Mock Examination : CAT Paper MA2
Managing Costs And Finance

Session : December 2012
Set by : Mr Wilson Aw

Your Lecturer
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☐ Mr Wilson Aw

Your Mailing Address : ______________________________________
______________________________________

Your Contact Number : ________________________________

I wish to have my script marked by my lecturer and
☐ collect the marked script at the SAA-GE Reception Counter
☐ have the marked script returned to me by mail

(Please submit your script latest by 12th November 2012 for marking)
The following information is to be used for questions 1 and 2.
A national chain of tyre fitters holds a popular tyre in inventory for which the following information is available:

- Average usage: 140 tyres per day
- Minimum usage: 90 tyres per day
- Maximum usage: 175 tyres per day
- Lead time: 10 to 16 days
- Re-order quantity: 3,000 tyres

1. Based on the data above, at what level of inventory should a replenishment order be issued?
   A  2,240
   B  2,800
   C  3,000
   D  5,740

2. Based on the data above, what is the maximum inventory control level?
   A  2,800
   B  3,000
   C  4,900
   D  5,800

The following information is to be used for questions 3 and 4.
A large retailer with multiple outlets maintains a central warehouse from which the outlets are supplied. The following information is available for Part Number SF525.

- Average usage: 350 per day
- Minimum usage: 180 per day
- Maximum usage: 420 per day
- Lead time for replenishment: 11-15 days
- Re-order quantity: 7,000 units
- Re-order level: 6,300 units

3. Based on the data above, what is the maximum inventory control level?
   A  5,250
   B  6,500
   C  11,320
   D  12,800

4. What is the minimum stock (inventory) control level?
   A  200
   B  1,750
   C  2,450
   D  4,520
5. The following are all examples of stockout costs except:
   A. Loss of revenue from customers
   B. Loss of bulk purchase discount
   C. Idle time payments to workers
   D. Premium paid to supplier for urgent order.

6. A manufacturing organization uses 5,000 kg of a raw material evenly over a period. The purchase price is $6.50 per kg and the holding cost per period is 10% of purchase price. If the order quantity is 500 kg and a buffer inventory of 100 kg is held, the total holding cost of the raw material in the period is:
   A. $195
   B. $227.50
   C. $325
   D. $3,250

7. A manufacturing firm is very busy and overtime is being worked. The amount of overtime premium contained in direct wages would normally be classed as:
   A. part of prime cost
   B. factory overheads
   C. direct labour costs
   D. administrative overheads.

8. A contract cleaning firm estimates that it will take 2,520 actual cleaning hours to clean an office block. Unavoidable interruptions and lost time are estimated to take 10% of the operatives’ time. If the wage rate is $4 per hour, what is the budgeted labour cost?
   A. $10,080
   B. $11,088
   C. $11,200
   D. $12,197

9. Which of the following would be classed as indirect labour?
   A. Assembly workers in a company manufacturing televisions
   B. A stores assistant in a factory store
   C. Plasterers in a construction company
   D. An audit clerk in a firm of auditors
10. Gross wages incurred in Department 1 in June were $135,000. The wages analysis shows the following summary breakdown of the gross pay:

<table>
<thead>
<tr>
<th></th>
<th>Paid to direct labour</th>
<th>Paid to indirect labour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary time</td>
<td>62,965</td>
<td>29,750</td>
</tr>
<tr>
<td>Overtime</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic pay</td>
<td>13,600</td>
<td>8,750</td>
</tr>
<tr>
<td>Premium</td>
<td>3,400</td>
<td>2,190</td>
</tr>
<tr>
<td>Shift allowance</td>
<td>6,750</td>
<td>3,495</td>
</tr>
<tr>
<td>Sick pay</td>
<td>3,450</td>
<td>650</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$90,165</strong></td>
<td><strong>$44,835</strong></td>
</tr>
</tbody>
</table>

What is the direct wages cost for Department 1 in June?
A $62,965  
B $76,565  
C $86,715  
D $90,165

