. The process of “carving away the unwanted reality from the bones of a problem” is called ___________
   a. modeling the problem
   b. crafting the problem
   c. defining the criteria
   d. modeling the criteria

Ans: a
Section Reference: 2.2 Project Selection Criteria and Models
Level: intermediate
Bloom’s: Comprehension

24. In a project portfolio, __________ projects have objectives or deliverables that are only incrementally different in both product and process from existing offerings.
   a. breakthrough
   b. R&D
   c. platform
   d. derivative

Ans: d
Section Reference: 2.5 Project Portfolio Management (PPM)
Level: intermediate
Bloom’s: Knowledge

25. In a project portfolio, a project that involves a new technology or even a disruptive technology that is known to the industry would serve as an example of a __________ project.
   a. breakthrough
   b. R&D
   c. platform
   d. derivative

Ans: a
Section Reference: 2.5 Project Portfolio Management (PPM)
Level: intermediate
Bloom’s: Comprehension
26. The set of documents submitted when evaluating a project is referred to as the
__________.
   a. project proposal
   b. evaluation set
   c. evaluation criteria
   d. project manual

Ans: a
Section Reference: 2.6 Project Bids and RFPs
Level: easy
Bloom’s: Knowledge

27. When the decision maker’s information is not complete, he/she will have to make a
decision under conditions of __________.
   a. proof
   b. uncertainty
   c. management
   d. risk mitigation

Ans: b
Section Reference: 2.4 Risk Considerations in Project Selection
Level: intermediate
Bloom’s: Comprehension

28. The sophistication and experience of an organization in managing multiple projects
is called __________.
   a. maturity
   b. uncertainty
   c. program management
   d. multi-tasking

Ans: a
Section Reference: Glossary
Level: easy
Bloom’s: Comprehension

29. Project Typhoon has a net present value of $10,000 and a profitability index of 1.01.
Project Cyclone has a net present value of $10,000 and a profitability index of 1.10.
Project Surf’s Up has a net present value of $10,000 and a profitability index of 1.05. If
only one project could be undertaken, the organization should select __________.
   a. Project Typhoon
   b. Project Cyclone
   c. Project Surf’s Up
30. The discounted cash flow method determines the net present value of all cash flows by discounting them by the __________.
   a. hurdle rate
   b. acceptable rate
   c. internal rate of return
   d. net present value

   Ans: a
   Section Reference: 2.3 Types of Project Selection Models
   Level: intermediate
   Bloom’s: Knowledge

31. Financial forecasts are reported as __________ financial statements.
   a. final
   b. initial
   c. pro forma
   d. hypothetical

   Ans: c
   Section Reference: Glossary
   Level: intermediate
   Bloom’s: Comprehension

32. Which of the following is not a numeric scoring model?
   a. Unweighted 0-1 factor model
   b. Unweighted factor scoring model
   c. Real options
   d. The sacred cow

   Ans: d
   Level: easy
   Section Reference: 2.3 Types of Project Selection Models
   Bloom’s: Comprehension

33. A project selection criteria that focuses on environmental and social issues is
   a. sustainability
   b. comparative benefit model
   c. production line extension

   d. Not enough information is provided

Ans: b
Section Reference: 2.3 Types of Project Selection Models
Level: advanced
Bloom’s: Analysis
34. A project selection criteria that focuses on how well new products would fit the firm’s existing product line would be
   a. sustainability
   b. comparative benefit model
   c. production line extension
   d. operating necessity

   Ans: c
   Level: easy
   Selection Reference: 2.3 Types of Project Selection Models
   Bloom’s: Comprehension

35. According to research by Sanchez and Robert (2010), which of the following is not a reason why strategic benefits may be difficult to appraise?
   a. Not immediately realized
   b. Difficult to quantify
   c. May be confounded with other factors
   d. Easy to plan for when they occur

   Ans: d
   Level: easy
   Selection Reference: 2.3 Types of Project Selection Models
   Bloom’s: Comprehension

