

## UNIVERSITY OF KELANIYA - SRI LANKA

# Centre for Distance and Continuing Education

### **Faculty of Commerce & Management Studies**

Bachelor of Commerce (Special) Degree Second Year Examination (External) – 2014 November - 2017 Year II

# BCOM E 2045- Cost and Management Accounting

No. of Questions: Six (06)

Answer five (05) questions only.

Time: 03 hours

#### Question 01

A) State the differences in between cost and management accounting and financial accounting.

(5 Marks)

B) The following data extracts from the books and records of SihinaLtd for the year 2016 and there is no beginning inventory.

Production 7,500 units

Variable Manufacturing cost;

Direct material - Rs. 40 per one unit Direct Labour - Rs. 20 per one unit Variable Overhead – Rs. 10 per unit

Fixed Manufacturing Overhead Rs. 150,000

Sales 6,000 units

Selling and administration Expenses:

Variable

Fixed

Rs. 15 per unit

Rs. 100,000

Selling price Rs. 300 per unit

#### Required:

a) Prepare a marginal costing income statement and an absorption costing income statement.

(8 Marks)

b) Explain the difference between net profit under absorption costing and the same under marginal costing.

(2 Marks)

c) Indicate what would have been the impact on profit in the sales were

I. 4,500 units II. 5,500 units

(5 Marks)

(Total 20 Marks)

#### Question 02

A) Define "Stock Control".

(3 Marks)

B) What types of costs are included in the stock control cost?

(3 Marks)

- C) The XYZ Company purchases a component used in the manufacturing of a product directly from the supplier. XYZ's production operation, which is operated at a constant rate, will require 1,000 components per month throughout the year. If ordering costs are Rs.25.00 per order, unit cost is Rs.2.50 per component, and annual inventory holding costs are charged at 20%, answer the following inventory policy questions for XYZ.
  - I. What is the EOQ for this component?
  - II. What the cycle time in months?
  - III. What are the total annual inventory holding and ordering costs associated with your recommended EOQ?

(6 marks)

D) Following figures relating to two components X and Y.

| Particulars                  | Component X  | Component Y  |  |
|------------------------------|--------------|--------------|--|
| Maximum consumption per week | 75 units     | 75 units     |  |
| Average consumption per week | 50 units     | 50 units     |  |
| Minimum consumption per week | 25 units     | 25 units     |  |
| Reorder period               | 4 to 6 weeks | 2 to 4 weeks |  |
| Reorder quantity             | 400 units    | 600 units    |  |

You are required to calculate:

- I. Re order level
- II. Maximum stock level
- III. Minimum stock level
- IV. Average stock level

for two components separately.

(8 Marks) (Total 20 Marks)

#### Question 03

A) "Cost Volume Profit (CVP) analysis is based on simplistic assumptions". What are they?
(3Marks)

- B) You are the advisor of a welfare society in your organization. You need to help the group to make a decision about "Pen Project" which is going to be implemented with the intention of fund creation to the welfare society. The group hope to sell a pen for Rs.15. The variable cost is Rs.7 per pen, fixed cost is estimated as Rs.8,000 for project and group is expecting to sell 4000 pens. The group asked following questions from you.
  - a) How many pens must we sell to break even?
  - b) How much must we have in sales rupees to break even?
  - c) How many pens must we sell to earn a profit of Rs.20,000?
  - d) What is the margin of safety in units and in sales rupee?

You are required to answer the above questions.

(7 Marks)

C) The following particulars are extracted from the records of a company.

|                                      |      | Produc |      |
|--------------------------------------|------|--------|------|
|                                      | P    | Q      | R    |
| Raw materials per unit (kg)          | 10   | 6      | 15   |
| Labor hours per unit (Rs 1 per hour) | 15   | 25     | 20   |
| Variable overhead                    | 3    | 5 5    | 4    |
| Maximum production possible          | 6000 | 4000   | 3000 |
| Selling price per unit (Rs.)         | 125  | 100    | 200  |

100,000 kg of raw material is available at Rs.10 per kg. Maximum production hours are 1,84,000 On the basis of above information,

Determine the product mix which will give the highest attainable profit.

(10 Marks) (Total 20 Marks)

#### Question 04

A) State the benefits of budgeting for an organization.

(4 Marks)

- B) Wajira Ltd. manufactures three products X, Y and Z. You are required to prepare, the following budgets for the month of January 2018 from the information given below.
  - I. Sales Budget in quantity and value
  - II. Production Budget
  - III. Material Utilization Budget
  - IV. Purchase Budget in quantity and value

#### Sales Forecast

| Product | Quantity | Price per Unit |
|---------|----------|----------------|
| X       | 100,000  | Rs.120         |
| Y       | 250,000  | Rs.190         |
| Z       | 125,000  | Rs.160         |

