

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

Response: Refer to the section: Project Selection Criteria and Models.

Level: easy

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

Response: Refer to the section: Project Selection Criteria and Models.

Level: easy

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

Response: Refer to the section: Types of Project Selection Models.

Level: intermediate

4. A project selected using the sacred cow model will 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

Response: Refer to the section: Types of Project Selection Models.

Level: easy

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

Response: Refer to the section: Types of Project Selection Models.

Level: easy

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

Response: Refer to the section: Types of Project Selection Models.

Level: easy

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

Response: Refer to the section: Types of Project Selection Models.

Level: intermediate

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

Response: Refer to the section: Types of Project Selection Models.

Level: advanced

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

Response: Refer to the section: Types of Project Selection Models.

Level: intermediate

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 easily be adapted to changes in managerial philosophy.
- d) They can help avoid a short-term focus on profitability.

Ans: b

Response: Refer to the section: Types of Project Selection Models.

Level: easy

11. Real options seek to reduce which of the following risks in projects?

- a) political
- b) environmental
- c) technological
- d) sociological

Ans: c

Response: Refer to the section: Types of Project Selection Models.

Level: easy

12. The Astebro 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

Response: Refer to the section: Project Selection Criteria and Models.

Level: easy

13. Project proposals should include all of the following, EXCEPT _____.

- a) a section describing the past experience of the proposing group
- b) an executive summary
- c) a description of the ability of the proposer to supply the facilities, needed during the project
- d) a list of the top executives in the proposing firm

Ans: d

Response: Refer to the section: Project Bids and RFPS (Requests For Proposals).

Level: intermediate

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

Response: Refer to the section: Project Selection Criteria and Models.
Level: easy

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
Response: Refer to the section: Types of Project Selection Models
Level: easy

16. A formalized method for transforming the opinions of a group of individuals into quantitative measures that can be aggregated for use in decision-making is referred to as the _____.
- a) Delphi system
 - b) expert system
 - c) portfolio
 - d) simulation

Ans: a
Response: Refer to the section: Glossary.
Level: easy

17. Which of the following is NOT a type of nonnumeric model?
- a) the sacred cow
 - b) the operating necessity
 - c) payback period
 - d) the product line extension

Ans: c
Response: Refer to the section: Types of Project Selection Models
Level: easy

18. The _____ is the value of an opportunity foregone.
- a) real option
 - b) profit

- c) opportunity cost
- d) revenue

Ans: c

Response: Refer to the section: Types of Project Selection Models

Level: easy

Fill in the blanks

19. The underlying premise of the real options approach is that _____.

Ans: delaying an investment may lead to greater returns or may lead to elimination of marginal projects

Response: Refer to the section: Types of Project Selection Models

Level: Intermediate

20. The _____ is the interest rate set by an organization as the minimum acceptable rate of return for a project.

Ans: hurdle rate

Response: Refer to the section: Types of Project Selection Models

21. The mastery of the skills required to manage projects competently is referred to in the literature as _____.

Ans: project management maturity

Response: Refer to the section: Project Management Maturity.

Level: easy

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.

Ans: Project selection

Response: Refer to the section: Project Selection Criteria and Models.

Level: easy

23. The process of “carving away the unwanted reality from the bones of a problem” is called _____.

Ans: modeling the problem

Response: Refer to the section: Project Selection Criteria and Models.

Level: intermediate

24. In a project portfolio process, the main purpose of the _____ is to establish and articulate a strategic direction for those projects spanning the internal or external boundaries of the organization.

Ans: project council

Response: Refer to the section: The Project Portfolio Process (PPP).

Level: intermediate

25. In a project portfolio, _____ projects have objectives or deliverables that are only incrementally different in both product and process from existing offerings.

Ans: derivative

Response: Refer to the section: The Project Portfolio Process (PPP).

Level: intermediate

26. 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.

Ans: breakthrough

Response: Refer to the section: The Project Portfolio Process (PPP).

Level: intermediate

27. The set of documents submitted when evaluating a project is referred to as the _____.

Ans: project proposal

Response: Refer to the section: Project Bids and RFPS (Requests For Proposals).

Level: easy

28. When the decision maker's information is not complete, he/she will have to make a decision under conditions of _____.

Ans: uncertainty

Response: Refer to the section: Risk Considerations in Project Selection.

Level: intermediate

29. The sophistication and experience of an organization in managing multiple projects is called _____.

Ans: maturity, or project management maturity

Response: Refer to the section: Glossary.

Level: easy

30. 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. If only one project could be undertaken, the organization should select _____.

Ans: Project Cyclone

Response: Refer to the section: Types of Project Selection Models. Although the NPV for both projects are identical, Project Cyclone requires fewer resources to produce the same net present value.

Level: advanced

31. The discounted cash flow method determines the net present value of all cash flows by discounting them by the _____.

Ans: hurdle rate

Response: Refer to the section: Types of Project Selection Models

Level: intermediate

32. If the initial project investment is \$50,000 and the average net cash flow is \$10,000 per year into the foreseeable future, the payback period is _____.

Ans: 5 years

Response: Refer to the section: Types of Project Selection Models.

Level: easy

33. Financial forecasts are reported as _____ financial statements.

Ans: pro forma

Response: Refer to the section: Glossary.

Level: intermediate

Essay

34. 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.

Response: Refer to the section: Introduction.

Level: intermediate

35. 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.

Response: Refer to the section: Types of Project Selection Models.

Level: advanced

36. 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.

Response: Refer to the section: Risk Considerations in Project Selection

Level: intermediate

37. 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).

Response: Refer to the section: Types of Project Selection Models.

Level: advanced

38. 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.

Response: Refer to the section: Types of Project Selection Models.

Level: advanced

39. 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.

Response: Refer to the section: Types of Project Selection Models.

Level: intermediate