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GUTI UNIVERSITY

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FACULTY OF BUSINESS, ECONOMICS AND ACCOUNTING

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DEPARTMENT OF ECONOMICS AND BUSINESS SCIENCES

**EXAMINATION PAPER**

**COURSE CODE** : CAC107  
**COURSE TITLE** : INTRODUCTION TO COST AND MANAGEMENT ACCOUNTING  
**SPECIAL REQUIREMENTS** : **SCIENTIFIC CALCULATORS IS ALLOWED**  
**DURATION** : 3 Hours  
**LEVEL** : 1.2  
**DATE** : 29 MAR 2021

*Printed*

**INSTRUCTIONS TO CANDIDATES:**

1. No cell phones are allowed in the examination venue.
2. Answer any **All questions**
3. Begin each question on new page in section B
4. The number of marks for each question or part question is shown in brackets [ ]

**SECTION A (ANSWER ALL QUESTIONS IN THIS SECTION, EACH QUESTION CARRIES TWO MARKS)**

1. The application of the principles of accounting and financial management to create, protect, preserve and increase value for the \_\_\_\_\_ of for-profit and not-for profit enterprises in the public and private sectors.

- A. Auditors    B. Stakeholders    C. Owners    D. Customers

2. Cost centres are;

- A. Units of output or service for which costs are ascertained.  
B. Functions or locations for which costs are ascertained.  
C. A segment of the Organization for which budgets are prepared.  
D. Amounts of expenditure attributable to various activities.

3. Which ONE of the following costs would NOT be classified as a production overhead cost in a food processing company?

- A. The cost of renting the factory building  
B. The salary of the factory manager  
C. The depreciation of equipment located in the materials store  
D. The cost of ingredients

4. An engineering firm operates a job costing system. Production overhead is absorbed at the rate of \$8.50 per machine hour. In order to allow for non-production overhead costs and profit, a markup of 60% of prime cost is added to the production cost when preparing price estimates. The estimated requirements of job number 808 are as follows:

Direct materials \$10,650

Direct labour    \$3,260

Machine hours 140

The estimated price notified to the customer for job number 808 will be

- A. \$22,256    B. \$22,851    C. \$23,446    D. \$24,160

5. Which ONE of the following statements is true?

A. The total variable cost varies with a measure of activity.

B. A variable cost is an unavoidable cost.

C. A variable cost is not relevant for decision-making.

D. A variable cost becomes fixed in the long run.

6. Fixed costs are conventionally deemed to be:

A. Constant per unit of output

B. Constant in total when production volume changes

C. Outside the control of management

D. Those unaffected by inflation

7. Based on the data below, what is the amount of the overhead under-/over-absorbed?

Budgeted overheads \$493,200

Budgeted machine hours 10,960

Actual machine hours 10,493

Actual overheads \$514,157

A. \$20,957 under-absorbed

B. \$21,015 over-absorbed

C. \$21,015 under-absorbed

D. \$41,972 under-absorbed

8. A standard cost

A. The planned unit cost of a product, component or service in a period.

B. The budgeted cost ascribed to the level of activity achieved in a budget centre in a control period.

C. The budgeted production cost ascribed to the level of activity in a budget period.

D. The budgeted non-production cost for a product, component or service in a period.

9. A company has been asked to quote for a job. The company aims to make a net profit of 30% on sales. The estimated cost for the job is as follows:

Direct materials 10 kg @ £10 per kg

Direct labour 20 hours @ £5 per hour

Variable production overheads are recovered at the rate of £2 per labour hour. Fixed production overheads for the company are budgeted to be £100,000 each year and are recovered on the basis of labour hours.

There are 10,000 budgeted labour hours each year. Other costs in relation to selling, distribution and administration are recovered at the rate of £50 per job.

The company quote for the job should be

- A. £572      B. £637      C. £700      D. £833

10. Which of the following are characteristics of service costing?

(i) High levels of indirect costs as a proportion of total cost

(ii) Use of composite cost units

(iii) Use of equivalent units

- A. (i) only      B. (ii) only      C. (i) and (ii) only      D. All of them

11. For decision-making purposes, which of the following are relevant costs?

(i) Avoidable cost

(ii) Future cost

(iii) Opportunity cost

(iv) Differential cost

- A. (i), (ii), (iii) and (iv)      B. (i) and (ii) only      C. (ii) and (iii) only      D. (i) and (iv) only

12. Which of the following words DOES NOT describe a main focus of management accounting?

- A. Planning      B. Control      C. External      D. Decision-making

13. A hospital's records show that the cost of carrying out health checks in the last five accounting periods have been as follows:

| Period | Number of patients seen | Total cost (\$) |
|--------|-------------------------|-----------------|
| 1      | 650                     | 17,125          |
| 2      | 940                     | 17,800          |
| 3      | 1260                    | 18,650          |
| 4      | 990                     | 17,980          |
| 5      | 1150                    | 18,360          |

Using the high-low method and ignoring inflation, the estimated cost of carrying out health checks on 850 patients in period 6 is:

- A. \$17,515    B. \$17,570    C. \$17,625    D. \$17,680

14. A flexible budget is;

- A. A budget which by recognizing different cost behaviour patterns is designed to change as the volume of activity changes.
- B. A budget for a defined period of time which includes planned revenues, expenses, assets, liabilities and cash flow.
- C. A budget which is prepared for a period of one year which is reviewed monthly, whereby each time actual results are reported, a further forecast period is added and the intermediate period forecasts are updated.
- D. A budget of semi-variable production costs only.

