Mock Examination : CAT Paper FMA
Management Accounting

Session : December 2012

Set by : Mdm Gan Bee Eng

Your Lecturer
☑ Mdm Gan Bee Eng
☑ 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)
FOUNDATIONS IN ACCOUNTANCY

FMA - Management Accounting
Mock Test December 2012
ALL 50 questions are compulsory and MUST be attempted
Each question is worth 2 marks

1 Which of the following statements concerning management information is/are correct?
   1. A management information user should have all the information he/she needs to do his/her job properly
   2. A management information report must be relevant for a variety of purposes
   3. A management information report should contain a lot of detail to ensure complete accuracy
   A 1 only     B 1 and 2 only     C 2 and 3 only     D 3 only

2 A company, which uses marginal costing, normally manufactures 1,000 units of a product in a period. The product is sold for $50 per unit. Costs for the 1,000 units are:
   Direct materials $16,300
   Direct labour    $9,800
   Fixed overheads  $21,600
   How much profit will be expected if 1,100 units of the product are manufactured and sold in a period?
   A $2,300     B $2,530     C $4,690     D $7,300

3 A particular cost has been classified as 'semi-variable'.
   How will the average cost per unit of activity be affected by a 20% reduction in the level of activity?
   A Decrease by less than 20%  
   B Decrease by more than 29%  
   C Increase by less than 25%  
   D Increase by more than 25%

4 The following data relates to production activity in a cost centre for a period:

<table>
<thead>
<tr>
<th></th>
<th>Budget</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output (units)</td>
<td>9,600</td>
<td>9,400</td>
</tr>
<tr>
<td>Labour (hours)</td>
<td>2,400</td>
<td>2,320</td>
</tr>
</tbody>
</table>

What was the efficiency ratio in the period (to one decimal place)?
   A 96.7%     B 97.9%     C 98.7%     D 101.3%
5. Which of the following is a feasible value for the correlation co-efficient?

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.55</td>
<td>-1.33</td>
<td>1.55</td>
<td>-2.12</td>
</tr>
</tbody>
</table>

6. A company sold 100,000 units of the products as follows:

   - Product A – 26,000 units
   - Product B – 20,000 units
   - Product C – 23,000 units
   - Product D – 31,000 units

   In a pie chart, what would be the angle of the section representing Product A (to the nearest whole degree)?

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>94 degrees</td>
<td>147 degrees</td>
<td>119 degrees</td>
<td>47 degrees</td>
</tr>
</tbody>
</table>

7. Direct material usage variance arises due to:
   1. Lack of demand for the final product
   2. Substandard or defective materials
   3. Pilferage of materials
   4. Due to a shortage of materials

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>only 1 and 2</td>
<td>only 1 and 3</td>
<td>only 2 and 3</td>
<td>only 3 and 4</td>
</tr>
</tbody>
</table>

8. When is service costing used?

   - A. When indirect costs are a small proportion of total costs
   - B. When overhead absorption is straightforward
   - C. When the absence of a physical product makes it impossible to determine unit costs
   - D. When the output is intangible

9. Are the following statements about marginal costing TRUE or FALSE?

   1. Inventory value will always be lower than when using absorption costing
   2. Profit will always be higher than when using absorption.

<table>
<thead>
<tr>
<th></th>
<th>Statement 1</th>
<th>Statement 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>True</td>
<td>True</td>
</tr>
<tr>
<td>B</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>C</td>
<td>False</td>
<td>True</td>
</tr>
<tr>
<td>D</td>
<td>False</td>
<td>False</td>
</tr>
</tbody>
</table>
10 A customer returns a faulty product to a firm for repair under a warranty scheme. The firm operates a total quality management system.

Which of the following best describe the cost of repair?

A An internal failure cost
B An external failure cost
C An appraisal cost
D A prevention cost

11 Each month, a social club incurs $5,000 of fixed operating costs plus $4.00 of operating cost for every club member. If \( x \) represents the number of club members, which of the following best describes the club’s total monthly operating costs?