11. A business is considering a project requiring an investment of $200,000 now and with estimated cash inflows of $23,000 per annum in perpetuity. The first cash inflow would be received in one year's time. The cost of capital is 10% per annum.
What is the net present value of the investment?
A $2,300  
B $3,000  
C $20,000  
D $30,000

12. All of the following costs relating to a machine in a manufacturing process would be classified as indirect expenses **except:**
A the cost of power to run the machine  
B depreciation of the machine  
C insurance of the machine  
D lubricating oil for the machine

13. A machine has an estimated four-year life and a residual value of $2,500. It originally cost $20,000. The depreciation charge in Year 3, if the reducing balance method at 25% is used, is:
A $2,812.50  
B $2,460.94  
C $4,375.00  
D $3,750.00
14. A new vehicle has an estimated six-year life and nil residual value. Depreciation is currently charged at 20% on a reducing balance method on this type of asset. The company is considering changing to a straight-line method of depreciation. Which of the following statements is correct?

A Depreciation would be higher in the first year if a straight-line method is used.
B The total depreciation charge over the whole life of the asset would be used.
C Depreciation would be lower in Year 1 if the straight-line method is used but higher in Year 6, compared to the existing method.
D Depreciation would be lower each year if the straight-line method is used.

15. The process of cost apportionment is carried out so that:
A costs may be controlled
B cost units gather overhead as they pass through cost centres
C whole items of cost can be charged to cost centres
D common costs are shared among cost centres

16. A flexible budget is
A a budget for semi-variable overhead costs only;
B a budget which, by recognising different cost behaviour patterns, is designed to change as volume of activity changes;
C a budget for a twelve month period which includes planned revenues, expenses, assets and liabilities;
D a budget which is prepared for a rolling period which is reviewed monthly, and updated accordingly.

17. A purpose of a flexible budget is:
A to cap discretionary expenditure
B to produce a revised forecast by changing the original budget when actual costs are known
C to control resource efficiency
D to communicate target activity levels within an organisation by setting a budget in advance of the period to which it relates.

18. A fixed budget is:
A a budget for a single level of activity
B used when the mix of products is fixed in advance of the budget period
C a budget which ignores inflation
D an overhead cost budget.
19. Are the following statements about joint product cost apportionment TRUE or FALSE?

1. Using the sales value method of cost apportionment, and where there is no further processing, the gross profit margin of each product will be the same.
2. Using the units of output method of cost apportionment, the joint cost per unit will be the same for all joint products.

<table>
<thead>
<tr>
<th>Statement 1</th>
<th>Statement 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>False</td>
</tr>
<tr>
<td>B</td>
<td>False</td>
</tr>
<tr>
<td>C</td>
<td>True</td>
</tr>
<tr>
<td>D</td>
<td>True</td>
</tr>
</tbody>
</table>

20. The following extracts are from Sam Co's financial statements.
Non-current assets 250,000
Inventory 56,000
Receivables 12,000
Overdraft 2,000
Payables 15,000
Accruals 1,500

What is Sarah Co's working capital?
A $49,500
B $51,000
C $53,500
D $299,500

21. Sources of useful data may be:
(i) External
(ii) Internal
(iii) Financial
(iv) Non-financial

Which of the above sources may be used by an accounting Technician?
A (i), (ii) and (iii) only
B (ii), (iii) and (iv) only
C (ii) and (iii) only
D (i), (ii), (iii) and (iv)
22. Which of the following statements about cost and management accounting are true?

(i) Cost accounting cannot be used to provide inventory valuations for external financial reporting.
(ii) There is a legal requirement to prepare management accounts.
(iii) The format of management accounts may vary from one business to another.
(iv) Management accounting provides information to help management make business decisions.

