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## SCHOOL OF ACCOUNTING AND BUSINESS

## BSc. (APPLIED ACCOUNTING) GENERAL / SPECIAL DEGREE PROGRAMME

## YEAR I SEMESTER I (Intake IV- Group B) END SEMESTER EXAMINATION - SEPTEMBER 2015

## AFM10230 Fundamentals of Management Accounting

| Date | $:$ | 19th September 2015 |
| :--- | :--- | :--- |
| Time | $:$ | 9.00 a.m. -12.00 p.m. |
| Duration | $:$ | Three (03) Hours |

## Instructions to Candidate:

- This paper consists of three sections (A, B and C).

Section A - Ten Multiple Choice questions (Compulsory)
Section B - Answer four (4) questions out of five (5)
Section C - Answer one (1) questions out of two (2)

- Please submit answers to Question No. 1 of Section A separately.
- The total marks for the paper is 100 .
- The marks for each question are shown in brackets.
- Use of scientific calculator is allowed.
- Answers should be written neatly and legibly.


## SECTION A

## Question No. 01

All questions are compulsory in this section and you are required to select the correct answer, to each out of the given alternatives.
i. Managerial Accounting is concerned with;
a. Providing information to the managers of an entity for planning and, controlling decisions
b. Recording day -to -day transactions of the business organization
c. Providing information to external users of an entity for planning, controlling \& decision making.
d. Adhering to the statutory requirements
ii. Cost Accounting emerged mainly on account of;
a. Statutory requirements
b. Competition in the market
c. Limitations of financial accounting
d. Determining the tender prices
(1 Mark)
iii. Decision making process has correctly mentioned in;
a. Set objectives, data collection ,search for alternatives, selecting the best alternative, implement the decision, respond to deviations \& compare results
b. Set objectives, search for alternatives, data collection, selecting the best alternative, implement the decision, measure actual results, compare actual results with plan \& respond
c. Set objectives, data collection ,search for alternatives, , selecting the best alternative, implement the decision, respond to deviations \& compare the results, measure actual results
d. search for alternatives, Set objectives, data collection, selecting the best alternative, implement the decision, compare actual results with plan \& respond
iv. Challenges of introducing the technology in to management accounting practices;
a. may result in improved efficiency
b. May result in increasing the cost
c. May require repositioning of skill and knowledge of users
d. All of the above
v. A monetary measure of the resources sacrificed to achieve a specific objective, such as manufacturing or acquiring a product is known as;
a. Cost object
b. Cost
c. Responsibility centre
d. Cost centre
vi. Following information is provided in relation to a Garment manufacturing organization for the month of July 2015.

|  | Rs ‘000' |
| :--- | :---: |
| Cost of fabrics | 2,500 |
| Other direct materials | 900 |
| Machine operators' salary | 750 |
| Supervisors' salary | 500 |
| Head office salaries | 1,000 |
| Machinery maintenance | 300 |
| Electricity \& Water -Manufacturing | 500 |
| Royalty payment | 250 |

Total direct cost of manufacturing for the month is;
a. Rs.4,900,000
b. Rs.4,400,000
c. Rs.3,400,000
d. Rs.4,150,000
vii. Using the data given in (vi) above, the calculated total manufacturing cost of the Garment Factory for July 2015 is;
a. Rs.6,700,000
b. Rs.6,600,000
c. Rs.5,700,000
d. Rs.5,400,000
viii. Marginal cost refers;
a. Costs which are included but not considered for decisions
b. Costs that have already been incurred
c. Costs which are to be incurred although the plant is shut down temporarily
d. Variable cost of producing an additional unit
ix. The following information is provided

Output 6,000 units
Variable cost per unit Rs. 60
Direct Material cost per unit Rs. 30
Selling Price per unit Rs. 80
Total fixed cost Rs.30,000

Accordingly;
Contribution per unit \& the break-even point in units are respectively;
a. Rs. 25 and 1,000 units
b. Rs. 20 and 1,500 units
c. Rs. 30 and 1,500 units
d. Rs. 50 and 1,500 units
x. Use the data given in the (ix) above, If company is willing to earn a profit of Rs.20,000 calculate number of units to be sold in order to achieve the target?
a. 2,000 units
b. 1,500 units
c. 2,500 units
d. 2,250 units

## SECTION-B

Answer four (4) questions out of five (5)

## Question No. 02

i. Accounting information is widely used by different stakeholders to fulfill their diverse decision making needs.

Identify three (3) uses of accounting information to managers of the organization.
ii. The following data related to the manufacturer of a standard product during four weeks ending $30^{\text {th }}$ June 2015;

| Raw material consumed | Rs. 40,000 |
| :--- | :--- |
| Direct wages | Rs. 24,000 |
| Machine hours worked | 190 Hours |
| Machine Hour Rate | Rs. 20 |
| Factory overhead | $15 \%$ on direct wages cost |
| Selling overhead | 75 cents per unit sold |
| No.of units produced | 20,000 |
| No.of units sold | 18,000 (@ Rs. 5 each) |

## You are required to;

a. Calculate the cost of production per unit for the period.
b. Calculate the total profit they earned during the period
iii. "Cost information is required to achieve different kind of objectives such as inventory valuation, decision making or control".

