**Testbank**

to accompany

**Management accounting**

**4th edition**

by

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**Chapter 2: Cost concepts, behaviour and estimation**

**True/false questions**

1. Cost behaviour refers to the way that costs vary in relation to changes in an organisation’s activities.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.1 ~ Demonstrate an understanding of the concept of cost behaviour*

2. The traditional basis for understanding cost behaviour uses an activity analysis cost framework.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.1 ~ Demonstrate an understanding of the concept of cost behaviour*

3. Organisations need to understand how costs behave so they can predict the changes in costs that occur as a result of decisions made about production, sales and services.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.1 ~ Demonstrate an understanding of the concept of cost behaviour*

4. To understand cost behaviour accountants need to consider the drivers of the organisation’s costs.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.1 ~ Demonstrate an understanding of the concept of cost behaviour*

5. Distinguishing between fixed and variable costs is an important element of understanding cost behaviour.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.1 ~ Demonstrate an understanding of the concept of cost behaviour*

6. The cost of beverages on an airplane vary with the number of passengers on the flight.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

7. The line rental paid on a telephone account is an example of a variable cost.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

8. Total fixed costs vary with small changes in activity levels.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

9. An example of a fixed cost is the cost of petrol in a transport company.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

10. Rent on a building is usually a fixed cost.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

11. When a company expands its operations and rents new premises, the rental cost can be classified as a step-wise linear fixed cost.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

12. It is always easy to determine whether a cost is a variable or a fixed cost.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

13. Total costs that have both fixed and variable elements are call mixed costs.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

14. A hospital would have mainly fixed costs because its costs do not vary based on the number of patients it treats.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

15. Most organisations ignore mixed costs because it is too difficult to predict their behaviour.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

16. A relevant range is a span of activity for a given cost object where both total fixed costs and total variable costs per unit of activity remain constant.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

17. The relevant range for an organisation never changes.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

18. When an organisation changes their capacity or operations significantly it is likely that the relevant range will also change.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

19. The incremental cost of an activity is known as the marginal cost.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

20. The marginal cost of an activity is not useful for decision making because managers only need to know the total cost.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

21. Within the relevant range the variable cost approximates the marginal cost.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

22. Cost functions are a mathematical representation of the total cost of a cost object over a relevant range.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

23. Within the relevant range of activity the change in total cost is linear, or close to linear.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

24. When graphing a cost function, the y-intercept represents the variable cost per unit.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

25. When volume is very low or very high, the total cost function is non-linear.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

26. A cost driver is also known as the variable cost per unit.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

27. An input or activity that causes changes in total cost is a cost driver.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

28. The number of patients treated is an example of a cost driver for a hospital’s cardiac ward.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

29. Cost drivers are always considered based on a specific cost object.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

30. Cost objects only ever have one cost driver.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

31. Past costs can be used for estimating future cost behaviour.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

32. When estimating future costs, it is necessary to classify costs into fixed and variable components.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

33. One method for determining cost functions that relies on past costs is regression analysis.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

34. Engineered estimates of costs can only be used by manufacturing firms to estimate future costs.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

35. If the organisation has only operated for a short time several methods of determining the cost function cannot be used.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

36. The method of cost estimation that analyses accounting records to determine future cost patterns is called engineered cost analysis.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

37. Cost functions are most useful for estimating long-term cost patterns.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

38. Scatter plots provide a visual technique for exploring cost behaviour.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

39. Computer programs such as Excel can be used to improve the analysis when using scatter plots.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

40. Reviewing the pattern of a cost over time is a critical step in determining an engineered cost estimate.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

41. The two-point method uses the highest and lowest data points to estimate a mixed cost function.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

42. Preparing a scatter plot is a requirement before applying the two-point method of cost estimation.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

43. The high-low method is a specific application of the two-point method of cost estimation.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

44. When using the two-point method of cost estimation or the high low method, the calculation to derive the variable cost component of a mixed cost is: change in cost ÷ change in cost driver.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

45. One of the problems of the high-low method is that the highest and lowest observation is usually outliers.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

46. The first step in estimating a cost function is to identify relevant costs for the cost object.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

47. When estimating cost functions, it is important to continuously evaluate uncertainties and quality of information.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

48. Multiple methods of cost estimation techniques may be required to estimate total cost functions for a cost object.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

49. The statistical technique that measure the average change in a dependent variable for every unit change in one or more independent variables is called regression analysis.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

50. Regression analysis uses all the available data points and often improve the accuracy of the cost function.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

