



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

WEDNESDAY: 4 December 2024. Afternoon Paper.

Time Allowed: 3 hours.

This paper consists of fifty (50) Multiple Choice Questions. Answer ALL questions by indicating the letter (A, B, C or D) that represents the correct answer. Each question is allocated two (2) marks. Do NOT write anything on this paper.

1. Which one of the following is **NOT** an objective of management accounting?
 - A. To formulate financial plans and policies
 - B. To assist in decision making process
 - C. To help in cost ascertainment and control
 - D. To prepare summarised periodical reports(2 marks)

2. James Mwaniki has been employed as the assistant management accountant in Wetu Limited. The chief management accountant of the company has tasked him to classify the following costs:
 - (i) Period costs
 - (ii) Product costs
 - (iii) Direct labour
 - (iv) Depreciation of machinery
 - (v) Factory rent
 - (vi) Salesman salaryWhich of the following combination of expenses should he classify as fixed costs only?
 - A. (i), (iv) and (v)
 - B. (ii), (iv) and (vi)
 - C. (iv), (v) and (vi)
 - D. (i), (iii) and (v)(2 marks)

3. Which one of the following costs is **NOT** an overhead cost in a processing factory?
 - A. Indirect materials cost
 - B. Cost of ingredients
 - C. Factory rent expenses
 - D. Administrative expenses(2 marks)

4. A good management accountant should avoid conflict of interest while carrying out his duties. The code of ethics that prohibits unethical behaviour is called _____.
 - A. Confidentiality
 - B. Credibility
 - C. Integrity
 - D. Competency(2 marks)

5. Which one of the following is a major problem when installing a management accounting system? Lack of _____.
 - A. communication among managers
 - B. enough funds to install machines
 - C. customers to buy the goods
 - D. support from top management and resistance from existing employees(2 marks)

www.chopi.co.ke

6. The correct basis of classifying expenses such as administrative overheads and production overheads is _____.
- time classification
 - decision classification
 - functional classification
 - behaviour classification
- (2 marks)
7. Which one of the following users of management accounting information is concerned with firm's credit worthiness before accepting the transaction?
- Sales managers
 - Creditors
 - Debtors
 - Production managers
- (2 marks)

Use the following information to answer Question 8 to Question 10:

Tiba Hospital records have shown that the cost of carrying out health checks in the last five accounting months have been as follows:

| Month | Number of patients seen | Total cost (Sh.) |
|-------|-------------------------|------------------|
| 1 | 65 | 17,125 |
| 2 | 94 | 17,800 |
| 3 | 126 | 18,650 |
| 4 | 99 | 17,980 |
| 5 | 115 | 18,360 |

$\sum X = 499$ $\sum Y = 89,915$ $\sum XY = 9,027,645$ $\sum X^2 = 51,963$

Using linear regression analysis:

8. Calculate the value of variable cost per patient.
- Sh.90.91
 - Sh.68.48
 - Sh.30.58
 - Sh.25.03
- (2 marks)
9. Calculate the fixed cost per month.
- Sh.14,931.615
 - Sh.7,353
 - Sh.15,485.32
 - Sh.17,125
- (2 marks)
10. Calculate the total cost of carrying out health checks on 85 patients.
- Sh.17,530.49
 - Sh.17,612.87
 - Sh.17,125
 - Sh.18,360
- (2 marks)
11. The inventory control systems where stock take is normally done periodically is known as _____.
- continuous stock take
 - perpetual stock take
 - physical stock take
 - verification stock take
- (2 marks)
12. The inventory level where minimum level is reached and then a new replenishment order has to be placed with suppliers is known as _____.
- minimum level
 - reorder level
 - reorder quantity
 - maximum level
- (2 marks)

13. Which one of the following is the **MAIN** advantage of centralised materials storage system?
- A. There is an increased internal and external cost
 - B. Possible loss of local knowledge
 - C. Less convenient because it increases paperwork
 - D. Less risk of duplication
- (2 marks)

Use the information below to answer Question 14 and Question 15:

A wholesaler purchases and sells material Z to retailers. The following data relates to material Z:

| | |
|-------------------------------------|---------------------------|
| Consumption of material Z per annum | 800,000 kilograms |
| Ordering cost per order | Sh.4,000 |
| The purchase price per kilogram | Sh.2,000 |
| Storage cost | 20% of the purchase price |

14. Calculate the economic order quantity (EOQ).
- A. 4,000
 - B. 2,000
 - C. 8,000
 - D. 6,000
- (2 marks)
15. How many orders would the wholesaler place under the EOQ policy?
- A. 133 orders
 - B. 100 orders
 - C. 400 orders
 - D. 200 orders
- (2 marks)

Use the information below to answer Question 16 to Question 18:

A&B Brothers has provided the following information about component X and component Y:

| | |
|------------------|----------------------------------|
| Normal usage | 150 units per week each |
| Minimum usage | 75 units per week each |
| Maximum usage | 225 units per week each |
| Reorder quantity | X: 900 units; Y: 1,500 units |
| Reorder period | X: 4 to 6 weeks; Y: 2 to 4 weeks |

16. Calculate the reorder level for component X and component Y.
- A. X = 1,350 units, Y = 1500 units
 - B. X = 5,400 units, Y = 6,000 units
 - C. X = 900 units, Y = 1,500 units
 - D. X = 1,350 units, Y = 900 units
- (2 marks)
17. Calculate the minimum level for component X.
- A. 600 units
 - B. 1,050 units
 - C. 900 units
 - D. 750 units
- (2 marks)
18. Calculate the maximum level for component Y.
- A. 1,950 units
 - B. 2,250 units
 - C. 3,250 units
 - D. 3,000 units
- (2 marks)
19. Which method of labour remuneration requires close supervision for the job to be accomplished?
- A. Time rate system
 - B. Piece rate system
 - C. Differential piece rate system
 - D. Group bonus scheme system
- (2 marks)

20. The rate at which employees join or leave the organisation is known as _____.
- Overtime premium
 - Labour turnover
 - Job rotation
 - Retrenchment
- (2 marks)
21. Hamsa Limited has two production departments; department A and department B. The company also has two service departments; department X and department Y. The overhead analysis sheet below provides the following overheads allocated:

| | Sh. "000" |
|--------------------------|-----------|
| Production department: A | 360,560 |
| B | 320,000 |
| Service department: X | 15,050 |
| Y | 10,280 |

The overheads of the service departments are apportioned as follows:

| | Production departments | | Service departments | |
|----------------------|------------------------|-----|---------------------|----|
| | A | B | X | Y |
| Service department X | 50% | 42% | - | 8% |
| Service department Y | 40% | 40% | 20% | - |

Required:

Using simultaneous equation method of overhead apportionment, which one of the following equations shows the total overhead of service department X?

- $X = \text{Sh.}15,050 + 0.08Y$
 - $X = \text{Sh.}10,280 + 0.20Y$
 - $X = \text{Sh.}15,050 + 0.20Y$
 - $X = \text{Sh.}10,280 + 0.08Y$
- (2 marks)

Use the information below to answer Question 22 and Question 23:

Kiwanda Ltd. makes racing bicycles using job order costing technique. Overheads are absorbed based on machine hours. The following data is available for the year 2024:

Budgeted

| | |
|----------------------|---------------|
| Production overheads | Sh.9,000,000 |
| Direct labour hours | 300,000 hours |
| Machine hours | 93,750 hours |

Actual

| | |
|----------------------|---------------|
| Units produced | 750,000 units |
| Production overheads | Sh.8,932,500 |
| Prime costs | Sh.13,500,000 |
| Direct labour hours | 297,500 hours |
| Machine hours | 93,935 hours |

22. Calculate the overhead absorption rate (OAR).
- Sh.30
 - Sh.96
 - Sh.300
 - Sh.960
- (2 marks)
23. Calculate the over or under absorption of overhead for the year 2024.
- Sh.85,260
 - Sh.67,500
 - Sh.7,500
 - Sh.75,000
- (2 marks)

24. A company has over-absorbed fixed production overheads for the period ended 30 September 2024 by Sh.6,000,000. The fixed production overhead absorption rate was Sh.8 per unit and is based on the normal level of activity of 5,000,000 units. Actual production was 4,500,000 units. What was the actual fixed production overheads incurred for the period?
- A. Sh.30,000,000
 B. Sh.34,000,000
 C. Sh.40,000,000
 D. Sh.42,000,000

(2 marks)

Use the information below to answer Question 25 to Question 28:

Sweet Loaf Bakery bakes sweet cakes which are sold at a selling price of Sh.1,200 per cake. Unit costs are as follows:

| | Sh.Per unit |
|---|----------------------|
| Direct materials | 190 |
| Direct labour | 285 |
| Variable production overhead | 125 |
| Variable selling expenses | 200 |
| Fixed costs | |
| | Sh. Per annum |
| Total fixed production overheads | 4,500,000 |
| Total fixed selling and administrative expenses | 2,680,000 |

Sweet Loaf Bakery expects to sell 20,000 sweet cakes.

25. Calculate the contribution margin per unit.
- A. Sh.400
 B. Sh.800
 C. Sh.600
 D. Sh.725
- (2 marks)
26. Calculate the break-even point in units.
- A. 11,250 units
 B. 17,950 units
 C. 8,985 units
 D. 11,967 units
- (2 marks)
27. Calculate the margin of safety in units.
- A. 20,000 units
 B. 8,750 units
 C. 11,005 units
 D. 2,050 units
- (2 marks)
28. How many units must Sweet Loaf Bakery produce and sell to earn operating income of Sh.900,000?
- A. 20,200 units
 B. 20,000 units
 C. 2,250 units
 D. 10,100 units
- (2 marks)
29. Each of the following costs will affect break-even point **EXCEPT** a change in the _____.
- A. number of units sold
 B. variable cost per unit
 C. total fixed cost
 D. selling price per unit
- (2 marks)
30. Which one of the following statements concerning marginal and absorption costing is **TRUE**?
- A. Absorption costing profits are always greater than marginal costing profits
 B. Marginal costing profits are always greater than absorption costing profits
 C. In the long run, there will be no difference between absorption costing profits and marginal costing profits
 D. Differences between marginal costing profits and absorption costing profits always reverse in the following period
- (2 marks)

www.chopi.co.ke

31. Indirect materials are _____.
- A. prime cost
 - B. fixed cost
 - C. irrelevant cost
 - D. factory overhead cost
- (2 marks)

32. An engineering firm operates a job costing system. Production overheads are absorbed at the rate of Sh.8.50 per machine hour. In order to allow for non production overhead costs and profit, a mark-up of 60% of prime costs is added to the production cost when preparing price estimates.

The estimated requirements of job number 808 are as follows:

| | |
|------------------|-----------|
| Direct materials | Sh.10,650 |
| Direct Labour | Sh.3,260 |
| Machine hours | 140 |

- The estimated price notified to the customers for job number 808 will be _____.
- A. Sh.22,256
 - B. Sh.22,851
 - C. Sh.23,446
 - D. Sh.24,160
- (2 marks)

33. A company has discovered that the cost of raw materials will increase due to high demand in the market. If nothing else changes, what is the effect of this on margin of safety and breakeven point?
- A. The breakeven point will decrease and the margin of safety will increase
 - B. Both breakeven point and margin of safety will decrease
 - C. Both breakeven point and margin of safety will increase
 - D. The breakeven point will increase and the margin of safety will decrease
- (2 marks)

34. During the period of inflation, which one of the following statements concerning the First In First Out (FIFO) method of valuing the issue of materials issued will be **TRUE** as compared to Last In First Out (LIFO) Method?
- A. Product costs are overstated and profits understated
 - B. Product costs are understated and profit overstated
 - C. Both product costs and profits are overstated
 - D. Both product costs and profits are understated
- (2 marks)

35. The following information is available for a company operating in hotel industry for a particular month (with 30 days).

| | |
|-------------------------------------|------------|
| Number of rooms available per night | 200 |
| Occupancy achieved | 75% |
| Room servicing cost incurred | Sh.585,000 |

- What was the room servicing cost per occupied room per night?
- A. Sh.97.50
 - B. Sh.3,900.00
 - C. Sh.130.00
 - D. Sh.2,925
- (2 marks)

36. AK Chemicals produces high quality plastic bottles in a continuous manufacturing operation. All materials are input at the beginning of the process. A quality control inspection occurs 75% through the manufacturing process, when some units are separated out as inferior quality. The following data is available for the month of November 2024:

- Material costs Sh.50,000
- Conversion costs Sh.22,000
- Units started 2,000
- Units completed 1,750

There is no opening or closing work in progress. Past experience indicates that approximately 10% of the units started are found to be defective on inspection by the Quality Control Department.

Required:

Determine the cost of abnormal loss for the month of November 2024.

- A. Sh.2,000
- B. Sh.2,100
- C. Sh.1,800
- D. Sh.1,080

(2 marks)

Use the information below to answer Question 37 and Question 38:

The monthly recordings for output and maintenance costs for the past 12 months have been examined and the following information has been extracted for the lowest and highest output levels:

| | Volume of Production (Units) | Maintenance costs (Sh.) |
|------------------|---|--|
| Lowest activity | 5,000 | 22,000 |
| Highest activity | 10,000 | 32,000 |

37. Using the high-low method of cost estimation, determine variable cost per unit.

- A. Sh.2.0
- B. Sh.3.2
- C. Sh.4.4
- D. Sh.3.6

(2 marks)

38. Compute the fixed element of the total cost.

- A. Sh.12,000
- B. Sh.22,000
- C. Sh.32,000
- D. Sh.20,000

(2 marks)

Use the information below to answer Question 39 and Question 40:

The following are the estimated sales and purchases of Patto Enterprises for the first 3 months of the year 2025.

| Month | Sales Sh. | Purchases Sh. |
|--------------|----------------------|--------------------------|
| January | 560,000 | 920,000 |
| February | 1,060,000 | 860,000 |
| March | 980,000 | 400,000 |

Additional information:

- On 1 January 2025, cash balance is expected to be Sh.110,000.
- All sales are made on cash basis.
- 50% of purchases are on credit payable in the following month.
- The purchases for the month of December 2024 is expected to be Sh.320,000.
- Rent of Sh.60,000 is to be paid every month.

39. What is the total payment for purchases for the month of January 2025?

- A. Sh.920,000
- B. Sh.160,000
- C. Sh.460,000
- D. Sh.620,000

(2 marks)

40. The closing cash balance for the month of February 2025 shall be _____.

- A. Sh.100,000
- B. Sh.950,000
- C. Sh.200,000
- D. Sh.890,000

(2 marks)

www.chopi.co.ke

41. In process costing, normal wastage and abnormal wastage should be classified as _____.
- | | Normal | Abnormal | |
|----|---------------|-----------------|-----------|
| A. | Period cost | Period cost | |
| B. | Product cost | Period cost | |
| C. | Period cost | Product cost | |
| D. | Product cost | Product cost | (2 marks) |
42. Which of the following industries is most likely to use process costing in accounting for production costs.
- | | | |
|----|-------------------------|-----------|
| A. | Road builders | |
| B. | Electrical contactors | |
| C. | Paint manufacturers | |
| D. | Automobile repair shops | (2 marks) |

Use the information below to answer Question 43 and Question 44:

The following details relate to product R:

| Level of activity (units) | 1,000 (Sh. Per unit) | 2,000 (Sh. Per unit) |
|---------------------------|-------------------------|-------------------------|
| Direct Materials | 4.00 | 4.00 |
| Direct labour | 3.00 | 3.00 |
| Production overhead | 3.50 | 2.50 |
| Selling overhead | <u>1.00</u> | <u>0.50</u> |
| | <u>11.50</u> | <u>10.00</u> |

43. The total fixed cost and variable cost per unit are:
- | | Total Fixed
Cost
Sh. | Variable cost
per unit
Sh. | |
|----|-------------------------------------|---|-----------|
| A. | 2,000 | 1.50 | |
| B. | 2,000 | 7.00 | |
| C. | 2,000 | 8.50 | |
| D. | 3,000 | 8.50 | (2 marks) |
44. What is the variable production overhead cost per unit?
- | | | |
|----|---------|-----------|
| A. | Sh.1.5 | |
| B. | Sh.3.5 | |
| C. | Sh.2.5 | |
| D. | Sh.1.00 | (2 marks) |
45. Benga Limited uses job costing method and a standard net profit mark-up of 20% on total cost to calculate selling price of its products. The selling price of Job DX is Sh.2,688 and the fixed overhead cost of the job amount to Sh.1,360.
- Determine the total variable cost for Job DX?
- | | | |
|----|----------|-----------|
| A. | Sh.1,328 | |
| B. | Sh.2,240 | |
| C. | Sh.880 | |
| D. | Sh.656 | (2 marks) |

Use the information below to answer Question 46 and Question 47:

Droppers Limited have drawn up the following budget for its next financial period:

| | |
|---------------------------------------|-------------------------|
| Sales quantity | 90,000 units |
| Unit selling price | Sh.5,800 |
| Unit variable production cost | Sh.1,700 |
| Sales commission | 5% of the selling price |
| Fixed production cost | Sh.215,250,000 |
| Fixed selling and administration cost | Sh.99,075,000 |

46. What percentage of the budgeted sales is represented by the margin of safety?
- A. 14.8%
 - B. 11.6%
 - C. 8.3%
 - D. 5.6%
- (2 marks)

47. The marketing manager has indicated that an increase in the selling price to Sh.6,125 per unit would not affect the number of units sold, provided that the sales commission is increased to 8% of the selling price. If the selling price is increased, what will be the new break-even point to the nearest whole units?
- A. Sh.87,070
 - B. Sh.79,879
 - C. Sh.76,016
 - D. Sh.71,033
- (2 marks)

48. The following two organisations wishes to set up a costing system:

Organisation A A law firm dealing with their clients' needs such as claims for damages or writing contracts.

Organisation B A pharmaceutical company producing tablets in production runs of two million tablets and where the cost of packs of 42 tablets needs to be determined.

Required:

Which type of costing system is most appropriate for each organisation?

- | | Organisation A | Organisation B | |
|----|-----------------------|-----------------------|-----------|
| A. | Job costing | Job costing | |
| B. | Process costing | Job costing | |
| C. | Job costing | Batch costing | |
| D. | Batch costing | Process costing | (2 marks) |

49. Which one of the following statements defines an "investment center" in the context of responsibility accounting?
- A. Part of business that utilises equipment and machinery
 - B. Part of business where management are responsible for decisions regarding the purchase of non-current assets
 - C. Part of a business that is involved in financial services
 - D. Part of the business where management are responsible both for revenues and operating costs
- (2 marks)

50. The following statements relates to the participation of junior management in setting organisational budgets:
- (i) It reduces the level of budget padding.
 - (ii) It speeds up the setting of budgets.
 - (iii) It increases motivation of junior managers.

Which of the above statement(s) is/are true?

- A. Only
 - B. (iii) only
 - C. (i) and (iii) only
 - D. (i), (ii) and (iii)
- (2 marks)

.....



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

WEDNESDAY: 21 August 2024. Afternoon Paper.

Time Allowed: 2 hours.

This paper consists of fifty (50) Multiple Choice Questions. Answer ALL questions by indicating the letter (A, B, C or D) that represents the correct answer. Each question is allocated two (2) marks. Do NOT write anything on this paper.

1. Agano Ltd. uses an overhead absorption rate of Sh.35 per machine hour based on 64,000 budgeted machine hours for the period. During the same period, the actual total overhead expenditure amounted to Sh.1,088,750 and 60,000 machine hours were recorded as actual production. By how much was the total overhead under or over absorbed for the period?
- A. Sh.1,011,250 under absorbed
 - B. Sh.1,151,250 under absorbed
 - C. Sh.1,011,250 over absorbed
 - D. Sh.1,151,250 over absorbed
- (2 marks)

2. Which one of the following statements **BEST** describes a controllable cost?
- A. A specific cost of an activity or business which would be avoided if the activity or business did not exist
 - B. A cost which arises from the decision already taken, which cannot, in the short run, be changed
 - C. A cost which the behavior pattern can be easily analysed to facilitate valid budgetary control system
 - D. A cost which can be influenced by its budget holder
- (2 marks)

3. The management director of Annex Ltd., a manufacturing company has tasked the management accountant to coordinate the preparation of their functional budgets for the next financial year. The budgets were listed as follows:
- (1) Sales budget
 - (2) Cash budget
 - (3) Material purchases budget
 - (4) Production budget
 - (5) Material usage budget

In what order should the above budgets be prepared?

- A. (2), (3), (4), (5), (1)
 - B. (1), (5), (3), (4), (2)
 - C. (1), (4), (5), (3), (2)
 - D. (4), (5), (3), (1), (2)
- (2 marks)

4. An engineering firm operates a job costing system. Production overhead is absorbed at the rate of Sh.8.50 per machine hour. In order to allow for non-production overhead costs and profit, a mark-up of 60 percent 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 | Sh. 10,650 |
| Direct labour | Sh. 3,260 |
| Machine hours | 140 |

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

- A. Sh.22,256
 - B. Sh.22,851
 - C. Sh.23,446
 - D. Sh.24,160
- (2 marks)

5. Kiwanja Ltd. has established a budgeted sales revenue amounting to Sh.5,000,000 with an associated contribution of Sh.2,750,000. The fixed production costs amount to Sh.1,375,000 while fixed selling costs are Sh.275,000. Calculate the break-even sales revenue.
- A. Sh.756,250
 B. Sh.907,500
 C. Sh.2,500,000
 D. Sh.3,000,000

(2 marks)

Use the information below to answer question 6, 7 and 8.

Mambo Enterprises produces three products; X, Y and Z which have the following details:

| | Product X | Product Y | Product Z |
|--|------------------|------------------|------------------|
| | Per unit | Per unit | Per unit |
| Direct materials (at Sh. 5 per kg) | 8 kgs | 5 kgs | 6 kgs |
| Contribution per unit | Sh.35 | Sh.25 | Sh.48 |
| Contribution per kg of material | Sh.4.375 | Sh.5 | Sh.8 |
| Demand in units (excluding special contract) | 3,000 | 5,000 | 2,000 |

Mambo Enterprises must produce 1,000 units of product X for a special contract before meeting normal demand. Unfortunately, there are only 35,000 kgs of materials available.

6. Calculate the total quantity of materials needed in (kgs) to meet all the demand.
- A. 69,000 kgs
 B. 61,000 kgs
 C. 10,000 kgs
 D. 35,000 kgs
7. Determine the order of priority in production considering that materials in kgs are in short supply.
- A. X, Z, Y
 B. Z, Y, X
 C. Y, X, Z
 D. Z, X, Y
8. What is the optimum production level (in units) based on the materials available that will give maximum profit if all conditions are fulfilled?

(2 marks)

(2 marks)

| | Product X | Product Y | Product Z |
|----|------------------|------------------|------------------|
| A. | 1,000 | 4,600 | 2,000 |
| B. | 1,000 | 3,000 | 2,000 |
| C. | 2,875 | - | 2,000 |
| D. | 3,000 | 2,200 | - |

(2 marks)

Use the following information to answer question 9 and 10.

A transport service company is running five buses between two towns which are 50 kilometres apart. The seating capacity of each bus is 50 passengers. The following particulars were obtained from their books for the month of June 2024:

| | |
|--|---------|
| Wage of drivers, conductors and cleaners | 480,000 |
| Salaries of office staff | 232,500 |
| Diesel oil and other lubricants | 700,000 |
| Repairs and maintenance | 160,000 |
| Taxation and insurance | 320,000 |
| Depreciation | 520,000 |
| Interest and other expenses | 400,000 |

During the month of June 2024, the passengers carried were 75% of seating capacity. All buses operated on all days of the month. Each bus made one round trip per day.

9. What is the total passenger - kilometres?
- A. 562,500
 B. 750,000
 C. 281,250
 D. 775,000

(2 marks)

10. What is the cost per passenger - kilometre?
- A. Sh.3.70
 - B. Sh.9.90
 - C. Sh.5.00
 - D. Sh.2.50
- (2 marks)

Use the following information to answer question 11 and 12.

A manufacturing enterprise uses process costing to value its output. The following information was recorded for the first week of August 2024:

| | |
|------------------|--------------------------------------|
| Input materials | 20,000 unit at Sh.45 per unit |
| Conversion costs | Sh. 133,400 |
| Normal loss | 5% of input valued at Sh.30 per unit |
| Actual loss | 1,500 units |

There was no opening inventories or closing inventories.

11. The abnormal loss/gain in units will be _____.
- A. abnormal gain; 1,500 units
 - B. abnormal loss; 1,500 units
 - C. abnormal gain; 500 units
 - D. abnormal loss; 500 units
- (2 marks)
12. What is the valuation of one unit of output?
- A. Sh.21.85
 - B. Sh.52.81
 - C. Sh.86.04
 - D. Sh.37.79
- (2 marks)

Use the following information to answer question 13 and 14.