36. ______ is a modeling technique for emulating a process, usually conducted a considerable number of times to understand the process better and measure its outcomes under different policies.
   a. Simulation
   b. Project management
   c. Projectizing
   d. Modeling

   Ans: a
   Level: easy
   Selection Reference: 2.3 Types of Project Selection Models
   Bloom’s: Comprehension
Essay

37. Explain why it is necessary for the project manager to understand the reasons leading to the selection of a project.

Ans: If the project manager does not understand what a given project is expected to contribute to the parent organization, the project manager lacks critical information needed to manage the project successfully. It is important for the project manager to make sound business decisions regarding the work that will be done as part of the authorized project scope. The criteria used to select a project should provide the project manager with important insights about what the organization is trying to accomplish. The project manager should use these insights to align the project's work with the organization's objectives.
Level: intermediate
Section Reference: 2.1 Project Management Maturity
Bloom's: Comprehension

38. Project Boulder has a payback period of 2.4 years, an NPV of $10,000, and a profitability index of 1.10. Project Flintstone has a payback period of 3.0 years, an NPV of $10,000 and a profitability index of 1.05. If only one project can be executed, which project should be selected? Explain your reasoning.

Ans: Based on the available data, Project Boulder appears to be more favorable. In addition to recovering the initial investment more quickly, the same net present value is generated using fewer resources.
Section Reference: 2.3 Types of Project Selection Models
Level: advanced
Bloom's: Analysis

39. Explain the difference between risk and uncertainty.

Ans: Uncertainty means that it is possible to have alternate outcomes. Risk is uncertainty that affects the project for better or for worse. If the risk is favorable, it presents the project team with an opportunity to capture. If the risk is unfavorable, it represents a threat that may require a response from the project team. Uncertainty will not always affect the project. If the project is unaffected by the uncertain scenario, the uncertain scenario is not a risk to the project. Uncertainty ends when determinism is achieved.
Section Reference: 2.4 Risk Considerations in Project Selection
Level: intermediate
Bloom’s: Comprehension
40. Consider the following three-year projects A and B each with the same initial investment of $1000. You are presented with the following measures for the projects:

Project A:  
NPV $400; Payback 24 months  

Project B:  
NPV $545; Payback 26 months  

Which project would you choose and why?

Ans: Project B would be the better choice for the following reasons:
Project B has a greater NPV. Since NPV takes into account the time value of money and Payback does not, NPV is a more robust estimate. The fact that the Payback is delayed by two months (a 5.5% delay in a 36 month project) does not warrant leaving $145 on the table (36.25% higher NPV).

Section Reference: 2.3 Types of Project Selection Models  
Level: advanced  
Bloom’s: Analysis

41. Suppose that you have been assigned as the project manager to execute a project that was selected using the sacred cow method of project selection. The project sponsor is an executive who has been with the company for three years. Based on past employment history, the average tenure of a senior executive at your company is 5 years. After reviewing the project’s expectations and requirements, the project team has determined that the payback period will be 3.5 years. What are the implications for you and the project team?

Ans: Many projects are terminated before they can be successfully completed. One potential source of uncertainty in a project that was selected using the sacred cow method would be the continuity of executive leadership. Therefore, it would be important for the project manager to understand the project-related factors that would support the overall corporate strategy for business success. Otherwise, should the sponsoring executive depart the company prior to completion of the project, the project will lack a sponsor. Given the selection method used, the scope of the project is likely to be unstable. A project manager should think about what he/she is doing and how it supports business success. This suggests that the project manager should understand the correlation between the project’s selection criteria and the business strategy.

Level: advanced  
Section Reference: 2.3 Types of Project Selection Models  
Bloom’s: Application

42. Contrast the real options selection approach with profitability models.

Ans: Profitability models analyze a potential project using a single criterion: monetary return. This analysis may also include time value of money but this is not always true. Real options models are based on the concept of investing now to create opportunities for the future. This model analyses a potential project in terms of options that it generates or capability that it provides to a firm in the future. The investment may or may not be profitable or beneficial in the near future.

Section Reference: 2.3 Types of Project Selection Models  
Level: intermediate
Bloom’s: Analysis