51. The dependent variable in regression analysis is the cost driver.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

52. Multiple regression analysis develops a cost function for the statistical relationship between total cost and two or more cost drivers.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

53. In the simple regression analysis equation below, α represents the fixed costs.

Y= α + βX + ε

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

54. The cost and time associated with using regression analysis means that it is likely that the costs of using outweigh the benefits of doing so.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

55. Regression analysis produces the most accurate results when there is a strong linear relationship between the cost and cost driver.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

56. Regression analysis removes errors in cost estimation associated with changing cost patterns over time, unusual events and random fluctuations.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

57. In regression analysis, the adjusted *R*-square statistic is used to evaluate how well the cost driver explains the behaviour in the cost.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

58. When comparing the adjusted *R*-squares from multiple regressions, the best equation is represented by the regression with the lowest adjusted *R*-square.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

59. When only one coefficient is statistically greater than zero this means it is likely that the cost being estimated is not a mixed cost.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

60. When generating a list of possible cost-drivers it is important that the change in cost driver could potentially affect the cost.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

61. In regression analysis, the estimated fixed cost is represented by the intercept coefficient.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

62. When an organisation operates in an environment where technologies and costs change rapidly, the information quality of past cost data is reduced.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

63. Overhead cost pools are used to allocate indirect fixed costs only.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

64. The calculation of average cost is total costs ÷ activity.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

65. Management accounting commonly uses average costs in reports because they are more useful for decision-making purposes.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

66. Average costs incorrectly treat fixed costs as variable.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

67. Regression analysis usually provides a higher quality cost function than the high-low method.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

68. Changes in cost behaviour due to inflation or deflation is one source of uncertainty in estimating future costs.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

69. The analysis at the account level method can be used when there is no past cost information available.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

70. Cost estimates that are based on resources used is a characteristic of the engineered estimate of cost method.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

71. Scatter plots facilitates whether a potential cost driver is viable.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

72. In regression analysis it is not necessary to eliminate data from unusual periods because the statistical analysis is able to factor this in to the regression outputs.

a. True

\*b. False

*Correct answer: b*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

73. Regression analysis mismeasures the cost function if data points come from more than one relevant range.

\*a. True

b. False

*Correct answer: a*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

**Multiple-choice questions**

74. Cost behaviour is:

a. another word for cost object.

b. irrelevant for service organisations.

\*c. the variation in costs relative to the variation in activities.

d. an old-fashioned term for activity cost analysis.

*Correct answer: c*

*Learning objective 2.1 ~ Demonstrate an understanding of the concept of cost behaviour*

75. Cost behaviour can be classified in a more contemporary way using:

a. a fixed and variable framework.

\*b. an activity analysis cost framework.

c. a direct and indirect cost framework.

d. all of the options are correct.

*Correct answer: b*

*Learning objective 2.1 ~ Demonstrate an understanding of the concept of cost behaviour*

76. Fixed costs per unit:

a. will not change over the relevant range.

b. are constant regardless of changes in activity.

\*c. vary inversely with changes in activity.

d. increase with an increase in activity.

*Correct answer: c*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

77. Total fixed costs:

a. vary inversely with changes in activity.

b. increase with an increase in activity.

c. decrease with a decrease in activity.

\*d. are constant regardless of changes in activity.

*Correct answer: d*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

78. Total variable costs:

\*a. change proportionately with changes in activity levels.

b. increase with a decrease in activity.

c. have no relevant range.

d. are constant regardless of changes in activity.

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

79. Mixed costs:

a. have a constant per-unit value.

b. are constant in total.

c. consist of the variable portion of all costs.

\*d. consist of fixed and variable costs.

*Correct answer: d*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

80. The total cost function can be represented by the equation TC = F + V x Q. V x Q in the equation represents the:

\*a. total value of variable costs.

b. total value of fixed costs.

c. total value of mixed costs.

d. total value of both fixed and variable costs.

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

81. The relevant range is defined as:

a. a period of time over which total costs do not change.

\*b. a span of activity where both total fixed costs and variable cost per unit of activity remain constant.

c. the volume of production over which step-wise fixed costs increase.

d. the time period in which the level of production does not change.

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

82. Which of the follow is *not* an assumption when estimating a cost function over the relevant range of activity?

a. Mixed costs will change in total

b. Variable cost per unit will be constant

\*c. Variable costs will be constant in total

d. Fixed costs will be constant in total

*Correct answer: c*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

83. Keep Smiling Dental Surgery is located in Christchurch. The company employs three dentists, four dental assistants and two receptionists who book appointments and keep records. The surgery provides a range of services including general dental care, paediatric dental care and teeth whitening. The clinic includes a small retail section that carries specialised products for home treatment.