Rahisi Ltd. makes plastic buckets. An analysis of their accounting records reveals the following:

| | |
|---------------------------|------------------------|
| Variables cost per bucket | Sh.200 |
| Fixed cost | Sh.500,000 per year |
| Capacity | 2,000 buckets per year |
| Selling price per bucket | Sh.700 |

13. What is the number of buckets to be sold in order to break-even?
- A. 2,000
 - B. 3,200
 - C. 1,600
 - D. 1,000
- (2 marks)
14. The number of buckets to be sold to earn a profit of Sh.300,000 will be _____.
- A. 2,000
 - B. 1,000
 - C. 1,600
 - D. 1,000
- (2 marks)
15. Which one of the following differences between management accounting and financial accounting is **FALSE**?
- A. Management accounting is for internal reporting while financial accounting is for external reporting
 - B. Management accounting is future oriented while financial accounting is historical
 - C. Management accounting is more detailed while financial accounting generates summarised reports
 - D. Management accounting reports are periodical while financial accounting reports are perpetual
- (2 marks)
16. Which one of the following classifications of cost is meant for distinction between direct cost and indirect costs?
- A. By function
 - B. By nature of elements
 - C. By cost behavior
 - D. By controllability
- (2 marks)
17. Minimax Ltd. sells smart phones. The selling and distribution department of Minimax Ltd. is its _____.
- A. profit centre
 - B. cost centre
 - C. revenue centre
 - D. investment centre
- (2 marks)

18. The type of short-term decision making where capacity constraints exists is known as _____.
- make or buy decision
 - accept or reject decisions
 - break-even analysis
 - limiting factor analysis
- (2 marks)
19. Which one of the following methods of secondary apportionment is also referred to as “continuous” apportionment?
- Step down method
 - Simultaneous method
 - Direct allocation method
 - Specified order method
- (2 marks)

Use the following information to answer questions 20 to question 22.

Spiro Ltd. makes superior vehicle leather seats. The management accountant of Spiro Ltd. intends to prepare a budgeted cost statement. The following budgeted data is provided:

- Budgeted output for the year is 24,500 units
- Standard details for one unit of productions is as follows:

| | |
|----------------------|--|
| Direct materials | 100 square metres at Sh.450 per square metre |
| Direct wages: | |
| Fitting department | 120 hours at Sh.150 per hour |
| Finishing department | 80 hours at Sh.220 per hour |
- Budgeted overhead costs and hours per annum were as follows:

| Variable overhead: | Sh. | Hours |
|-----------------------------------|-------------|--------------|
| Fitting department | 2,000,000 | 25,000 |
| Finishing department | 1,440,000 | 12,000 |
| | | |
| Fixed overheads: | | Sh. |
| Production overhead | 196,000,000 | |
| Selling and distribution overhead | 122,500,000 | |
| Administration overhead | 61,250,000 | |

- Fixed overheads are absorbed based on budgeted output units.

Calculate the following:

20. Prime cost per unit.
- Sh.82,000
 - Sh.80,600
 - Sh.45,000
 - Sh.35,600
- (2 marks)
21. Variable production cost per unit.
- Sh.1,020
 - Sh.19,200
 - Sh.99,800
 - Sh.80,600
- (2 marks)
22. Total cost per unit.
- Sh.99,800
 - Sh.15,500
 - Sh.80,600
 - Sh.115,300
- (2 marks)

Use the following information to answer question 23 to question 26.

Masafa Enterprise is a sole motorcycle repair shop. The sole trader has decided to estimate the fixed and variable cost components associated with the repair activity per day. The following data has been collected for the past six months:

| Number of motorcycles repaired | Total repair cost Sh. |
|--------------------------------|--------------------------|
| 10 | 800 |
| 20 | 1,100 |
| 15 | 900 |
| 12 | 900 |
| 18 | 1,050 |
| 26 | 1,250 |

Using linear regression function in the form $Y = a + bX$:

23. What is the value of **a**?
- Sh.27.84
 - Sh.531.39
 - Sh.25
 - Sh.920
- (2 marks)

24. Estimate the value of **b**.
- Sh.25
 - Sh.27.84
 - Sh.30
 - Sh. 31.39
- (2 marks)

25. What is the value of $\sum Y$?
- Sh.6,000
 - Sh.105,700
 - Sh.101,000
 - Sh.1,869
- (2 marks)

26. What is the value of Y if 30 motorcycles were repaired?
- Sh.834.9
 - Sh.1,670
 - Sh.1,366.59
 - Sh.1,754.9
- (2 marks)

27. Economic order quantity is that quantity at which cost of holding and ordering inventory is _____.
- maximum and equal
 - minimum and equal
 - maximum and unequal
 - minimum and unequal
- (2 marks)

28. You are provided with the following information:

Opening inventory:

- August 1: 50 units @ Sh.40

Receipts:

- August 5: 100 units @ Sh.50
- August 12: 200 units @ Sh.45

Issues:

- August 2: 30 units
- August 18: 150 units

Calculate the value of the closing inventory using first in first out (FIFO) method of inventory valuation:

- Sh.7,650
- Sh.8,050
- Sh.7,860
- Sh.14,800

29. Which one of the following is an assumption of break-even analysis?
- All costs are classified as fixed costs
 - The selling price per unit varies with level of output
 - At break-even point, the profit is maximised
 - A single product or a single salesmix
- (2 marks)

Use the following information to answer question 30 and 31.

Promo Products Ltd. is in the process of preparing its master budget. Promo Products Ltd. expects to have 10,000 units in inventory as at 31 December 2024. The company has a policy of carrying 60% of the following month's projected sales in inventory. The following is the budgeted data for the year 2025:

| | January 2025 | February 2025 |
|-------------------------------|--------------|---------------|
| Budgeted sales (units) | 24,000 | 20,000 |
| Sales price per unit | Sh.750 | Sh.950 |
| Direct labour hours per unit | 4 hours | 5.5 hours |
| Direct labour hourly rate | Sh.110 | Sh.120 |
| Direct material cost per unit | Sh.150 | Sh.150 |

For the month of January 2025:

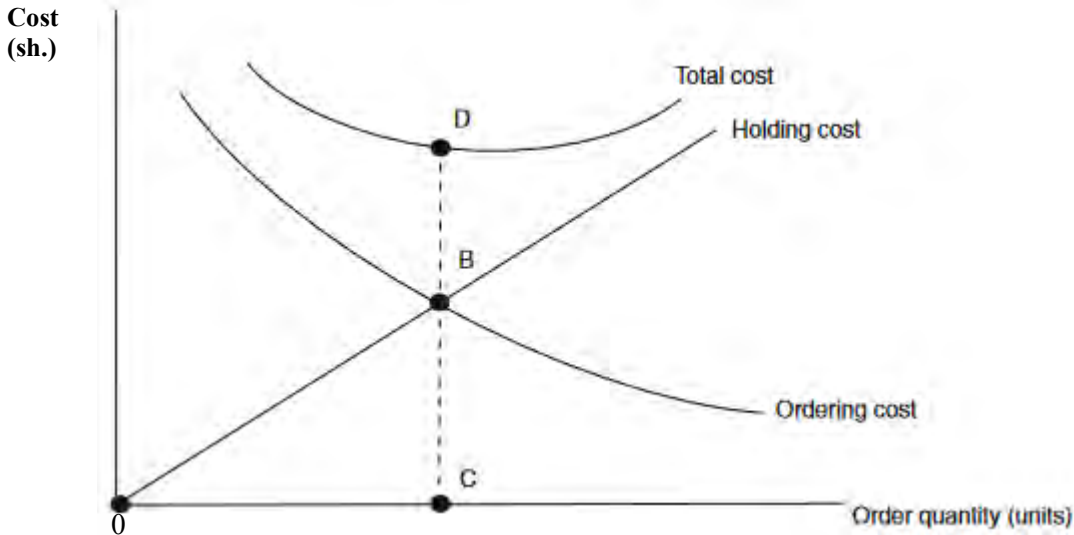
30. Determine the production budget in units.
- 24,000 units
 - 20,000 units
 - 26,000 units
 - 22,000 units
- (2 marks)
31. Determine the direct labour cost budget in shillings.
- Sh.11,440,000
 - Sh.140,000
 - Sh.9,680,000
 - Sh.10,560,00
- (2 marks)
32. Factory overhead includes _____.
- all manufacturing costs
 - all manufacturing costs except direct materials and direct labour
 - indirect materials but not indirect labour
 - indirect labour but not indirect materials
- (2 marks)
33. In order to identify costs that relate to specific product, an allocation base should be chosen that _____.
- does not have cause and effect relationship
 - has a cause and effect relationship
 - considers variable costs and but not fixed costs
 - considers direct materials and direct labour but not factory overheads
- (2 marks)
34. In the absence of more realistic information, supervision overheads should be split up according to _____.
- Floor area occupied
 - The number of employees
 - Replacement value of plant and equipment
 - The number of kilowatt hours
- (2 marks)
35. A company has under absorbed fixed production overhead for the period by Sh.630,000. The fixed production overhead absorption rate was Sh.490 per unit and is based on the normal level of activity of 35,000 units. Actual production was 38,500 units. What was the actual fixed production overhead incurred?
- Sh.16,520,000
 - Sh.18,235,000
 - Sh.17,780,000
 - Sh.19,495,000
- (2 marks)

36. The following information relates to a company's cutting process for the month of July 2024:
- | | |
|------------------------------------|-------------------------------------|
| Output to finished goods inventory | 16,224 units valued at Sh.2,676,960 |
| Normal loss. | 828 units |
| Actual loss. | 336 units |
- All losses have a scrap value of Sh.75 per unit and there was no opening or closing work in progress. Compute the value of input during the period.
- A. Sh.2,595,780
 B. Sh.2,657,880
 C. Sh.2,676,960
 D. Sh.2,739,060
- (2 marks)

37. Brown Ltd. uses standard absorption costing to value inventory. Its fixed overhead absorption rate is Sh.240 per labour hour and each unit of production takes 4 hours. In a recent period where there was no opening inventory of finished goods, 40,000 units were produced using 100,000 labour hours and 36,000 units were sold. The actual profit was Sh.9,280,000.
- Determine the amount of profit that would have been earned under a standard marginal costing system.
- A. Sh.5,440,000
 B. Sh.8,320,000
 C. Sh.6,880,000
 D. Sh.13,120,000
- (2 marks)

38. One of the fundamental principles of ethical behavior that should be observed by a management accountant is 'integrity'. Which one of the following statements **BEST** describes integrity in the context of management accounting?
- A. Maintaining the skills required to ensure a competent professional service
 B. Compliance with relevant laws and regulations
 C. Being straightforward and honest when dealing with clients or employing organisation
 D. Not being biased or prejudiced
- (2 marks)

39. The following graph represents the economic order quantity model:



Which point on the graph indicates the value of the Economic Order Quantity (E.O.Q)?

- A. 0
 B. D
 C. B
 D. C
- (2 marks)

40. Budgeted costs and revenues for an output level of 20,000 units are provided below:

| | Sh.Per unit |
|---------------|--------------------|
| Selling price | 1,500 |
| Variable cost | 900 |
| Fixed cost | <u>200</u> |
| Profit | <u>400</u> |

It is known that after an output level of 25,000 units, there is a step-up in fixed cost of Sh.50,000. What is the flexed budget profit at an output level of 30,000 units?

- A. Sh.11,950,000
 - B. Sh.12,000,000
 - C. Sh.13,950,000
 - D. Sh.14,000,000
- (2 marks)

41. A sales man is paid a fixed monthly salary of Sh.45,000 plus an extra 2% commission of the monthly sales value. How would this type of cost be classified?
- A. Stepped labour cost
 - B. Fixed selling cost
 - C. Semi-variable labour cost
 - D. Variable distribution cost
- (2 marks)

42. The purchase price of an item of inventory is Sh.4, 400 per unit. In each six-month period, the usage of the item is 200,000 units. The annual holding cost associated with one unit equates to 3% of the purchase price. The cost of placing an order for the item is Sh.600. What is the Economic Order Quantity (E.O.Q) for the inventory item to the nearest whole number?
- A. 1,348
 - B. 1,907
 - C. 3,303
 - D. 20,010
- (2 marks)

43. Tim Company has two processes namely; cutting and finishing. There is an expected loss of 5% of input in cutting process and 7% of input in finishing process. Activities during the month of June 2024 were as follows:

| | Cutting | Finishing |
|----------------------|----------------|------------------|
| Material input (kgs) | 60,000 | 84,000 |
| Output (kgs) | 55,500 | 78,300 |

For each process, is there an abnormal loss or gain?

- | | Cutting | Finishing |
|----|----------------|------------------|
| A. | Abnormal gain | Abnormal gain |
| B. | Abnormal loss | Abnormal gain |
| C. | Abnormal gain | Abnormal loss |
| D. | Abnormal loss | Abnormal loss |

(2 marks)

44. The following data relates to work undertaken in the finishing department of a certain factory in your country:

| | |
|---|-------------------|
| Normal working day | 7 hours |
| Basic rate of pay per hour | Sh.1200 |
| Standard time allowed to produce one unit | 4 minutes |
| Premium bonus payable at the basic rate | 70% of time saved |

On a particular day, an employee finished 180 units. What was his gross pay for the day?

- A. Sh.8,400
 - B. Sh.12,600
 - C. Sh.4,200
 - D. Sh.14,400
- (2 marks)

45. Which one of the following statements about predetermined overhead absorption rates is **TRUE**?
- A. Using predetermined overhead absorption rate offers the administrative convenience of recording production cost sooner
 - B. Using a predetermined overhead absorption rate avoids problems of under or over absorption of overheads because the overhead rate is constant
 - C. Using predetermined overhead absorption rate avoids the problems associated with choosing an appropriate absorption base
 - D. Predetermined overhead absorption rates are more difficult to use in product costing as compared to actual rates
- (2 marks)

46. Which one of the following statements is **TRUE** about marginal and absorption costing profit in a period when sales in units are greater than production units?
- A. Marginal costing profit will be less than absorption costing profit
 - B. Marginal costing profit will be greater than absorption costing profit
 - C. Both marginal and absorption costing profits will be the same
 - D. There will be over absorption of overheads under absorption costing
- (2 marks)

47. Which one of the following cost categories is **NOT** a functional cost classification?
- A. Administrative cost
 - B. Production cost
 - C. Direct cost
 - D. Selling cost
- (2 marks)

48. Sabuni Ltd. manufactures liquid soap for the local market. Which of the following costing methods is most likely to be used by Sabuni Ltd.?
- A. Batch costing
 - B. Job costing
 - C. Process costing
 - D. Service costing
- (2 marks)

49. A manufacturing organisation's records shows that the cost of manufacturing batches of products in the last five accounting periods has been as follows:

| Period | Number of batches | Total cost "Sh.000" |
|--------|-------------------|---------------------|
| 1 | 1,300 | 34,250 |
| 2 | 1,880 | 35,600 |
| 3 | 2,520 | 37,300 |
| 4 | 1,980 | 35,960 |
| 5 | 2,300 | 36,720 |

Using high-low method and ignoring inflation, what is the estimated cost in period 6 if production is estimated to be 1,700 batches?

- A. Sh.35,030,000
 - B. Sh.35,140,000
 - C. Sh.35,250,000
 - D. Sh.35,360,000
- (2 marks)

50. Which of the following is the **MAIN** purpose for cost estimation?
- A. Cost reduction
 - B. Cost prediction
 - C. Cost classification
 - D. Cost accumulation
- (2 marks)

.....



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

WEDNESDAY: 24 April 2024. Afternoon Paper.

Time Allowed: 2 hours.

This paper is made up of fifty (50) Multiple Choice Questions. Answer ALL questions by indicating the letter (A, B, C or D) that represents the correct answer. Each question is allocated two (2) marks. Do NOT write anything on this paper.

- Which one of the following statements describe margin of safety?
 - The total sales units up to the break-even sales volume
 - The difference in units between the expected sales volume and the break-even sales volume
 - The difference between the total cost and the fixed costs at break-even sales volume
 - The difference between fixed cost and variable cost at breakeven point(2 marks)
- Which of the following elements is **UNLIKELY** to be found in a budget manual?
 - Selling overhead budget
 - Objectives of the budgetary process
 - Administrative details of budget preparation
 - Organisational structure(2 marks)

Use the information below to answer question 3 to question 5.

Tundra Ltd. uses job-order costing system. The company has two departments through which most jobs go through. Selected budgeted and actual data for the year ended 31 December 2023 is as follows:

| Cost Centre | Mixing | Blending |
|------------------------------|--------------|--------------|
| Budgeted overhead | Sh.1,000,000 | Sh.5,000,000 |
| Actual overhead | Sh.1,100,000 | Sh.5,200,000 |
| Budgeted direct labour hours | 50,000 hours | 10,000 hours |
| Budgeted machine hours | 10,000 hours | 50,000 hours |
| Actual direct labour hours | 51,000 hours | 9,000 hours |
| Actual machine hours | 10,500 hours | 52,000 hours |

During the year, several jobs were completed. Data pertaining to job number JFC is as follows:

| | | |
|---|-----|-----------|
| Direct materials | Sh. | 2,000,000 |
| Direct labour cost: | | |
| Mixing cost centre (5,000 hours at Sh.600 per hour) | | 3,000,000 |
| Blending cost centre (1,000 hours at Sh.600 per hour) | | 600,000 |
| Machine hours used: | | |
| Mixing cost centre | | 100 |
| Blending cost centre | | 1,200 |
| Units produced | | 10,000 |

- Determine the overhead absorption rate (OAR) of mixing department using direct labour hours basis.
 - Sh.0.5
 - Sh.22
 - Sh.20
 - Sh.2(2 marks)

4. Determine the overhead absorption rate (OAR) of blending department using machine hour basis.
- A. Sh.500
B. Sh.100
C. Sh.520
D. Sh.200 (2 marks)
5. Compute the overhead over/(under) absorbed for mixing department.
- A. Sh.100,000 over-absorbed
B. Sh.80,000 over-absorbed
C. Sh.80,000 under-absorbed
D. Sh.100,000 under-absorbed (2 marks)
6. A management consultancy recovers overheads on chargeable consulting hours. Budgeted overheads were Sh.2,460,000 and actual consulting hours were 32,150. Overheads were under-recovered by Sh.140,000. If the actual overheads were Sh.2,776,300, compute the budgeted overhead absorption rate per hour.
- A. Sh.76.52
B. Sh.82.00
C. Sh.86.35
D. Sh.90.71 (2 marks)
7. Which one of the following statements define cost classification?
- A. The use by several companies of the same costing method
B. The sum of all cost incurred
C. The allotment of items of cost to cost centers
D. The grouping of costs according to their common characteristics (2 marks)
8. Digo Ltd. uses batch costing and has an order of 900 units which will be made in a single batch, batch number 68B. The following information is available for batch number 68B.

Direct materials Sh. 60,000
Direct labour 450 hours at Sh.80 per hour

Digo Ltd.'s budgeted fixed overhead costs for the year 2024 amount to Sh.1,200,000 based on 60,000 labour hours. Overhead is absorbed based on labour hours. Determine the cost per unit of the product.

- A. Sh.116.67
B. Sh.109.46
C. Sh.103.71
D. Sh.129.63 (2 marks)
9. An organisation has four types of cost identified as W, X, Y and Z. The total cost for each type of two different production levels have been analysed by the cost accountant as follows:

| Cost type | Total cost for 250,000 units (Sh.) | Total cost for 360,000 units (Sh.) |
|-----------|------------------------------------|------------------------------------|
| W | 12,500,000 | 18,000,000 |
| X | 18,750,000 | 24,800,000 |
| Y | 11,250,000 | 16,200,000 |
| Z | 14,250,000 | 20,520,000 |

Which cost type would be classified as semi-variable?

- A. X
B. Z
C. W
D. Y (2 marks)

10. A company manufactures a single product whose unit cost is as follows:

| | Cost per unit (Sh.) |
|--------------------------|----------------------------|
| Variable production cost | 295 |
| Fixed production cost | 162 |
| Variable selling cost | 48 |
| Fixed selling cost | 107 |

400,000 units of the product were manufactured in a period, during which 394,000 units were sold. There was no inventory of the product at the beginning of the period.

Using marginal costing, what is the total value of the finished goods inventory at the end of the period?

- A. Sh.2,742,000
 - B. Sh.2,058,000
 - C. Sh.1,770,000
 - D. Sh.3,672,000
- (2 marks)

11. Which one of the following statements is a feature of job costing?

- A. It is associated with continuous production of large volumes of low-cost items
 - B. Production is carried out in accordance with the wishes of the customer
 - C. It takes a longer period (more than one accounting year)
 - D. It establishes the cost of the services rendered
- (2 marks)

Use the information below to answer question 12 to question 15.

Lengo Ltd. makes three products; X – 6,000 units, Y – 4,000 units and Z – 2,000 units. The cost per unit and selling price of each product is as follows:

| Product | X | Y | Z |
|-------------------|------------|------------|------------|
| | Sh. | Sh. | Sh. |
| Raw material | 3 | 4 | 5 |
| Direct wages | 3 | 5 | 4 |
| Variable overhead | 5 | 5 | 7 |
| Fixed cost | 5 | 5 | 7 |
| Total cost | 15 | 17 | 18 |
| Selling Price | 20 | 25 | 22 |

12. Calculate the contribution per unit of each product.

- A. X: Sh.5 Y: Sh.8 Z: Sh.4
 - B. X: Sh.35 Y: Sh.42 Z: Sh.40
 - C. X: Sh.10 Y: Sh.13 Z: Sh.11
 - D. X: Sh.10 Y: Sh.12 Z: Sh.11
- (2 marks)

13. Calculate the total net profit of each product.

- A. X: Sh.30,000 Y: Sh.32,000 Z: Sh.8,000
 - B. X: Sh.210,000 Y: Sh.168,000 Z: Sh.80,000
 - C. X: Sh.66,000 Y: Sh.52,000 Z: Sh.22,000
 - D. X: Sh.54,000 Y: Sh.48,000 Z: Sh.22,000
- (2 marks)

14. Which of the above products should be discontinued based on profitability?

- A. X
 - B. Y
 - C. Z
 - D. None
- (2 marks)

15. Determine the break-even point in units of product X.

- A. 6,000 units
 - B. 36,000 units
 - C. 3,000 units
 - D. 2,400 units
- (2 marks)

www.chopi.co.ke

Use the information below to answer question 16 to question 18.

Jomvu Factory incurred the following types of cost which were classified according to cost behaviour.

| | Sh. "000" |
|---|------------------|
| Direct materials | 190,000 |
| Direct labour | 150,000 |
| Electricity (variable cost Sh.35,000,000) | 60,000 |
| Rent (fixed) | 80,000 |
| Transport (1/3 variable) | 45,000 |
| Warehouse (variable) | 20,000 |
| Depreciation | 10,000 |

The total number of kilograms produced was 20,000 kilograms.

16. Compute the total fixed costs.
- A. Sh.145,000,000
 - B. Sh.310,000,000
 - C. Sh.350,000,000
 - D. Sh.135,000,000
- (2 marks)
17. Calculate the variable cost per kilogram.
- A. Sh.75,000
 - B. Sh.15,500
 - C. Sh.7,250
 - D. Sh.17,500
- (2 marks)
18. Using cost estimation equation in the form $Y = a + bx$, estimate the total cost if 10,000 kilograms were produced.
- A. Sh.160,500,000
 - B. Sh.300,000,000
 - C. Sh.310,000,000
 - D. Sh.455,000,000
- (2 marks)
19. Which one of the following is **NOT** an inventory cost?
- A. Carrying cost
 - B. Out of pocket cost
 - C. Set-up costs
 - D. Sunk cost
- (2 marks)
20. Which one of the following is an advantage of centralised material purchasing and storage?
- A. Close control is possible on inventory
 - B. Less risk of duplication
 - C. Stock taking is easier
 - D. Better understanding of local knowledge of suppliers
- (2 marks)

Use the following information to answer question 21 to question 23.

Victoria Garments Ltd. makes ladies wedding gowns. The company outsources the fabric material from Golden Cotton Factory. The following data is provided:

- Annual demand 22,500 metres
 - The cost of placing an order Sh.200,000
 - The purchase price of the raw material Sh.5,000 per metre
 - The re-order period 3 to 5 weeks
 - Minimum consumption per week 100 metres
 - Maximum consumption per week 800 metres
 - Average consumption per week 450 metres
 - The carrying cost of inventory is 20% of the purchase price per unit per annum
- Assume 50 weeks in a year

21. What is the optimal economic order quantity (EOQ) in metres?
 A. 800
 B. 5,000
 C. 3,000
 D. 450 (2 marks)
22. What is the re-order level in metres?
 A. 3,000
 B. 4,000
 C. 2,250
 D. 22,500 (2 marks)
23. Calculate the maximum inventory level in metres.
 A. 5,650
 B. 7,000
 C. 800
 D. 6,700 (2 marks)

Use the following information to answer question 24 to question 26.