15. RS is currently preparing the production budget for Product A and the material purchase budget for material X for the forthcoming year. Each unit of Product A requires 5 kgs of material X. The anticipated opening inventory for Product A is 5,000 units and the company wishes to increase the closing inventory by 30% by the end of the year. The anticipated opening inventory for material X is 50,000 kgs and in order to avoid stock outs the required closing inventory has been increased to 60,000 kgs.

The Sales Director has confirmed a sales requirement of 70,000 units of Product A.

How many units of Product A will need to be produced?

- A. 68,500 units    B. 71,500 units    C. 76,500 units    D. 80,000 units

**(TOTAL 30 MARKS)**

**SECTION B (ANSWER ALL QUESTIONS IN THIS SECTION)**

**Question one**

a) State whether the following statements are True (T) or False (F):

- (i) The cost of drawings, design and layout is an example of production cost. [1 mark]
- (ii) Cost accounting is a government reporting system for an organization. [1 mark]
- (iii) Internal instruction to buy the specified quantity and description is called stores requisition note. [1 mark]
- (iv) The stock turnover ratio indicates the slow-moving stocks. [1 mark]
- (v) The flux rate method of labour turnover considers employees replaced. [1 mark]
- (vi) An automobile service unit uses batch costing. [1 mark]
- (vii) Ash produced in thermal power plant is an example of co-product. [1 mark]
- (viii) The marginal costing method conforms to the accounting standards. [1 mark]
- (ix) An increase in variable cost reduces contribution. [1 mark]
- (x) The use of actual overhead absorption may be suitably applied in small firms which are manufacturing a single product [1 mark]

b) Explain 'Cost centre' and 'Cost unit'. [4 marks]

(b) A company manufactures a product from a raw material, which is purchased at ` 54 per kg. The company incurs a handling cost of ` 350 plus freight of ` 400 per order. The incremental carrying cost of inventory of raw material is Re. 0.50 per kg per month. In addition, the cost of working capital finance on the investment in inventory of raw material is ` 8 per kg per annum. The annual production of the product is 94,500 units and 2 units are obtained from one kg of raw material.

Required:

- (i) Calculate the economic order quantity of raw materials. [5marks]
- (ii) Advice, how frequently should orders for procurement be placed. [3marks]
- (iii) If the company proposes to rationalize placement of orders on quarterly basis, what percentage of discount in the price of raw materials should be negotiated? [3marks]

**[Total 25 marks]**

### Question two

- (a) State the five circumstances in which time rate system of wage payment can be preferred in a factory. [5 marks]
- (b) What are the advantages of this system? [5 marks]
- (c) The Nestle Pvt Ltd. is a manufacturer of breakfast meals. In 2020, it employed an average of 160 staff members. During 2020, the business recruited 24 staff members to replace 30 who left. Calculate the labour turnover. [3 marks]
- (d)

|                     | P1    | P2    | P3    |
|---------------------|-------|-------|-------|
| Machine hours       | 12000 | 2200  | 13000 |
| Labour hours        | 9000  | 15000 | 8500  |
| Allocated overheads | 15040 | 23085 | 28874 |

Product X has

Direct Materials 100

Direct labour p1 10 hrs @ 16 per hour

P2 15hrs @ 14 per hour

P3 12 hrs @ 10 per hour

Machine hours – p1 =20hours

P2 =12 hours

P3 =14 hours

### Required

- (i) Identify the appropriate Absorption base for each production cost for each department [3]
- (ii) Determine the OAR for each department [3]
- (iii) Calculate the production cost of the above production using Overhead Absorption Rate in (ii) above. [6]

[Total 25 marks]

### Question three

White is an ice cream producer. Currently it produces at capacity and sells ice cream in two flavours; vanilla and chocolate. The company is using traditional costing methods under which indirect costs are allocated based on direct labour hours. The operating data for White in March 2020 is as follows;

|                                        | VANILLA  | CHOCOLATE |
|----------------------------------------|----------|-----------|
| Units produced and sold                | 50000    | 1000      |
| Price                                  | \$30     | \$50      |
| Direct labour hours per unit           | 0.02     | 0.02      |
| Direct labour cost per hour            | \$50     | \$50      |
| Machine hour per unit                  | 0.01     | 0.01      |
| Machine setup hours per production run | 4        | 6         |
| Number of production runs              | 50       | 10        |
| Direct materials used                  | \$300000 | \$10000   |

The company incurs manufacturing overheads totaling \$1 275 000 in March 2020. An interview with production manager shows that the following activities are required in the production process during the month.

| ACTIVITY              | HIERARCHY                   | COST DRIVER         | COSTS              |
|-----------------------|-----------------------------|---------------------|--------------------|
| Run machines          | Unit level of activity      | Machine hour        | \$510 000          |
| Handle production run | Batch level activity        | Production run      | \$144 000          |
| Set up machine        | Batch level activity        | Machine setup hours | \$520 000          |
| Support production    | Product sustaining activity | Number of products  | \$101 000          |
|                       |                             |                     | <b>\$1 275 000</b> |

Required

- Calculate the profit for each product using traditional costing. [8 marks]
- Calculate the profit for each product using ABC. [10 marks]
- Comment on the results calculated above [2 marks]

• [Total 20 marks]