UNIVERSITY OF KELANIYA – SRI LANKA
Centre for Distance and Continuing Education
Faculty of Commerce & Management Studies
Bachelor of Business Management (General) Degree Second Examination (External) – 2011
December 2013

BMGT E 2035 – Accounting for Managers

No of questions – 07

Time: 03 Hours

Paper consists of two parts. **PART I is compulsory.** Provide the most appropriate answer on your question booklet. From PART II answer **04 questions only.** you are required to answer only for, **four (04) questions from Part II.**

**PART - 1**

(01) In supporting managers, management accountants have four guidelines. These guidelines are;

(i) Cost-benefits analysis, Performance reporting, behavioral considerations and technical considerations.

(ii) Cost-benefits analysis, behavioral considerations, technical considerations and different costs for different purposes.

(iii) Financial statement preparation, technical considerations, strategic direction and budgeting

(iv) Following functional lines of authority, cost-benefit analysis, behavioural considerations and value chain.

(02) Given that for a job standard time is 8 hrs, actual time taken is 6 hrs and the time rate is Rs. 2 per hr. What is the total wages under Halsey premium plan?

(i) Rs. 12

(ii) Rs. 14

(iii) Rs. 16

(iv) Rs. 18

(03) The method which issue prices of material is computed by dividing total purchase cost of material in stock with total quantity in stock,

(i) Simple average method

(ii) Weighted average method

(iii) Periodical average method

(iv) Periodic simple average method
(04) When there is no inter departmental services between two service departments then which of the following method of distribution can be used to distribute overhead cost?
   (i) Direct redistribution method
   (ii) Step method
   (iii) Trial and error method
   (iv) Repeated distribution method.

(05) Existing sales are Rs. 100,000 (500 units) variable costs are Rs. 60,000 fixed costs are Rs. 24,000. If selling price is reduced by 10%. Which of the following is the break even sales quantity.
   (i) 450 units
   (ii) 500 units
   (iii) 400 units
   (iv) 334 units

(06) Which of these statements relating to standard costs is not true?
   (i) They are predetermined costs.
   (ii) They serve as benchmarks against which actual performance can be evaluated.
   (iii) The approach is not suitable for a service business.
   (iv) An unforgettable variance when actual costs exceed standard costs.

(07) Which of the following statements is true?
   (i) Gross margin is another term for contribution margin.
   (ii) Contribution margin is acceptable for use in external financial statements.
   (iii) Contribution margin is used to help managers in decision making
   (iv) Gross margin is revenues minus variable cost.

(08) Which of the following operations would normally be carried out first when preparing a master budget?
   (i) Calculating overhead absorption rates
   (ii) Determining the budget period
   (iii) Identifying the principal budget factor
   (iv) Preparing a forecast profit and loss account
(09) A firm is considering three projects each with an initial investment of Rs. 1000 and a life of 5 years. The generated profits are as follows.

<table>
<thead>
<tr>
<th>Year</th>
<th>Project I</th>
<th>Project II</th>
<th>Project III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>200</td>
<td>350</td>
<td>150</td>
</tr>
<tr>
<td>2</td>
<td>200</td>
<td>200</td>
<td>150</td>
</tr>
<tr>
<td>3</td>
<td>200</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>4</td>
<td>200</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>5</td>
<td>200</td>
<td>150</td>
<td>350</td>
</tr>
<tr>
<td>Total</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
</tbody>
</table>

What is the Accounting Rate of Return on Initial capital?

(i) 40%
(ii) 60%
(iii) 20%
(iv) 30%

(10) Opening Stock 1000 units
Material Purchase 7000 units
Closing Stock 500 units
Material Consumed Rs. 7500

What will be the inventory turnover ratio

(i) 12 times
(ii) 10 times
(iii) 14.5 times
(iv) 9.5 times

(02 marks for each)
(Total 20 marks)
PART - II

(a) "Management Accounting is a system of foresight and not a post- mortem examination. It turns losses into profits, speeds up activities and eliminates wastes" Illustrate above statement briefly.

(b) Explain the basic similarities between Management Accounting and Financial Accounting.

(c) A company uses three raw materials A, B and C for a particular product for which the following data apply.

<table>
<thead>
<tr>
<th>Raw material</th>
<th>usage per unit of product (kgs)</th>
<th>Re-order quantity (Kgs)</th>
<th>Price per kg</th>
<th>Delivery in period (in weeks)</th>
<th>Re-order Level (Kgs)</th>
<th>Minimum Level (Kgs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>10,000</td>
<td>0.10</td>
<td>Minimum</td>
<td>8000</td>
<td>2000</td>
</tr>
<tr>
<td>B</td>
<td>04</td>
<td>5,000</td>
<td>0.30</td>
<td>Average</td>
<td>4750</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>06</td>
<td>10,000</td>
<td>0.15</td>
<td>Maximum</td>
<td>2000</td>
<td></td>
</tr>
</tbody>
</table>

Weekly production varies from 175 to 225 units, averaging 200 units of the said product. What would be the following quantities.