Marsha Hospital is in the process of estimating its inpatient cost for the month of May 2024. Past data for the Admitting Department's costs and the number of patients admitted during the immediately preceding eight months are given in the following table:

| Month | Number of patients admitted | Inpatient cost Sh. "000" |
|----------------|-----------------------------|-----------------------------|
| September 2023 | 1,150 | 7,150 |
| October 2023 | 1,400 | 7,950 |
| November 2023 | 1,280 | 8,350 |
| December 2023 | 1,250 | 7,425 |
| January 2024 | 890 | 5,730 |
| February 2024 | 900 | 5,800 |
| March 2024 | 700 | 5,150 |
| April 2024 | 1,060 | 5,450 |

Using High-Low method:

24. Calculate the inpatient variable cost per patient.
 A. Sh.4
 B. Sh.40
 C. Sh.400
 D. Sh.4,000 (2 marks)
25. Estimate the fixed inpatient cost per month.
 A. Sh.2,350,000
 B. Sh.235,000
 C. Sh.23,500
 D. Sh.2,350 (2 marks)
26. Estimate the total inpatient cost of admitting 1,010 patients in May 2024.
 A. Sh.4,040,000
 B. Sh.9,200,000
 C. Sh.2,350,000
 D. Sh.6,390,000 (2 marks)
27. Which of the following managers is responsible for revenues and expenses?
 A. Investment centre manager
 B. Profit centre manager
 C. Cost centre manager
 D. Revenue centre manager (2 marks)

28. The type of process loss that arises due to difference between “expected output” and “actual output” is known as _____.
- Normal loss
 - Actual loss
 - Standard loss
 - Abnormal loss
- (2 marks)

29. Which of the following costs is **NOT CORRECTLY** classified to its type of cost?

| | Type of cost | Example of cost |
|----|-----------------------|------------------------|
| A. | Cost behaviour | Direct material |
| B. | Nature classification | Historical cost |
| C. | Decision making | Opportunity cost |
| D. | Inventory cost | Holding cost |

(2 marks)

Use the following information to answer question 30 and question 31.

Amani Ltd. sells tinned fish at a selling price of Sh.750 per tin. The sales budget for the first four months of the year 2024 is presented below:

| | Units sold | Sales budget |
|----------|-------------------|---------------------|
| | | Sh. |
| January | 200,000 | 150,000,000 |
| February | 240,000 | 180,000,000 |
| March | 220,000 | 165,000,000 |
| April | 200,000 | 150,000,000 |

The company policy requires that ending inventories for each month be 35% of next month’s sales. At the beginning of January 2024, the inventory of tinned fish amounted to 38,000 tins.

30. Which one of the following shows the production budget in units for the month of January 2024?
- 200,000
 - 284,000
 - 246,000
 - 154,000
- (2 marks)
31. Which one of the following shows the production budget in units for February 2024?
- 240,000
 - 277,000
 - 233,000
 - 247,000
- (2 marks)
32. The process of distributing common overhead costs to cost centres on the basis of benefit received is called overhead _____.
- Accumulation
 - Absorption
 - Apportionment
 - Allocation
- (2 marks)
33. Maria Mueni is employed as a chief chef at Mlo Cafeteria. Maria earns Sh.150 per hour up to 400 units of production per day. If she produces more than 400 units per day, she will receive additional piece-rate of Sh.25 per unit. In the last week of March 2024, she worked the following hours and produced the following units:

| Day | Hours worked | Units produced |
|------------|---------------------|-----------------------|
| Monday | 8 | 400 |
| Tuesday | 8 | 380 |
| Wednesday | 8 | 440 |
| Thursday | 8 | 450 |
| Friday | 8 | 360 |

Calculate the total earnings received by Maria Mueni at the end of the week.

- A. Sh.6,000
 - B. Sh.2,250
 - C. Sh.20,000
 - D. Sh.8,250
- (2 marks)

34. The term labour turnover as used in labour costing refers to _____.

- A. Total sales in labour costing
 - B. Rate at which employees join or leave employment
 - C. The total labour cost per revenue received
 - D. The rate of promoting employees from low level to high level
- (2 marks)

35. In which of the following methods of material pricing and issues do costs lag behind the current economic values?

- A. Weighted average price method
 - B. Replacement price method
 - C. First in first out price method
 - D. Last in first out price method
- (2 marks)

36. Which one of the following is **NOT** a salient feature of process costing?

- A. The output of preceding process is the input of the succeeding process
 - B. The goods produced per process are in uniform batches
 - C. The goods produced per process are homogeneous
 - D. Normal loss is calculated as a percentage of input material of each process
- (2 marks)

37. A company has the following budget for the next month:

Finished product:

| | |
|------------------|-------------|
| Sales units | 7,000 units |
| Production units | 7,200 units |

Materials:

| | |
|----------------|---------|
| Usage per unit | 3 kgs |
| Opening stock | 400 kgs |
| Closing stock | 500 kgs |

What is the material purchases budget for the month?

- A. 20,900 kgs
 - B. 21,100 kgs
 - C. 21,500 kgs
 - D. 21,700 kgs
- (2 marks)

38. Which one of the following statements is **NOT** a major assumption of break-even analysis?

- A. Production level is equal to sales level
 - B. Sales prices vary in line with levels of activity
 - C. Fixed costs are the same in total and unit variable costs are the same at all levels of output
 - D. It can only apply to one product or a constant sales mix
- (2 marks)

39. Which of the following statements about management accounts is/are true?

- (i) The format of management accounts is largely determined by law
- (ii) Management accounting serves as a future planning tool and are not used as a historical record
- (iii) There is a legal requirement to prepare management accounts
- (iv) Management accounts are used internally by the managers in planning, control and decision making

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

www.chopi.co.ke

40. Which one of the following costs could **NOT** be classified as a production overhead cost in a food processing company?
- A. The salary of the factory manager
 - B. The cost of factory rent
 - C. Depreciation of cooking equipment
 - D. The cost of ingredients
- (2 marks)
41. Which one of the following statements is **FALSE**?
- A. Management accounting cannot substitute financial accounting
 - B. Financial accounting information can be used for internal reporting purpose
 - C. Cost accounting can only be used to provide inventory valuations for internal reporting
 - D. Management accounting provides information relevant to decision making, planning, control and evaluation of performance
- (2 marks)
42. Which one of the following statements **BEST** describe a flexible budget?
- A. A monthly budget which is changed to reflect the number of days in the month
 - B. A budget which shows variable production costs only
 - C. A budget that is updated halfway through the year to incorporate the actual results for the first half of the year
 - D. A budget which shows sales revenues and costs at different levels of activity
- (2 marks)
43. Which of the following costing methods would be most suitable for an accounting firm?
- A. Batch costing and uniform costing
 - B. Job costing and service costing
 - C. Process costing and service costing
 - D. Job costing and batch costing
- (2 marks)
44. The branch of accounting that is concerned with providing special purpose reports within the organisation for the top management to make informed decision is called _____.
- A. Management accounting
 - B. Cost accounting
 - C. Financial accounting
 - D. Forensic accounting
- (2 marks)
45. Fixed costs are conventionally deemed to be _____.
- A. Irrelevant costs
 - B. Variable in the short-run
 - C. Constant per unit of output
 - D. Outside the control of management
- (2 marks)
46. Which of the following statements is **NOT** an argument in favour of marginal costing?
- A. It is simple to operate
 - B. Closing inventory is valued in accordance with International Accounting Standard (IAS 2)
 - C. There is no under or over absorption of overheads
 - D. The information from this costing method can be used in decision making
- (2 marks)
47. In make or buy decision, it is profitable to buy from outside only when the supplier's price is below the firm's own _____.
- A. Fixed cost
 - B. Variable cost
 - C. Total cost
 - D. Prime cost
- (2 marks)
48. Which one of the following statements is **NOT** an assumption of cost- volume- profit (CVP) analysis?
- A. Total cost and total revenue are linear functions of output
 - B. The cost behaviour applies to a relevant range only
 - C. All costs are classified into variable and fixed costs
 - D. The company produces more than one product
- (2 marks)

49. Under marginal costing principles, the opening inventory, production units and closing inventory are valued at _____.
- A. Full cost per unit
 - B. Variable production cost per unit only
 - C. Variable production and variable selling cost per unit
 - D. Fixed cost only
- (2 marks)

50. Which one of the following statements **CORRECTLY** describe a direct cost?
- A. A cost that cannot be clearly associated with specific activities or products
 - B. A cost that can be clearly associated with specific activities or products
 - C. A cost that is past and should not be considered for future decisions
 - D. A cost that will change as a result of a decision under consideration
- (2 marks)
-

www.chopi.co.ke



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 4 December 2023. Afternoon Paper.

Time Allowed: 3 hours

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings. Do NOT write anything on this paper.

QUESTION ONE

- (a) Highlight **FOUR** arguments against introduction of a management accounting system in a business organisation. (4 marks)
- (b) Sauti Electronics is a popular car radio retailer. The following information was obtained from one of its outlets:

| | |
|-------------------|-------------------|
| Average sales | 750 units per day |
| Maximum sales | 950 units per day |
| Minimum sales | 500 units per day |
| Lead time | 12 - 18 days |
| Re-order quantity | 17,500 units |

Required:

Determine the following:

- (i) The level of stock that a replenishment order will be required. (2 marks)
- (ii) The minimum level of stock possible. (2 marks)
- (iii) The maximum level of stock possible. (2 marks)
- (iv) The average level of stock. (2 marks)
- (c) Rolly Motors Ltd. is a manufacturer of quality trucks which they sell at Sh.3,500,000 each. The cost of the company can be separated into fixed and variable costs.

The following is a budgeted data for the first six months of the year 2024:

| Months | Sales (Trucks) | Costs (Sh.) |
|----------|----------------|-------------|
| January | 9 | 23,500,000 |
| February | 10 | 25,000,000 |
| March | 15 | 32,500,000 |
| April | 11 | 26,500,000 |
| May | 12 | 28,000,000 |
| June | 8 | 22,000,000 |

Fixed costs for the six months have been spread evenly over the period under review to arrive at the monthly projections.

Required:

- (i) Calculate the total fixed costs for the period using high-low method. (4 marks)
- (ii) Determine break-even-point (BEP) in units and sales revenue. (4 marks)

(Total: 20 marks)

**AD32 Page 1
Out of 4**

QUESTION TWO

- (a) Chanzo Ltd. operates a factory which has four operators working in department RPM400. The company uses time-rate system of labour remuneration to compensate its workers.

The data about the four employees for the month of November 2023 is as follows:

| Employee Name | PIN No. | Basic salary Sh. | Salary advance Sh. | Loan repayment Sh. |
|---------------|----------|---------------------|-----------------------|-----------------------|
| Angel Chebet | A08522F | 50,000 | 6,000 | 10,000 |
| Bob Munene | A086538K | 45,000 | 5,000 | 12,000 |
| Chris Lemayan | A106587J | 30,000 | 0 | 0 |
| Diana Nina | A258850H | 48,000 | 9,000 | 15,000 |

Additional information:

- Affordable housing levy (AHL) tax of 1.5% is charged on gross income per month.
- NSSF is deducted at a rate of 5% of the gross income
- NHIF is deducted at a rate of 3% of the basic pay.
- PAYE is charged at a rate of 30% of gross income.
- Housing allowance is provided at a rate of 15% of the basic pay.
- Gross income is the total of basic pay plus house allowance but before any deductions.

Required:

Prepare a payroll to show the take-home net pay for the month of November 2023 for the four operators. (8 marks)

- (b) Dodoma Ltd. has submitted the following data relating to component “T” that it currently manufactures:

Total cost of making 10,000 units of component “T”

| | Sh. |
|-------------------------|----------------|
| Direct material | 100,000 |
| Direct labour | 80,000 |
| Indirect labour | 40,000 |
| Depreciation | 60,000 |
| Repairs and maintenance | <u>50,000</u> |
| Total cost | <u>330,000</u> |

Additional information:

- The Management Accountant of Dodoma Ltd. analysed each item of the expense according to cost behaviour pattern into variable and fixed elements. The analysis is as follows:

| | Unit variable cost Sh. | Total fixed cost Sh. |
|-------------------------|---------------------------|-------------------------|
| Direct material | 10 | |
| Direct labour | 8 | |
| Indirect labour | | 40,000 |
| Depreciation | | 60,000 |
| Repairs and maintenance | <u>2.50</u> | <u>25,000</u> |
| Total cost | <u>20.50</u> | <u>125,000</u> |

- Dodoma Ltd. has determined that Sh.30,000 of fixed indirect labour cost is an unavoidable cost even if component “T” is outsourced.
- RVD Ltd. has offered to supply 10,000 units of component “T” to Dodoma Ltd. for Sh.16 per unit.
- All variables costs are avoidable costs if component “T” is bought from RVD Ltd.

Required:

- Advise Dodoma Ltd. whether to make or buy component “T” from RVD Ltd. (8 marks)
- Summarise **FOUR** overriding considerations to be met before accepting “make” or “buy” decision. (4 marks)

(Total: 20 marks)

www.chopi.co.ke

QUESTION THREE

- (a) Explain **FOUR** features of service costing. (8 marks)
- (b) The following information relates to the books of Digital Watches Ltd. that produced watches in batches during the three months of September, October and November 2023:

| Month | Batch output (Units) | Material cost (Sh.) | Labour cost (Sh.) |
|----------------|----------------------|---------------------|-------------------|
| September 2023 | 2,500 | 937,500 | 250,000 |
| October 2023 | 3,000 | 1,275,000 | 300,000 |
| November 2023 | 2,000 | 750,000 | 200,000 |

Additional information:

- Each watch retails at Sh.1,500.
- Labour is paid at a rate of Sh.200 per hour.
- Overheads are charged at a rate per labour hour.
- Budgeted overheads and labour hours were as follows:

| Month | Overheads (Sh.) | Total labour hours |
|----------------|-----------------|--------------------|
| September 2023 | 1,200,000 | 4,000 |
| October 2023 | 900,000 | 4,500 |
| November 2023 | 1,500,000 | 5,000 |

Required:

- (i) Total profit per batch for each month. (6 marks)
- (ii) Cost per watch. (3 marks)
- (iii) Profit per watch. (3 marks)
- (Total: 20 marks)**

QUESTION FOUR

- (a) Identify **SIX** types of costs classified by function. (6 marks)
- (b) Dawa Ltd. is a pharmaceutical company which manufactures antibiotic drugs. Dawa Ltd. has two production departments namely; factory plant and assembly department. The company has also two service departments namely; laboratory that deals with efficacy and chemist that is concerned with stocking of the drugs.

The overhead analysis sheet showing primary allocation of overheads analysed to production and service departments are as follows:

| | Production departments | | Service departments | |
|---------------------------|------------------------|------------------|---------------------|------------------|
| | Factory plant | Assembly | Laboratory | Chemist |
| | Sh. | Sh. | Sh. | Sh. |
| Indirect labour | 1,080,000 | 2,500,000 | 1,500,000 | 1,000,000 |
| Indirect material | 300,000 | 720,000 | 200,000 | 200,000 |
| Lighting and heating | 350,000 | 550,000 | 200,000 | 100,000 |
| Property taxes | 280,000 | 470,000 | 300,000 | 200,000 |
| Salary to factory manager | <u>380,000</u> | <u>670,000</u> | <u>400,000</u> | <u>300,000</u> |
| Total overheads | <u>2,390,000</u> | <u>4,910,000</u> | <u>2,600,000</u> | <u>1,800,000</u> |

Additional information:

- Budgeted direct labour hours were 23,780 hours for factory plant department and 15,050 hours for assembly department.
- The budgeted direct labour rate per hour is Sh.300 in factory plant department and Sh.510 in the assembly department.

3. The total overheads of the service departments are to be apportioned to production departments as follows:
- Laboratory: 50% to Factory plant department
 30% to Assembly department
 20% to Chemistry department
- Chemist: 60% to Factory plant department
 30% to Assembly department
 10% to Laboratory department

Required:

- (i) Secondary apportionment of service department total overheads using stepwise method. (8 marks)
- (ii) Compute the overhead absorption rate (OAR) for each production department. (2 marks)
- (iii) A special order of antibiotics capsules has been received from a customer. The management accountant has estimated the costs as follows:

| | | |
|-----------------|---------------|-------------------------|
| Direct material | | Sh. 225,000 |
| Direct labour: | Factory plant | 300 direct labour hours |
| | Assembly | 160 direct labour hours |

Required:

- Calculate the total cost of the special order. (4 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) Describe the following types of functional budgets:
- (i) Sales budget. (2 marks)
- (ii) Production budget. (2 marks)
- (iii) Material purchases budget. (2 marks)
- (iv) Cash budget. (2 marks)
- (b) Summarise **FOUR** applications of marginal costing. (4 marks)
- (c) AMA Ltd. is a company that concentrates wholly on the production of refined vegetable oils for exports and domestic markets. In the year ended 31 August 2023, the company produced 100,000 tonnes of oil out of which 90,000 tonnes were sold.

The balance was returned to store. The production cost was as follows:

| | |
|----------------------|------------------|
| | Sh. "000" |
| Direct materials | 3,200,000 |
| Direct labour | 1,480,000 |
| Production overheads | <u>800,000</u> |
| | <u>5,480,000</u> |

Additional information:

- 60% of the production overheads are fixed.
- The average selling price for each tonne of oil was Sh.80,000.
- Selling and administration expenses for the year amounted to Sh.1,200,000,000 of which Sh.300,000,000 were fixed.
- There was no opening or closing stock of work-in-progress.

Required:

- (i) Statement of profit or loss for the year ended 31 August 2023 under direct costing method. (6 marks)
- (ii) Minimum number of tonnes of oil that must be produced and sold in order to breakeven. (2 marks)
- (Total: 20 marks)**
-



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 21 August 2023. Afternoon Paper.

Time Allowed: 3 hours

Answer ALL questions. Marks Allocated to each question are shown at the end of the question. Show ALL your workings. Do not write anything on this paper.

QUESTION ONE

- (a) List **FOUR** examples of costs that are relevant for decision making process. (4 marks)
- (b) A product is manufactured by passing it through three processes namely: Process I, II and III respectively. For the first week of July 2023, the actual data included the following:

| Process | Process I | Process II | Process III |
|----------------------------------|------------------|-------------------|--------------------|
| Normal loss of output | 5% | 10% | 5% |
| Scrap value per unit (Sh.) | 1.50 | 2.00 | 4.00 |
| Output (units) | 5,760 | 5,100 | 4,880 |
| Direct costs: | Sh. "000" | Sh. "000" | Sh. "000" |
| Direct material (6,000 units) | 12,000 | - | - |
| Direct material added in process | 5,000 | 9,000 | 4,220 |
| Direct labour | 4,000 | 6,000 | 2,200 |
| Direct expenses | 1,000 | 1,800 | 2,411 |

Additional information:

- Budgeted production overhead for the week is Sh.30,500,000 and are absorbed based on direct labour cost.
- Budgeted direct wages for the week amounted to Sh.12,200,000.

Required:

- (i) Process I account. (5 marks)
- (ii) Process II account. (5 marks)
- (iii) Process III account. (6 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Rindo Ltd. is considering the type of remuneration scheme to adopt for its employees. The following information is availed to you for your analysis:

| Employees | A | B | C |
|--------------------------|----------|----------|----------|
| Actual hours worked | 38 | 36 | 40 |
| Hourly rate of pay (Sh.) | 200 | 150 | 230 |
| Output (units) : Product | | | |
| X | 50 | 150 | - |
| Y | 80 | 80 | 80 |
| Z | 100 | - | 80 |

Additional information:

1. The standard time allowed per unit is 10 minutes for product X, 20 minutes for product Y and 30 minutes for product Z respectively.
2. For the calculation of piece-rates system, the company values each minute at the rate of Sh.8.

Required:

Calculate the earnings for each employee using:

- (i) Basic guaranteed time rates. (3 marks)
 - (ii) Piecework rates. (6 marks)
- (b) The following information has been extracted from the books of Delta Ltd. for the year to 31 July 2023:

| | |
|---|------------------|
| Production | 30,000 units |
| Sales | 24,000 units |
| Production cost incurred: | |
| | Sh. '000' |
| Direct materials | 7,200 |
| Direct labour | 1,800 |
| Variable overheads | 1,500 |
| Fixed overheads | 2,700 |
| Selling and administrations costs: | |
| Salaries of sales staff | 450 |
| Variable sales commission | 300 |
| Promotion and advertising | 480 |
| Administration costs | 720 |

The company's unit selling price is Sh. 550.

Required:

Prepare statement of profit or loss using the following costing techniques:

- (i) Marginal costing. (5 marks)
 - (ii) Absorption costing. (6 marks)
- (Total: 20 marks)**

QUESTION THREE

- (a) Describe **FOUR** distinguishing features between "financial accounting" and "management accounting". (4 marks)
- (a) Mwangaza Factory Ltd. manufactures fluorescent bulbs. The factory has taken a sample of eight employees from its production department for quality assurance.

The following data relate to the number of weeks of experience in the wiring of components and the number of components which were rejected as unsatisfactory last year:

| Employee | A | B | C | D | E | F | G | H |
|-------------------------|----|----|----|----|----|----|----|----|
| Weeks of experience (X) | 4 | 5 | 7 | 9 | 10 | 11 | 12 | 14 |
| Number of rejects (Y) | 21 | 22 | 15 | 18 | 14 | 14 | 11 | 13 |

Additional information:

| | | |
|--------------|---|-------|
| ΣX | = | 72 |
| ΣY | = | 128 |
| ΣXY | = | 1,069 |
| ΣX^2 | = | 732 |

Required:

- (i) The least squares regression equation of rejects on experience in the form of $Y = a + bx$. (4 marks)
- (ii) Predict the number of rejects you would expect from employee K with one week of experience. (2 marks)
- (iii) If each rejected unit costs the factory Sh.55, compute the total rejection cost of employee K with one week of experience. (2 marks)

- (c) Fashion Dressmakers Ltd. makes ladies dresses using job costing method. Two jobs namely “ABC” and “XYZ” use predetermined overhead rates to apply manufacturing overhead to production departments. Job ABC is based on machine hours while job XYZ is based on percentage of materials cost.

Budgeted production and cost data for the two jobs are as follows:

| | Job ABC | Job XYZ |
|---------------------|----------------|----------------|
| Production overhead | Sh.304,000 | Sh.220,000 |
| Units produced | 10,000 | 20,000 |
| Machine hours | 16,000 | 7,500 |
| Materials cost | Sh.150,000 | Sh.400,000 |

Additional information:

- At the end of the year 2022, Job ABC had incurred production overhead cost amounting to Sh.305,000 and had produced 9,800 units using 15,990 machine hours and materials costing Sh.147,000.
- Job XYZ had incurred production overhead cost amounting to Sh.216,000 and had produced 20,500 units using 7,550 machine hours and materials costing Sh.395,000.

Required:

- Compute the predetermined overhead absorption rates (OAR) for Job ABC and Job XYZ. (4 marks)
- Determine the extent of over/under absorption of overhead for each job. (4 marks)

(Total: 20 marks)

QUESTION FOUR

- Evaluate **FOUR** advantages of centralised material purchasing by an organisation. (8 marks)
- Shauri Moyo Bakery Ltd. planned production and sales for the next seven months for the financial year 2023/2024 is as follows:

| Month | Production (units) | Sales demand (units) |
|---------------|---------------------------|-----------------------------|
| November 2023 | 1,000 | 800 |
| December 2023 | 1,200 | 1,000 |
| January 2024 | 1,200 | 1,200 |
| February 2024 | 1,400 | 1,300 |
| March 2024 | 1,500 | 1,400 |
| April 2024 | 1,500 | 1,600 |
| May 2024 | 1,600 | 1,500 |

Additional information:

- The selling price per unit will be Sh.30,000 throughout the period. 40% of the sales are normally made on one month’s credit. The other 60% are settled in cash within the month of sale.
- Purchases of raw materials are Sh.10,000 per unit of production and will be paid after one month delay.
- Direct wages is Sh.6,000 per unit of production. Time lag in payment of wages is 50% in the month of sale and the balance in the month following month of sale.
- During the period, the business plans to advertise its products. Payment for advertisement of Sh.10,000,000 and Sh.15,000,000 will be made in January and March 2024 respectively.
- Production overheads during the period to 31 December 2023 had been at Sh.18,000,000 a month and are expected to rise by Sh.2,000,000 per month.
- A new baking oven machine will be bought and delivered in December 2023. The machine will cost Sh.66,000,000. This will be paid in three equal installments in January, February and March 2024.
- A loan of Sh.100,000,000 is being issued in December 2023 and the amount is expected to be received in early February 2024. Interest on loan at a rate of 1% per month shall be charged from February 2024.
- An outstanding tax liability of Sh.16,000,000 is due in March 2024. In the same month the company intends to dispose of surplus baking ovens with a net book value of Sh.11,000,000 for Sh.6,000,000.
- A depreciation expense is expected to be 5% of actual sales per month.
- The bank balance as at 1 January 2024 is expected to be Sh.15,000,000 deficit.

Required:

A cash budget for the four months ending 30 April 2024.

(12 marks)

(Total: 20 marks)

**AD32 Page 3
Out of 4**

QUESTION FIVE

- (a) Explain the relevance of the following terms as used in management accounting:
 - (i) Break-even analysis. (2 marks)
 - (ii) Responsibility centre. (2 marks)
 - (iii) Batch costing. (2 marks)
- (b) Analyse **FOUR** limitations that a firm would encounter when operating a marginal costing system. (8 marks)
- (c) Tausi Tours Ltd. is a transport service company that runs five buses between two towns which are 50 kilometres apart. Seating capacity of each bus is 50 passengers. The following particulars were obtained from the books of the company for the month of March 2023:

| Particulars | Fixed cost Sh. "000" | Variable cost Sh. "000" |
|---------------------------------|-------------------------|----------------------------|
| Wages of drivers and conductors | | 24,000 |
| Salaries of office staff | 10,000 | |
| Diesel and other oils | | 35,000 |
| Repairs and maintenance | | 8,000 |
| Taxation and insurance | 12,000 | |
| Depreciation | 30,000 | |
| Interest expense on loan | <u>20,000</u> | |
| Total cost | <u>72,000</u> | <u>67,000</u> |

Additional information:

- 1. Actual passengers were 75% of seating capacity.
- 2. All buses operated on all 30 days of the month.
- 3. Each bus made one round trip per day.

