1. The process of forecasting or approximating the time and cost of completing project deliverables is called
A. Budgeting
B. Predicting
C. Estimating
D. Planning
E. Guesstimating

2. In practice, estimating processes are frequently classified as
A. Top down/bottom up
B. Rough/polished
C. Precise/order of magnitude
D. Draft/final
E. Both A and B are correct

3. A typical statement in actual practice is that estimates should have a probability of being met _____ of the time.
A. 100%
B. 98%
C. 95%
D. 90%
E. 80%

4. A good starting point for developing time and cost estimates is
A. Past experience
B. Work packages
C. Task analysis
D. Time and motion studies
E. Work breakdown structure

5. Which of the following is not one of the factors that need to be considered to improve quality of estimates for project times and costs?
A. Planning horizon
B. People
C. Padding estimates
D. Profit
E. Project structure

6. Ed is looking over the actual results of projects and comparing them to what was estimated. He notices that projects that took six months or longer to complete were noticeably more off the estimates. Which of the following factors is he recognizing?
A. Padding estimates
B. Planning horizon
C. Project structure
D. People
E. Organization culture

7. Janet is forecasting how much money her department needs to support a new project. She estimates that two people and $25,000 in expenses will cover her needs. Because management typically insists on reducing forecasts by 20 percent, she increases her estimates to allow for that reduction. Which of the following factors is illustrated in this situation?
A. Padding estimates
B. Planning horizon
C. Project structure
D. People
E. Organization culture

8. Which of the following is a good condition for top-down estimating?
A. Cost and time important
B. Fixed price contract
C. Customer wants details
D. Internal, small project
E. All of these are good conditions for top-down estimating

9. Which of the following is a good condition for bottom-up estimating?
A. Strategic decision making
B. Internal, small project
C. Fixed price contract
D. High uncertainty
E. Both C and D are good conditions for bottom-up estimating

10. Top-down estimates are most likely to occur during the _____ phase.
A. Concept
B. Planning
C. Execution
D. Delivery
E. All of these are equally likely

11. _____ estimates are most likely to use low cost, efficient methods.
A. Apportion
B. Ratio
C. Top-down
D. Bottom-up
E. All of these are equally likely

12. Which of the following methods is not considered a top-down approach to estimating project time and cost?
A. Ratio
B. Template
C. Apportion
D. Function point
E. Learning curve

13. Jose is forecasting project time and cost for constructing a new building by multiplying the total square footage by a given dollar amount. Which of the following methods is he using?
A. Ratio
B. Template
C. Apportion
D. Function point
E. Learning curve

14. Sean is forecasting the time and cost of developing a customized software program by looking at the number of inputs, outputs, inquires, files, and interfaces. Which of the following methods is he using?
A. Ratio
B. Template
C. Apportion
D. Function point
E. Learning curve

15. Laura is forecasting the time and cost of developing an intranet for a new customer. Her department has completed six such intranets for customers during the last two years. Although the proposed system is about the same size as the others she estimates that it will take about 10 percent less time and money. Which of the following methods is she using?
A. Ratio
B. Template
C. Apportion
D. Function point
E. Learning curve

A

16. Learning curves are more likely to apply in situations where most of the costs are
A. Materials
B. Labor
C. Overhead
D. Evenly spread over materials, labor, and overhead
E. All of these are equally likely situations for learning curves

17. Which of the following is not one of the bottom-up approaches to estimating project time and cost?
A. Parametric procedures applied to specific tasks
B. Estimates for the WBS work packages
C. Learning curve
D. Template method
E. All of these are bottom-up approaches

18. The approach that begins with a top-down estimate for the project and then refines estimates as the project is implemented is known as _____ method.
A. Function point
B. Template
C. Learning curve
D. Phase estimating
E. Apportion

19. Which of the following would be the best method for projects where the final product is not known and the uncertainty is very large?
A. Function point
B. Template
C. Learning curve
D. Phase estimating
E. Apportion