Material Used in Company's Products are, Material M1 Rs.8 per unit

Material M2 Rs.10 per unit Material M3 Rs.11 per unit

| Quantitiesa | ised in Pr | (Futher |    |  |
|-------------|------------|---------|----|--|
| Product     | M1         | M2      | M3 |  |
| X           | 10         | 8       | 6  |  |
| Y           | 12         | 18      | -  |  |
| Z           | 14         | 10      | 10 |  |

| <b>Rinished Stocks</b>       | er som |      |      |
|------------------------------|--------|------|------|
| Product                      | X      | Y    | Z    |
| Opening<br>Inventory - units | 5200   | 2700 | 1350 |
| Closing<br>Inventory - units | 4800   | 2900 | 2100 |

| Material Stock        | E     |       |       |
|-----------------------|-------|-------|-------|
| Materials             | M1    | M2    | M3    |
| Opening Stock (Units) | 6,000 | 2,500 | 3,200 |
| Closing Stock (units) | 4,700 | 3,400 | 4,100 |

(8 Marks)

## C) Rajika Ltd made the following forecasts for the 1<sup>st</sup> six months of the year 2018.

|               | January | February | March   | April   | May     | June    |
|---------------|---------|----------|---------|---------|---------|---------|
| Sales         | 410,000 | 430,000  | 560,000 | 580,000 | 610,000 | 630,000 |
| Purchases     | 190,000 | 210,000  | 240,000 | 250,000 | 330,000 | 350,000 |
| Manufacturing | 84,000  | 68,000   | 72,000  | 56,000  | 64,000  | 92,000  |
| expenses      |         |          |         |         |         |         |

- I. The expected selling price is Rs.40 per unit.
- II. The cash collection pattern from customers is expected to be:
  - Cash Customers: 40% of sales revenue will be for immediate cash.
  - Credit Customers: 60% of sales revenue will be from credit customers. These debtors will pay their bills 50% in month after sale and the remainder in the second month after sale.
- III. Total purchases are on credit basis and the purchases will be paid for 60% in the month after purchase and the remaining purchases will be paid for in the second month after purchase.
- IV. Expenses of the business will be settled as follows:
  - Lag on payment of manufacturing expenses is quarter month.
  - Wages Rs.40,000 per month payable as incurred.
  - Variable overhead Rs.10 per unit payable as incurred.
  - Fixed overheads Rs.45,000 per month payable as incurred.
- V. Equipment will be purchased on January costing Rs.48,000 which will have a useful life of 5 years. To finance this obtain a loan of Rs.40,000 in July with 12% interest. Interest to be paid monthly, but capital loan repayments will not be commence until July 2018.

By using above information, you are required to prepare,

Cash budget for 3 months starting from April 2018.

(8 Marks)

(Total 20 Marks)

#### Question 05

A) What do you meant by normal loss and abnormal loss? How those are treated in process cost accounts?

(4 Marks)

B) The following information is available in respect of Process 2 for the month of March 2017.

Opening Stock 1000 units

Direct Material 1 (transferred in cost)Rs.4000

Direct Material 2 Rs.2000

Direct Labour Rs.350

Production Overhead Rs.800

Transferred from Process 1 (transferred in cost)16000 units at Rs.81000

Transfer to Process 3 14500 units

Direct Materials added in process 2 Rs.43,750

Direct Labour amounted to Rs.14300

Production Overhead absorbed Rs.28,500

Unit Scrapped500

Degree of Completion

Direct Materials 100%
Direct Labour 60%
Production Overhead 20%

Normal Loss was estimated 5% of production, unit scrapped realized Rs.5 each.

Closing Stock – 2000 units

Degree of Completion

Direct Materials 50%
Direct Labour 20%
Production Overhead 20%

Using weighted average method, you are required to prepare,

- I. Statement of Equivalent Units and Costs
- II. Process 3 Account
- III. Normal Loss Account
- IV. Abnormal Loss/ Abnormal Gain Account

(16 Marks)

(Total 20 Marks)

#### Question 06

A) Discuss limitations of standard costing

(4 Marks)

B) The following information relate to the GantheraLtd's budget for the month of June, 2017.

Production Quantity - 120,000 kg

Direct Materials:

Material A 50,000 kg (Rs.1,200 per kg)

Material B 80,000 kg (Rs.1,600 per kg)

Direct Labour: 60,000 hours (Rs.6,000 per hour)

Variable overheads – Rs.30 million

Fixed overheads – Rs.15 million

Production overhead is absorbed on the basis of direct labour hours.

Actual results achieved during June 2017 are as follows.

Production - 130,000 kg

Direct Materials Purchased:

Material A - 80,000 Kg at Rs.88 million

Material B - 70,000 kg at Rs.98 million

Direct labour hours 80,000 hours worked costing Rs.400 million.

# Variable overheads – Rs.28 million Fixed overheads – Rs.18 million

#### Required:

Compute following variances from the data given above.

- I. Direct material total cost variance
- II. Direct material price variance
- III. Direct material usage variance
- IV. Direct labour total cost variance
- V. Direct labour rate variance
- VI. Direct labour efficiency variance
- VII. Variable overhead cost variance
- VIII. Variable overhead expenditure variance
- IX. Fixed overhead cost variance
- X. Fixed overhead expenditure variance

(16 Marks) (Total 20 Marks)