Required:

Calculate the cost per passenger per kilometre per day.

.....

(6 marks)

(Total: 20 marks)

www.chopi.co.ke



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 24 April 2023. Afternoon Paper.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings. Do NOT write anything on this paper.

QUESTION ONE

- (a) Distinguish between “process costing” and “batch costing”. (4 marks)
- (b) Tegemeo Battery Ltd. manufactures long lasting batteries for both domestic and commercial vehicles. The following information is provided for the year ended 31 December 2022:

| | Sh. “000” |
|---------------------|------------------|
| Fixed cost | 4,500,000 |
| Total variable cost | 7,500,000 |
| Total sales | 15,000,000 |
| Target profit | 6,000,000 |

Required:

- (i) The contribution to sales (C/S) ratio. (2 marks)
- (ii) The break-even point (BEP) in sales value. (2 marks)
- (iii) Amount of sales required to achieve the target profit. (2 marks)
- (iv) Sales value to cover extra Sh.1.5 million advertising expenditure. (2 marks)
- (c) Bongo Ltd.’s budgeted overheads for the forthcoming period applicable to its production departments; A and B are as follows:

| Production department | Sh. “000” |
|------------------------------|------------------|
| A | 240,000 |
| B | 180,000 |

The budgeted total costs for the same period for the service departments C and D are as follows:

| Service department | Sh. “000” |
|---------------------------|------------------|
| C | 86,000 |
| D | 44,000 |

Additional information:

1. The proportionate use of the services has been estimated as follows:

| Production department | | Service department | |
|------------------------------|----------|---------------------------|----------|
| A | B | C | D |
| 50% | 35% | - | 15% |
| 40% | 40% | 20% | - |

2. Overheads are absorbed based on the following bases and hours:

| Production department | Absorption basis | Budget hours |
|------------------------------|-------------------------|---------------------|
| A | Direct labour hours | 1,952 labour hours |
| B | Machine hours | 1,362 machine hours |

Required:

- (i) Reapportion the service departments cost to production departments using simultaneous equation method. (6 marks)
- (ii) The overhead absorption rate (OAR) of each production department. (2 marks)
- (Total: 20 marks)**

QUESTION TWO

- (a) In the context of budgetary control:
- (i) Outline **FOUR** objectives of budgeting. (4 marks)
- (ii) Highlight **FOUR** criticisms of budgeting. (4 marks)
- (b) Pamoja Enterprises Ltd. makes and sells a single product branded "PMJ" using a single type of raw materials and two types of labour.

The firm is now preparing its budget for the first quarter of the year 2023. The following information has been identified for product "PMJ".

| Month | January 2023 | February 2023 | March 2023 | April 2023 |
|----------------------|--------------|---------------|------------|------------|
| Sales demand (units) | 1,000 | 1,500 | 2,500 | 3,200 |

Additional information:

- Selling price per unit will be Sh.2,500 in January 2023. It will increase by 10% per month.
- The various cost elements for production are as follows:

| | |
|--|--------------|
| Raw material: | Sh. |
| X: (5 kgs per unit at Sh.100 per kg) | 500 |
| Labour: | |
| Skilled (6 hours per unit at Sh.150 per hour) | 900 |
| Semi-skilled (6 hours per unit at Sh.190 per hour) | <u>1,140</u> |
| Total cost | <u>2,540</u> |
- Closing inventory of finished goods is 30% of the monthly sales demand. The closing inventory for December 2022 was 450 units.
- Closing inventory of raw material is 20% of the next month's requirement. The closing inventory for December 2022 was 850 units.

Required:

- (i) Production budget in units. (4 marks)
- (ii) Material purchase budget in shillings. (4 marks)
- (iii) Direct labour budget for skilled labour only. (4 marks)
- (Total: 20 marks)**

QUESTION THREE

- (a) The following information relates to several tasks at Ayub Ltd. for the month of March 2023:

1. The company received four tasks and incurred the following costs on them:

| Details | Task 1 Sh."000" | Task 2 Sh."000" | Task 3 Sh."000" | Task 4 Sh."000" |
|-----------------------------|--------------------|--------------------|--------------------|--------------------|
| Direct material issued | 8,000 | 5,000 | 3,000 | 2,000 |
| Direct material transferred | (1,000) | (500) | 1,300 | 200 |
| Direct labour cost | 3,000 | 2,500 | 1,500 | 1,000 |

- Factory production overheads are absorbed at the rate of 50% of prime cost.
- On completion of a task, the company charges administration, selling and distribution cost at the rate of 30% of total factory cost.
- During the month, Tasks 1, 2 and 3 were completed.
- The company's policy is to earn a profit margin of 20% on every task completed.

Required:

- (i) Compute the total factory cost for each task done in the month of March 2023. (8 marks)
- (ii) Determine the invoice price for each of the completed task. (3 marks)
- (b) Malimali Ltd. is considering the possibility of outsourcing component “Zed” which it currently makes from Topdown Suppliers. Topdown Suppliers will supply the component which has the following requirements of an economic order quantity model:
- Annual requirement 20,000 units
 - Ordering cost Sh.1,000 per order
 - Purchase price per unit Sh.40
 - Carrying cost per annum per unit 16% of the purchase price

Additional information:

1. If Malimali Ltd. continues to make 20,000 units per annum of component Zed, its cost budget will be as follows:

| | Cost per unit |
|-------------------------------------|----------------------|
| | Sh. |
| Direct material | 25 |
| Direct labour | 20 |
| Production overheads (60% variable) | 25 |
| Distribution overheads (50% fixed) | <u>40</u> |
| | <u>110</u> |

2. The fixed overheads above are absorbed based on a budgeted production and sales capacity of 25,000 units.
3. If Malimali Ltd. continues to make product “Zed”, then the cost of direct material will rise by 2% but direct labour cost will fall by 2%.
4. Fixed distribution overheads are unavoidable costs if Malimali Ltd. outsource the component but fixed production overheads will go down by 30%

Required:

- Advise Malimali Ltd. whether to make or buy component “Zed” from Topdown suppliers. (9 marks)
- (Total: 20 marks)**

QUESTION FOUR

- (a) Highlight **FOUR** advantages of time rate system over piece rate system of labour remuneration. (4 marks)
- (b) Vendit Ltd. obtains component “K” from a specialist supplier. The daily usage for the component and the time between placing and receiving an order can vary as follows:

| | |
|-------------------------|-----------------|
| Economic order quantity | 12,000 kgs |
| Average usage | 600 kgs per day |
| Minimum usage | 400 kgs per day |
| Maximum usage | 800 kgs per day |
| Maximum lead time | 14 days |
| Normal lead time | 12 days |
| Minimum lead time | 10 days |

Required:

- (i) Reorder level. (2 marks)
- (ii) The maximum inventory level. (2 marks)
- (iii) The minimum inventory level. (2 marks)
- (c) A company currently remunerates its factory workers on time basis and is now considering the introduction of alternative methods of remuneration.

The following information relates to two employees for one week:

| | Ali | Baba |
|--------------------------|------------|-------------|
| Hours worked | 44 | 40 |
| Rate of pay per hour | Sh.1,200 | Sh.1,400 |
| Units of output achieved | 480 | 390 |

Additional information:

1. The time allowed for each unit of output is seven standard minutes.
2. For purposes of piecework calculations each minute is valued at Sh.16.

Required:

Compute the earnings of the employees using:

- (i) Piecework rates with earnings guaranteed at 80% of pay calculated on an hourly basis. (4 marks)
- (ii) Premium bonus scheme in which bonus is based on 75% of time saved and added to pay calculated on an hourly basis. (6 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Summarise **FOUR** salient features of process costing systems. (4 marks)
- (b) Explain **TWO** costs that could be classified under the time bases of cost classification. (2 marks)
- (c) Highlight **FOUR** benefits that a firm would derive from establishing a good cost accounting system. (4 marks)
- (d) Roma Ltd. is preparing its budgets for the year ending 31 December 2024. It makes and sells a single product, which has budgeted costs and selling price as follows:

| | Sh. Per unit |
|--------------------------|---------------------|
| Selling price | 45 |
| Direct materials | 11 |
| Direct labour | 8 |
| Production overheads: | |
| Variable | 4 |
| Fixed | 3 |
| Selling overhead: | |
| Variable | 5 |
| Fixed | 2 |
| Administrative overhead: | |
| Fixed | 4 |

www.chopi.co.ke

Additional information:

1. Fixed overhead costs per unit are based on a normal annual activity level of 96,000,000 units.
2. These costs are expected to be incurred at a constant rate throughout the year.
3. Activity levels during the months of January 2024 and February 2024 were expected to be:

| | January (units) | February (units) |
|------------|----------------------------|-----------------------------|
| Sales | 7,000,000 | 8,750,000 |
| Production | 8,500,000 | 7,750,000 |

4. Assume that there will be no stock held on 1 January 2024.

Required:

Prepare in columnar format, profit statements for each of the two months of January 2024 and February 2024 using:

- (i) Direct costing method. (5 marks)
- (ii) Indirect costing method. (5 marks)

(Total: 20 marks)

.....



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 5 December 2022. Afternoon Paper.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings. Do NOT write anything on this paper.

QUESTION ONE

- (a) Outline **FOUR** disadvantages of using the scatter graph as a method of cost estimation. (4 marks)
- (b) Remah Ltd has established the following information for the costs and revenues for the month of October 2022 at an activity level of 500 units:

| | Sh. "000" |
|----------------------|------------------|
| Direct materials | 16,250 |
| Direct labour | 32,500 |
| Production overheads | 6,500 |
| Selling costs | <u>8,125</u> |
| Total costs | 63,375 |
| Sales revenue | <u>113,750</u> |
| Profits | <u>50,375</u> |

Additional information:

- All direct costs are variable costs.
- 20% of selling costs and 50% of the production overheads are fixed over all levels of activity respectively.

Required:

- (i) Determine cost estimation equation in the form $Y = a + bx$ using the account analysis method. (4 marks)
- (ii) Calculate the total profit at an activity level of 1,000 units. (3 marks)
- (c) Moyale matt supermarket maintains a variety of inventory.

The following information is given for stock item "Z":

1. Consumption in kilograms per month:

| Month | Kilograms |
|--------------|------------------|
| January | 15,000 |
| February | 6,000 |
| March | 22,000 |
| April | 20,000 |
| May | 10,000 |
| June | 15,000 |
| July | 17,000 |
| August | 12,000 |
| September | 9,000 |
| October | 8,000 |
| November | 6,000 |
| December | 10,000 |

2. Lead time is 5 - 8 days.

3. Annual holding cost per unit per annum is Sh.26.60.
4. The purchase price is Sh.200 and discounts are not allowed.
5. The ordering cost per order is Sh.798.
6. The annual demand is the accumulated monthly consumption.

Required:

- (i) The optimal economic order quantity (EOQ). (3 marks)
- (ii) Frequency of placing orders. (2 marks)
- (iii) Reorder level. (2 marks)
- (iv) Maximum inventory level. (2 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Outline **FOUR** assumptions of cost volume profit (CVP) analysis. (4 marks)
- (b) Highlight **FOUR** factors influencing wage rate determination. (4 marks)
- (c) Toto enterprise manufactures dolly kits for children. It is currently considering various techniques of overhead absorption that are more efficient to apply to job costing:

| Cost centre | P Sh. | Q Sh. |
|----------------------|----------|----------|
| Direct material cost | 800,000 | 600,000 |
| Direct labour cost | 600,000 | 500,000 |
| Factory overheads | 600,000 | 400,000 |
| Direct labour hours | 40,000 | 50,000 |
| Machine hours | 120,000 | 7,500 |

www.chopi.co.ke

Required:

Calculate the overhead absorption rate (OAR) on the following basis:

- (i) Percentage of direct material cost basis for cost centre P. (2 marks)
- (ii) Direct labour hours basis for cost centre Q. (2 marks)
- (iii) A particular job marked as Job number JB22 consumed the following inputs during the year:

| Cost centre | P Sh. | Q Sh. |
|---------------------|----------|----------|
| Materials issued | 5,000 | 15,000 |
| Direct labour cost | 4,800 | 4,000 |
| Direct labour hours | 400 | 500 |
| Machine hours | 1,500 | 100 |

Additional information:

1. Administration overheads are absorbed at the rate of 20% on factory costs.
2. Profit mark-up is $33\frac{1}{3}$ % on cost.

Required:

Calculate the total cost and total sales for Job number JB22. (6 marks)

- (iv) Assuming the job number JB22 consists of 50 items, calculate the selling price per unit. (2 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Explain **FOUR** functions of management accounting in decision making. (8 marks)
- (b) Identify **FOUR** sources of loss in process costing. (4 marks)
- (b) Oilivya Ltd. manufactures an industrial lubricant, which is formed by subjecting certain crude oil chemicals to two successive processes namely; P and Q. The output of process P is passed to process Q where it is blended with other chemicals.

The process costs for period 3 were as follows:

Process P:

| | |
|---------------------|-------------------------------|
| Material | 3,000 kg at Sh.25 per kg |
| Labour | Sh.12,000 |
| Process plant time: | 12 hours at Sh.2,000 per hour |

Process Q:

| | |
|--------------------|-------------------------------|
| Material | 2,000 kg at Sh.40 per kg |
| Labour | Sh.13,840 |
| Process plant time | 20 hours at Sh.1,350 per hour |

Additional information:

- General overhead cost for the period amounted to Sh.27,200 and is absorbed into process costs on a process labour basis.
- The normal output of process P is 80% of input, while that of process Q is 90% of input.
- Waste matter scrapped from process P is sold for Sh.2 per kg, while that from process Q is sold for Sh.3 per kg.
- The output for period 3 were as follows:
 - Process P 2,300 kg
 - Process Q 4,000 kg
- There was no stock or work in progress at either the beginning or the end of the period, and it may be assumed that all available waste matter had been sold at the prices indicated.

Required:

Prepare the following process accounts:

- (i) Process P. (4 marks)
- (ii) Process Q. (4 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) Kandogo guest house operates service costing system.

The following costs were incurred during a 30-week year:

1. Weekly cost incurred per guest was as follows:

| | Sh. |
|-------------------------------------|------------|
| Food | 25,000 |
| Electricity for heating and cooking | 3,000 |
| Laundry and cleaning expenses | 5,000 |
| Transport expenses | 10,000 |

- The hotel operates for 30 weeks a year.
- Fifteen guests are received per week.
- Each guest is charged Sh.100,000 per week.
- Fixed salary and supervision expenses are Sh.11,000,000 per annum.
- Rent and rates for the property per annum is Sh.4,000,000.
- Recreation and accommodation fixed costs are Sh.1,000,000 per annum.

Required:

- (i) Total cost per annum. (4 marks)
- (ii) Cost per guest per week. (3 marks)
- (iii) Hotel profit/(loss) per guest per week. (3 marks)
- (b) Furahia Ltd. operates in the entertainment and event organising industry and one of its activities is to promote concerts at locations through-out the county.

The company is examining the viability of a concert in Raha County.

Selling price, fixed costs and variable costs will comprise of the following cost structure:

| | Sh. |
|--|------------|
| 1. Selling price per ticket | 1,160 |
| 2. Variable cost: | |
| Per ticket | 340 |
| Sales commission | 58 |
| 3. Estimated fixed costs comprise: | |
| Fixed hiring costs | 19,815,000 |
| Fixed administrative expenses | 43,050,000 |
| 4. Expected sales were 90,000 tickets. | |

Required:

- (i) The number of tickets that must be sold to break-even. (4 marks)
- (ii) The number of tickets to be sold to earn Sh.5,715,000 target profit. (2 marks)
- (iii) The profit, assuming 85,000 tickets are sold. (2 marks)
- (iv) The number of additional tickets that must be sold to cover extra cost of television advertising of Sh.13,335,000. (2 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) By citing **ONE** example for each, define the following types of costs:
- (i) Avoidable costs. (2 marks)
- (ii) Prime costs. (2 marks)
- (iii) Marginal costs. (2 marks)
- (b) Derap Enterprise wishes to prepare a master budget for the forthcoming period. Information regarding products, costs and sales levels is as follows:

| Product | Q | M |
|---------------------------|----------|----------|
| Materials required: | | |
| T (kilograms) | 5 | 7.5 |
| Z (litres) | 2.5 | 10 |
| Labour hours required | | |
| Skilled (hours) | 10 | 5 |
| Semi-skilled (hours) | 5 | 12.5 |
| Sales level (units) | 8,000 | 6,000 |
| Opening inventory (units) | 1,200 | 1,400 |

Additional information:

1. Opening inventory of material T was 14,075 kilograms and for material Z was 15,750 litres.
2. Closing inventory of finished goods will be sufficient to meet 20% of sales demand.
3. Closing inventory of materials will be sufficient to meet 25% of production requirements.
4. Material prices are Sh.15 per kilogram for material T and Sh.12 per litre for material Z.
5. Labour costs are Sh.120 per hour for the skilled workers and Sh.80 per hour for the semi-skilled workers.

Required:

Prepare the following functional budgets:

- | | | |
|-------|---|-----------|
| (i) | Production budgets in units only. | (3 marks) |
| (ii) | Material usage budget in kilograms and litres. | (3 marks) |
| (iii) | Material purchases budget in kilograms, litres and shillings. | (4 marks) |
| (iv) | Labour budget in hours and shillings. | (4 marks) |

(Total: 20 marks)

.....

Chopi.co.ke



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 26 November 2018.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) XYZ Ltd. deals in the purchase and sale of hardware products. The company recorded the following transactions in relation to product JL-40 during the month of September 2018:

| Date | Purchases | | Sales | |
|-------------|------------------|--------------|------------------|--------------|
| | Quantity (Units) | Sh. per unit | Quantity (Units) | Sh. per unit |
| September 2 | 10,000 | 30.00 | | |
| 4 | 6,000 | 32.00 | | |
| 7 | | | 10,000 | 40.00 |
| 12 | 8,000 | 31.00 | | |
| 15 | | | 3,000 | 42.00 |
| 17 | | | 6,000 | 41.00 |
| 24 | 10,000 | 28.00 | | |
| 28 | 5,000 | 30.50 | | |
| 29 | | | 9,000 | 40.00 |
| 30 | | | 5,000 | 40.50 |

Additional information:

- The opening stock of product JL-40 on 1 September 2018 comprised 7,000 units purchased at a cost of Sh.27 per unit.
- On 9 September 2018, the company reported a shortage of 400 units.
- On 20 September 2018, 1,000 units sold on 15 September 2018 were returned by a customer.
- Operating expenses for the month of September 2018 amounted to Sh.250,000.

Required:

Using the First In First Out (FIFO) method prepare:

- Stores ledger card for product JL-40 for the month of September 2018. (8 marks)
- Income statement for product JL-40 for the month ended 30 September 2018. (4 marks)

(b) The total maintenance cost and machine hours of Jumbo Ltd. for ten months were as follows:

| Month | Machine Hours | Maintenance Cost Sh.,"000" |
|-----------|---------------|-------------------------------|
| January | 400 | 960 |
| February | 240 | 880 |
| March | 80 | 480 |
| April | 400 | 1,200 |
| May | 320 | 800 |
| June | 240 | 640 |
| July | 160 | 560 |
| August | 480 | 1,200 |
| September | 320 | 880 |
| October | 160 | 440 |

Required:

Using the least squares method, formulate the cost function.

(8 marks)

(Total: 20 marks)

www.chopi.co.ke

QUESTION TWO

- (a) Explain the following terms as used in management accounting:
- (i) Cost audit. (2 marks)
 - (ii) Continuous costing. (2 marks)
 - (iii) Conversion costs. (2 marks)
- (b) Generations Ltd. base their inventory levels at cost and sales value at the end of each month.

The following information relates to the months of September 2018 to December 2018:

| | Opening inventory Sh. | Sales Sh. |
|-----------|--------------------------|--------------|
| September | 687,500 | - |
| October | 550,000 | 1,100,000 |
| November | 675,000 | 875,000 |
| December | 600,000 | 1,050,000 |

Additional information:

1. The cost of goods sold is 60% of sales.
2. Purchases for the months of August 2018 and September 2018 were Sh.625,000 and Sh.450,000 respectively.
3. Payment for each month's purchases were made as follows:
 - 10% during the month of purchase.
 - 80% the following month of purchase.
 - Balance after two months of purchase.

Required:

For the months of October 2018 to December 2018, prepare:

- (i) Purchases budget schedule. (6 marks)
 - (ii) Purchases payment schedule. (6 marks)
- (c) Describe two uses of functional budgets. (2 marks)
- (Total: 20 marks)**

QUESTION THREE

- (a) A factory requires 1,500 units of an item per month, each costing Sh.27. The ordering cost is Sh.150 per order and the inventory carrying cost is 20 percent of the unit purchase cost. Assume a 360 day year.

Required:

- (i) Economic Order Quantity (EOQ). (2 marks)
 - (ii) The number of orders per year. (2 marks)
 - (iii) The time-lag between orders. (2 marks)
 - (iv) The total relevant cost. (2 marks)
- (b) Mauzo Ltd. manufactures an equipment which requires four components namely: A, B, C and D. The budgeted production in units and costs for each component are presented below:

| | Component | | | |
|--------------------------------------|-----------|-------|-------|-------|
| | A | B | C | D |
| Production (Units) | 2,000 | 4,000 | 8,000 | 6,000 |
| Variable cost per unit (Sh): | | | | |
| Direct materials | 8 | 10 | 4 | 8 |
| Direct labour | 16 | 18 | 8 | 12 |
| Overheads | 4 | 6 | 2 | 4 |
| Total specific fixed cost (Sh."000") | 12 | 10 | 12 | 30 |

Additional information:

1. General fixed cost amounts to Sh.60,000 per annum.
2. Mauzo Ltd. can instead of manufacturing the components, purchase one or all of them from a dealer at the price of Sh.24, Sh.42, Sh.20 and Sh.28 for components A, B, C and D respectively.

Required:

- (i) Advise Mauzo Ltd. on the component(s) that should be purchased rather than manufactured internally. (10 marks)
- (ii) State any other factor(s) that Mauzo Ltd. should consider in the make or buy decision. (2 marks)

(Total: 20 marks)**QUESTION FOUR**

XL Ltd. manufactures a product that passes through three processes to completion. During the month of October 2018, the cost of production was as follows:

| Cost element | Total cost Sh. | Process | | |
|----------------------|-------------------|----------|----------|----------|
| | | 1 Sh. | 2 Sh. | 3 Sh. |
| Direct materials | 333,280 | 100,480 | 169,920 | 62,880 |
| Direct labour | 176,320 | 40,400 | 59,360 | 76,560 |
| Direct expenses | 18,720 | 187,720 | - | - |
| Production overheads | 176,320 | - | - | - |

Additional information:

1. 500 units at Sh.480 per unit were issued to process 1.
2. Normal loss of units per process was estimated as follows:

| Process | Rate (%) |
|---------|----------|
| 1 | 10 |
| 2 | 10 |
| 3 | 5 |
3. Losses represent scrap which could be sold to merchants at a value as follows:

| Process | Sh. |
|---------|-----|
| 1 | 160 |
| 2 | 320 |
| 3 | 400 |
4. Actual output of each process was as follows:

| Process | Units |
|---------|-------|
| 1 | 440 |
| 2 | 400 |
| 3 | 382 |
5. There was no stock of materials or work-in-progress in any process, either at the beginning or at the end of the period.
6. The output of each process passes direct to the next process and finally to finished goods stock.
7. Production overheads are allocated to each process on a basis of 100% of the cost of direct labour.

Required:

- (a) Process 1 account. (4 marks)
- (b) Process 2 account. (4 marks)
- (c) Process 3 account. (4 marks)
- (d) Finished goods stock account. (2 marks)
- (e) Abnormal loss account. (3 marks)
- (f) Abnormal gain account. (3 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Evaluate four major challenges that might be faced by a medium sized organisation in applying budgetary control. (8 marks)
- (b) Using suitable examples, discuss the following types of costs:
- (i) Fixed costs. (3 marks)
 - (ii) Variable costs. (3 marks)
 - (iii) Step cost. (3 marks)
 - (iv) Out of pocket costs. (3 marks)
- (Total: 20 marks)**
-



kasneb

ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 4 April 2022. Afternoon paper.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings. Do NOT write anything on this paper.

QUESTION ONE

- (a) Using a suitable example in each case, explain the meaning of the following types of cost:
- (i) Differential costs. (2 marks)
 - (ii) Out of pocket costs. (2 marks)
 - (iii) Sunk costs. (2 marks)

- (b) Everest Company manufactures a single product branded “solo”.