The surgery has recently updated its communications plan and negotiated a plan with a new provider which includes a monthly line charge and a usage charge for internet activity. The cost structure for communications is best described as a:

a. fixed cost.

b. marginal cost.

c. sunk cost.

\*d. mixed cost.

*Correct answer: d*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

84. Keep Smiling Dental Surgery is located in Christchurch. The company employs three dentists, four dental assistants and two receptionists who book appointments and keep records. The surgery provides a range of services including general dental care, paediatric dental care and teeth whitening. The clinic includes a small retail section that carries specialised products for home treatment.

The surgery has recently updated its communications plan and negotiated a plan with a new provider which includes a monthly line charge and a usage charge for internet activity. The internet usage change is best described as a:

a. fixed cost.

\*b. variable cost.

c. sunk cost.

d. mixed cost.

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

85. Keep Smiling Dental Surgery is located in Christchurch. The company employs three dentists, four dental assistants and two receptionists who book appointments and keep records. The surgery provides a range of services including general dental care, paediatric dental care and teeth whitening. The clinic includes a small retail section that carries specialised products for home treatment.

The clinic’s relevant range of activity would best be measured in terms of:

a. the number of staff employed.

\*b. the number of patients treated.

c. the current budget for staff wages.

d. the number of parking spaces available in the parking lot.

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

86. Keep Smiling Dental Surgery is located in Christchurch. The company employs three dentists, four dental assistants and two receptionists who book appointments and keep records. The surgery provides a range of services including general dental care, paediatric dental care and teeth whitening. The clinic includes a small retail section that carries specialised products for home treatment.

Keep Smiling has recently secured a contract with the Christchurch branch of a major bank to treat their staff. Currently each dentist can treat 35 patients per week. However, the new contract means that they will have a total of 100 patients per week. This means that they will need to employ an additional dentist to cope with the increased demand. No other changes are required to the surgery. The cost attached to employing a new dentist is an example of a:

\*a. stepwise linear cost function.

b. marginal cost.

c. mixed cost.

d. variable cost.

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

87. A fixed cost function which changes at some point but remains constant after the change is called a:

a. piecewise linear cost function.

\*b. stepwise linear cost function.

c. mixed cost.

d. none of the options listed.

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

88. Which of the following statements is true?

a. Past costs are always relevant for decisions and are often useful in estimating future cost behaviour.

b. Past costs are always relevant for decisions, but are rarely useful in estimating future cost behaviour.

\*c. Past costs are never relevant for decisions, but are often useful in estimating future cost behaviour.

d. Past costs are never relevant for decisions, nor are they useful in estimating future cost behaviour.

*Correct answer: c*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

89. In most accounting information systems, costs are often recorded and coded so they can be summarised based on different:

a. cost drivers.

b. activity levels.

\*c. cost objects.

d. independent variables.

*Correct answer: c*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

90. The multiple regression method of developing a cost function:

a. calculates values for the statistical relationship between total cost and a single cost driver.

b. calculates values for the statistical relationship between two dependent cost objects and a single cost driver.

\*c. calculates values for the statistical relationship between total cost and two or more cost drivers.

d. does not use all available data points.

*Correct answer: c*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

91. Which of the following statements is NOT true when using analysis at the account level to estimate a cost function?

a. Salaries are usually fixed.

b. Manufacturing overhead is usually treated as a mixed cost.

c. Materials used in production are usually variable.

\*d. Maintenance on the buildings and facilities is usually treated as variable.

*Correct answer: d*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

92. Hifi Company wants to develop a cost function for its maintenance costs to estimate such costs for the coming year. The following data are available:

|  |  |  |
| --- | --- | --- |
| **Month** | **Machine hours** | **Maintenance costs incurred** |
| January | 8000 | $3600 |
| February | 13000 | $5300 |
| March | 14000 | $6000 |
| April | 11000 | $4600 |

Using the high-low method, what is the variable maintenance cost per machine hour?

a. $0.30

\*b. $0.40

c. $0.20

d. $2.50

*Correct answer: b*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

93. Hifi Company wants to develop a cost function for its maintenance costs to estimate such costs for the coming year. The following data are available:

|  |  |  |
| --- | --- | --- |
| **Month** | **Machine hours** | **Maintenance costs incurred** |
| January | 8000 | $3600 |
| February | 13000 | $5300 |
| March | 14000 | $6000 |
| April | 11000 | $4600 |

Using the high-low method, what is the fixed maintenance cost?