A (i) and (ii)  
B (i) and (iv)  
C (ii) and (iii)  
D (iii) and (iv)

23. A firm uses job costing. Details of the three jobs worked on during a period are:

<table>
<thead>
<tr>
<th></th>
<th>Job A</th>
<th>Job B</th>
<th>Job C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening work-in-progress</td>
<td>22,760</td>
<td>3,190</td>
<td></td>
</tr>
<tr>
<td>Direct materials in the period</td>
<td>4,620</td>
<td>11,660</td>
<td>14,335</td>
</tr>
<tr>
<td>Direct labour in the period</td>
<td>12,125</td>
<td>10,520</td>
<td>7,695</td>
</tr>
</tbody>
</table>

Overheads are absorbed at 40% of prime cost in each period. Jobs B and C remained incomplete at the end of the period. What is the value of the closing work-in-progress?

A $61,894  
B $65,084  
C $66,360  
D $68,952

24. Costs totaling $4,250 were incurred in a process in a period. 80 units of output were rejected and destroyed in the period, 20 units more than allowed for as a normal loss, leaving 420 units of good production to be transferred to finished goods. What is the amount written off as abnormal loss (to the nearest $)?

A $170  
B $177  
C $193  
D $202

25. Consider the following statements relating to process costing:

Statement 1: normal losses are credited to the process account at the cost per unit incurred on normal production
Statement 2: abnormal gains are debited to the process account at the cost per unit incurred on normal production

Which statement(s) is/are true?

A Both statements are true  
B Neither statement is true  
C Statement 1 only is true  
D Statement 2 only is true
26. Passwords can be set to protect which of the following?
   A. An individual cell on a spreadsheet
   B. A worksheet
   C. A workbook
   D. A cell, a worksheet or a workbook

27. What is a by-product?
   A. A product that has insignificant saleable value compared with the joint products
   B. A product that has no saleable value
   C. A product that can be further processed
   D. A waste product that has to be disposed of at a cost

28. 5,400 units of a company's single product were sold for a total revenue of $140,400. Fixed costs in the period were $39,420 and net profit was $11,880. What was the contribution per unit?
   A. $7.30
   B. $9.50
   C. $16.50
   D. $18.70

29. Which of the following best describes an investment centre?
   A. Part of a business that uses non-current assets
   B. Part of a business that provides a service for other parts of the business
   C. Part of a business where management is only responsible for investment costs
   D. Part of a business where management is responsible for capital investment as well as profit

30. A division has a residual income of $240,000 and a net profit before imputed interest of $640,000. If it uses a rate of 10% for computing imputed interest on its invested capital, what is its return on investment (ROI) to the nearest whole number?
   A. 4%
   B. 10%
   C. 16%
   D. 27%
The following information is for questions 31-33

The budgeted output for a period is 1,500 units and the standard time allowed per unit is 30 minutes. The actual output in the period was 1,400 units and these were produced in 720 hours.

31. Calculate the production/volume ratio
   A  97.2%
   B  93.3%
   C  96.0%
   D  95.8%

32. Calculate the capacity ratio
   A  97.2%
   B  93.3%
   C  96.0%
   D  95.8%

33. Calculate the efficiency ratio
   A  97.2%
   B  93.3%
   C  96.0%
   D  95.8%

34. HH plc monitors the % of total sales that derives from pr developed in the last year. Which part of the balanced scorecard would this metric be classified under?
   A  Financial perspective
   B  Customer perspective
   C  Internal perspective
   D  Learning perspective

35. If the current ratio for a company is equal to its acid test (that is the quick ratio), then:
   A  the current ratio must be greater than one
   B  the company does not carry any inventory
   C  trade receivables plus cash is greater than trade payables minus inventory
   D  working capital is positive

36. A government is looking at assessing hospitals by reference to a range of both financial and non-financial factors, one of which is survival rates for heart by-pass operation. Which of the three E's best describes the above measure?
   A  Economy
   B  Effectiveness
   C  Efficiency
   D  Externality
37. An organisation is divided into a number of divisions, each of which operates as a profit centre. Which of the following would be useful measures to monitor divisional performance?
   Contribution
   Controllable profit
   Return on investment
   Residual income

   A  (i) only
   B  (i) and (ii) only
   C  (iii) and (iv) only
   D  All of them

38. The benefit of using a spreadsheet to prepare a budget is that estimates can be varied without everything having to be recalculated manually.
   Is this statement TRUE or FALSE?