20. The accuracy of top-down estimates will typically be in the range of
A. Minus 50% to plus 50%
B. Minus 0% to plus 75%
C. Minus 20% to plus 60%
D. Minus 35% to plus 35%
E. Minus 10% to plus 30%

21. The accuracy of bottom-up estimates will typically be in the range of
A. Minus 50% to plus 50%
B. Minus 0% to plus 75%
C. Minus 20% to plus 60%
D. Minus 35% to plus 35%
E. Minus 10% to plus 30%

22. The cost to prepare bottom-up estimates will typically run how much more than the costs to prepare the top-down estimates?
A. About the same
B. About twice as much
C. About three times as much
D. About four times as much
E. About five times as much

23. Typical kinds of costs found in a project include
A. Direct costs
B. Project overhead costs
C. General and administrative costs
D. Only A and B are included
E. A, B, and C are all included

24. Project costs are typically viewed from all of the following except:
A. Scheduled
B. Sunk
C. Actual
D. Committed
E. All of these are correct

25. Which of the following would be considered a direct project cost?
A. Labor
B. Materials
C. Equipment
D. Both A and B are direct costs
E. A, B, and C are all considered direct costs

26. Which of the following is not one of the recommended guidelines for developing useful work package estimates?
A. Estimates should be made by those responsible for the work
B. Use several people to estimate the same work
C. Estimates should be based on normal conditions
D. Estimates should include a normal level of contingency
E. Estimates should be independent of other projects

27. Companies like Boeing, Kodak, and IBM are using which of the following for improving the estimating process?
A. Adjusting estimates based on individual forecasting abilities
B. Benchmarking using the experience of other companies
C. Using time and motion studies
D. Creating historical databases of previous projects
E. All of these are correct

28. Reasons why estimating time and cost are important include all of the following except:
A. To schedule work
B. To determine how long the project should take and cost
C. To develop cash flow needs
D. To determine how well the project is progressing
E. All of the above are valid reasons

29. In a learning curve, the improvement ratio is applied to which of the following items?
A. Direct materials
B. Direct labor
C. Overhead
D. Both A and B are correct
E. A, B, and C are all correct

30. The bottom-up approach for estimating times and costs that uses costs from past projects that were similar to the current project is known as:
A. Detailed WBS work package estimates
B. Template method
C. Function point method
D. Time-phased cost estimates
E. Phase estimating

31. Which of the follow top-down methods is used when projects closely follow past projects in features and costs and result in costs being assigned by percentages to major segments of the project?
A. Apportion
B. Function point
C. Phase estimating
D. Learning curve
E. Consensus

32. Resource shortages, in the form of people, equipment, or materials, is a good example of
A. Hidden interaction costs
B. Things going wrong on a project
C. Normal conditions not applying
D. Changes in project scope
E. None of these are correct

33. People working on prototype development needing time to interact with the design engineers after the design is completed is an example of:
A. Hidden interaction costs
B. Things going wrong on a project
C. Normal conditions not applying
D. Changes in project scope
E. None of these are correct

34. A manager getting further into a project and obtaining a better understanding of what needs to be done to accomplish a project is an example of:
A. Hidden interaction costs
B. Things going wrong on a project
C. Normal conditions not applying
D. Changes in project scope
E. None of these are correct

35. Design flaws being revealed after the fact, extreme weather conditions, and accidents occurring are examples of:
A. Hidden interaction costs
B. Things going wrong on a project
C. Normal conditions not applying
D. Changes in project scope
E. None of these are correct

59. Project estimates should be broken down into as much detail than and with as much accuracy as possible.
FALSE

60. Bottom-up-estimating is another name for overzealous top management estimates.
FALSE

61. The use of past experience is almost always used primarily in the initial phases of a project.
TRUE

62. Due to the averaging out of under-estimates and over-estimates, a long duration project is more likely to be on target than a short term, small project.
Refer to Snapshot from Practice Page 140.
FALSE

63. The project structure chosen to manage the project will have little impact on the actual project work to be accomplished.
FALSE

