

# TECHNICAL UNIVERSITY OF MOMBASA School of Business <br> DEPARTMENT OF ACCOUNTING AND FINANCE <br> UNIVERSITY EXAMINATIONS FOR DEGREE IN BACHELOR OF COMMERCE <br> BAC 4201: COST ACCOUNTING 

SERIES: APRIL 2022
TIME: 2 HOURS

## INSTRUCTIONS:

Answer Question ONE (Compulsory) and any other TWO questions
This paper consists of Four printed pages

## Question One

(a) Briefly explain any five Objectives of Cost Accounting (10 marks)

## Solution

(i) To ascertain the Costs under different situations using different techniques and systems of costing
(ii) To determine the selling prices under different circumstances
(iii) To determine and control efficiency by setting standards for Materials, Labour and Overheads
(iv) To determine the value of closing inventory for preparing financial statements of the concern
(v) To provide a basis for operating policies which may be determination of Cost Volume relationship, whether to close or operate at a loss, whether to manufacture or buy from market, whether to continue the existing method of production or to replace it by a more improved method of production....etc
(b)

Calculate the Economic Order Quantity from the following information. Also state the number of orders to be placed in a year and the annual material cost. (10 marks)
Consumption of materials per annum : 10,000 kg
Order placing cost per order : `50 Cost per kg. of raw materials : ` 2
Storage costs : 8\% on average inventory
(c) Planet plc. uses a standard costing system. The following information relates to the company's product Earth, for the month of August:

## Standard data

## Actual data

Sales

| Sales Volume units | 20,000 | 18,500 |
| :--- | ---: | ---: |
| Selling Price per unit (sh.) | 24.00 | 28.50 |
| Production |  |  |
| Materials used per unit (kg) | 1.75 | 2.00 |
| Materials price per kg (sh) | 8.50 | 9.00 |
| Labour hours per unit | 0.65 | 0.85 |
| Labour rate per hour (sh) | 10.80 | 10.50 |

## Required:

Prepare a statement showing the budgeted profit, the actual profit for August and a reconciliation statement.

## Question Two

(a) The stock of material held on 1-4-2015 was 400 units @ 50 per unit. The following receipts and sales were recorded. You are required to prepare income statement for the period ended 0n 30 ${ }^{\text {th }}$ June 2015 using FIFO and LIFO (14 marks)
2-4-2015 Purchased 100 units @ sh, 55 per unit
6-4-2015 Sold 400 units at sh. 70
10-4-2015 Purchased 600 units @ sh. 55 per unit
13-4-2015 Sold 400 units at sh. 75
20-4-2015 Purchased 500 units @ sh. 65 per unit.
25-4-2015 Sold 600 units at sh. 80
10-5-2015 Purchased 800 units @ sh. 70 per unit
12-5-2015 Sold 500 units at sh. 85
13-5-2015 Sold 200 units at sh. 90 each

15-5-2015 Purchased 500 units @ sh. 75 per unit
12-6-2015 Sold 400 units at sh. 100 each
15-6-2015 Purchased 300 units @ sh. 80 per unit

## Additional Information

(i) Wages for two workers, one is paid sh. 250 per day and the other sh. 300 per day. The company's policy is 18 working days a month.
(ii) Miscellaneous expenses amounting to 1500 per month
(b) Briefly explain the process of accounting for overheads ( 6 marks)

## Question Three

(a) Two workmen, Vishnu and Shiva, produce the same product using the same material. Their normal wage rate is also the same. Vishnu is paid bonus according to the Rowan System, while Shiva is paid bonus according to Halsey System. The time allowed to make the product is 100 hours. Vishnu takes 60 hours while Shiva takes 80 hours to complete the product. The factory overhead rate is $` 10$ per man-hour actually worked. The factory cost for the product for Vishnu is ${ }^{`} 7,280$ and for Shiva it is sh. 7,600 .
You are required:-
(i) to find the normal rate of wages;
(ii) to find the cost of materials;
(iii) to prepare a statement comparing the factory cost of the products as made by the two works men. ( 10 marks)
b) From the following particulars, work out the earnings for the week of a worker under
(i) Straight Piece Rate
(ii) Differential Piece Rate
(iii) Halsey Premium System
(iv) Rowan System

Number of working hours per week - 48
Wages per hour - sh. 3.75
Normal time per piece - 20 Min
Normal output per week - 120 pieces
Actual output for the week - 150 pieces
Differential piece rate - $80 \%$ of the piece rate when output is below standard and $120 \%$ above standard. ( 10 marks)

## Question Four

(a) Two fitters, a labourer and a boy undertake a job on piece rate basis for sh. 1,290. The time spent by each of them is 220 ordinary working hours. The rates of pay on time rate basis, are ` 1.50 per hour for each of the two fitters, sh. 1 per hour for the labourer and sh. 0.50 per hour for the boy.

Bonuses were paid in proportion to their basic earnings.

## Required:

Compute the selling price of the above job on the basis of the following additional data:-
Cost of the direct material `2,010; works overhead at \(20 \%\) of prime cost; selling overhead at \(10 \%\) of works cost and profit at \(20 \%\) of sales. (10Marks) (b) A manufacturing company has two production departments Fabrication and Assembly and 3 service departments as Stores, Time Office and Maintenance. The departmental overheads summary for the month of March 2016 is given below: Fabrication - `24000
Assembly - `16000 Stores - `5000
Time office - `4000
Maintenance - -3000
Other information relating to the department was:

| Particulars | Production <br> Departments |  |  | Service departments |  |  |
| :--- | :---: | :---: | :---: | :---: | :--- | :---: |
|  | Fabricatio Assemb <br> n | Store <br> ly | Time <br> office | Maintenanc <br> e |  |  |
|  | 40 | 30 | 20 | $\mathbf{1 6}$ | $\mathbf{1 0}$ |  |
| No of stores requisition <br> slips | 24 | 20 |  |  | $\mathbf{6}$ |  |
|  |  |  |  |  |  |  |
| Machine Hours | $\mathbf{2 4 0 0}$ | $\mathbf{1 6 0 0}$ |  |  |  |  |

Required:
Apportion the costs of service departments to the production departments using Stepdown method if Time office is allocated using No of employees, Stores - No of stores requisitions and Maintenance - Machine hours (10 marks)

## Question Five

(a) The following particulars for the first week of September, 2015 relate to X and Y two workers employed in a factory:
a) Job Completed - units
X
3,600
Y
4,200
b) Out of above output rejected and unsalable $540 \quad 420$
c) Time allowed $12 \mathrm{Mts} /$ dozen
d) Basic wage rate per hour
e) Hours worked
sh. 5
45

3 Hrs./200 units
sh. 6
50

The normal working hours per week are fixed at 42 hours. Bonus is paid @ $2 / 3$ of the basic wage rate for gross time worked and gross output produced without deduction for rejected output. The rate of overtime for first 4 hours is paid at time plus $1 / 3$ and for next 4 hours is paid at time plus $1 / 2$.
Required:
Calculate for each employee
a) Number of bonus hours and amount of bonus earned; (5 marks)
b) Total wages earned including basic wages overtime premium and bonus; (5 marks)
c) Direct wages cost per 100 saleable units. ( 5 marks)
d) Briefly explain the requirements for a good cost accounting system ( 5 marks)