Briefly explain following cost concepts.
a. Cost Object
b. Responsibility Centre

## Question No. 03

i. The information given below has been taken from the cost records of an engineering company in respect of job No. 500

Direct Materials Rs.7, 500.00
Direct wages

| Department | Rate |
| :--- | :---: |
| X | 50 hours @ Rs. 8 per hour |
| Y | 60 hours @ Rs. 5 per hour |
| Z | 30 hours @ Rs. 10 per hour |

The overhead expenses are as follows:
Variable: Department X - Rs. 20,000.00 for 5000 labour hours
Department Y - Rs. 6,0000.00 for 30,000 labour hours
Department Z- Rs. 20,000.00 for 10,000 labour hours

Fixed: Rs. $90,000.00$ for 45,000 working hours

## Required,

a. Prepare the job cost record for Job. 500
(6 Marks)
b. Calculate the selling price for the job to have a profit of $18 \%$ mark- up.
(3 Marks)
ii. Write two (2) advantages and two (2) disadvantages of Job costing system.
(3 Marks)
(Total 12 Marks)

## Question No. 04

i. Describe the meaning of Margin of Safety (MOS) in brief?
ii. The following data are available from the records of $\mathrm{ABC} \operatorname{Ltd}$. For the year ended $31^{\text {st }}$ March 2015:

Rs.

| Sales | 80,000 |
| :--- | :--- |
| Variable costs | 40,000 |
| Fixed Cost | 24,000 |

You are required to:
a. Calculate the $\mathrm{P} / \mathrm{V}$ ratio, B.E.P and MOS?
(5 Marks)
b. Calculate the effect of $10 \%$ increase in sales price to above (a)?
c. Calculate the effect of $2 \%$ decrease in Variable Cost to above (a)?

## Question No. 05

In a factory producing two different kinds of products, the limiting factor is the availability of labour.

|  | Cost per unit (Rs) <br> Product A | Product B |
| :--- | :--- | ---: |
| Materials | 5.00 | 5.00 |
| Labour |  |  |
| 6 hours @ Rs. 0.50 | 3.00 | - |
| 3 hours @ Rs. 0.50 | - | 1.50 |
| Overheads: |  |  |
| Fixed (50\% labour) | 1.50 | 0.75 |
| Variable | 1.50 | 1.50 |
|  | 11.00 | 8.75 |
| Selling price | 14.00 | 11.00 |
| Profit | 3.00 | 2.25 |
| Total Production for the month (units) | 500 | 600 |

Maximum capacity per month is 4,800 hours

You are required to;
a. Calculate the contribution per limiting factor.
(6 Marks)
b. Prepare Statement of profitability and show which product is more profitable.
(6 Marks)
(Total 12 Marks)

## Question No. 06

i. List three (3) examples for application of marginal costing techniques to managerial decision making?
(3Marks)
ii. The following data are available in respect of product 'A' manufactured by Arjun Ltd.

Rs.
Sales 500,000
Direct Materials 200,000
Direct Wages 100,000
Variable Overheads 50,000
Fixed Overheads 100,000

The company now proposes to introduce a new product ' B ' to the market, so that sales may be increased by Rs.100,000. There will be no increase in fixed costs and the estimated variable costs of the product ' B ' are;
Rs.

Direct materials 48,000
Direct wages 22,000
Overhead 14,000

You are required to;
a. Prepare statement to calculate the profitability of existing product
(4 Marks)
b. Prepare marginal costing statement including new proposal and give your recommendation, whether the product B will be profitable or not?

## SECTION C

## Answer One (1) question out of two (2)

## Question No. 07

'Thusitha Manufacturing (TM) (Pvt) Ltd.' is a labour intensive factory operates in Katunayake export processing Zone. TM manufactures One finished product namely X-34 and three more sub components.

However, the finished Product (X-34) has to pass through three (3) processes (A, B and C). During the last few months they were suffered lot, without having a responsible person to maintain their costing system to provide on time accurate cost data of the factory due to the resignation of their management accountant. Recently, they have hired a well-qualified Management Accountant to look after their management accounting function of the factory. The very first task assigned to him by the senior management is to systematize the management accounting system of the factory to provide the accurate cost data to the head office. He has identified the normal wastage of each process as $2 \%$ in A, 5\% in B and 10\% in $C$ on the basis of number of units entering each process. The scrap value of the wastage of process A, B and C is Rs.10, Rs. 40 and Rs. 20 per 100 units respectively.