(i) Minimum Stock level of A?
(ii) Maximum Stock level of B?
(iii) Re-order level of C?
(iv) Average stock level of A?

(06 marks)

(04 marks)

(10 marks)

(Total 20 marks)

(03) The budgeted working conditions of a cost centre are as follows.

Normal working per week 42 hours
No. of machines 14
Normal weekly loss of hours on maintenance 5 hours per machine

No. of weeks worked per year 48
Estimated annual overheads Rs. 1,24,320
Estimated direct wage rate Rs. 4 per hour
Actual result in respect of a 4-week period are:
Wages incurred Rs. 9,000
Overhead incurred Rs. 10,200
Machine hours produced 2,000

You are required to calculate;
a) the overhead rate per machine hour

b) the amount of under or over absorption of wages and overheads.

(04 marks)

(04 marks)

c) Management of a manufacturing unit is considering extensive modernization of the factory through progressive mechanization which would result in improved productivity. Workers would be paid 0.5% incentive wages. It was also agreed that through voluntary retirement the staff strength would be reduced to 300 from the present level of 400. The following further comparative data are available before and after the proposed mechanization:

<table>
<thead>
<tr>
<th></th>
<th>Before mechanization</th>
<th>After mechanization</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of articles produced per month</td>
<td>50,000</td>
<td>48,000</td>
</tr>
<tr>
<td>other Allowance</td>
<td>50% of wages</td>
<td></td>
</tr>
<tr>
<td>Wages paid per month for workers</td>
<td>Rs. 4,00,000</td>
<td></td>
</tr>
<tr>
<td>Sales per month (value)</td>
<td>Rs. 24,00,000</td>
<td></td>
</tr>
<tr>
<td>PV ratio</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>

Based on the above data, you are required to work out the annual financial implication of the proposal.

(12 marks)

(Total 20 marks)

(04) a) Differentiate the limitations of Absorption costing and Marginal costing.

(04 marks)

b) Ceramic company Ltd, which is located in Colombo, manufactures a component used in production of industrial goods. The company's fixed costs are Rs. 2,00,00,000 per year. The variable cost of each component is Rs. 1000/= and the components are sold for Rs. 1500/= each. The company sold 7000 components during the previous year.

You are required to;
i) Compute the Break - Even point in units. 

(02 marks)

ii) What will the new break - even point be if the fixed costs increase by 5% 

(02 marks)

iii) What was the company net income for the prior year. 

(03 marks)

iv) The sales manager believes that reduction in the sales price to Rs. 1400 will result in orders for 1000 more components each year. What will the break-even point be if the price is changed? 

(03 marks)

c) Thimira and company has given following data for products x, y and z.

<table>
<thead>
<tr>
<th>Products</th>
<th>Sale (Rs.)</th>
<th>Variable cost (Rs.)</th>
<th>Fixed Cost (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>15,000</td>
<td>3,000</td>
<td>-</td>
</tr>
<tr>
<td>y</td>
<td>15,000</td>
<td>10,500</td>
<td>-</td>
</tr>
<tr>
<td>z</td>
<td>7500</td>
<td>9,000</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>37,500</td>
<td>22,500</td>
<td>10,000</td>
</tr>
</tbody>
</table>

i) Draw a profit volume graph for products x, y and z. 

ii) Calculate sales value at the breakeven point. 

(06 marks)

(Total 20 marks)

(05) a) Siyesta company furnishes the following forecast for the quarter ending 31\textsuperscript{st} March 2013.

(Rs.)

Sales January 24,00,000
February 22,00,000
March 28,00,000

During the month of December last the company made a sale of Rs. 20,00,000 and computed the cost of sales as under.

Rs.

Raw materials 700,000
Wages (variable) 350,000
Overhead (variable) 350,000
Overhead (Fixed) 300,000
The fixed overhead includes depreciation of Rs. 80,000. One fifth of sales is for cash on which a cash discount 1 1/2% is allowed: out of the remaining portion 50% is collected in the same month and the balance in the next month. Raw material suppliers allow a credit of one month. Wages are paid on the last working day of the month to which they relate. While variable overheads are paid in the next month, Fixed overhead expenses are met in the same month.