A \( y = 5000x \)
B \( y = 4.00 \)
C \( y = 4.00x \)
D \( y = 5000 + 4.00x \)

12 The cost per unit decreases as volume increases for which of the following cost behavior?

A Variable costs and fixed costs
B Variable costs and mixed costs
C Fixed costs and mixed costs
D Only fixed costs

13 Which of the following affects the present value of an investment?

A The interest rate
B The number of time periods (length of the investment)
C The type of investment (annuity versus single lump sum)
D All of the above

14 A company can expect to receive which of the following benefits when it started its budgeting process?

A The planning required to develop the budget helps managers foresee and avoid potential problems before they occur
B The budget helps motivate employees to achieve the company’s sales growth and cost reduction goals
C The budget provides the company’s managers with a benchmark against which to compare actual results for performance evaluation
D All of the above
A company has recorded its total cost for different levels of activity over the last five months as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>Activity level (units)</th>
<th>Total cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>300</td>
<td>17,500</td>
</tr>
<tr>
<td>8</td>
<td>360</td>
<td>19,500</td>
</tr>
<tr>
<td>9</td>
<td>400</td>
<td>20,500</td>
</tr>
<tr>
<td>10</td>
<td>320</td>
<td>18,500</td>
</tr>
<tr>
<td>11</td>
<td>280</td>
<td>17,000</td>
</tr>
</tbody>
</table>

The equation for total cost is being calculated using regression analysis on the above data. The equation for total cost is of the general form ‘y = a + bx’ and the value of ‘b’ has been calculated correctly as 29.53.

What is the value of ‘a’ (to the nearest $) in the total cost equation?

A 7,338  B 8,796  C 10,430  D 10,995

Regression analysis: 
\[ a = \frac{\sum y}{n} - b \frac{\sum x}{n} \]

A company which operates a process costing system had work in progress at the start of last month of 300 units (valued at $1,710) which were 60% complete in respect of all costs.

Last month a total of 2,000 units were completed and transferred to the finished goods warehouse. The cost per equivalent unit for costs arising last month was $10. The company uses the FIFO method of cost allocation.

What was the total value of the 2,000 units transferred to the finished goods warehouse last month?

A $19,910  B $20,000  C $20,510  D $21,710

A company uses a standard absorption costing system. Last month budgeted production was 8,000 units and the standard fixed production overhead cost was $15 per unit. Actual production last month was 8,500 units and the actual fixed production overhead cost was $17 per unit.

What was the total adverse fixed production overhead variance for last month?

A $7,500  B $16,000  C $17,000  D $24,500
18 A company budgets $6 million for customer service costs but actually spends $4 million. Which of the following is true?

A  Because this $2 million variance is favourable, management does not need to investigate further.
B  Management will investigate this $2 million favourable variance to ensure that the cost savings do not reflect skimping on customer service.
C  Management will investigate this $2 million favourable variance to try to identify and then correct the problem that led to the unfavourable variance.
D  Management should investigate every variance, especially unfavourable ones.

19 Which of the following are expenses that may be part of the cost accounts, but not of the financial accounts?

1. Cash discounts available to customers
2. Interest charged to products based on average inventory
3. Notional rent for the use, by different cost centres, of company-owned buildings
4. Trade discounts received from suppliers

A  1 and 4
B  2 and 3 only
C  1, 2 and 3
D  4 only

20 Which of the following balanced scorecard perspectives essentially asks, “Can we continue to improve and create value”?

A  Financial
B  Customer
C  Internal business
D  Learning and growth

21 When considering setting standards for costing which of the following would NOT be considered relevant?

A  The normal level of activity should always be used for absorbing overheads.
B  Average prices for materials should be used, encompassing any discounts that are regularly available.
C  The labour rate used will be the rate at which labour is paid.
D  Average material usage should be established based on generally accepted working practices
22 A company operates a standard marginal costing system. Last month the company sold 200 units more than it planned to sell. The following data relate to last month:

<table>
<thead>
<tr>
<th></th>
<th>Standard</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling price per unit</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td>Variable cost per unit</td>
<td>30</td>
<td>29</td>
</tr>
</tbody>
</table>

What was the favourable sales volume contribution variance last month?

A $1,600  B $1,800  C $2,000  D $2,200

23 A company manufactures and sells one product which requires 8 kg of raw material in its manufacture. The budgeted data relating to the next period are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
<th>Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>19,000</td>
<td></td>
</tr>
<tr>
<td>Opening inventory of finished goods</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Closing inventory of finished goods</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Opening inventory of raw materials</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>Closing inventory of raw materials</td>
<td>53,000</td>
<td></td>
</tr>
</tbody>
</table>

What is the budgeted raw material purchases for next period (in kg)?

