## UNIVERSITY OF RUHUNA

# Master of Business Management Degree Program 

## First Semester End Examination 2018 October

## MBM 11053-Accounting for Managers

## Answer all questions.

## Calculators are permitted

Time : 03 Hours
Total Marks 60
01.
a. Why do we need a conceptual framework when we have a comprehensive set of accounting standards such as LKAS and SLFRS?
(04 Marks)
b. According to the conceptual framework, describe the qualitative characteristics of useful financial information.
(04 Marks)
c. Distinguish between an Integrated and an Interlocking Cost Accounting Systems.
(04 Marks)
(Total Marks 12)
02.
a. Cristal is a manufacturing company that produces four products: Alpha, Beta, Gamma and Omega. Each uses the same resources, but in different quantities. As an account executive of Cristal, you have been assigned to examine the application the principles of Activity Based Costing (ABC) to the above four products. Details of the four products and relevant information are given below for one period:

|  | Alpha | Beta | Gamma | Omega |
| :--- | ---: | ---: | ---: | ---: |
| Output in units | 2,400 | 1,200 | 1,600 | 900 |
| Direct material cost per unit Rs. | 420 | 560 | 340 | 680 |
| Direct labour hours per unit | 4 | 3 | 5 | 2 |
| Machine hours per unit | 3 | 5 | 2 | 4 |
| Batch size (units) | 30 | 20 | 40 | 45 |
| Machine setups per batch | 3 | 4 | 2 | 1 |
| Purchase orders per batch | 7 | 4 | 6 | 3 |
| Orders executed | 14 | 8 | 12 | 6 |

Currently the company is paying Rs. 120 per labour hour. Cristal's budgeted production overhead costs for the period are Rs. 1,234,000 and current practice is to absorb these costs into production costs using an absorption rate based on machine hour basis. The total of production overhead for the period is analyzed as follows:

| Cost pool | Rs. | Cost driver |
| :--- | :--- | :--- |
| Machine department costs (rent, <br> maintenance, depreciation and <br> supervision) | 240,000 | Machine hours |
| Machine setup costs | 174,000 | Machine setups |
| Purchasing | 220,000 | Purchase orders |
| Inspection/quality control | 250,000 | Number of batches |
| Materials handling | 120,000 | Orders executed |

The remaining Rs. 230,000 of overhead costs are caused by a number of different factors and activities that are mainly labour related and are to be attributed to products on the basis of labour hours.

Required:
i. To calculate the total costs for each product if all overhead costs are absorbed on a machine hour basis;
(04 Marks)
ii. To calculate the total production costs for each product, using activity-based costing; (06 Marks)
iii. Compare and comment the production costs from your figures in (i) and (ii) above on product pricing and profit implications.
(02 Marks)
(Total Marks 12)
03.
a. Fresh PLC commenced operations five years ago and produces a range of healthy drinks for the retail market. The company uses process costing system based on First In First Out (FIFO) method to value production and inventory. Manufacturing comprises two simple processes: mixing and finishing. All raw materials are added at the start of the both processes. Labour and production overheads, are also called conversion costs are incurred evenly throughout the processes. Details relating to the company's most popular product for the most recent financial period are shown below:

Opening work in progress:

Costs incurred during the period: Direct materials Rs. 720,000 for 15,000 liters of

Normal loss:

Actual output:

Closing work in progress:
input and conversion cost is Rs. 360,000. conversion costs) valued in total at Rs. 148,000 (Rs. 96,000 for direct materials; Rs. 52,000 for conversion).
$5 \%$ of input in the period. All losses, of the process, can be sold for Rs. 15 per liter.

12,500 liters were transferred from the finishing process to the finished goods warehouse.

3,900 liters ( 30 per cent complete in respect of conversion costs).