The percentage of contribution to sales as obtained in December is expected to be maintained during the forth coming quarter also. The cash balance on 1st January 2013 is Rs. 100,000. The company has to pay a sum of Rs. 120,000 as an installment of arrears of wages in March 2013 in terms of a contract with the union. All production will be sold in the same month. Long term loan interest of Rs. 700,000 is payable in January 2013 and the Bank will be charging quarterly interest of Rs. 800,000 on drawings in March 2013.

Prepare a cash Budget showing the cash position for each of the three months of the quarter ending 31st March, 2013.

(20 marks)

(06) a) Neemo company has established the following standards for manufacturing 10 liters of an industrial paint.

5 liters material A at Rs. 350/- per liter
6 liters material B at Rs. 450/- per liter

As the company follows a JIT purchasing policy of raw materials, no stocks of raw material are held. During the period 10,000 liters of industrial paint were produced.

You are given the following information regarding the actual material purchases and usage.

<table>
<thead>
<tr>
<th>Actual quantity purchased and used</th>
<th>Type of material</th>
<th>Actual cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>4600 liters</td>
<td>material A</td>
<td>Rs. 1,656,000</td>
</tr>
<tr>
<td>5900 liters</td>
<td>material B</td>
<td>Rs. 2,625,500</td>
</tr>
</tbody>
</table>

You are required to,

i) Calculate the total material variance and analyze it into its price, usage, mix and yield variances.

(10 marks)
ii) Explain the circumstances under which a material mix and yield variance is relevant to managerial control.

b) The "Mega Brown" company Financial Statement contain the following information.

<table>
<thead>
<tr>
<th></th>
<th>31st March 2011</th>
<th>31st March 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rs.</td>
<td>Rs.</td>
</tr>
<tr>
<td>Cash</td>
<td>200,000</td>
<td>1,60,000</td>
</tr>
<tr>
<td>Sundry debtors</td>
<td>320,000</td>
<td>4,00,000</td>
</tr>
<tr>
<td>Short term Investments</td>
<td>200,000</td>
<td>320,000</td>
</tr>
<tr>
<td>Stock</td>
<td>1840,000</td>
<td>2160,000</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>28,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Current assets</td>
<td>2588,000</td>
<td>30,52,000</td>
</tr>
<tr>
<td>Total assets</td>
<td>56,00,000</td>
<td>64,00,000</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>6,40,000</td>
<td>8,00,000</td>
</tr>
<tr>
<td>10% Debentures</td>
<td>16,00,000</td>
<td>16,00,000</td>
</tr>
<tr>
<td>Equity share capital</td>
<td>20,00,000</td>
<td>20,00,000</td>
</tr>
<tr>
<td>Retain earnings</td>
<td>4,68,000</td>
<td>8,12,000</td>
</tr>
</tbody>
</table>

Statement of profit for the year ended 31st March, 2012

<table>
<thead>
<tr>
<th></th>
<th>Rs.</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>sales</td>
<td></td>
<td>40,00,000</td>
</tr>
<tr>
<td>(-) Cost of goods sold</td>
<td>28,00,000</td>
<td></td>
</tr>
<tr>
<td>(-) Interest</td>
<td>1,60,000</td>
<td>29,60,000</td>
</tr>
<tr>
<td>Less</td>
<td></td>
<td>10,40,000</td>
</tr>
<tr>
<td>Taxes @ 50%</td>
<td>520,000</td>
<td>520,000</td>
</tr>
<tr>
<td>Profit for the year (after tax)</td>
<td></td>
<td>520,000</td>
</tr>
</tbody>
</table>

Dividend declared on equity shares Rs. 2,20,000 from the above figures appraise the financial position of the company from the points of view of

i) Liquidity       ii) Solvency      iii) Profitability
iv) Activity

(10 marks)
(Total 20 marks)

(07) a) What are the principal methods employed for ascertaining the profitability of a capital expenditure project? Write short notes on any two methods.  
(06 marks)
b) **Synthetic company** has a backlog of orders for its solar heating system. To meet this demand, management Plans to expand its production capacity with Rs. 100 million investment in plant and machinery including Rs. 1 million installation cost.

The following information related to this.
- Cost of modification to the machine Rs. 1 million (for special use by company)
- Additional working capital to be incurred Rs. 10 million
The sale value of the machinery at the end of 05 years Rs. 2 million
Annual savings in operating cost (Before taxes and depreciation) Rs. 25 million
The annual depreciation rate 20%
company tax rate 50%
The company expects to use this machinery for five years.

You are required to estimate;

a) Net cost of the machine for the investment

b) Initial cost of the project

c) The net operating cash flow in year I

d) The net cash flow in year 05

e) Payback period of the project.

(02 marks)

(02 marks)

(03 marks)

(04 marks)

(03 marks)

(14 marks)

(Total 20 marks)