A 141,000  B 147,000  C 157,000  D 163,000

24 A company operates a process in which no losses are incurred. The process account for last month, when there was no opening work-in-progress was as follows:

<table>
<thead>
<tr>
<th>Process Account</th>
<th>$</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs arising</td>
<td>624,000</td>
<td></td>
</tr>
<tr>
<td>Finished output</td>
<td></td>
<td>480,000</td>
</tr>
<tr>
<td>(10,000 units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing work-in-progress</td>
<td>144,000</td>
<td>(4,000 units)</td>
</tr>
</tbody>
</table>

The closing work-in-progress was complete to the same degree for all elements of cost.

What was the percentage degree of completion of the closing work-in-progress?

A 12%  B 30%  C 40%  D 75%
25 A company manufactures and sells a single product. In two consecutive months the following levels of production and sales (in units) occurred:

<table>
<thead>
<tr>
<th></th>
<th>Month 1</th>
<th>Month 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>3,800</td>
<td>4,400</td>
</tr>
<tr>
<td>Production</td>
<td>3,900</td>
<td>4,200</td>
</tr>
</tbody>
</table>

The opening inventory for Month 1 was 400 units. Profits or losses have been calculated for each month using both absorption and marginal costing principles.

Which of the following combination of profits and losses for the two months is consistent with the above data?

<table>
<thead>
<tr>
<th>Absorption costing profit/(loss)</th>
<th>Marginal costing profit/(loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month 1</td>
<td>Month 2</td>
</tr>
<tr>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>A 200</td>
<td>(400)</td>
</tr>
<tr>
<td>B (400)</td>
<td>200</td>
</tr>
<tr>
<td>C 200</td>
<td>(400)</td>
</tr>
<tr>
<td>D (400)</td>
<td>200</td>
</tr>
</tbody>
</table>

26 Which of the following best describes a flexible budget?

A A budget which shows variable production costs only.
B A monthly budget which is changed to reflect the number of days in the month.
C A budget which shows sales revenue and costs at different levels of activity.
D A budget that is updated halfway through the year to incorporate the actual results for the first half of the year.

27 If the relationship between production costs and output is connected by the linear relationship $y = 65x + 85,000$, what is 85,000?

A The number of units produced
B Total production costs
C The production cost if 65 units are produced
D The fixed production cost

28 Which of the four components of a time series is missing from the list below?

Trend
Random variations
Cyclical variations

Answer ___________
29.1 Service quality is measured principally by quantitative measures.
True  O    False  O

29.2 Ideal standards are long-term targets.
True  O    False  O

30 A manufacturer wants to calculate a target cost for a new product, the selling price of which will be set at $8,000. The company requires a profit margin of 10%.

The target cost is ____________

31.1 Over absorption means that the overheads charged to the cost of sales are greater than the overheads actually occurred.
True  O    False  O

31.2 A budget for motivational purposes, with fairly difficult targets of performance, is an aspiration budget.
True  O    False  O

Use the following data for questions 32 and 33
A company has budgeted three hours of direct labour per unit at a standard cost of $15 per hour. During September, the staff actually worked 210 hours to complete 75 units and was paid $15.50 per hour.

32 What is the direct labour price variance for September?
A $37.50 (A) B $105.00 (A) C $112.50 (A) D $120.00 (A)

33 What is the direct labour efficiency variance for September?
A $75.00 (F) B $225.00 (F) C $232.50 (F) D $1,350.00 (F)
Use the following data for questions 34 to 37

Sales $4,250,000  
Operating income 850,000  
Total assets 5,000,000  
Current liabilities 250,000

34 What is the sales margin if the target return is 12% and the average cost of capital is 10%?

A 20%  B 85%  C 17%  D 5%

35 What is the division capital turnover?

A 20%  B 85%  C 17%  D 117%

36 What is the division’s ROI?

A 17%  B 5.88%  C 17.89%  D 85%

37 What is the division RI?

A $375,000  B $250,000  C $350,000  D $280,000

38 Which of the following managers is at the highest level of the organisation?

A Cost centre manager  
B Revenue centre manager  
C Profit centre manager  
D Investment centre manager

39 Adam wishes to make a comparison between the sales revenue figures for two different time periods. The following figures were recorded:

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales</th>
<th>Inflation Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 7</td>
<td>$325,000</td>
<td>124</td>
</tr>
<tr>
<td>Year 10</td>
<td>$435,000</td>
<td>130</td>
</tr>
</tbody>
</table>

What is the real increase in the sales revenue over this period in % terms?