The output of each process is transferred to the next process and the finished products are transferred from process C into stock. The following further information is obtained for a period of one month.

|  | Process A (Rs) | Process B (Rs) | Process C (Rs) |
| :--- | :--- | :--- | :--- |
| Materials Consumed | 120,000 | 40,000 | 40,000 |
| Direct Labour | 80,000 | 60,000 | 60,000 |
| Manufacturing Overhead | 20,000 | 40,000 | 20,000 |

20,000 units were put into the process A at a cost of Rs. 160,000. The output of each process has been A 19,600 units, B 18,400 units, and C 16,700 units. There was no stock of Work -in- progress in any process during this period.

Assume you as the newly hired management accountant and to make a report to the senior management to explain regarding the existing position of the process of producing X-34.
a. Briefly describe the meaning of responsibility centre in relation to your new position as the Management Accountant?
(2 Marks)
b. Discuss how you would define the normal loss, abnormal loss and abnormal effectives if any?
(4 Marks)
c. Is there any difference in treating the normal loss and abnormal loss in process accounting? Briefly explain.
d. Further you are required to prepare following set of cost accounts to provide as an annexure to your report ;
i. Process Accounts
ii. Normal Wastage A/C
(3 Marks)
iii. Abnormal wastage $\mathrm{A} / \mathrm{C}$
(3 Marks)
iv. Abnormal Effectives A/C

## Question No. 08

Oshadi Company Ltd. is a manufacturing company which manufactures two main products " X " \& "Y", both products passes through two production departments" Assembling" \& "Finishing" and they have two Service departments namely "Maintenance" and "Stores" to serve both production and service departments. Following information is provided with related Oshadi Company Ltd. for the period of one year.

Finishing process is considered as Machine intensive production department and Assembling process is considered as labour intensive department.

|  | Assembling | Finishing | Maintenance | Stores |
| :--- | ---: | ---: | ---: | ---: |
| Budgeted overhead cost Rs. | $260,000.00$ | $220,000.00$ | - | - |
| Budgeted Machine hours | 40,000 | 22,000 | - | - |
| Budgeted labour hours | 32,000 | 40,000 | - | - |
| Actual overhead allocated |  |  |  |  |
| Power | $80,000.00$ | $50,000.00$ | $40,000.00$ | $20,000.00$ |
| Indirect Wages | $86,000.00$ | $54,000.00$ | $32,000.00$ | $18,000.00$ |
| Number of employees | 150 | 70 | 20 | 10 |
| Cost of Machine | $600,000.00$ | $900,000.00$ | - | - |
| Floor space | 3,500 | 4,700 | 1,300 | 500 |

Following actual overheads also incurred during the period under review.
Rs.

| Welfare | $420,000.00$ |
| :--- | :--- |
| Depreciation | $250,000.00$ |
| Rent \& Taxes | $340,000.00$ |

Number of units produced

| $\mathbf{X}$ | $\mathbf{Y}$ |
| ---: | ---: |
| 8,000 | 12,000 |
| $480,000.00$ | $720,000.00$ |
| $520,000.00$ | $380,000.00$ |
| $12 \%$ | $20 \%$ |

## Actual Machine hours

| Assembling | 8,000 | 12,000 |
| :--- | ---: | ---: |
| Finishing | 24,000 | 32,000 |

## Actual labour hours

| Assembling | 30,000 | 24,000 |
| :--- | :--- | :--- |
| Finishing | 16,000 | 20,000 |

Percentages of services provided by each service department to the other departments are as follows;

|  | Assembling | Finishing | Maintenance | Stores |
| :--- | :--- | :--- | :--- | :--- |
| Maintenance (As a \%) | 60 | 30 | - | 10 |
| Stores (As a \%) | 40 | 40 | 20 | - |

Newly hired Management Accountant is trying to establish a proper costing system to maintain proper management accounting information system. As one of the senior members of the Management Accounting team, Management Accountant is required your support to prepare a detail report on overhead absorption of the company by providing following information.
a. Apportion the unallocated costs between the departments using the basis of apportionment that is most appropriate from the information given and determine the total overhead budget for each department.
(4 Marks)
b. Calculate the budgeted overhead absorption rates for each of the production departments using the most appropriate basis for recovery in each case.
c. Calculate the cost per each product for Oshadi Ltd.
d. Estimate unit selling price of both products
e. Find over/ under absorbed overhead cost for the given period.

Management Accountant of Oshadi Ltd found that while it costsRs. 6.25 each to make a sub component X-70 which is an essential for producing both products ' X ' and ' Y ', the same is available in the market at Rs.5.75, with an assurance of continued supply. The break-down of the cost is as follows;

|  | Per each unit |
| :--- | ---: |
|  | Rs. |
| Direct Materials | 2.75 |
| Direct Labour | 1.75 |
| Other Variables | .50 |
| Depreciation and other fixed cost | $\underline{1.25}$ |
| Total | $\underline{\underline{6.25}}$ |

f. Should company make or buy component X-70? Recommend
(4 Marks)
g. What would be your decision if the supplier offers the component at Rs. 4.85 each?