   A  True
   B  False

39. A spreadsheet is more useful than a database when the primary objective is to store large amounts of raw data that needs to be accessed by multiple users.
   Is this statement TRUE or FALSE?

   A  True
   B  False

40. Which of following is not a disadvantage of using spreadsheets?

   A  Spreadsheets are restricted to a finite number of records, and can require a large amount of hard-drive space for data storage
   B  There can be sharing violations among users wishing to view or change data at the same time
   C  Spreadsheets do not have the ability to generate graphs and charts for the analysis of data

41. Which of following is the least suitable application of a spreadsheet package?

   A  Budgeting and forecasting
   B  Maintenance of customer records
   C  Inventory valuation
   D  Variance analysis
42. A business is considering a project requiring an investment of $200,000 now and with estimated cash inflows of $23,000 per annum in perpetuity. The first cash inflow would be received in one year's time. The cost of capital is 10% per annum.
What is the net present value of the investment?
A $2,300  
B $3,000  
C $20,000  
D $30,000

43. A single-product business has the following results for a period:
Sales revenue 268,000 (at $25 per unit)
Less: variable costs 139,360
Contribution 128,640
Less: fixed costs 87,480
Net profit 41,160

What is the break-even point in units?
A 3,499  
B 7,290  
C 8,645  
D 9,074

44. The following statements relate to the use of different raw material pricing methods in a period of consistently rising prices:

Statement 1: Production costs will be higher using Last-in First-out (LIFO) rather than First-in First-out (FIFO)
Statement 2: Raw material inventory values will be lower using Last-in First-out (LIFO) rather than weighted average

Which of the statements is/are true?
A Neither statement  
B Statement 1 only  
C Statement 2 only  
D Both statements

45. A flexible budget is
A a budget for semi-variable overhead costs only;  
B a budget which, by recognising different cost behaviour patterns, is designed to change as volume of activity changes;  
C a budget for a twelve month period which includes planned revenues, expenses, assets and liabilities;  
D a budget which is prepared for a rolling period which is reviewed monthly, and updated accordingly.
46. The conversion costs in a process totalled $47,620 for a period. There was no opening work-in-progress. During the period 9,000 units of product completed production and a further 1,000 units remained, 60% complete.
What was the conversion cost per unit (to 2 decimal places) in the period?
A $4.76  
B $4.96  
C $5.07  
D $5.29

47. A single-product business has the following results for a period:
Sales revenue  268,000 (at $25 per unit)
Less: variable costs  139,360
Contribution  128,640
Less: fixed costs  87,480
Net profit  41,160
What is the break-even point in units?
A 3,499  
B 7,290  
C 8,645  
D 9,074

48. The following forecasts relate to a single-product business for a period:
Variable costs  $38,640
Fixed costs  $39,975
Sales revenue  $84,000
Sales unit  6,000
What sales revenue is required to achieve a profit of $12,000 in the period?
A $74,030  
B $90,615  
C $96,250  
D $112,990

49. An investment project has net present values as follows:
Discount rate 10% per annum, net present value $24,760 positive
Discount rate 20% per annum, net present value $16,110 negative
What is the internal rate of return?
A 106%  
B 129%  
C 161%  
D 28.6%

50. The following are examples of labour costs incurred in production cost centre X in a factory:
1 Basic wages of machine operatives
2 Cost centre supervisor's wages
3 Wages (including overtime premium) of cleaning staff
Which of the labour costs are direct product costs?
A 1 only  
B 1 and 2 only  
C 1 and 3 only  
D 1, 2 and 3