The following information relates to the month of March 2022 for an output level of 100,000 units:

| | Sh. |
|-------------------------------------|------------------|
| Direct materials | 1,000,000 |
| Direct labour costs | 1,400,000 |
| Indirect labour | 300,000 |
| Depreciation | 150,000 |
| Repairs and maintenance (50% fixed) | <u>100,000</u> |
| | <u>2,950,000</u> |

Unit selling price Sh.80

Target profit Sh.50,000

Required:

- (i) Formulate a predictor equation in the form $y = a + bx$. (6 marks)
- (ii) Estimate the cost of producing 95,000 units. (2 marks)
- (iii) Compute the level of sale at which the company will recover all the costs. (2 marks)
- (iv) Summarise four limitations of the accounts analysis method. (4 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Management accounting system acts as a “decision support system” for providing the right information to the right people at the right time.

With reference to the above statement, discuss five characteristics of management accounting that makes it a key tool for decision making. (10 marks)

- (b) Blaze Techz Ltd. manufactures small assemblies to order and has the following budgeted overheads for the year, based on normal activity levels:

| Department | Budgeted overheads (Sh.) | Overheads absorption base |
|-------------------|---------------------------------|----------------------------------|
| Blanking | 18,000 | 1,500 labour hours |
| Machining | 43,000 | 2,500 machine hours |
| Welding | 20,000 | 1,800 labour hours |
| Assembly | 15,000 | 1,000 labour hours |

Additional information:

1. Selling and administration overheads are 20% of factory costs.
2. An order for 250 assemblies type XR200, were made as Batch AA5901 and incurred the following costs:

| | |
|-----------|--|
| Materials | Sh.3,107 |
| Labour: | 128 hours Blanking Shop at Sh.10 per hour |
| | 452 hours Machining Shop at Sh.11 per hour |
| | 90 hours Welding Shop at Sh.10 per hour |
| | 175 hours Assembly Shop at Sh.9 per hour |
3. A special X-ray equipment for testing the welds was hired at Sh.525.
4. The time of booking in the machine shop was 643 machine hours.
5. Selling price was Sh.150 per assembly.

Required:

- (i) Total cost of the batch. (8 marks)
- (ii) Unit cost of each assembly. (1 mark)
- (iii) Profit per assembly. (1 mark)

(Total: 20 marks)**QUESTION THREE**

- (a) Bridge Ltd.'s budget included the following estimated costs for the financial year 2021 with respect to its manufacturing activities.

| | Sh. "000" |
|---|-----------|
| Depreciation on manufacturing equipment | 17,200 |
| Cost of manufacturing supplies | 3,000 |
| Direct labour cost | 86,400 |
| Rent on manufacturing facility | 7,600 |
| Direct material cost | 74,000 |
| Manufacturing utilities cost | 6,000 |
| Maintenance cost for manufacturing facility | 5,200 |
| Administrative salaries cost | 30,000 |

The company uses a predetermined overhead absorption rate based on machine hours. It was estimated that machine hours usage for the year 2021 would be 30,000 hours.

Required:

- (i) Identify the manufacturing overhead costs that Bridge Ltd. would use to calculate the predetermined overhead rate. (6 marks)
 - (ii) Calculate the predetermined overhead absorption rate. (2 marks)
 - (iii) Assuming that Bridge Ltd., actually used 29,200 machine hours during the financial year 2021, determine the amount of manufacturing overheads it would have applied to the work in progress during the period. (2 marks)
- (b) Bondeni Manufacturing Ltd. pays its production managers a bonus based on the company's profitability. During the two most recent years, the company maintained the same cost structure to manufacture its products.

The details are provided below.

| Year | Units produced | Units sold |
|------|----------------|------------|
| 2020 | 4,000 | 4,000 |
| 2021 | 6,000 | 4,000 |

Cost data:

| | |
|--|---------------------|
| Direct materials | Sh.80 per unit |
| Direct labour | Sh.120 per unit |
| Manufacturing overheads (variable) | Sh.40 per unit |
| Manufacturing overheads (fixed) | Sh.720,000 |
| Variable selling and administrative expenses | Sh.40 per unit sold |
| Fixed selling and administrative expenses | Sh.300,000 |

Bondeni Ltd.'s sales revenue for both years amounted to Sh.2,300,000.

Required:

Prepare income statements based on absorption costing for the years 2020 and 2021.

(10 marks)

(Total: 20 marks)**AD32 Page 2
Out of 3**

QUESTION FOUR

- (a) In the context of labour remuneration, summarise five conditions necessary for successful operation of incentive schemes. (5 marks)
- (b) In a factory, three processes are employed. The output of process A is transferred to process B and the output of process B to process C. It has been the experience that the wastage of process A is 2%, process B 5% and process C 10%. The scrap value of wastage in process A and B is Sh.200 per unit while process C wastage is Sh.500 per unit.

The expenses incurred in the month of March 2022 were as follows:

| | A | Process B | C |
|------------------------|-----------|--------------|-----------|
| | Sh. "000" | Sh. "000" | Sh. "000" |
| Materials | 10,000 | 8,000 | 6,000 |
| Wages | 5,000 | 4,000 | 3,000 |
| Manufacturing expenses | 3,000 | 3,000 | 1,000 |
| Overheads | 2,000 | 2,000 | 500 |

In process A, 5,000 units of materials added were purchased for Sh.10,000,000. The output of each process was as follows:

| Process: | Units |
|----------|-------|
| A | 4,500 |
| B | 4,400 |
| C | 3,500 |

Required:

- (i) Process A account. (5 marks)
- (ii) Process B account. (5 marks)
- (iii) Process C account. (5 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Explain five limitations of cost-volume-profit (CVP) analysis. (5 marks)
- (b) Pendo Ltd. which manufactures product "wye" has prepared the following sales budget for the first five months of the year 2022:

| Month | Sales budget (units) |
|----------|----------------------|
| January | 10,800 |
| February | 15,600 |
| March | 12,200 |
| April | 10,400 |
| May | 9,800 |

Additional information:

- Inventory of finished goods at the end of every month is to be equal to 25% of the sales estimate for the next month.
- On 1 January 2022, there were 2,700 units of the product "wye" on hand.
- There is no stock of work-in-progress at the end of any month.
- Every unit requires two types of materials in the following quantities:
Material A: 4kgs
Material B: 5kgs
- Materials equal to one half of the requirements for the next month's production are to be in hand at the end of every month. This requirement was met on 1 January 2022.

Required:

Prepare the following budgets for the quarter ended 31 March 2022:

- (i) Production budget. (6 marks)
- (ii) Materials purchases budget. (9 marks)

(Total: 20 marks)

.....



**ATD LEVEL III
PILOT PAPER**

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

December 2021.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) Define “management accounting” and give reasons why it is important to study the subject as an accounting student. (4 marks)
- (b) Define the following terms:
- (i) Direct costs. (2 marks)
 - (ii) Indirect costs. (2 marks)
 - (iii) Break-even point. (2 marks)
- (c) Bagasse company produces a liquid with the following direct costs:
- 1. Materials Sh. 42.
 - 2. Labour Sh.18.
 - 3. The company has capacity to produce 40,000 units of the liquid product. The fixed costs are Sh.1,500,000.
 - 4. The product selling price is Sh.100.

Required:

- (i) The break-even point for the product. (4 marks)
- (ii) The company receives an order of 40,000 units but the customer is requesting for a discount of 10%. should the company accept or reject the order? Justify your answer. (6 marks)

(Total: 20 marks)

QUESTION TWO

- (a) (i) Define break-even analysis. (2 marks)
- (ii) List the limitations of break-even analysis. (4 marks)
- (b) The following information was obtained from a company producing Product Zed:

| | Sh. |
|----------------------------------|------------|
| Fixed factory overhead costs | 6,000,000 |
| Fixed selling overhead costs | 120,000 |
| Variable manufacturing cost/unit | 120 |
| Variable selling cost/unit | 30 |
| Selling price per unit | 240 |

Required:

- (i) Calculate the break-even point for the product. (4 marks)

- (ii) Calculate the number of units required to produce a profit of Sh.280,000.00 (4 marks)
- (c) Drake Ltd. has provided projected sales and costs for the next financial year as follows:

| | |
|------------------------------|-------------|
| Fixed costs (Sh.) | 100,000,000 |
| Variable costs (Sh.) | 75,000,000 |
| Production units | 37,500 |
| Selling price per unit (Sh.) | 5,000 |

Required:

- (i) The projected profit for the year. (3 marks)
- (ii) The management wishes to lower the selling price by 20% to increase sales by 20%. Advise whether it is prudent. (3 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Describe the features of a budget. (4 marks)
- (b) Omran produces two products. The following estimates relate to the financial year ending December 2022:

| Product | X | Y |
|-----------------------------------|--------|--------|
| Selling price per unit (Sh.) | 240 | 350 |
| Direct materials (kgs) | 5 | 4 |
| Direct labour required (hours) | 4 | 3 |
| Sales units | 38,000 | 46,000 |
| Finished products: | | |
| 01.01.2022 year beginning (units) | 3,200 | 1,000 |
| 31.12.2022 year ending (units) | 2,000 | 1,500 |

Additional information:

- Direct material cost/kg = Sh 12.00
- Labour cost/hour = Sh 20.00
- The stock of direct material at the beginning and closing of the year are expected to be 10,000 kgs and 500 kgs respectively.

Required:

- (i) Sales budget.
- (ii) Production budget.
- (iii) Labour cost budget.
- (iv) Material usage budget.
- (v) Material purchase budget.

(16 marks)
(Total: 20 marks)

QUESTION FOUR

- (a) Highlight the advantages of perpetual stores management system. (4 marks)
- (b) The following information was obtained from a stores card for four months as follows:

| Month | Units purchased | Cost (Sh per unit) |
|----------|-----------------|--------------------|
| January | 60,000 | 72 |
| February | 70,000 | 74 |
| March | 80,000 | 78 |

www.chopi.co.ke

| | | |
|--------------|--------------|----------------------------|
| April | 60,000 | 81 |
| Month | Sales | Price (Sh per unit) |
| January | 70,000 | 82 |
| February | 60,000 | 84 |
| March | 70,000 | 88 |
| April | 65,000 | 91 |

Additional information:

1. The operating costs for the year was Sh.6,000,000.00 which was evenly distributed throughout the year.
2. The opening stock was 30,000 units which had been purchased at a price of Sh.70 per unit.
3. The organisation used FIFO method in stock management.

Required:

- (i) Outline the advantages of FIFO method in stores management. (2 marks)
 - (ii) Calculate the closing stock for the above organisation. (3 marks)
 - (iii) Prepare a store card for the organisation using FIFO method. (6 marks)
 - (iv) Calculate the profit for the company during the 4 months. (5 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) Explain some of the challenges that have affected manufacturing businesses due to the COVID-19 pandemic. (6 marks)
- (b) Biafra Ltd. provided the following information for machine maintenance for the past eight months:

| Period | Machine hours | Maintenance cost |
|--------|---------------|------------------|
| 1 | 10 | 24 |
| 2 | 6 | 22 |
| 3 | 2 | 12 |
| 4 | 9 | 28 |
| 5 | 8 | 20 |
| 6 | 7 | 19 |
| 7 | 4 | 14 |
| 8 | 12 | 30 |

Required:

- (i) Estimate the cost of a machine that can be repaired for 25 hours using the high low method. (4 marks)
 - (ii) Highlight the advantages of using graphs in management accounting. (3 marks)
- (c) Explain the importance of the following to a management accountant:
 - (i) Internet. (4 marks)
 - (ii) Tax expert. (3 marks)
- (Total: 20 marks)**
-



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

WEDNESDAY: 15 December 2021.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) The following information was obtained from the stores record of Bandari Ltd., a retail outlet that distributes Kokakora brands in the coastal region for the month of February 2021:

| Date | Receipts | |
|------|------------------|-----------------------|
| | Number of crates | Price per crate (Sh.) |
| 4 | 400 | 550 |
| 10 | 500 | 565 |
| 15 | 300 | 575 |
| 20 | 400 | 565 |
| 25 | 350 | 550 |

| Date | Issues | |
|------|------------------|-----------------------|
| | Number of crates | Price per crate (Sh.) |
| 8 | 550 | 850 |
| 17 | 850 | 800 |
| 27 | 700 | 825 |

Additional information:

- On 31 January 2021, there were 300 crates which were valued at Sh.500 per crate.
- Bandari Ltd. uses First in First Out (FIFO) method for valuing inventories.

Required:

Stores ledger card for the month of February 2021.

(8 marks)

- (b) Best Value Ltd. manufactures three products namely; Smart, Cool and Fit. The following budget information is relevant for the year ended 30 April 2021:

| | Smart | Cool | Fit |
|------------------------------------|------------|------------|------------|
| Selling price per unit (Sh.) | 4,000 | 6,000 | 8,000 |
| Variable cost per unit (Sh.) | 3,200 | 4,800 | 6,400 |
| Fixed costs (Sh.) | 14,000,000 | 20,000,000 | 26,000,000 |
| Maximum sales (Units) | 35,000 | 15,000 | 50,000 |
| Direct labour hours per unit | 2 | 5 | 3 |
| Direct materials in (kgs) per unit | 16 | 30 | 20 |

Additional information:

- It has been estimated that the maximum direct labour hours available for the year will be 300,000 hours.
- It will neither be possible to employ additional workers nor work overtime.
- The direct materials which is imported from Saudi Arabia will be limited to a total of 1,480,000 kilograms due to an import quota imposed on the material.
- All opening and closing inventories will be zero.

Required:

- Using suitable computations, identify the limiting factor for Best Value Ltd. (4 marks)
- Compute the sales mix that will maximise profits for Best Value Ltd. (6 marks)
- Compute the resulting profit from the sales mix in (b) (ii) above. (2 marks)

(Total: 20 marks)

AD32 Page 1
Out of 4

QUESTION TWO

- (a) Smart Designs Ltd., a company that specialises in making men’s suites is in the process of planning for production cost for the next financial year. The budgeted production is estimated to be 50,000 suites. The overhead costs have been classified as either fixed or variable and are provided below:

| Overheads | Cost (Sh.) |
|--------------------|------------------------------|
| Indirect materials | 450,000 (variable) |
| Rent | 150,000 (fixed) |
| Electricity | 40,000 (Sh.10,000 fixed) |
| Supplies | 600,000 (variable) |
| Indirect labour | 400,000 (Sh.150,000 fixed) |
| Depreciation | 100,000 (fixed) |
| General support | 200,000 (Sh.75,000 variable) |

Required:

- (i) Using the accounts analysis method, formulate overhead cost function in the form of $Y = a + bx$ taking the number of suites produced as the cost driver. (6 marks)
- (ii) Using the equation obtained in (a) (i) above, estimate the overhead cost to be incurred assuming production turns out to be 60,000 suites. (2 marks)
- (b) Masenoku Electronics Ltd. has two production departments namely; A and B and two service departments; X and Y.

During the year ended 31 August 2021, the following budget details were agreed on by the company’s management:

| | Production departments | | Service departments | |
|---|------------------------|----------|---------------------|----------|
| | A | B | X | Y |
| | Sh.“000” | Sh.“000” | Sh.“000” | Sh.“000” |
| Direct materials cost | 45,280 | 49,250 | | |
| Direct labour cost | 50,000 | 45,000 | | |
| Total overheads | 38,000 | 24,000 | 16,000 | 18,000 |
| Production per direct labour hour (units) | 25 | 20 | | |

Additional information:

- The direct wages rate in both production departments is Sh.62.5 per hour.
- The service department costs are apportioned to the production departments as follows:

| | | Service department | |
|------------------------|---|--------------------|------|
| | | X | Y |
| | | (%) | (%) |
| Production department: | A | 60 | 50 |
| | B | 40 | 50 |

Required:

- (i) Budgeted overheads to be absorbed by the production departments. (4 marks)
- (ii) Overhead absorption rates for each production department based on rate per unit produced and direct materials percentage. (8 marks)
- (Total: 20 marks)**

QUESTION THREE

- (a) Highlight four implications of high labour turnover in a business organisation. (4 marks)
- (b) Premier Products Ltd. manufactures three products namely; A, B and C. The company uses three types of materials; E, F and G.

The following data has been assembled for the company’s budget preparation for the month of October 2021:

| Sales forecast | Product A | Product B | Product C |
|------------------------------|-----------|-----------|-----------|
| Sales (units) | 4,000 | 3,000 | 2,000 |
| Selling price per unit (Sh.) | 250 | 300 | 350 |

Standard material cost per kilogram:

| Material | Sh. |
|----------|-----|
| E | 8 |
| F | 10 |
| G | 12 |

Standard material Requirements in kilograms:

| Product: | | Material | | |
|----------|--|----------|---|---|
| | | E | F | G |
| A | | 5 | 2 | 3 |
| B | | 3 | 2 | 4 |
| C | | 4 | 3 | 2 |

Inventories:

| | Product | | | Material | | |
|-----------------|---------|-------|-------|----------|--------|--------|
| | A | B | C | E | F | G |
| 1 October 2021 | 500 | 1,000 | 1,500 | 25,000 | 20,000 | 15,000 |
| 31 October 2021 | 1,000 | 1,500 | 2,000 | 35,000 | 30,000 | 25,000 |

Required:

For the month of October 2021, prepare:

- Sales budget in value. (3 marks)
- Production budget in units. (4 marks)
- Materials usage budget in units. (3 marks)
- Materials purchase budget in units and in value. (6 marks)

(Total: 20 marks)

QUESTION FOUR

- Outline four features of process costing technique. (4 marks)
- Lengo Ltd. manufactures a single product which passes through two processes namely; 1 and 2. The output of process 1 becoming the input of process 2. Normal losses and abnormal losses are defective units having a scrap value and cash is received at the end of the period for all such units.

The following information relates to the month of November 2021:

- Raw materials issued to process 1 was 3,000 units at a cost of Sh.50 per unit.
- There were no opening or closing work-in-progress but opening and closing stocks of finished goods were 2,000 units and 2,300 units respectively.
- Additional information on process 1 and process 2:

| | Process 1 | Process 2 |
|--|------------|------------|
| Normal loss as a percentage of input | 10% | 5% |
| Output in units | 2,800 | 2,600 |
| Scrap value per unit | Sh.20 | Sh.50 |
| Additional materials | Sh.10,000 | Sh.7,800 |
| Direct wages incurred | Sh.40,000 | Sh.60,000 |
| Direct expenses incurred | Sh.100,000 | Sh.140,000 |
| Production overheads as a percentage of direct wages | 75% | 125% |

Required:

- Process 1 account. (6 marks)
- Process 2 account. (6 marks)
- Abnormal loss account. (2 marks)
- Abnormal gain account. (2 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Explain five characteristics of a good cost accounting system. (10 marks)
- (b) List four purposes of overhead cost analysis. (4 marks)
- (c) Describe three objectives of transport costing. (6 marks)

(Total: 20 marks)

.....



kasneb

ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 30 August 2021.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) Outline six methods used in cost classification. (6 marks)
- (b) Samaki Ltd. is a company based in the industrial area that manufactures fishing hooks and fishing nets. The Company uses predetermined overhead absorption rates in applying overheads to production orders. In this respect, it uses the cost of labour in applying overheads incurred in department A while in department B it uses machine hours utilised in the department.

The company made the following projections at the commencement of the year ending 30 June 2021:

| | Department A | Department B |
|----------------------|-------------------------|-----------------------|
| | Sh. | Sh. |
| Direct materials | 1,800,000 | 400,000 |
| Direct labour | 1,200,000 | 250,000 |
| Production overheads | <u>960,000</u> | <u>220,000</u> |
| | <u>3,960,000</u> | <u>870,000</u> |
| Machine hours | 96,000 | 22,000 |
| Direct labour hours | 80,000 | 25,000 |

During the month of June 2021, Job B25 consumed the following inputs:

| | Department A | Department B |
|--------------------------|---------------------|---------------------|
| Materials issued (Sh.) | 11,000 | 2,500 |
| Direct labour cost (Sh.) | 9,600 | 2,000 |
| Machine hours | 768 | 176 |
| Direct labour hours | 640 | 200 |

Required:

- (i) The overhead absorption rate for department A and department B. (4 marks)
- (ii) The total cost of production of Job B25. (6 marks)
- (iii) At the end of June 2021, the actual factory cost incurred amounted to Sh.944,000 in department A and Sh.231,000 in department B.

Determine the over or under absorbed overhead for each department and for the entire factory. (4 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Describe five conditions that must be satisfied for an effective costing system to operate in an organisation. (10 marks)
- (b) ABC Ltd. produces three products namely X, Y and Z. The following data relates to the three products:

| Details | Product | | | Total |
|----------------|----------------|-----------------|----------------|----------------|
| | X | Y | Z | |
| | Sh. | Sh. | Sh. | Sh. |
| Sales | 250,000 | 180,000 | 150,000 | 580,000 |
| Total costs | <u>200,000</u> | <u>200,000</u> | <u>120,000</u> | <u>520,000</u> |
| Profit (loss) | <u>50,000</u> | <u>(20,000)</u> | <u>30,000</u> | <u>60,000</u> |

Additional information:

1. Total costs comprise 75% variable and 25% fixed.
2. The directors of ABC Ltd. consider Product 'Y' as a loss making and therefore should be discontinued.

Required:

Using suitable computations, advise the management of ABC Ltd. on whether to discontinue production of product 'Y'.
(10 marks)

(Total: 20 marks)**QUESTION THREE**

Makao Ltd. values, advertises and sells residential properties on behalf of its customers. The company has been in business for only a short time and is preparing a cash budget for the first four months of the year 2022.

The expected sales of residential properties are as follows:

| Year | 2021 | 2022 | 2022 | 2022 | 2022 |
|------------|----------|---------|----------|-------|-------|
| Month | December | January | February | March | April |
| Units sold | 10 | 10 | 15 | 25 | 30 |

Additional information:

1. The average price of each property is Sh.18,000,000 and Makao Ltd. charges a fee of 3% of the value of each property sold.
2. The company receives 10% of the charged fee in the month of sale and remaining balance in the following month.
3. The company has 9 employees who are paid on a monthly basis. The average salary per employee is Sh.3,500,000 per year.
4. If more than 20 properties are sold in a given month, each employee is paid in that month a bonus of Sh.14,000 for each additional property sold.
5. Variable expenses are incurred at the rate of 0.5% of the value of each property sold and these expenses are paid in the month of sale.
6. Fixed overheads of Sh.430,000 per month are paid in the month in which they arise.
7. Makao Ltd. pays interest every three months on a loan of Sh.20,000,000 at an interest rate of 6% per annum. The last instalment payment in each year is paid in the month of December.
8. An outstanding tax liability of Sh.9,580,000 is due to be paid in the month of April 2022. In the same month, Makao Ltd. intends to dispose of surplus vehicles, with a net book value of Sh.1,500,000 for Sh.2,000,000.
9. The cash balance at the beginning of January 2022 is expected to be a deficit of Sh.4,000,000.

Required:

Prepare a monthly cash budget for the months of January 2022 to April 2022.

(20 marks)**QUESTION FOUR**

The following information relates to Product "XX", the only product manufactured and sold by Acumen Ltd.

| | Price per unit |
|---------------------------------------|----------------|
| | Sh. |
| Selling price | 70 |
| Direct material cost | 25 |
| Direct labour cost | 20 |
| Variable production overhead | 5 |
| Variable sales and marketing overhead | 2 |

The following levels of activity took place over the first three months of the product's life:

| | Sales units | Production units |
|----------------|-------------|------------------|
| September 2020 | 4,750 | 5,000 |
| October 2020 | 5,500 | 6,000 |
| November 2020 | 6,500 | 7,000 |

Additional information:

1. Budgeted fixed production overhead was Sh.300,000 per annum.
2. Actual fixed production overhead for the period was Sh.25,000 per month.
3. Sales and marketing overheads of Sh.25,000 per month and administration overhead of Sh.18,750 per month were in line with the budget for that period.

4. All fixed overhead costs are budgeted on the basis of a projected volume of 75,000 units per year and all costs are expected to be incurred at a constant rate throughout the year.
5. The business does not expect to have any inventory as at 1 September 2020.

Required:

- (a) Statement of profit or loss for each month using each of the following methods:
- (i) Absorption costing. (7 marks)
- (ii) Marginal costing. (7 marks)
- (b) Calculate the under/over absorbed fixed production overhead for each month. (3 marks)
- (c) Explain the reason for any difference in the reported profit under the two method for each month. (3 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) Outline four advantages of piece rate method of labour remuneration. (4 marks)
- (b) An employee is compensated on differential piece rate basis. The following schedule is applied to determine his remuneration:

| Number of units produced | Wage rate per unit Sh. |
|--------------------------|---------------------------|
| 1 - 250 | 65 |
| 251 - 500 | 72.5 |
| 501 - 1,000 | 75 |
| Over 1,000 | 77.5 |

James Karanja completed 1,680 units during the month of July 2021.

Required:

Determine the wages payable to him. (4 marks)

- (c) Best Ways Product Kenya Ltd. operates cost and financial accounting system. The following balances from the final accounts of the company for both systems are available to you as the company's financial and management accountant for the year ended 31 December 2020.

| | Sh. "000" |
|---|-----------|
| Net profit as per financial accounts | 95,670 |
| Net profit as per cost accounts | 100,140 |
| Dividends paid | 1,800 |
| Loss due to theft and pilferage charged to financial accounts | 390 |
| Stock depreciation charged to financial accounts | 1,290 |
| Stores adjustment credited in financial accounts | 630 |
| Bank interest credited in financial accounts | 345 |
| Tax provision in financial accounts | 900 |
| Interest received not included in cost accounts | 675 |
| Depreciation recovered in cost accounts | 5,925 |
| Depreciation charge in financial accounts | 5,490 |
| Excess administration costs recovered | 6,375 |
| Factory costs under recovered | 8,550 |

Required:

A reconciliation statement of the cost accounts and financial accounts profits for the year ended 31 December 2020. (12 marks)

(Total: 20 marks)

.....



kasneb

ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 17 May 2021.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) Describe four assumptions of cost-volume-profit (C-V-P) analysis. (4 marks)
- (b) Westwood Holdings Ltd. is a manufacturer of camping trailers. The factory is located near Kakamega town in Kenya and nearly 70% of the company's output is exported to Uganda, Rwanda and Burundi.