\*a. $400

b. $3200

c. $200

d. $1800

*Correct answer: a*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

94. Hifi Company wants to develop a cost function for its maintenance costs to estimate such costs for the coming year. The following data are available:

|  |  |  |
| --- | --- | --- |
| **Month** | **Machine hours** | **Maintenance costs incurred** |
| January | 8000 | $3600 |
| February | 13000 | $5300 |
| March | 14000 | $6000 |
| April | 11000 | $4600 |

Using the high-low method, what is the cost function for maintenance costs?

a. $1800 + $0.40 per machine hour

b. $300 + $0.40 per machine hour

\*c. $400 + $0.40 per machine hour

d. $200 + $0.40 per machine hour

*Correct answer: c*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

95. The major disadvantage of the high-low method is that it:

\*a. uses the two most extreme data points in determining a cost function.

b. is difficult to calculate.

c. is difficult to understand.

d. involves more judgmental factors than do other methods.

*Correct answer: a*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

96. Highland Rose Ltd is attempting to develop the cost function for repair costs. The following past data are available.

|  |  |
| --- | --- |
| **Machine hours** | **Repair costs** |
| 4800 | $6385 |
| 3400 | 4585 |
| 4000 | 5285 |
| 5900 | 7085 |

Using the high-low method, what is the variable repair cost per machine hour?

\*a. $1.00

b. $0.15

c. $4.00

d. $5.00

*Correct answer: a*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

97. Highland Rose Ltd is attempting to develop the cost function for repair costs. The following past data are available.

|  |  |
| --- | --- |
| **Machine hours** | **Repair costs** |
| 4800 | $6385 |
| 3400 | 4585 |
| 4000 | 5285 |
| 5900 | 7085 |

Using the high-low method, what is the fixed repair cost?

a. $475

b. $850

\*c. $1185

d. $565

*Correct answer: c*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

98. Highland Rose Ltd is attempting to develop the cost function for repair costs. The following past data are available.

|  |  |
| --- | --- |
| **Machine hours** | **Repair costs** |
| 4800 | $6385 |
| 3400 | 4585 |
| 4000 | 5285 |
| 5900 | 7085 |

Using the high-low method, what is the estimated repair cost for 4500 machine hours?

a. $5785

b. $5585

c. $5985

\*d. $5685

*Correct answer: d*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

99. Design Fashion has an average overhead cost per hour of $21.00 at 3500 machine hours and at 3000 hours it is $22.50. The company managers wish to estimate the overhead cost function.

What is the variable overhead cost per machine hour?

a. $1.50

\*b. $12.00

c. $6.00

d. $1.75

*Correct answer: b*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

100. Design fashion has an average overhead cost per hour of $21.00 at 3500 machine hours and at 3000 hours it is $22.50. The company managers wish to estimate the overhead cost function.

What is the fixed overhead cost?

a. $15 750

b. $36 750

\*c. $31 500

d. $6000

*Correct answer: c*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

101. Assuming that a cost is mixed and linear, and that past cost behaviour is expected to continue into the future, which of the following is mostly likely the best technique for estimating future costs?

\*a. Regression analysis

b. Two-point method

c. Scatter plot

d. Engineered estimate of cost

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

102. An organisation’s accountant is estimating next period’s total overhead costs. She performed two regression analyses, one based on direct labour hours and the other based upon machine hours. The results were as follows.

Total overhead = $150 000 + $4 x direct labour hours  
Adjusted *R*-square = 0.83  
Total overhead = $130 000 + $5 x machine hours  
Adjusted *R*-square = 0.77

For the next period the accountant anticipates using 28 000 direct labour hours and 26 000 machine hours. Based upon this information, what is the best estimate for overhead for the next period?

\*a. $262 000

b. $260 000

c. $254 000

d. $270 000

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

103. Which of the following is *not* an assumption of linear regression analysis?

a. The error terms have a constant variance

b. The error terms are independent

\*c. There is a cause and effect relationship between the dependent and independent variables

d. A linear relationship exists between the dependent and independent variables

*Correct answer: c*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

104. Which of the following are forms of regression analysis?

\*a. Simple and multiple

b. Fixed and variable

c. Quantitative and qualitative

d. Financial and managerial

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

105. Simple regression analysis differs from multiple regression analysis based on the number of:

a. the interpretation of the adjusted *R*-square statistic.

b. costs predicted.

c. data points incorporated.

