## EASTERN UNIVERSITY, SRI LANKA

FACULTY OF COMMERCE AND MANAGEMENT
FIRST YEAR - SECOND SEMESTER EXAMINATION IN BACHELOR OF BUSINESS
ADMINISTRATION / BACHELOR OF COMMERCE 201612017 (JANUARY 2019)
(PROPER/ REPEAT)
DAF 1023 COST AND MANAGEMENT ACCOUNTING
nswer all questions
alculator is permitted
Time: 03 Hours
a. It is commonly suggested that a Management Accounting System should be capable of supplying different measures of cost for different purposes. You are required to set out the main types of purposes for which cost information may be required in a business organization, and to discuss the alternative measures of cost which might be appropriate for each purpose.
(Marks 05)
b. Distinguish between, and provide an illustration of:
i. "Avoidable" and "Unavoidable" costs;
ii. "Cost centers" and "Cost units".
(Marks 05)
c. Product Wye is purchased by Ace Ltd. for resale and the 10,000 units annual demand is spread evenly throughout the year. Incremental ordering costs are Rs. 100 per order and the normal unit cost is Rs.20. However, the suppliers of Wye are now offering quantity discounts for large orders. The details of these are:

| Quantity ordered | Unit price (Rs.) |
| :--- | :---: |
| Up to 999 | 20.00 |
| 1,000 to 1,999 | 19.80 |
| 2,000 and over | 19.60 |

The purchasing manager feels that full advantage should be taken of discounts and purchase should be made at Rs. 19.60 per unit using orderseffor 2,000 units or more. Holding costs for Wye are calculated at Rs. 8.00 per unit per year and this figure will not be altered by any change in the purchase price per unit.

## Required:

Advise Ace Ltd. on the correct size of order for the purchase of Wye.
d. The following data relate to work at a certain factory.

Normal working day 8 hours
Basic rate of pay per hour Rs. 600
Standard time allowed to produce 1 unit 2 minutes
Premium bonus $75 \%$ of time saved at basic rate

What will be the labour cost in a day when 340 units are made?
02. a. Briefly describe material handling procedures.
b. A furniture making business manufactures quality furniture to customers' orde three production departments and two service departments. Budgeted ovent for the coming year as follows:

Total (Rs.)

| Rent and Rates | 16,000 |
| :--- | ---: |
| Machine insurance | 6,000 |
| Depreciation | 18,000 |
| Production supervisor's salaries | 24,000 |

Heating Lighting 6,400 70,400

The three production departments $-\mathrm{A}, \mathrm{B}$ and C and the two service depatrie and Y , are housed in the new premises, the details of which, together statistics and information are given below.

Departments

| Details | A | B | C | X |
| :--- | ---: | ---: | ---: | ---: |
| Floor area occupied (sq. metres) | 3,000 | 1,800 | 600 | 600 |
| Machine value (Rs.'000) | 24 | 10 | 8 | 4 |
| Direct labour hours budgeted | 3,200 | 1,800 | 1,000 |  |
| Labour rates per hour (Rs.) | 3.80 | 3.50 | 3.40 | 3.00 |
| Allocated overheads: Specific to each <br> department (Rs.'000) | 2.8 | 3.50 | 3.40 | 3.00 |
| Service Department X's costs apportioned | $50 \%$ | $25 \%$ | $25 \%$ |  |
| Service Department Y's costs apportioned | $20 \%$ | $30 \%$ | $50 \%$ |  |

## Required:

i. Prepare a statement showing the overhead cost budgeted for each department, showing the basis of apportionment used. Also calculate suitable overhead absorption rates.
(Marks 12)
ii. Two pieces of furniture are to be manufactured for customers. Direct costs are as follows:

Job 123 Job 124

| Direct Material | Rs. 154 | Rs. 108 |
| :--- | :--- | :--- |
| Direct Labour | 20 hours Dept. A | 16 hours Dept. A |
|  | 12 hours Dept. B | 10 hours Dept. B |
|  | 10 hours Dept. C | 14 hours Dept. B |

Calculate the total costs of each job.
(Marks 06)
iii. If the firm quotes prices to customers that reflect a required profit of $25 \%$ on selling price, calculate the quoted selling price for each job.
(Marks 02)
(Total Marks 25)
03. a. Magic Ltd. manufactures two products, known as Luxx and Raani. Luxx is produced in department 1 and Raani in department 2. The following information is available for 2019.