The fixed costs are Sh.200,000,000 per annum while the variable costs are Sh.600,000 per trailer. The trailers are sold at Sh.800,000 each.

Required:

- (i) Explain the term "contribution". (1 mark)
- (ii) The contribution made by each trailer. (2 marks)
- (iii) The number of trailers that Westwood Holdings Ltd. should sell in order to break-even. (3 marks)
- (iv) The profit to be made by Westwood Holdings Ltd. assuming 2,000 trailers are sold. (3 marks)
- (v) Due to a new entrant in the market, Westwood Holdings Ltd. is forced to lower its selling price to Sh.700,000 per trailer in the coming year.
- Evaluate the impact that this price cut will have on the company's annual profit. (4 marks)
- (vi) Summarise three limitations of the cost-volume-profit (C-V-P) analysis. (3 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Cost classification is the grouping of related costs for the purposes of cost control to facilitate cost prediction and to aid decision making. With regard to this statement, identify and explain the following bases of cost classification:
- (i) Relevance. (2 marks)
- (ii) Traceability. (2 marks)
- (iii) Controllability. (2 marks)
- (iv) Discretion. (2 marks)

- (b) Bondeni Ltd. is a manufacturing company which is divided into two production departments namely; A and B and two service cost centres X and Y.

The following is the summary of overhead costs for the month of September 2020:

| | Sh. | Sh. |
|-------------------------------------|---------------|------------------|
| Works manager's salary | | 40,000 |
| Power | | 210,000 |
| Contribution to provident fund | | 90,000 |
| Plant insurance | | 40,000 |
| Depreciation of plant and machinery | | 200,000 |
| Canteen expenses | | 120,000 |
| Rent | | 60,000 |
| Indirect wages: | | |
| A | 122,000 | |
| B | 96,000 | |
| X | 100,000 | |
| Y | <u>50,000</u> | |
| | | <u>368,000</u> |
| | | <u>1,128,000</u> |

The following information is also provided from the various departments:

| | Department | | | |
|--------------------------------|------------|-----------|---------|-------|
| | Production | | Service | |
| | A | B | X | Y |
| Number of employees | 16 | 8 | 4 | 4 |
| Area occupied (in square feet) | 2,000 | 3,000 | 500 | 500 |
| Value of plant (Sh.) | 750,000 | 1,000,000 | 250,000 | - |
| Wages (Sh.) | 40,000 | 20,000 | 10,000 | 5,000 |
| Horse power ratio | 3 | 3 | 1 | - |

Required:

Apportion the above overhead costs to the various departments using the most suitable bases. (12 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Explain two differences between "interlocking cost book keeping system" and "integrated cost book keeping system". (4 marks)
- (b) The Knickers Company manufactures rocking chairs. Budgeted sales for the first five months of the year 2021 are as follows:

| | Budgeted sales (units) |
|----------|------------------------|
| January | 200 |
| February | 240 |
| March | 180 |
| April | 160 |
| May | 240 |

Each rocking chair requires 10 square feet of Oak wood at a cost of Sh.2,000 per square foot. The company wants to maintain an inventory of chairs equal to 25% of the following month's sales. At the beginning of the year, 40 chairs were in stock.

Assume the company maintains an inventory of Oak wood equal to 10% of the next months' needs. At the beginning of the year, 240 square feet of Oak wood were in stock. Inventory of Oak wood as at 31 March 2021 is estimated to be 180 square feet.

Required:

- (i) Production budget, in units, for each of the first four months. (8 marks)
- (ii) Purchases budget, in shillings, for each of the first three months. (8 marks)
- (Total: 20 marks)**

QUESTION FOUR

(a) Explain four applications of marginal costing in an organisation. (8 marks)

(b) Modern Computers Ltd. deals in new and refurbished computers. The old computers are repaired and then sold at a slightly lower price. Repair costs have been fluctuating greatly and the management wants to establish a predictable cost relationship for cost control purposes.

The following details have been obtained from the records of the company for the past eight weeks regarding the number of computers repaired and total cost incurred:

| Week | Number of computers repaired | Total cost incurred Sh."000" |
|------|------------------------------|---------------------------------|
| 1 | 300 | 232 |
| 2 | 200 | 195 |
| 3 | 600 | 320 |
| 4 | 500 | 290 |
| 5 | 400 | 248 |
| 6 | 450 | 240 |
| 7 | 450 | 230 |
| 8 | 350 | 230 |

Required:Formulate the cost function in the form of $y = a + bx$ using:

(i) The high-low method. (4 marks)

(ii) The regression analysis method. (6 marks)

(iii) In week 9, the company expects delivery of 550 computers to be repaired. Using the equation obtained in (b) (ii) above, estimate the total cost to be incurred. (2 marks)

(Total: 20 marks)**QUESTION FIVE**

(a) Explain three objectives of material control in an organisation. (6 marks)

(b) Ng'arisha Chemicals Limited produces a range of products including a detergent branded "Ng'ara" which passes through three processes before completion and transfer to finished goods stock.

During the month of April 2020, data relating to Ng'ara was as follows:

| | Process | | | Total Sh. |
|-----------------------------------|----------|----------|----------|--------------|
| | 1 Sh. | 2 Sh. | 3 Sh. | |
| Basic raw material (10,000 units) | 6,000 | - | - | 6,000 |
| Materials added | 8,500 | 9,500 | 5,500 | 23,500 |
| Direct wages | 4,000 | 6,000 | 12,000 | 22,000 |
| Direct expenses | 1,200 | 930 | 1,340 | 3,470 |
| Production overheads | - | - | - | 16,500 |
| Output (units) | 9,200 | 8,700 | 7,900 | |
| Expected loss (%) | 10 | 5 | 10 | |

Additional information:

1. There was no stock of work-in-progress at the beginning or at the end of any process.

2. Normal process loss was scrapped as follows:

| Process | Price per unit (Sh.) |
|---------|----------------------|
| 1 | 0.2 |
| 2 | 0.5 |
| 3 | 1.0 |

3. Production overheads are absorbed as a percentage of direct wages.

Required:

(i) Process 1 account. (4 marks)

(ii) Process 2 account. (4 marks)

(iii) Process 3 account. (4 marks)

(iv) Abnormal gain account. (2 marks)

(Total: 20 marks)



kasneb

ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 23 November 2020.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) Max Ltd. manufactures a product branded "Maxim". Some of the manufacturing expenses are easily identifiable as fixed or directly variable with production.

The following information relates to the first 10 months of production:

| Month | Number of units produced (Sh.) | Factory overheads (Sh.) |
|-------|-----------------------------------|----------------------------|
| 1 | 1,500 | 800 |
| 2 | 2,000 | 1,000 |
| 3 | 3,000 | 1,350 |
| 4 | 2,500 | 1,250 |
| 5 | 3,000 | 1,300 |
| 6 | 2,500 | 1,200 |
| 7 | 3,500 | 1,400 |
| 8 | 3,000 | 1,250 |
| 9 | 2,500 | 1,150 |
| 10 | 1,500 | 800 |

Required:

Formulate the cost function in the form of $Y = a + bX$ using:

- (i) The high-low method. (4 marks)
- (ii) The ordinary least squares method. (8 marks)
- (b) A manufacturing company has disclosed a net loss of Sh.8,750,000 as per the cost accounting records for the year ended 31 March 2020. However, their financial accounting records disclosed a net loss of Sh.7,192,500 for the same period.

A scrutiny of the data of both sets of books of accounts revealed the following information:

| | Sh. |
|---|-----------|
| Factory overheads (over-absorbed) | 475,000 |
| Administration overheads (under-absorbed) | 327,500 |
| Depreciation charged in financial accounts | 2,250,000 |
| Depreciation charged in cost accounts | 2,422,500 |
| Interest on investments not included in cost accounts | 627,500 |
| Income tax provided in financial accounts | 72,500 |
| Transfer fees (credit in financial accounts) | 125,000 |
| Preliminary expenses written off | 275,000 |
| Under-valuation of opening stock in cost accounts | 62,500 |
| Under-valuation of closing stock in cost accounts | 175,000 |

Required:

A statement reconciling the net loss as per cost accounts and the net loss as per financial accounts.

(8 marks)

(Total: 20 marks)

AD32 Page 1

Out of 4

QUESTION TWO

- (a) Explain five differences between financial accounting and management accounting. (10 marks)
- (b) Robin Highlands Ltd. imports a high value component for its manufacturing process. The following data relating to the component, has been extracted from Robin Highlands records for the last twelve months:

| | |
|--------------------------|-----------|
| Maximum usage in a month | 300 units |
| Minimum usage in a month | 200 units |
| Average usage in a month | 225 units |
| Maximum lead time | 6 months |
| Minimum lead time | 2 months |
| Re-order quantity | 750 units |

Required:

- (i) Re-order level. (2 marks)
- (ii) Maximum stock level. (3 marks)
- (iii) Minimum stock level. (3 marks)
- (iv) Average stock level. (2 marks)

(Total: 20 marks)**QUESTION THREE**

- (a) Cost accounting and management accounting specialises in providing information that firm managers find useful for internal management of operations.

In light of the above statement, highlight four tasks that managers are able to perform by utilising the said information. (4 marks)

- (b) A small manufacturing firm produces a single product branded "Zed". The budgeted sales for the month of December 2020 is for 10,000 units at a selling price of Sh.2,000 per unit.

Additional information:

1. Two components of inputs are used in the production of one unit of product Zed.

| Component (Input) | Number | Unit cost of each component | |
|----------------------|--------|-----------------------------|--|
| | | Sh. | |
| X | 5 | 20 | |
| Y | 3 | 10 | |

2. Stocks at the beginning of the month are budgeted as follows:

- 4,000 units of finished goods at a unit cost of Sh.1,050
- Component X: 16,000 units at a cost of Sh.20
- Component Y: 9,600 units at a unit cost of Sh.10

3. Production of each unit of product Zed requires the following labour hours:

| Department | Hours per unit | Labour rate per hour | |
|------------|----------------|----------------------|--|
| | | Sh. | |
| Production | 4 | 100 | |
| Finishing | 2 | 140 | |

4. Factory overhead is absorbed into unit cost on the basis of direct labour hours. The budgeted factory overheads for the month of December 2020 amount to Sh.1,920,000.

5. The administration, selling and distribution overheads for the month are budgeted at Sh.5,500,000.

6. The company plans a reduction of 50% in quantity of finished stock at the end of the month and an increase of 25% in the quantity of each input component.

Required:

For the month of December 2020 prepare:

- (i) Sales budget. (1 mark)
- (ii) Production quantity budget. (3 marks)
- (iii) Material usage budget. (2 marks)
- (iv) Material purchases budget. (3 marks)
- (v) Direct labour budget. (3 marks)
- (vi) Budgeted income statement. (4 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) Costs for decision making could be classified according to relevance. A cost is relevant if it can be changed by a decision taken.

In reference to the above statement and using suitable examples, explain the meaning of the following costs and state whether they are relevant or not relevant for decision making:

- (i) Sunk cost. (3 marks)
- (ii) Opportunity cost. (3 marks)

- (b) Evanda Ltd. operates three segments. The income statement below for the segments imply that the company could improve profitability if segment X is eliminated.

Income statement for the year ended 31 March 2020:

| Segment | X Sh. "000" | Y Sh. "000" | Z Sh. "000" |
|-------------------------|-----------------|----------------|----------------|
| Sales | 87,000 | 210,000 | 200,000 |
| Cost of goods sold | (67,000) | (82,000) | (85,000) |
| Sales commission | (12,000) | (22,000) | (20,000) |
| Contribution margin | 8,000 | 106,000 | 95,000 |
| General fixed overheads | (20,000) | (20,000) | (20,000) |
| Advertising expenses | (6,000) | (18,000) | - |
| Net income | <u>(18,000)</u> | <u>68,000</u> | <u>75,000</u> |

Additional information:

- The general fixed overheads relates to the salary of the Chief Executive Officer (CEO) which has been allocated equally to the segments.
- The advertising expenses are specific to the individual segments.

Required:

- (i) Prepare comparative income statements for the company as a whole under the two alternatives, that is, when segment X is retained and when segment X is eliminated. (10 marks)
- (ii) Advise the management of Evanda Ltd. the effect on profitability assuming segment X is eliminated. (4 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) In the context of labour remuneration, examine six limitations of co-partnership and profit sharing scheme. (6 marks)
- (b) "NF" is an industrial lubricant which is formed by subjecting certain crude chemicals to two successive processes. The output of process 1 is passed to process 2 where it is blended with other chemicals.

The process cost for the month of April 2020 were as follows:

Process 1

| | |
|---------------------|-------------------------------|
| Material: | 3,000 kgs at Sh.25 per kg. |
| Labour: | Sh.12,000 |
| Process plant time: | 12 hours at Sh.2,000 per hour |

Process 2

| | |
|---------------------|-------------------------------|
| Material: | 2,000 kgs at Sh.40 per kg. |
| Labour: | Sh.8,400 |
| Process plant time: | 20 hours at Sh.1,350 per hour |

Additional information:

- General overheads for the month of April 2020 amounted to Sh.35,700 and is absorbed into process costs based on process labour.
- The normal output of process 1 is 80% of input, while that of process 2 is 90% of input.

3. Waste matter from process 1 is sold for Sh.20 per kg while that from process 2 is sold for Sh.30 per kg.
4. The output for the month of April 2020 was as follows:
- | | |
|-----------|-----------|
| Process 1 | 2,300 kgs |
| Process 2 | 4,000 kgs |
5. There was no stock or work-in-progress at either the beginning or the end of the period.

Required:

- (i) Process 1 account. (4 marks)
- (ii) Process 2 account. (4 marks)
- (iii) Abnormal gain account. (2 marks)
- (iv) Abnormal loss account. (2 marks)
- (v) Normal loss account. (2 marks)

(Total: 20 marks)

.....



kasneb

ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

TUESDAY: 26 November 2019.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) Summarise six objectives of management accounting. (6 marks)
- (b) Mantex Ltd. has two production departments namely: assembly and finishing. The company has been using a plantwide predetermined overhead rate based on direct labour hours.

The following estimates were made for the year ended 30 June 2019:

| | Assembly | Finishing | Total |
|-------------------------------|----------|-----------|---------|
| Manufacturing overheads (Sh.) | 200,000 | 100,000 | 300,000 |
| Direct labour hours | 40,000 | 35,000 | 75,000 |
| Machine hours | 5,000 | 16,000 | 21,000 |

Mantex Ltd. started and completed Job I005 during the year. The job order cost sheet indicated the following:

| | |
|------------------------|-----------|
| Material requisitioned | Sh.18,000 |
| Direct labour cost | Sh.16,000 |
| Direct labour hours: | |
| Assembly | 1,700 |
| Finishing | 1,300 |
| Machine Hours: | |
| Assembly | 1,000 |
| Finishing | 700 |

A total of 2,000 units were produced on Job I005.

Required:

Determine the total cost and the unit cost for each of the 2,000 units produced by Job I005 assuming that Mantex Ltd. uses:

- (i) A plantwide predetermined overhead rate based on direct labours. (6 marks)
- (ii) Separate department overhead rates, based on direct labour hours for assembly department and machine hours for finishing department. (8 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Explain four advantages of using simple linear regression analysis method. (8 marks)
- (b) Safiri Tours and Travel Ltd. operates tourist travel services in the game parks around East Africa. The company is in the process of purchasing a tour van. The following details relating to the van are provided:

| | |
|---|-----------|
| | Sh. |
| Cost of the van | 5,500,000 |
| Trade-in price after 2 years or 60,000 Kilometres is expected to be | 1,500,000 |
| Spare parts per 1,000 kilometres | 20,000 |
| Maintenance every 6 months costing | 60,000 |
| Vehicle licence per annum | 80,000 |
| Insurance per annum | 150,000 |

Additional information:

1. The company purchases petrol in barrels at a cost of Sh.1,900 per barrel.
2. The average mileage per barrel is 25 kilometres.

Required:

A cost analysis schedule for mileages of 5,000, 10,000, 15,000 and 30,000 kilometres per annum showing the following details:

- | | | |
|--------------------------|------------------------------|-----------|
| (i) | Total variable cost. | (2 marks) |
| (ii) | Variable cost per kilometre. | (2 marks) |
| (iii) | Total fixed cost. | (2 marks) |
| (iv) | Fixed cost per kilometre. | (2 marks) |
| (v) | Total cost. | (2 marks) |
| (vi) | Total cost per kilometre. | (2 marks) |
| (Total: 20 marks) | | |

QUESTION THREE

(a) Citing appropriate examples, explain the meaning of the following terms as used in cost classification:

- | | | |
|------|-------------------|-----------|
| (i) | Imputed cost. | (3 marks) |
| (ii) | Incremental cost. | (3 marks) |

(b) Jane Atieno has developed a new product that she has decided to produce and market. To proceed with the project, Jane will have to quit her present job, where she earns Sh.300,000 per month.

Jane has found premises to rent for Sh.50,000 per month that will house the production facilities. In addition, she will lease equipment that will be used to manufacture the product, at Sh.10,000 per month.

Jane had purchased all other required tools five years ago for Sh.150,000. Material costs to make the product are estimated at Sh.300 per unit while monthly advertising costs for the product are estimated at Sh.60,000.

Required:

Complete the chart below by placing an "X" under each heading that helps to identify the costs involved. There can be "Xs" placed under more than one heading for a single cost.

| | Opportunity cost | Sunk cost | Variable cost | Fixed Cost | Prime cost | Conversion cost | Period cost | Differential cost |
|------------------------|------------------|-----------|---------------|------------|------------|-----------------|-------------|-------------------|
| Rent for building | | | | | | | | |
| Original cost of tools | | | | | | | | |
| Equipment leased | | | | | | | | |
| Material cost | | | | | | | | |
| Present salary | | | | | | | | |
| Advertising | | | | | | | | |

(7 marks)

(c) Bullock Ltd. assembles bicycles for sale in the local market. They produce 4,050 bicycles annually.

The tyres used in these bicycles (2 for each bicycle) are purchased from an outside supplier at a unit cost of Sh.450. The annual holding cost is 10% of the value per tyre while the cost of making an order from the supplier is Sh.1,000.

Required:

- (i) Determine the number of the tyres that should be ordered in each order if the relevant costs are to be minimised. (4 marks)
- (ii) Calculate the minimum total relevant cost if orders are made according to the plan established in (c) (i) above. (3 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) The standard cost per unit of product "J" manufactured by Design Manufacturing Ltd. is provided below:

| | |
|-----------------------|------------|
| | Sh. |
| Direct material | 120 |
| Direct labour | 130 |
| Variable overheads | 150 |
| Fixed overheads | <u>200</u> |
| Total production cost | 600 |
| Standard profit | <u>150</u> |
| Selling price | <u>750</u> |

Additional information:

1. The actual data for the month of October 2019 was as follows:

| | |
|-------------------------|--------------|
| | Units |
| Opening stock | 14,000 |
| Closing stock | 12,500 |
| Sales (Sh.700 per unit) | 25,000 |

2. Actual fixed overheads incurred amounted to Sh.4,500,000.

Required:

Income statement using:

- (i) Marginal costing. (8 marks)
- (ii) Absorption costing. (8 marks)
- (b) Reconciliation statement for the profits obtained in (a) (i) and (a) (ii) above. (4 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) The following information was extracted from the books of Imara Ltd. from the forecasts made for the last five months of the year ended 31 December 2018:

| Month | Sales | Purchases | Overheads | Depreciation | Wages |
|-----------|----------|-----------|-----------|--------------|----------|
| | Sh."000" | Sh."000" | Sh."000" | Sh."000" | Sh."000" |
| August | 42,000 | 24,000 | 4,200 | 320 | 13,000 |
| September | 26,000 | 25,000 | 3,200 | 320 | 9,000 |
| October | 28,000 | 14,000 | 3,600 | 320 | 9,600 |
| November | 32,000 | 16,000 | 3,400 | 320 | 12,000 |
| December | 38,000 | 18,000 | 3,800 | 320 | 12,000 |

Additional information:

- All purchases are on credit and suppliers are paid two months after the date of transaction.
- 25% of the sales are on credit. Debtors are expected to settle their accounts the month after which sales took place.
- Wages are paid in cash as they become due.
- The bank balance on 1 October 2018 was estimated to be Sh.3,600,000.
- Overheads are paid in the month in which they are incurred.
- Depreciation expense is included in the overheads provided above.

Required:

Cash budget for the fourth quarter showing the months of October, November and December 2018. (12 marks)

- (b) Baraka manufacturers operate separate financial accounts and cost accounts. The cost accountant maintains the cost ledgers while the chief accountant maintains the financial ledgers.

The financial accounting profit for the year ended 30 September 2019 amounted to Sh.29,250,000 while the cost accounting profit for the same period amounted to Sh.36,270,000.

The following information relating to the year ended 30 September 2019 is provided:

1. Debenture interest of Sh.5,070,000 was paid during the year.
2. Rent of Sh.9,750,000 was received during the year.
3. Goodwill amounting to Sh.7,800,000 was written off.
4. Machinery with a net book value of Sh.5,850,000 was sold for Sh.8,190,000.
5. Notional rent charge of Sh.5,460,000 was charged in the cost accounts.
6. Discounts allowed amounted to Sh.2,730,000 while discounts received amounted to Sh.1,950,000.
7. Overheads absorbed in cost accounts amounted to Sh.78,000,000 while actual overheads incurred amounted to Sh.85,800,000
8. Valuation of stocks using two approaches are provided below:

| | Financial accounts | Cost accounts |
|---------------------------------|---------------------------|----------------------|
| | Sh. | Sh. |
| Opening stock of raw materials | 6,240,000 | 8,190,000 |
| Opening stock of finished goods | 18,330,000 | 16,380,000 |
| Closing stock of raw materials | 10,530,000 | 13,260,000 |
| Closing stock of finished goods | 15,210,000 | 15,600,000 |

Required:

A statement reconciling the cost profit and financial profit for the year ended 30 September 2019.

(8 marks)

Total: 20 marks)

.....



kasneb

ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 20 May 2019.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) Describe four characteristics of a good labour remuneration system. (8 marks)
- (b) Bidii Enterprises applies an incentive scheme of labour remuneration.

The following data is provided for three employees:

| Details | Jane | Peter | Anne |
|-------------------------------|---------------|---------------|---------------|
| Time allowed per unit (Hours) | $\frac{1}{4}$ | $\frac{1}{6}$ | $\frac{1}{2}$ |
| Units produced | 474 | 684 | 175 |
| Time taken (Hours) | 78 | 72 | 80 |
| Basic pay per hour (Sh.) | 600 | 600 | 300 |
| Rejected units | 54 | 84 | 25 |

Additional information:

- Bonus is paid at 50% of the normal wage rate for every hour saved.
- No penalty is imposed on rejected output.

Required:

For each of the above employees, determine:

- (i) Bonus payable. (5 marks)
- (ii) Gross wages payable. (4 marks)
- (iii) Wages cost per unit made. (3 marks)
- (Total: 20 marks)

QUESTION TWO

- (a) Distinguish between "period costs" and "irrelevant costs". (4 marks)

- (b) AMC Ltd. manufactures three products namely; A, B and C. The processes by which they are manufactured are independent of one another and the sales of any one product are in no way affected by the prices or volume of sales of the other products.

The company's budgeted income statement is as follows:

| Details | Product | | |
|-------------------------|----------------|----------------|-----------------|
| | A Sh. | B Sh. | C Sh. |
| Sales | 30,000 | 20,000 | 150,000 |
| Production cost: | | | |
| Variable | (16,000) | (8,000) | (96,000) |
| Apportioned fixed | <u>(2,000)</u> | <u>(6,000)</u> | <u>(32,000)</u> |
| Gross profit | 12,000 | 6,000 | 22,000 |
| Selling costs: | | | |
| Variable | (5,400) | (5,200) | (5,400) |
| Apportioned fixed | <u>(1,400)</u> | <u>(1,400)</u> | <u>(1,200)</u> |
| Net profit/(loss) | <u>5,200</u> | <u>(600)</u> | <u>15,400</u> |

Required:

Advise the management of AMC Ltd. on whether Product B should be discontinued.

(8 marks)

www.chopi.co.ke

- (c) Corneril Ltd. has a weekly demand of 16 units of Product Zed. The unit cost of Product Zed is Sh.55 while fixed cost per order is Sh.4,400.
Corneril Ltd. is financed at a cost of 20% per annum. The company works for 50 weeks in a year.

Required:

The annual total inventory costs.

(8 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Jaribu Ltd. has been facing challenges in the control of operating costs. A consultant has advised the management that they need to understand the behaviour of the costs for control purposes.