\*d. cost drivers used.

*Correct answer: d*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

106. Simple regression estimates an equation that minimises the distance from each data point to:

a. the error term.

b. the y-intercept.

\*c. a trend line.

d. the x-axis.

*Correct answer: c*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

107. In a multiple regression, more than one cost driver is used to determine which is more appropriate to explain a cost behaviour. The cost being measured is considered a(n):

\*a. dependent variable.

b. independent variable.

c. residual.

d. error term.

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

108. Which of the following is an alternative name for the cost being predicted in a regression analysis?

a. Independent variable

\*b. Dependent variable

c. Beta

d. Slope

*Correct answer: b*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

109. Regression analysis works best when the relationship between costs and cost drivers is:

\*a. positive and linear.

b. negative and linear.

c. positive and indirect.

d. positive, linear and indirect.

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

110. In a regression equation, variable costs per unit are represented by the:

\*a. slope.

b. intercept.

c. error term.

d. adjusted *R*-square coefficient.

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

111. In a regression equation, fixed costs per unit are represented by the:

a. slope.

b. intercept.

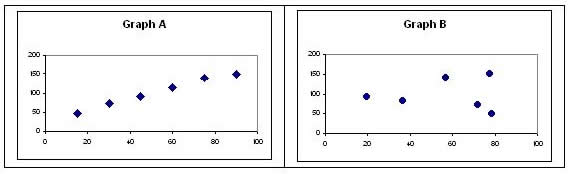
c. adjusted *R*-square coefficient.

\*d. none of the options listed.

*Correct answer: d*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

112. Which graph shows data that are more suitable for regression analysis?



\*a. Graph A

b. Graph B

c. Neither Graph A nor Graph B

d. Cannot be determined

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

113. Simple regression analysis output produces a variety of information and statistics. Which of the following statistics provides information for fixed costs?

\*a. *T*-statistic and *p*-value for the alpha coefficient

b. *T*-statistics for alpha and beta coefficients

c. Adjusted *R*-square

d. *P*-values for alpha and beta coefficients

*Correct answer: a*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

114. Simple regression analysis output produces a variety of statistics. Which of the following statistics best summarises how well the cost driver explains the behaviour of the cost?

a. *T*-statistics for alpha and beta coefficients

b. *T*-statistic and *p*-value for the alpha coefficient

\*c. Adjusted *R*-square

d. *P*-values for alpha and beta coefficients

*Correct answer: c*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

115. When determining whether a coefficient should be used in a cost function the relevant statistic in the regression output is:

a. the coefficient value.

\*b. *p*-value for the coefficient.

c. *t*-statistic for the coefficient.

d. number of observations.

*Correct answer: b*

*Learning objective 2.5 ~ Apply regression analysis in cost estimation*

116. When estimating future costs, information quality is higher when:

a. costs must be allocated.

b. the regression adjusted *R*-square is near zero.

\*c. the accounting system can trace relevant costs to a cost object.

d. most costs are fixed, rather than variable.

*Correct answer: c*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

117. Past cost information might be too unreliable for future cost estimation because:

a. the organisation’s operations have changed considerably.

b. the organisation’s accounting system does not currently capture the necessary information.

\*c. all of the options listed.

d. none of the options listed.

*Correct answer: c*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

118. A disadvantage of regression analysis as a method of determining a cost function is:

a. it is time consuming.

b. uses only two data points.

\*c. mismeasures the cost function if data points come from more than one relevant range.

d. all of the options listed are disadvantages.

*Correct answer: c*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

119. Consider the following cost data for the cost object, number of machine setups. Each set of costs (A, B and C) is from a different type of manufacturing operation and represents the cost behaviour for the cost of that company’s machine setups.

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of machine setups** | **Cost A** | **Cost B** | **Cost C** |
| 0 | $ 0 | $80 | $ 5 |
| 10 | 20 | 79 | 37 |
| 20 | 40 | 82 | 66 |
| 30 | 60 | 78 | 91 |
| 40 | 80 | 81 | 123 |
| 50 | 100 | 79 | 154 |

Cost A is best described as:

\*a. variable.

b. fixed.

c. mixed.

d. direct.

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

120. Consider the following cost data for the cost object, number of machine setups. Each set of costs (A, B and C) is from a different type of manufacturing operation and represents the cost behaviour for the cost of that company’s machine setups.