64. As long as everyone in a project adds just a little padding to reduce risk, the project duration and costs are probably overstated by a small amount.
FALSE

65. Organization culture can significantly influence project time and cost estimates.
TRUE

66. If a project is internal to the company and relatively small, the bottom-up approach to estimating time and costs for the project is the best choice.
FALSE

67. If time and costs are important to a project the top-down approach to estimating time and costs for the project is the best choice.
FALSE

68. The ideal approach to estimating project time and costs is to use both the top-down and the bottom-up approach.
TRUE

69. At the strategic level top-down estimating methods are used to evaluate a project proposal.
TRUE

70. Top-down estimates usually are derived from someone who uses experience and/or information to determine the project duration and total cost.
TRUE

71. Estimating the total cost of a house by multiplying the total square feet by a cost per square foot is an example of the apportion method of estimating costs.
FALSE

72. Estimating the total cost of a project by multiplying each major function by a complexity factor is an example of the apportion method of estimating costs.
FALSE

73. Phase estimating is used when a project cannot be rigorously defined because of the uncertainty of design or the final product.
TRUE

74. Phase estimating uses both the bottom-up and top-down methods for estimating project time and costs.
TRUE

75. Using a WBS permits the use of different levels of detail for different levels of management.
TRUE

76. The Consensus method of estimating costs is a bottom-up technique.
FALSE

77. The salary of the project manager and her administrative assistant is classified as direct labor costs.
FALSE

78. General and Administrative costs are usually allocated as a percent of the total of a direct cost such as labor, materials, or equipment.
TRUE

79. The apportion method is a top-down approach that uses the pooled experience of senior and/or middle managers to estimate the total project duration and cost.
FALSE

80. The function point method of time and cost estimating is best applied to projects that have large, complex physical deliverables, such as a bridge or building.
FALSE

81. Identify and briefly describe the two major categories of estimating project time and costs.
1. Top-down estimates made by top management, and 2. bottom-up estimates are made by those responsible for completing the work packages

82. Why are the estimates for a project's time and costs important for all phases of a project?
The estimates serve as the standard for comparison of actual and plan throughout the life of a project.

83. Identify the factors that should be considered to improve the quality of estimates for project times and costs.
1. planning horizon, 2. project duration, 3. people, 4. project structure and organization, 5. padding estimates, 6. organization culture, and 7. non-project factors

84. Under what conditions would the top-down approach to estimating project times and costs be the best choice?
In the early stages of a project to help develop the initial plan, in making strategic decisions, in projects of high uncertainty, in small internal projects, or in projects with an unstable scope.

85. Under what conditions would the bottom-up approach to estimating project times and costs be the best choice?
When low cost, efficient estimates are needed, when time and cost are important, when working on a fixed price contract, or when the customer wants details.

86. Describe the ideal approach for a project manager to develop optimal estimates for a project's time and costs.
Allow enough time for both the top-down and bottom-up estimates to be worked out and included in the final plan.

87. Identify and briefly describe the five major methods of top-down estimating.
1. consensus, 2. ratio method, 3. apportion method, 4. function point, and 5. learning curves

88. Identify and briefly describe the four major methods of bottom-up estimating.
1. template method, 2. parametric procedure applied to specific tasks, 3. detailed estimates from the WBS work packages, and 4. phase estimating

89. Identify the drawbacks to an excessive level of detail in project times and costs.
1. emphasis on departmental outcomes, and 2. increased paperwork

90. Identify the three major categories of project costs and give an example of each.
1. Direct costs (labor, materials, equipment, other), 2. Project Overhead Costs (salaries of project manager, rent on space to house the project), and 3. General and Administrative Overhead Costs (advertising, accounting, and senior management of the organization)

91. "The best way to improve estimates is to collect and archive data on past project estimates and actuals." Agree or disagree and support your answer.
This technique is rated as a 'best practice' among leading project management organizations. Several large firms have large estimating departments that have developed large time and cost databases.