The management accountant has provided the following data which relates to the production of 250 units:

| | Sh. |
|---------------------------------|---------|
| Direct materials cost | 80,000 |
| Direct labour cost | 120,000 |
| Indirect labour cost (fixed) | 3,000 |
| Indirect materials cost (fixed) | 18,000 |
| Depreciation cost (fixed) | 7,000 |
| Rent (fixed) | 15,000 |

Required:

Formulate a cost function in form of $Y = a + bx$ using accounts analysis method.

(6 marks)

- (b) Kamama Ltd. operates separate cost accounting and financial accounting systems.

The following information for the year ended 30 April 2019 is available:

| | Sh. |
|---|---------|
| Cost of finished goods produced | 512,050 |
| Cost of goods sold | 493,460 |
| Direct materials issued | 197,750 |
| Direct wages | 85,480 |
| Production overhead (as per financial accounts) | 208,220 |
| Direct materials purchases | 216,590 |

Additional information:

- In the cost accounts, additional depreciation of Sh.12,500 per year is to be charged.
- Production overheads are absorbed at the rate of 250% of direct wages.
- The following were the balances as at 1 May 2018:

| | Sh. |
|----------------------------------|--------|
| Stores control account | 54,250 |
| Work-in-Progress control account | 89,100 |
| Finished goods control account | 42,075 |

Required:

- Stores control account. (3 marks)
- Work-in-Progress control account (5 marks)
- Finished goods control account (3 marks)
- Production overhead control account. (3 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) Identify four differences between job order costing and process costing. (8 marks)

- (b) BetterCare Ltd. is a health facility that operates two branches in the country namely; Tibu and Afya.

For the month of April 2019, the following information was available:

| | Branch | |
|-----------------------|---------|--------|
| | Tibu | Afya |
| Number of beds | 780 | 500 |
| Number of inpatients | 23,472 | 8,165 |
| Average stay (days) | 7.5 | 19 |
| Number of outpatients | 216,500 | 63,920 |

| Details | Costs breakdown | | | |
|--------------------|-------------------|-------------------|-------------------|-------------------|
| | Tibu branch | | Afya branch | |
| | Inpatient Sh. | Outpatient Sh. | Inpatient Sh. | Outpatient Sh. |
| Supplies and drugs | 1,821,520 | 693,600 | 1,551,350 | 285,450 |
| Medical staff | 8,729,100 | 3,308,950 | 6,832,700 | 1,975,050 |
| Support services | 2,210,500 | 2,563,700 | 1,845,380 | 1,591,620 |
| General services | <u>3,524,470</u> | <u>1,721,800</u> | <u>1,937,410</u> | <u>635,600</u> |
| Total costs | <u>16,285,590</u> | <u>8,288,050</u> | <u>12,166,840</u> | <u>4,487,720</u> |

Required:

For each branch, compute:

- (i) Cost per inpatient. (6 marks)
- (ii) Cost per outpatient. (6 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Summarise six functions of a budget committee. (6 marks)
- (b) Anwa Ltd. manufactures two products: XL and YL, using two types of materials; M and N.

The following information relates to the production activities of the company in the month of March 2019:

1. Budgeted sales:

| Product | Quantity (Kgs.) | Price per unit (Sh.) |
|---------|-----------------|----------------------|
| XL | 1,250 | 215 |
| YL | 3,111 | 302 |

2. Budgeted materials to be used per unit:

| Material | M | N |
|------------------|----|----|
| Unit cost (Sh.) | 90 | 60 |
| Quantity (Kgs.): | | |
| XL | 6 | 4 |
| YL | 2 | 2 |

3. The following inventories are expected:

| Finished products | Opening inventories (Kgs.) | Closing inventories (Kgs.) |
|-------------------|----------------------------|----------------------------|
| XL | 200 | 501 |
| YL | 443 | 333 |
| Materials: | | |
| M | 221 | 100 |
| N | 50 | 155 |

Required:

- (i) Sales budget in value. (2 marks)
- (ii) Production budget. (4 marks)
- (iii) Material usage budget. (4 marks)
- (iv) Material purchases budget. (4 marks)

(Total: 20 marks)



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 21 May 2018.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) Highlight four characteristics of a good cost and management accounting system. (4 marks)
- (b) Brokem Ltd. manufactures three products namely; Red, Green and Yellow. The following budget information is relevant for the year ending 31 December 2018:

| | Red | Green | Yellow |
|--|------------|------------|------------|
| Selling price per unit (Sh.) | 400 | 600 | 800 |
| Variable cost per unit (Sh.) | 320 | 480 | 640 |
| Fixed cost (Sh.) | 14,000,000 | 20,000,000 | 26,000,000 |
| Maximum sales in units | 350,000 | 150,000 | 500,000 |
| Direct labour hours per unit | 2 | 5 | 3 |
| Direct materials in kilograms per unit | 16 | 30 | 20 |

Additional information:

1. It has been estimated that the maximum direct labour hours available for the year will be 3,000,000.
2. It will not be possible to employ additional workers nor work overtime.
3. The direct materials which are imported will be limited to a total of 14,800,000 kilograms.
4. All opening and closing stocks will be nil.

Required:

- (i) Determine which will be the limiting factor for Brokem Ltd. between labour hours and direct materials for the year ending 31 December 2018. (4 marks)
- (ii) Compute the sales mix that will maximise profits for the year ending 31 December 2018. (8 marks)
- (iii) Determine the profit at the maximum sales production. (4 marks)
- (Total: 20 marks)**

QUESTION TWO

- (a) Using appropriate examples, explain the following bases of cost classification:
- (i) Cost behaviour. (2 marks)
- (ii) Identity with stock. (2 marks)
- (iii) Controllability. (2 marks)
- (b) A manufacturing company has disclosed a net loss of Sh.213 million as per the cost accounting records for the year ended 31 December 2017. However, the financial accounting records disclosed a net loss of Sh.258 million for the same period.

The scrutiny of data from the two sets of accounts revealed the following information:

| | Sh. "000" |
|--|-----------|
| Factory overheads under-absorbed | 5,000 |
| Administrative overheads over-absorbed | 3,000 |
| Depreciation charged in financial accounts | 70,000 |
| Interest on investments not included in cost accounts | 20,000 |
| Depreciation charged in cost accounts | 80,000 |
| Income tax provided in financial accounts | 65,000 |
| Transfer fees credited in financial accounts | 2,000 |
| Preliminary expenses written off in the financial accounts | 3,000 |
| Over-valuation of closing stock of finished goods in cost accounts | 7,000 |

Required:

Prepare a memorandum reconciliation account. (6 marks)

- (c) Q Ltd. manufactures a single product and uses absorption costing method. The following data relates to the performance of the entity during the month of April 2018:

| | Sh. "000" |
|--|-----------|
| Profit | 37,000 |
| Over-absorbed overheads | 24,000 |
| Sales (48,000 units) | 720,000 |
| Non-production overheads (all fixed costs) | 275,000 |
| Opening inventory | 144,000 |
| Closing inventory | 162,000 |

Additional information:

- Units of inventory are valued at Sh.9,000 each, consisting of a variable cost of Sh.3,000 and a fixed overhead cost of Sh.6,000.
- All overhead costs are fixed costs.

Required:

- Determine the actual production overhead cost for the month of April 2018. (4 marks)
- Compute the profit that would have been reported in April 2018 if Q Ltd. had used marginal costing method. (4 marks)

(Total: 20 marks)

QUESTION THREE

- Discuss four limitations of a budgetary control system in a county government. (8 marks)
- Alltime Supplies Ltd. has approached Realtime Bank Ltd. for an overdraft facility to meet its cash requirements.

The following information is provided:

| Month | Sales (Sh.) | Purchases (Sh.) | Wage (Sh.) |
|----------------|-------------|-----------------|------------|
| June 2018 | 1,800,000 | 2,000,000 | 200,000 |
| July 2018 | 2,600,000 | 3,000,000 | 400,000 |
| August 2018 | 3,000,000 | 2,600,000 | 600,000 |
| September 2018 | 4,000,000 | 4,200,000 | 800,000 |
| October 2018 | 4,200,000 | 4,000,000 | 1,000,000 |
| November 2018 | 4,800,000 | 4,600,000 | 1,200,000 |
| December 2018 | 5,000,000 | 4,000,000 | 1,200,000 |

Additional information:

- 50% of credit sales are realised in the month following the sales and the remaining 50% in the second month following the sales.
- 75% of purchases are cash purchases. The balance is credit purchases. Creditors are paid in the month following the month of purchase.
- Monthly rent payment is Sh.50,000.
- Overheads are 10% of purchases, paid in cash in the same month.

5. Advance income tax is usually paid in the month of November every year.
6. Bonus payable to workers relating to the previous year amounts to Sh.1,200,000. The management has decided to pay Sh.1,000,000 of the bonus during the month of October 2018 and the balance to be paid in December 2018.
7. Plant and machinery costing Sh.500,000 shall be purchased during the month of September 2018. However, this payment shall be paid in October 2018. Additional installation expenses amounting to Sh.50,000 are payable in November 2018.
8. Interest on 12% of Sh.500,000 debentures is received by Alltime Supplies Ltd. in the month of September every year.
9. The company's books of account reflect an existing overdraft with Realltime Bank Ltd. The accountant to the company forecasts the balance of the overdraft at Sh.200,000 as at 1 September 2018.
10. The bank has stipulated the condition that the amount of overdraft at the end of November 2018 should not exceed Sh.5,000,000. For any excess amount, the directors have agreed to give a loan to the company at the end of November 2018, where necessary.

Required:

- (i) A cash budget for the period from September 2018 to November 2018, indicating the extent of overdraft the company requires at the end of each month. (8 marks)
 - (ii) Determine the forecasted amount of outstanding debtors and creditors at the end of November 2018. (4 marks)
- (Total: 20 marks)**

QUESTION FOUR

- (a) In the context of cost classification, differentiate between the following costs:

- (i) "Differential costs" and "opportunity costs" . (4 marks)
- (ii) "Replacement costs" and "imputed costs". (4 marks)

- (b) Tamarin Manufacturing Company has provided you with the following information about their operations for the year ending 31 March 2018:

| | |
|------------|--------------|
| Production | 20,000 units |
| Sales | 15,000 units |

| Production costs: | Sh. |
|--------------------|-----------|
| Direct materials | 4,800,000 |
| Direct labour | 1,200,000 |
| Variable overheads | 1,000,000 |
| Fixed overheads | 600,000 |

Selling and administration costs:

| | |
|-----------------------------------|---------|
| Salaries (fixed) | 300,000 |
| Sales commission (variable) | 200,000 |
| Advertising and promotion (fixed) | 320,000 |
| Other costs (fixed) | 480,000 |

Additional information:

1. The unit selling price for the company's product is Sh.500.
2. There were no stocks in the store at the beginning of the period.

Required:

Income statement using:

- (i) Marginal costing. (6 marks)
- (ii) Absorption costing. (6 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Explain the accounting treatment of normal losses and abnormal losses in process costing. (4 marks)
- (b) The following information was obtained from the books of Samid Processing Company Ltd. for the fourth quarter of the year 2017 relating to Process I:

| | |
|---|--------------------------------|
| Input of raw materials | 1,000 units at Sh.200 per unit |
| Direct materials added | Sh.40,250 |
| Direct wages | Sh.60,000 |
| Production overheads | Sh.60,000 |
| Actual output transferred to Process II | 900 units |
| Normal loss | 5% |
| Scrap value | Sh.80 per unit |

Required:

- (i) Process I account. (8 marks)
- (ii) Normal loss account. (3 marks)
- (iii) Abnormal loss account. (3 marks)
- (c) Highlight two factors that might cause abnormal loss in (b)(iii) above. (2 marks)

(Total: 20 marks)

.....

www.chopi.co.ke



kasneb

ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 27 November 2017.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

Juventus Ltd. is a manufacturing company with three departments namely; A, B and C.

The following are the monthly budgeted overheads for the month of December 2017:

| Department | Variable Overheads Sh."000" | Fixed Overheads Sh."000" |
|-------------------|--|-------------------------------------|
| A | 8,400 | 5,200 |
| B | 10,800 | 3,600 |
| C | 3,200 | 800 |

Budgeted labour hours for the month are as follows:

| Department | Labour hours |
|-------------------|---------------------|
| A | 800,000 |
| B | 1,200,000 |
| C | 400,000 |

The wage rates in the three departments are as follows:

| Department | Wage rate per hour (Sh.) |
|-------------------|---------------------------------|
| A | 9 |
| B | 6 |
| C | 8 |

General administration overheads are expected to be Sh.8,400,000 for the month.

Required:

- The variable and fixed overheads absorption rates for each department using direct labour hour basis. (9 marks)
- The administration overheads absorption rate using direct labour hour basis. (4 marks)
- The following information relates to Job No. 333 received from Tevin Ltd.:

Material costs: 80 kgs at Sh.35 per kg.

Direct labour:

| Department | Hours |
|-------------------|--------------|
| A | 50 |
| B | 120 |
| C | 26 |

Required:

Calculate the selling price of Job No.333 if Juventus Ltd. loads profit at 20% of the selling price. (7 marks)

(Total: 20 marks)

QUESTION TWO

- (a) In the context of cost estimation, describe three advantages of simple linear regression method. (6 marks)
- (b) Bine Ltd. operates separate cost accounting and financial accounting systems. The following is the list of opening balances as at 1 July 2016 in the cost ledger:

| | Debit Sh. "000" | Credit Sh. "000" |
|--|--------------------|---------------------|
| Stores ledger control account | 53,375 | |
| Work-in-progress (W-I-P) control account | 104,595 | |
| Finished goods control account | 30,780 | |
| Cost ledger control account | | 188,750 |

Transactions during the year were as follows:

| | Sh. "000" |
|---|-----------|
| Materials purchased | 26,700 |
| Materials issued to production | 40,000 |
| Materials issued for factory repairs | 900 |
| Factory wages paid (including indirect wages Sh.23,000,000) | 77,500 |
| Production overheads incurred | 95,200 |
| Production overheads under-absorbed and written off | 3,200 |
| Sales | 256,000 |

Additional information:

- The company's gross profit is 25% on factory cost.
- At the end of the year work-in-progress (W-I-P) stocks increased by Sh.7,500,000.

Required:

Prepare the relevant ledger accounts.

(14 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Epitech Academy has been using their own van to transport students to and from school. The new principal feels that this arrangement is costly and proposes that the school hires out transport services.

The school accountant has provided the following data:

| | Sh. |
|------------------------------------|-----------|
| Cost of the van | 3,500,000 |
| Annual insurance | 345,000 |
| Annual repairs | 220,000 |
| Driver's monthly salary | 45,000 |
| Annual road licence | 50,000 |
| TLB levy per annum | 54,000 |
| Scrap value of the van | 800,000 |
| Tyres and tubes annual expenditure | 63,000 |
| Inspection cost per annum | 5,000 |
| Petrol cost per kilometre | 68 |

Additional information:

- The van is estimated to cover 20,000 kilometres per year. It has an estimated useful life of 6 years.
- A new traffic rule has been issued requiring all passenger vehicles, including school vans to be fitted with speed governors and seat belts. This will cost Sh.120,000. The school plans to apportion this cost over the useful life of the van.
- Hired monthly transport will cost Sh.253,000 out of which Sh.210,000 is attributed to the van, the driver will earn a monthly salary of Sh.25,000 while the conductor who helps the children alight will earn Sh.18,000 per month.

Required:

Advise the principal of Epitech Academy on whether to use own transport or hired transport services.

(12 marks)

- (b) The following details were obtained from the books of Turbo Ltd., a manufacturing company:

| | |
|------------------------|------------|
| | Sh. |
| Variable cost per unit | 300 |
| Fixed expenses | 1,000,000 |
| Selling price per unit | 500 |

Required:

- (i) Break-even point in units. (2 marks)
 (ii) The selling price per unit, if the break-even point is brought down to 4,000 units. (3 marks)
 (iii) If the present sales volume is Sh.4,000,000, compute the margin of safety. (3 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) Explain four types of functional budgets that could be prepared by an organisation. (8 marks)

- (b) Tesugu Ltd. is a company in the manufacturing industry. The company engages casual workers in its factory. Tesugu Ltd. has three grades of casual workers namely; skilled, semi-skilled and unskilled.

The details relating to their remuneration are as follows:

| Grade | Wage rate per hour (Sh.) | Number of hours in a day | Number of workers |
|--------------|--------------------------|--------------------------|-------------------|
| Skilled | 450 | 4 | 125 |
| Semi-skilled | 375 | 6 | 153 |
| Unskilled | 250 | 8 | 198 |

During the first week of October 2017, the workers worked for only four days.

Required:

The remuneration payable to each of the three grades of workers and the take home pay per worker in each grade during the first week of October 2017. (12 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) Explain three limitations of financial accounting that might be solved by management accounting. (6 marks)

- (b) Beauty Care Ltd. has for some years manufactured a product which sells for Sh.100 per unit in the domestic market. Production is carried on at two separate factories.

The budgeted profit and loss statements for both factories are given below:

| | Factory A | | Factory B | |
|---------------------------------|------------------|--------------------|------------------|--------------------|
| | Sh. | Sh. | Sh. | Sh. |
| Sales at Sh.100 per unit | | 4,200,000 | | 3,900,000 |
| Materials | 840,000 | | 780,000 | |
| Labour | 1,050,000 | | 850,000 | |
| Production overheads | <u>620,000</u> | <u>(2,510,000)</u> | <u>632,000</u> | <u>(2,262,000)</u> |
| | | 1,690,000 | | 1,638,000 |
| Administration and selling cost | | <u>(800,000)</u> | | <u>(850,000)</u> |
| Net profit | | <u>890,000</u> | | <u>788,000</u> |
| Net profit to sales | | 21% | | 20% |

Additional information:

- During the year, a surprise order of 5,000 units was received and both factory managers wished to take the offer.
 Factory A manager argued that he earned higher profit on sales.
- The management has ascertained that in both factories, labour and material costs be considered variable.
- For the purposes of arriving at a decision, it has been agreed that production overheads of Sh.420,000 and Sh.312,000 be variable for Factory A and Factory B respectively.
- All other costs are fixed.

Required:

Advise the management of Beauty Care Ltd. on which factory should receive the order, explaining the reasons for the decision and any assumptions made. (14 marks)

(Total: 20 marks)

KASNEB

ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 22 May 2017.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) The following information relates to the output levels and corresponding overhead costs for Fox Ltd. for the last four months:

| Month | Output level "000" Units | Overhead cost Sh."000" |
|----------|-----------------------------|---------------------------|
| January | 100 | 17,500 |
| February | 75 | 12,500 |
| March | 95 | 18,100 |
| April | 50 | 10,000 |

Required:

Using the high-low method:

- (i) Formulate the cost function for the above relationship. (4 marks)
- (ii) Estimate the total overhead costs associated with 120,000 units of output. (2 marks)
- (b) Tukson Ltd. manufactures a single product branded "PS". The management accountant is in the process of preparing the budgets for the third quarter for the year ending 31 December 2017.

The following information is availed:

1. The production and sales forecast are as follows:

| | July Units | August Units | September Units |
|------------|---------------|-----------------|--------------------|
| Production | 1,700 | 1,900 | 1,900 |
| Sales | 1,500 | 1,800 | 2,000 |

2. The unit variable cost breakdown is as follows:

| | |
|-------------------|--------------|
| | Sh. |
| Direct materials | 1,500 |
| Direct labour | 1,000 |
| Variable overhead | <u>500</u> |
| | <u>3,000</u> |

3. The selling price per unit of "PS" is Sh.8,000.
4. The monthly fixed costs amount to Sh.1,600,000 payable one month in arrears.
5. The labour costs are paid in the month they are incurred.
6. Suppliers of materials give one-month credit.
7. The variable overheads are paid for in the month following production.
8. 50% of sales are on cash basis. The balance is paid in the following month.
9. The opening cash balance for the month of July 2017 is estimated at Sh.5,000,000.
10. A machine bought in May 2017 at Sh.5,000,000 is due for payment in July 2017.

Required:

Cash budget for three months ending 30 September 2017.

(14 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Explain three disadvantages of a group incentive scheme as a method of labour remuneration. (6 marks)
- (b) The management accountant of Mupe Ltd. has provided the projected sales and costs for the year commencing 1 July 2017 as follows:

| | |
|-----------------------------------|----------------|
| Fixed costs | Sh.800,000,000 |
| Variable costs | 80% of sales |
| Number of units produced and sold | 4,000,000 |
| Selling price per unit | Sh.2,000 |

Additional information:

- The management is considering reducing the selling price in order to increase both sales and profits.
- The sales manager has submitted the following estimates of the effect of reduction.

| | Reduce selling price by | Increase volume by |
|-----|-------------------------|--------------------|
| I | 20% | 20% |
| II | 10% | 15% |
| III | 5% | 10% |

Required:

- (i) A worksheet to show the effect of each change on the profit. (12 marks)
- (ii) Advise the management on the best alternative to adopt. (2 marks)
- (Total: 20 marks)**

QUESTION THREE

- (a) Describe four features of useful information in management accounting. (8 marks)
- (b) Exodus Ltd. manufactures three products namely; X, Y and Z. Each product is started in the machine area and completed in the finishing shop.

The direct costs associated with each product forecast for the financial period ending 30 June 2017 are as follows:

| | X | Y | Z |
|------------------------------|-----------|-----------|-----------|
| | Sh. | Sh. | Sh. |
| Materials | 37 | 30 | 45 |
| Wages: | | | |
| Machine area Sh.10 per hour | 20 | 10 | 20 |
| Finishing shop Sh.8 per hour | <u>12</u> | <u>8</u> | <u>16</u> |
| Total | <u>69</u> | <u>48</u> | <u>81</u> |

Additional information:

- There are machines in both departments and machine hours are required to complete one of each product as follows:

| Product | Machine Area | Finishing shop | Budget output |
|---------|--------------|----------------|---------------|
| | Hours | Hours | Units |
| X | 8 | 1 | 12,000 |
| Y | 3 | 1 | 16,000 |
| Z | <u>6</u> | <u>2</u> | <u>4,000</u> |
| | <u>17</u> | <u>4</u> | <u>32,000</u> |

- The fixed overheads for the machine area amount to Sh.201,600.
- The fixed overheads for the finishing shop amount to Sh.189,000.

Required:

For each department, compute fixed overheads absorption rate using:

- (i) Labour hours. (3 marks)
- (ii) Machine hours. (3 marks)
- (iii) The total cost for each product using the labour hour rate. (3 marks)
- (iv) The total cost for each product using the machine hour rate. (3 marks)

(Total: 20 marks)

QUESTION FOUR

Zico Ltd. produces a single product branded "zic". The product passes three distinct processes.

The following information relates to the month of April 2017:

| | Process | | |
|----------------------|---------|-------|--------|
| | A | B | C |
| | Sh. | Sh. | Sh. |
| Direct materials | 7,800 | 5,940 | 8,886 |
| Direct wages | 6,000 | 9,000 | 12,000 |
| Production overheads | 6,000 | 9,000 | 12,000 |

Additional information:

1. 3,000 units at Sh.3 each were introduced to process A.
2. There was no stock of materials or work-in-progress.
3. The output of each process passes directly to the next process and finally to finished stock account.
4. The following additional data is availed by the cost accountant:

| Process | Output (units) | Percentage of Normal loss to input | Value of scrap per unit (Sh.) |
|---------|----------------|------------------------------------|-------------------------------|
| A | 2,850 | 5% | 2 |
| B | 2,520 | 10% | 4 |
| C | 2,250 | 15% | 5 |

Required:

- (a) Process accounts for processes A, B and C. (12 marks)
 - (b) Abnormal gain account. (2 marks)
 - (c) Normal loss account. (6 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) Examine four types of costs under functional classification. (8 marks)
- (b) The management accountant of Empire Manufacturing Company provided the following information for the year ended 31 December 2016:

| | January 2016 | December 2016 |
|--|--------------|---------------|
| | Sh. | Sh. |
| Stores in hand | 32,000 | 45,060 |
| Finished goods inventory | 48,700 | 51,240 |
| Work-in-progress | 62,000 | 49,620 |
| Purchases | | 150,000 |
| Carriage inwards | | 2,260 |
| Stores issued | | 138,000 |
| Wages - Direct labour | | 132,000 |
| - Indirect labour | | 46,800 |
| Work expenses including power and rent | | 134,000 |
| Repairs on materials in store | | 1,200 |
| Cost of completed jobs | | 492,540 |
| Cost of finished goods | | 490,000 |
| Selling expenses | | 11,340 |
| Office and administration expenses | | 26,500 |

Additional information:

1. The cost journal for the period showed rent of Sh.182,660 was allocated to work-in-progress in respect of work overheads while office overhead costs amounted to Sh.26,300.
2. The company operated integrated accounting system.

Required:

The relevant cost ledger accounts.

(12 marks)
(Total: 20 marks)

KASNEB

ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 23 May 2016.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) A cost accounting system should be prepared based upon the requirements and particular needs of a business.

With reference to the above statement, describe four features of an ideal cost accounting system. (8 marks)

- (b) Davinda Ltd. manufactures a single product branded "MPZ". The company uses process costing technique to account for the costs incurred.