Cost B is best described as:

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of machine setups** | **Cost A** | **Cost B** | **Cost C** |
| 0 | $ 0 | $80 | $ 5 |
| 10 | 20 | 79 | 37 |
| 20 | 40 | 82 | 66 |
| 30 | 60 | 78 | 91 |
| 40 | 80 | 81 | 123 |
| 50 | 100 | 79 | 154 |

a. mixed.

b. variable.

\*c. fixed.

d. discretionary.

*Correct answer: c*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

121. Consider the following cost data for the cost object, number of machine setups. Each set of costs (A, B and C) is from a different type of manufacturing operation and represents the cost behaviour for the cost of that company’s machine setups.

Cost C is best described as:

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of machine setups** | **Cost A** | **Cost B** | **Cost C** |
| 0 | $ 0 | $80 | $ 5 |
| 10 | 20 | 79 | 37 |
| 20 | 40 | 82 | 66 |
| 30 | 60 | 78 | 91 |
| 40 | 80 | 81 | 123 |
| 50 | 100 | 79 | 154 |

\*a. mixed.

b. variable.

c. fixed.

d. indirect.

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

122. Three different divisions of a university are estimating costs for their human resources departments. Each division has a cost structure that is different from the other divisions and those structures are represented by the following cost behaviour patterns.

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of employees** | **Cost A** | **Cost B** | **Cost C** |
| 0 | $ 0 | $120 | $118 |
| 25 | 50 | 118 | 180 |
| 50 | 100 | 123 | 245 |
| 75 | 125 | 124 | 296 |
| 100 | 200 | 119 | 360 |

Which cost is best described as fixed?

a. Cost A

\*b. Cost B

c. Cost C

d. Cost B and Cost C

*Correct answer: b*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

123. Three different divisions of a university are estimating costs for their human resources departments. Each division has a cost structure that is different from the other divisions and those structures are represented by the following cost behaviour patterns.

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of employees** | **Cost A** | **Cost B** | **Cost C** |
| 0 | $ 0 | $120 | $118 |
| 25 | 50 | 118 | 180 |
| 50 | 100 | 123 | 245 |
| 75 | 125 | 124 | 296 |
| 100 | 200 | 119 | 360 |

Which cost is best described as variable?

\*a. Cost A

b. Cost B

c. Cost C

d. Cost A and Cost C

*Correct answer: a*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

124. Three different divisions of a university are estimating costs for their human resources departments. Each division has a cost structure that is different from the other divisions and those structures are represented by the following cost behaviour patterns.

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of employees** | **Cost A** | **Cost B** | **Cost C** |
| 0 | $ 0 | $120 | $118 |
| 25 | 50 | 118 | 180 |
| 50 | 100 | 123 | 245 |
| 75 | 125 | 124 | 296 |
| 100 | 200 | 119 | 360 |

Which cost is best described as mixed?

a. Cost A

b. Cost B

\*c. Cost C

d. Cost B and Cost C

*Correct answer: c*

*Learning objective 2.2 ~ Explain the different types of cost behaviour*

125. A firm has the capacity to produce 3100 units per week. At 80% capacity, the average total cost per unit is $12.50 and the average variable cost per unit is $7.50. What is the total fixed cost per week, assuming the firm is still operating within its relevant range?

\*a. $12 400

b. $19 375

c. $23 200

d. $15 500

*Correct answer: a*

*Learning objective 2.4 ~ Apply estimation techniques to determine the cost function*

126. A scatter plot is especially useful when managers wish to:

a. compute a cost function.

b. update a past cost function for future changes.

\*c. study the relationship between a cost and a potential cost driver.

d. analyse cost behaviour when only one period of data is available.

*Correct answer: c*

*Learning objective 2.3 ~ Describe different cost estimation techniques*

127. Which of the following are disadvantages of the high low method?

a. Ignores all but two data points

b. Relies on past costs

c. Highest and lowest data points are often atypical

\*d. All of the options listed

*Correct answer: d*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

128. Which of the following cost estimation techniques makes assumptions about the data being analysed?

I Analysis at the account level  
II High low method  
III Regression analysis

a. I only

b. I and II only

c. II and III only

\*d. I, II and III

*Correct answer: d*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*

129. The most reliable cost estimation technique is:

a. the high-low method.

b. a scatter plot.

c. the two-point method.

\*d. regression analysis.

*Correct answer: d*

*Learning objective 2.6 ~ Reflect on the uses and limitations of cost estimates*