A 7.9%  B 27.7%  C 33.8%  D 403.3%
40 Which of the following best describes the term ‘equivalent units’ when using the FIFO method?

A The number of units worked on during a period including the opening and closing stock units.
B The number of whole units worked on during a period ignoring the levels on completion of opening and closing stock units.
C The number of effective whole units worked on during a period allowing for the levels of completion of opening and closing stock units.
D The total number of whole units started during a period ignoring the opening stock units as these were started in the previous period.

41 A company uses standard marginal costing. Last month the standard contribution on budgeted sales was $39,500 and the following variances arose:

<table>
<thead>
<tr>
<th>Variance</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales volume contribution variance</td>
<td>3,950 (A)</td>
</tr>
<tr>
<td>Sales price variance</td>
<td>4,500 (F)</td>
</tr>
<tr>
<td>Total variable cost variance</td>
<td>1,000 (A)</td>
</tr>
<tr>
<td>Total fixed cost variance</td>
<td>2,000 (F)</td>
</tr>
</tbody>
</table>

What was the actual contribution for last month?

Answer: ____________________

42 A division earns a residual income of $400,000. The imputed interest charge is $300,000 and its cost of capital is 20% per annum.

What is the division’s return on capital employed?

A 5.3%    B 6.7%    C 26.7%    D 46.7%

43 The following statements to performance evaluation methods.

(i) Residual income is not a relative measure.
(ii) The return on investment is a relative measure.
(iii) Residual income cannot be calculated for an individual project.

Which of the above are correct?

A (i) and (ii) only
B (i) and (iii) only
C (ii) and (iii) only
D (i), (ii) and (iii)
44 The insurance on the factory building would be a

A Conversion cost but not a prime cost
B A prime cost but not a conversion cost
C Both a prime cost and a conversion cost
D Neither a prime cost or a conversion cost

45 The following statements refer to situations in Process X of an organization which operates a series of consecutive processes:

(i) Direct labour is working at below the agreed productivity level
(ii) A machine breakdown has occurred
(iii) Direct labour is waiting for work to be completed in a previous process

A (i) and (ii) only
B (i) and (iii) only
C (ii) and (iii) only
D (i), (ii) and (iii)

46 Which of the following is not a performance measure from the financial perspective?

A Revenue per employee
B Customer satisfaction index
C Cost reduction per business unit
D Increased operating income from productivity gains

47 Net cash flows, estimated for a capital investment project, have been discounted at four discount rates with the following results

<table>
<thead>
<tr>
<th>Discount rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
</tr>
<tr>
<td>Net present value</td>
</tr>
</tbody>
</table>

What is the best estimate of the IRR using only the above data as appropriate?

A 13.6%  B 14.5%  C 15.4%  D 15.7%
48 A project, investing in new machinery, has an estimated five year life. The cost of capital is 10% per annum. Estimated cash flows are:

<table>
<thead>
<tr>
<th>Time</th>
<th>Cashflows</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>(cost) ($186,000)</td>
</tr>
<tr>
<td>1 to 5</td>
<td>(inflows) $56,000 per annum</td>
</tr>
<tr>
<td>5</td>
<td>(residual value) $10,000</td>
</tr>
</tbody>
</table>

The cumulative discount factor at 10% for Time 1 to 5 is 3.79. The discount factor at 10% for Time 5 is 0.62.

What is the net present value of the project?
A $16,240    B $20,040    C $32,440    D $36,240

49 The production volume ratio for a period was 95%.

What could have caused this?
A Actual hours worked being greater than the budgeted hours
B Actual hours worked being less than budgeted hours
C Standard time for actual output being greater than budgeted hours
D Standard time for actual output being less than budgeted hours

50 A cost centre is charged with the following actual overhead costs for a period:

Allocated costs $28,720
Apportioned costs $10,260

Overheads were absorbed in the cost centre over a period of 1,760 actual labour hours at a predetermined absorption rate of $21.50 per hour. Actual labour hours worked in the period were 90 hours above budget.

What was the overhead over/under absorption in the cost centre?
A $1,140        B $1,935        C $3,055        D $9,120