## Required:

Prepare the following accounts, where applicable, for the financial period. You should ensure that all workings are shown clearly:
i. Process account.
ii. Normal loss account.
iii. Abnormal loss/Abnormal gain account.
(08 Marks)
b. Job costing reports more accurate product costs than process costing. Critically examine the above statement by contrasting the information requirements, procedures and problems associated with each costing method.
(04 Marks)
(Total Marks 12)
04.
a. 'The analysis of total costs into its behavioral elements is essential for effective cost and management accounting.'
Comment on the statement above, illustrating your answer with examples of cost behavior patterns.
(04 Marks)
b. ABC limited was established ten years ago to produce specially designed furniture item to the domestic market. You have recently accepted the position of assistant management accountant in the $A B C$ Limited. One of your tasks is to report variances in production costs on a monthly basis. You have been noticed that even though sales had increased over the past two years, profits for the periods were lower than the budgeted profit. The following table shows the budgeted and actual information for the month of September 2018.

|  | Actual <br> Information | Budgeted <br> Information |
| :--- | ---: | ---: |
| Sales volume (Units) | 150 | 140 |
| Selling price per unit Rs. | 17,000 | 18,000 |
| Production volume (Units) | 175 | 160 |
| Direct materials | 34 | 35 |
| Kgs | 210 | 189 |
| $\quad$ Price per kg Rs. | 325 | 280 |
| Direct labour | 15 | 16 |
| $\quad$ Hours per unit | 975 | 1,120 |
| $\quad$ Rate per hour Rs. | 23,000 |  |
| Variable production overhead per unit Rs. | 14,000 |  |
| Fixed overhead: |  |  |
| Production |  |  |
| Administration |  |  |

The variable overhead is absorbed into production, based on direct labour hours. Total fixed production overhead is budgeted to be Rs. 454,000 ( $30 \%$ for administration) for the year and normal annual production is budgeted to be 1800 units.

## Required

Prepare a statement which reconciles the budgeted profit with the actual profit for the month of September2018. showing individual variances for the above information.
(08 Marks)
(Total Marks 12)
05.
a. Diamond Limited is preparing its annual budget for the year ended 31 December 2019. It manufactures and sells one product, which has a selling price of Rs. 1,600. The marketing manager believes that the selling price can be increased to Rs. 1,750 from $01^{\text {st }}$ April 2019 and that at this price the sales volume for each quarter of 2019 will be as follows:

## Sales volume (Units)

| Quarter 01 | 4,500 |
| :--- | :--- |
| Quarter 02 | 3,600 |
| Quarter 03 | 4,200 |
| Quarter 04 | 5,000 |

Sales volume for each quarter of 2020 are expected to be 4,800 units.
Each unit of output of finish product which is manufactured requires three materials called A, B and C which are purchased from outside suppliers. The following information is available.

| Material | Requirement per <br> unit | Price per Kg |
| :---: | :---: | ---: |
| A | 2 kg | Rs. 150 |
| B | 4 kg | Rs. 100 |
| C | 5 kg | Rs. 120 |

These material components are expected to increase by $10 \%$ with effect from $01^{\text {st }}$ July 2019. Product is required four standard labour hours which is paid at Rs. 120 per hour. With from $01^{\text {st }}$ October 2019, $5 \%$ increase in wage costs is anticipated.

Variable overhead costs are expected to be Rs. 150 per unit for the whole of 2019; and fixed production overhead costs are expected to be Rs. 360,000 for the year, and are absorbed on a per unit basis. Stocks on 31 December 2018 are to be as follows:

| Finished units | 1,500 |
| :--- | :--- |
| Material A | $2,500 \mathrm{~kg}$ |
| Material B | $3,000 \mathrm{~kg}$ |
| Material C | $\mathbf{4 , 5 0 0} \mathrm{kg}$ |

The following is the inventory holding policy.
Closing inventory of finish goods: 20 percent of next quarter's sales
Closing inventory of materials: 10 percent of next quarter's production requirements

## Required

Prepare the following budgets of Diamond limited for the year ended 31 December 2019, showing value for each quarter and the year in total:
i. Sales budget
ii. Production budget
iii. Material usage budget
iv. Production cost budget
(09 Marks)
b. What is a zero-based budget and how does it differ from other more traditional forms of budgeting?
(03 Marks)
(Total Marks 12)