Standard material and labour costs:

| Detail | Rs. |
| :--- | :---: |
| Material P | 25.00 per unit |
| Material Q | 32.00 per unit |
| Direct labour | 150.00 per hour |

The standard material and labour usage for each product is as follows:

| Detail | Luxx | Raani |
| :--- | :---: | ---: |
| Material P | 12 units | 10 units |
| Material $Q$ | 6 units | 8 units |
| Direct labour | 8 hours | 7 hours |

Other relevant data is as follows for the year 2019:

| Detail | Finished product |  |
| :--- | ---: | ---: |
|  | Luxx | Raani |
| Forecast sales (units) | 9,000 | 3,500 |
| Selling price per (units) | Rs. 45 | Rs.40 |
| Ending inventory required (units) | 2,540 | 1,800 |
| Beginning inventory (units) | 370 | 160 |


| Detail | Direct material |  |
| :--- | :---: | ---: |
|  | Material P | Material Q |
| Beginning inventory (units) | 6,000 | 4,000 |
| Ending inventory required (units) | 8,400 | 7,300 |

You are required to prepare the following budgets:
i. Sales budget
ii. Production budget
iii. Direct materials usage budget
iv. Direct materials purchase budget
v. Direct labour budget
b. The following particulars were obtained from the books of a firm for two periot

| Particulars | Period I | Period II |
| :--- | :---: | :---: |
| Units sold | 7,000 | 9,000 |
| Selling price per unit | Rs. 100 | Rs. 100 |
| Profit or Loss | Rs. 10,000 (profit) | Rs. 10,000 (Loss) |

## Calculate:

i. PN ratio
ii. The amount of fixed expenses
iii. Break-even point
iv. Profits when sales were Rs. $1,000,000$
v. Margin of safety for the period II
a. PQ Ltd had the following transactions in one of its raw material during December 2018.

| Opening Stock |  | 50 units | @Rs. 15 each |
| ---: | :--- | :--- | :--- |
| December 6 | Bought | 80 units | @ Rs. 18 each |
| 9 | Used | 70 units |  |
| 14 | Bought | 90 units | @ Rs. 19 each |
| 15 | Used | 100 units |  |
| 17 | Bought | 150 units | @ Rs. 20 each |
| 20 | Used | 40 units |  |
| 24 | Used | 60 units |  |
| 28 | Bought | 50 units | @ Rs. 22 each |
| 30 | Used | 60 units |  |

You are required to write up storage ledger card using FIFO method of stock valuation.
(Marks 05)
b. From the following information, calculate earnings of each worker under Rowan Plan.

Hourly rate of wages
Standard time allowed
Actual time taken by worker A

| B | 10 hours |
| :--- | :--- |
| C | 07 hours |

( in iarks 05)
c. $A B$ is a manufacturing company which is specialized for an industrial product. Production Director has just raised his concerns that the factory modernization can no longer be delayed due to higher level of competition being faced by the company. The board of Directors now has arrived at a conclusion that the modernization should commence in beginning of March 2019 but only after running a proper analysis on the cash position of the company.

During the modemization, which is expected to take four months to complete, no production of the company's single product will be possible.

The following additional information is available.
i. Sales/Debtors: Demand forecasts for the month under review would be as follows.

| Nov | Dec | Jan | Feb | Mar | Apr | May | Jun |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 2018 | 2019 | 2019 | 2019 | 2019 | 2019 | 2019 |
| 800 | 800 | 800 | 700 | 700 | 700 | 900 | 900 |
| units | units | units | units | units | units | units | units |

The product is priced and sold at Rs. 20000 per unit.
All sales are on credit, $50 \%$ being received in cash in the month following the month of sale and $50 \%$ in the month after that.
ii. Production/ finished goods stock: Production will be at a level of 1200 month for January and February 2019. Finished goods stock is 2800 u beginning of January 2019.
iii. Raw material stock: Raw material stock is Rs. 7.2 million at the beginningo 2019. This will be increased by the end of January 2019 to Rs. 8 million ar to Rs. 2 million by the end of February 2019.
iv. Cost per unit

Variable cost (Rs):
Raw material 7000
Direct labour 4000
Overhead 2000
Fixed cost (Rs):
Overhead 5000

Fixed overheads have been apportioned to units on the basis of the nom level of 800 units per month and include depreciation of Rs. 800,000 pert addition to the above unit costs, overtime premium of Rs. 1 million per morf incurred in month January and February 2019. During the modernization cost will be avoided, apart from direct labour which will be incurred at equivalent to 800 units production per month. Outlays on fixed overhead reduced by Rs. 800,000 per month during the modernization.
v. Payments: Creditors for raw materials, which stand at Rs. 5.4 millon beginning of January 2019, are paid in the month following purchase. payments are made in the month in which the liability is incurred.
vi. Liquidity: The company expects a bank overdraft balance, of Rs. 7.8 millo beginning of January 2019

## Required:

Prepare a monthly cash budget covering the six months since January 2019.