The following information relates to the company's operations for the month of April 2016:

1. 1,200 kilogrammes of raw materials costing Sh.860,064 were input to the process.
2. Conversion costs amounted to Sh.238,656.
3. Losses in form of rejected product was estimated at 16% of the input materials.
4. Rejected product was sold at Sh.360 per kilogramme.
5. During the month, 994 kilogrammes of finished product passed the inspection.
6. The remaining output was sold as a rejected product.
7. There was no work-in-progress either at the beginning or at the end of the month.

Required:

- (i) The cost per unit of the normal output. (6 marks)

- (ii) Process account. (6 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Describe four types of costs that could be of significance in managerial decision making. (8 marks)

- (b) SK Ltd. has never operated a system of stock control. You have recently been appointed as the management accountant and tasked to develop a system of stock control.

From your investigations, you established the following consumption pattern for a component number G007 during the year 2015:

| Month | Monthly consumption (units) |
|-----------|-----------------------------|
| January | 800 |
| February | 900 |
| March | 1,000 |
| April | 1,200 |
| May | 1,300 |
| June | 1,400 |
| July | 1,400 |
| August | 1,200 |
| September | 1,000 |
| October | 800 |
| November | 600 |
| December | 400 |

Additional information:

1. The lead time for G007 is a minimum of 3 months and a maximum of 5 months.
2. The cost of ordering was found to be Sh.20 per order.
3. The cost price per unit of G007 is Sh.30.
4. The inventory holding cost is 10% of the cost price.

Required:

- (i) Economic order quantity (EOQ). (4 marks)
- (ii) Re-order level. (2 marks)
- (iii) Minimum stock level. (2 marks)
- (iv) Maximum stock level. (2 marks)
- (v) Frequency of ordering. (2 marks)

(Total: 20 marks)**QUESTION THREE**

MST enterprise manufactures two products namely: PQ and QP. Information relating to each of these products for the month of April 2016 is as follows:

| | PQ | QP |
|-------------------------------|--------------|--------------|
| | Units | Units |
| Opening inventory | Nil | Nil |
| Production | 15,000 | 6,000 |
| Sales | 10,000 | 5,000 |
| | Sh. | Sh. |
| Sales price per unit | 20 | 30 |
| Unit costs: | | |
| Direct materials | 8 | 14 |
| Direct labour | 4 | 2 |
| Variable production overheads | 2 | 1 |
| Variable sales overheads | 2 | 3 |

Additional information:

1. Fixed costs for the month were as follows:

| | Sh. |
|--------------------------------|--------|
| • Production costs | 40,000 |
| • Administrative costs | 15,000 |
| • Sales and distribution costs | 25,000 |
2. The budgeted fixed production overheads amount to Sh.45,000 for a normal combined output of 22,500 units for PQ and QP.

Required:

Prepare the income statement for the month of April 2016 using:

- (a) Marginal costing. (8 marks)
- (b) Absorption costing. (8 marks)
- (c) Reconcile the profits in (a) and (b) above. (4 marks)

(Total: 20 marks)**QUESTION FOUR**

- (a) BAC Ltd. has provided the following information relating to their sales budget for the period June 2016 to December 2016:

| Month (2016) | Sales (units) |
|--------------|---------------|
| June | 5,000 |
| July | 7,500 |
| August | 10,000 |
| September | 15,000 |
| October | 20,000 |
| November | 30,000 |
| December | 35,000 |

BAC Ltd. has a policy to maintain inventory levels equal to 30% of the following month's sales requirements. Inventory on 1 June 2016 is projected to be 1,500 units.

Required:

A production budget for BAC Ltd. for the period June 2016 to December 2016. (6 marks)

(b) The bankers of Macvision Ltd. have requested a cash budget for the month of July 2016 and August 2016. Macvision Ltd. has gathered the following information for budget preparation:

1. The cash balance forecast as at 1 July 2016 amounted to Sh.35,000,000.

2. Forecasted sales are as follows:

| | May 2016 | June 2016 | July 2016 | August 2016 |
|--------------|---------------|----------------|----------------|----------------|
| | Sh. "000" | Sh. "000" | Sh. "000" | Sh. "000" |
| Cash sales | 25,000 | 30,000 | 40,000 | 50,000 |
| Credit sales | <u>60,000</u> | <u>80,000</u> | <u>100,000</u> | <u>110,000</u> |
| Total | <u>85,000</u> | <u>110,000</u> | <u>140,000</u> | <u>160,000</u> |

3. Credit sales are collected 40% in the month of sale, 35% in the month following the month of sale, and 25% in the second month following the sale.

4. Inventory purchases average 55% of the total sales. Of these purchases, 65% are paid for in the month of purchase, with the remainder paid for in the following month.

5. Operating expenses are paid for as incurred. These expenses include Sh.2,500,000 in rent, Sh.6,000,000 in salaries and Sh.750,000 in utilities and miscellaneous expenses.

Required:

For the months of July 2016 and August 2016, prepare:

(i) A schedule of debtors collections. (4 marks)

(ii) A schedule of creditors payments. (4 marks)

(iii) A cash budget. (6 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Explain four items that cause the difference between profits as per financial accounts and profits as per cost accounts under the interlocking cost book keeping system. (8 marks)

(b) Furaha community centre carries out subsidised rehabilitation wellness checks on recovering alcoholics in the upper region of the country. The records of the centre show that the cost of carrying out rehabilitation wellness checks for the last five months was as follows:

| Month | Number of clients seen | Total cost Sh. "000" |
|---------------|------------------------|-------------------------|
| December 2015 | 650 | 17,125 |
| January 2016 | 940 | 17,800 |
| February 2016 | 1,260 | 18,650 |
| March 2016 | 990 | 17,980 |
| April 2016 | 1,150 | 18,360 |

Required:

Estimate the cost of wellness check on 900 clients using:

(i) Simple linear regression method. (6 marks)

(ii) High-low method (6 marks)

(Total: 20 marks)

KASNEB

ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

PILOT PAPER

September 2015.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

- (a) List five assumptions of economic order quantity (EOQ) model. (5 marks)
- (b) Shoes and Boots Limited sells 5760 boots in a week. The purchase price is Sh.250 per boot. The company currently orders in 12 periodic instalments. Ordering and related costs amount to Sh.12,500 per order. The stock holding cost is 20% of inventory value. The company has a 50 week working year.
- Required:**
- (i) Economic order quantity. (4 marks)
- (ii) Annual savings in total inventory cost if EOQ model is implemented. (5 marks)
- (c) Ujuzi Limited manufactures and sells product "Alpha" made from raw material "Beta". The following transactions relate to raw material "Beta" for week starting on 10 August and ending on 15 August 2015:

| Date | Transaction | Quantity (Units) | Price per unit Sh. |
|------|-------------|---------------------|-----------------------|
| 10 | Issues | 600 | |
| 11 | Purchases | 600 | 36.8 |
| 12 | Issues | 450 | |
| 13 | Purchases | 450 | 38.4 |
| 14 | Issues | 600 | |
| 15 | Purchases | 600 | 41.6 |
| 15 | Issues | 230 | |

Additional information:

- Stocks available at the beginning of the week was 900 units at a price of Sh.32 per unit.
- The company uses the weighted average method.

Required:

Stores ledger card for "Beta".

(6 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Distinguish between fixed, variable and semi variable costs. (6 marks)
- (b) The following details were extracted from the records of ABC Limited for the month of July 2015:

| | Sh. "000" | Sh. "000" |
|-----------------------------------|---------------|-----------|
| Direct materials | | 30,000 |
| Direct labour | | 22,000 |
| Production overhead: Variable | 4,000 | |
| Fixed | 6,000 | 10,000 |
| Selling and distribution overhead | | |
| Variable | 2,500 | |
| Semi variable (50% fixed) | 4,000 | |
| Fixed | <u>1,000</u> | 7,500 |
| Administration overhead | | |
| Fixed | 10,000 | |
| Semi variable (25% fixed) | <u>10,000</u> | 20,000 |
| Sales | | 100,000 |

Production and sales units were 10,000 units.

Required:

- (i) Income statement under marginal costing. (8 marks)
- (ii) Breakeven point in units and revenue. (4 marks)
- (iii) Calculate the margin of safety. (2 marks)

(Total: 20 marks)**QUESTION THREE**

- (a) Passion Fruit Processors Limited manufactures juices mixed from several fruits. The finished product is transferred to the warehouse on completion in mixing process.

The following cost data relates to the month of July 2015:

| | Sh. |
|---|-----------|
| Raw material input: Fruits mixture (60000 Kgs.) | 2,700,000 |
| Special liquid | 3,870,000 |
| Direct wages | 2,340,000 |
| Overheads | 1,350,000 |

Additional information:

- Normal output of the process is 90% of input.
- Losses in the process are sold to soap makers at Sh.90 per litre.
- The output from the process was 55,000 litres of juice.
- The company applies a profit margin of 40%.

Required:

- (i) Process account. (7 marks)
- (ii) Abnormal loss/gain account. (2 marks)
- (iii) The selling price per litre of juice. (3 marks)
- (b) The following cost data is available from the books of Usafi Limited for the month of July 2015 for a canteen operated by the company:

Purchases for the month:

| | |
|-------------|------------------------------------|
| Meat | 100 Kgs. at Sh.250 per kilogramme. |
| Eggs | 72 trays at Sh.200 per tray. |
| Vegetables | 200 Kgs. at Sh.50 per kilogramme. |
| Bread | 200 pieces at Sh.52.5 per piece. |
| Rice | 150Kgs. at Sh.100 per kilogramme. |
| Maize flour | 25 bales at Sh.1200 per bale. |

Wages and salaries:

- 2 cooks at Sh.25,000 per month each.
- 1 counter clerk at Sh.15,000 per month.
- 5 helpers at Sh.10,000 per month each.
- 1 manager at Sh.18,000 per month (an allowance).

Consumable stores Sh.50,000 per month.
 Gas and electricity Sh.12,000 per month.
 Overheads allocated to canteen Sh.180,000 per annum.
 Company subsidy Sh.14,900 per month.

Number of meals served in a month 2,500.

Required:

Determine the cost per meal served to the employees of the company.

(8 marks)**(Total: 20 marks)**

QUESTION FOUR

(a) Autotech Enterprises Limited have given the following particulars for cash budgeting:

| Month | Sales Sh. "000" | Materials Sh. "000" | Wages Sh. "000" | Overheads Sh. "000" |
|-----------|--------------------|------------------------|--------------------|------------------------|
| August | 20,000 | 10,200 | 3,800 | 1,900 |
| September | 21,000 | 10,000 | 3,800 | 2,100 |
| October | 23,000 | 9,800 | 4,000 | 2,300 |
| November | 25,000 | 10,000 | 4,200 | 2,400 |
| December | 30,000 | 10,800 | 4,500 | 2,500 |

Additional information

- 10% of sales are on cash basis. Of the credit sales, 50% are collected the following month and the balance the subsequent month.
- Creditors for material purchases give two months credit.
- Overheads are paid one month in arrears.
- Dividend of Sh.1,500,000 will be paid in December.
- Machinery costing Sh.10,000,000 will be installed in September. Payment will be in monthly instalments of Sh.2,000,000 per month for five months from October.
- Proceeds from sale of old machinery will be received in October for Sh.1,000,000.
- Income tax (advance tax) of Sh.5,000,000 will be paid in October.
- Opening cash balance on 1 October was Sh.800,000. If cash balance falls below Sh.500,000, a short term loan can be arranged at an interest rate of 18% per annum. Interest is payable monthly after the month of borrowing.

Required:

Cash budget for the three months ending December 2016.

(14 marks)

- (b) A calculator manufacturing company finds that it costs Sh.625 to make a calculator but the same is available in the market at Sh.575 each with assurance of continued supply.

The cost breakdown is as follows:

| | Sh. per unit |
|-------------------------------|--------------|
| Direct materials | 275 |
| Direct labour | 175 |
| Variable production overheads | 50 |
| Fixed production overhead | <u>125</u> |
| | <u>625</u> |

www.chopi.co.ke

Of the fixed production overhead, 40% are specifically incurred in making the calculator. The balance will be incurred irrespective of the decision made.

Required:

- Should the company make or buy the calculator? (3 marks)
- If the supplier offered the calculator for Sh.525 per calculator, would your decision change? Explain. (1 mark)
- Explain two factors that will need to be considered before such a decision is made. (2 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) List the qualities of a good labour remuneration system.

(6 marks)

- (b) Langa Limited operates an interlocking accounting system from the cost accounts. The following information was available for the month of July 2015:

| | Sh. |
|----------------------------------|---------|
| Opening balances | |
| Stores control account | 108,500 |
| Work in progress control account | 178,200 |
| Finished goods control account | 84,150 |

Transaction for the month of July 2015:

| | Sh. |
|--|-----------|
| Cost of finished goods | 1,024,100 |
| Cost of goods sold | 986,920 |
| Direct material issued | 395,500 |
| Direct wages | 170,960 |
| Production overheads (as per financial accounts) | 416,440 |
| Direct material purchases | 433,180 |

Additional information:

1. In the cost accounts, depreciation was Sh.25,000 per month.
2. The production overhead is absorbed at 250% of wages.

Required:

Prepare in the cost books:

- (i) Stores control account. (4 marks)
- (ii) Work in progress control account. (4 marks)
- (iii) Finished goods control account. (4 marks)
- (iv) Production overhead control account. (2 marks)

(Total: 20 marks)

.....



ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 1 August 2022. Afternoon paper.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings. Do NOT write anything on this paper.

QUESTION ONE

- (a) Explain three users of management accounting information. (6 marks)
- (b) Unik Ltd. a leading manufacturer of ceramic tiles is preparing its cost estimation for the master budget. A cost accountant has derived the following data on a weekly output of standard size tiles from a factory:

| Week | Output Units "000" | Total overheads Sh. "000" |
|------|-----------------------|------------------------------|
| 1 | 20 | 60 |
| 2 | 2 | 25 |
| 3 | 4 | 26 |
| 4 | 23 | 66 |
| 5 | 18 | 49 |
| 6 | 14 | 48 |
| 7 | 10 | 35 |
| 8 | 8 | 18 |
| 9 | 13 | 40 |
| 10 | 8 | 33 |

www.chopi.co.ke

Where;

$$\Sigma X = 120$$

$$\Sigma Y = 400$$

$$\Sigma X^2 = 1,866$$

$$\Sigma Y^2 = 18,200$$

$$\Sigma XY = 5,704$$

Required:

- (i) Using the least squares regression method, formulate a predictor equation in the form $y = a + bx$. (6 marks)
- (ii) In week 11, the factory planned to produce 25,000 standard size tiles. Estimate the total cost of producing this quantity. (2 marks)
- (c) Jikaze Ltd. is currently operating at full capacity and it manufactures and sells brooms for local market. Currently, the production volume is 100,000 brooms per annum with the following cost structure:

| | Sh. "000" | Sh. "000" |
|------------------------|--------------|---------------------|
| Sales | | 20,000 |
| Marginal cost : Labour | 8,000 | |
| Material | <u>5,000</u> | 13,000 |
| Contribution | | 7,000 |
| Fixed costs | | <u>(3,000)</u> |
| Net profit | | <u><u>4,000</u></u> |

Additional information:

1. Each broom is currently sold at Sh.200.
2. An opportunity has arisen to supply 30,000 brooms per annum at Sh.180 each.
3. Acceptance of this special order will incur extra fixed costs of Sh.800,000 per annum for the hire of additional machinery.
4. Jikaze Ltd. will pay an overtime premium of 20% for the extra direct labour.

Required:

Advise Jikaze Ltd. on whether the offer should be accepted or rejected.

(6 marks)

(Total: 20 marks)

QUESTION TWO

- (a) Highlight four causes of labour turnover in an organisation. (4 marks)
- (b) Zara Ltd. produces two products namely; Z and R. The following information relates to the budget for the year ended 30 June 2022:

| | Product Z | Product R |
|------------------------------|------------------|------------------|
| | Sh. | Sh. |
| Selling price per unit | 6 | 12 |
| Variable cost per unit | <u>2</u> | <u>4</u> |
| Contribution margin per unit | <u>4</u> | <u>8</u> |
| Fixed costs apportioned | 100,000 | 200,000 |
| Units sold (kgs) | 70,000 | 30,000 |

Required:

- (i) Calculate the break-even points of each product. (4 marks)
- (ii) The break-even point of product Z to achieve a target profit of Sh.60,000. (2 marks)
- (iii) The margin of safety of product R. (2 marks)
- (iv) The product to produce based on the break-even point calculated in (b) (i) above. (2 marks)
- (c) Malipo Ltd. pays its employees using time-rate system. The following information is available with respect to employee number EMP003 for the month of March 2022:

1. Monthly salary:
 - Basic Salary Sh.20,000
 - Commuter allowance 25% of basic salary
2. House rent allowance Sh.6,500 per month
3. Leave salary allowance earned Sh.15,000
4. Non-cash benefits received from place of work was worth Sh.6,500 per month.
5. Number of working hours in the month of March 2022 was 200 hours.

Required:

Calculate the cost of labour per day of 8 working hours.

(6 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Explain the following types of costs:
- (i) Product costs. (2 marks)
- (ii) Opportunity cost. (2 marks)
- (iii) Conversion costs. (2 marks)
- (b) Outline four limitations of process costing. (4 marks)

- (c) Maridadi Ltd. produces a product that passes through two distinct processes. The following information was obtained from the accounts of the company for the month of July 2022:

| Particulars | Process A | Process B |
|----------------------|-----------|-----------|
| | Sh. | Sh. |
| Direct materials | 78,000 | 59,400 |
| Direct wages | 60,000 | 90,000 |
| Production overheads | 60,000 | 90,000 |

At the beginning of the month of July 2022, 3,000 units of Sh.30 each were introduced to process A. There were no stock of materials or work-in-progress.

The output of each process passes directly to the next process and finally to the finished stock account.

The following additional data was obtained:

| Process | Output | Percentage of normal loss to input | Scrap value of normal loss per unit (Sh.) |
|-----------|--------|------------------------------------|---|
| Process A | 2,850 | 5% | 20 |
| Process B | 2,520 | 10% | 40 |

Required:

- (i) Process A account. (5 marks)
- (ii) Process B account. (5 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) RH Ltd. manufactures and sells a single product branded “Zed”. Currently it uses absorption costing to determine profits and inventory values. The budgeted production cost per unit is as follows:

| | | |
|---------------------------|--------------------------|-----------|
| Direct labour | 3 hours at Sh.6 per hour | 18 |
| Direct materials | 4 Kgs at Sh.7 per Kg | 28 |
| Fixed production overhead | | <u>20</u> |
| | | <u>66</u> |

Additional information:

- Normal output volume is 16,000 units per year and the volume is used to establish the fixed overhead absorption rate for each year.
- The costs relating to sales, distribution and administration are as follows:

| | |
|----------|---------------------|
| Variable | 20 % of sales value |
| Fixed | Sh.180,000 per year |
- There were no units of finished goods inventory at 1 October 2021. Fixed overhead expenditure is spread evenly throughout the year.
- The selling price per unit is Sh.140.
- For the two six-monthly periods, the number of units to be produced and sold were budgeted as follows:

| | Six months ending | Six months ending |
|------------|-------------------|-------------------|
| | 31 March 2022 | 30 September 2022 |
| | Units | Units |
| Production | 8,500 | 7,000 |
| Sales | 7,000 | 8,000 |

6. RH Ltd. is considering whether to abandon absorption costing and use marginal costing instead for profit reporting and inventory valuation.

Required:

- (a) Statement of profit or loss for each of the six-month periods using:
- (i) Marginal costing. (8 marks)
 - (ii) Absorption costing. (8 marks)
- (b) A statement reconciling the profits as per the marginal costing and absorption costing in (a) above. (4 marks)
(Total: 20 marks)

QUESTION FIVE

- (a) Distinguish between the following terms as used in management accounting:
- (i) "Avoidable costs" and "unavoidable costs". (4 marks)
 - (ii) "Cost control" and "cost reduction". (4 marks)
- (b) The following information relates to Erica Ltd:
1. The company had a cash balance of Sh.540,000 at the beginning of the month of October 2021.
 2. Creditors give a credit period of one month.
 3. Salaries are paid in the current month.
 4. Fixed cost are paid one month in arrears and include a charge of Sh.100,000 per month with respect to depreciation.
 5. Credit sales are settled as follows:
 - 40% in the month of sale.
 - 45% one month after the month of sale.
 - 12% two months after the month of sale.

The balance represents bad debts.

6. The actual sales, purchases and expenses for the month of August 2021 and September 2021 were as follows:

| Month | Cash sales Sh. | Credit sales Sh. | Purchases Sh. | Salaries Sh. | Fixed overheads Sh. |
|-----------|-------------------|---------------------|------------------|-----------------|------------------------|
| August | - | 1,480,000 | 1,104,000 | 180,000 | 600,000 |
| September | - | 1,640,000 | 1,224,000 | 180,000 | 600,000 |

7. The budgeted sales, purchases and expenses per month from October 2021 to December 2021 were as follows:

| Month | Cash sales Sh. | Credit sales Sh. | Purchases Sh. | Salaries Sh. | Fixed overheads Sh. |
|----------|-------------------|---------------------|------------------|-----------------|------------------------|
| October | 400,000 | 1,600,000 | 1,200,000 | 190,000 | 600,000 |
| November | 440,000 | 1,800,000 | 1,380,000 | 190,000 | 620,000 |
| December | 500,000 | 1,000,000 | 1,750,000 | 200,000 | 640,000 |

Required:

- A cash budget for the months of October 2021 to December 2021. (12 marks)
(Total: 20 marks)
-

KASNEB

ATD LEVEL III

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

MONDAY: 21 November 2016.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) Distinguish between the following types of costs as used in management accounting:

- (i) "Avoidable costs" and "unavoidable costs". (4 marks)
- (ii) "Product costs" and "conversion costs". (4 marks)

(b) Blade Ltd. manufactures and retails three products namely: A, B and C.

The company employs 60 direct workers who work under a group bonus scheme. The company engages three grades of workers who are paid a bonus on the excess of time allowed over time taken. The bonus is paid at 75% of the workers' base rate and is shared by the workers in proportion to the time spent on the work.

The following production data has been extracted from the company's records for the month of October 2016:

| Product | Units produced | Time allowed per unit (minutes) |
|---------|----------------|---------------------------------|
| A | 320 | 63 |
| B | 640 | 120 |
| C | 1,200 | 100 |

| Grade of worker | Number of direct workers | Rate per hour (Sh.) | Hours worked per worker |
|-----------------|--------------------------|---------------------|-------------------------|
| 1 | 20 | 300 | 30 |
| 2 | 8 | 270 | 64 |
| 3 | 32 | 240 | 50 |

Required:

- (i) Percentage of hours saved to hours worked. (4 marks)
- (ii) Bonus due to the group. (4 marks)
- (iii) Gross earnings due to the group. (4 marks)

(Total: 20 marks)

QUESTION TWO

(a) The choice of an appropriate basis of apportionment of overheads by an organisation is really a matter of judgement. A company may decide on any basis of apportioning overheads according to its own circumstances.

Required:

With reference to the above statement, outline four features of a suitable overhead apportionment basis. (4 marks)

(b) Redline Ltd. has three production departments and two service departments. For the year ended 30 June 2016, the overhead distribution summary is provided as follows:

| | | Sh. |
|-------------------------|---|---------|
| Production departments: | A | 800,000 |
| | B | 700,000 |
| | C | 500,000 |
| Service departments: | 1 | 250,000 |
| | 2 | 300,000 |

The overheads of the service departments are charged out to the production departments as follows:

| Department | A | B | C | 1 | 2 |
|------------|-----|-----|-----|-----|-----|
| 1 | 20% | 35% | 25% | - | 20% |
| 2 | 35% | 20% | 20% | 25% | - |

Required:

Apportion the overheads of the service departments to the production departments using direct allotment method.

(4 marks)

- (c) Kilima Ltd. manufactures three different products; X, Y and Z, each of which requires two key materials; M1 and M2.

The following information has been provided by the sales manager:

| Product | Estimated sales volume | | |
|---------------|------------------------|-------|-------|
| | X | Y | Z |
| | Units | Units | Units |
| January 2017 | 4,000 | 3,100 | 2,400 |
| February 2017 | 4,400 | 3,500 | 2,100 |
| March 2017 | 4,600 | 3,900 | 2,700 |

Material requirements for each product are as follows:

| Product: | | X | Y | Z |
|-----------|---------|---|----|----|
| Material: | M1 (Kg) | 8 | 11 | 15 |
| | M2 (Kg) | 6 | 9 | 11 |

Additional information:

- The production manager recommends that stock of raw materials at the end of each month be maintained at a level sufficient to meet 20% of the production requirements for the next month.
- The sales manager recommends that finished goods stock should be held for each product as follows:

| | X | Y | Z |
|--|-------------|--------------|-------------|
| | 1,000 units | 500 units | 1,800 units |
| 3. Estimates of closing inventories for the month of December 2016 are as follows: | | | |
| | | Kg | |
| Raw materials: | M1 | 2,400 | |
| | M2 | 4,800 | |
| | | Units | |
| Finished goods: | X | 400 | |
| | Y | 2,900 | |
| | Z | 800 | |

Required:

For the month of January and February 2017, prepare:

- Production budget. (4 marks)
- Material usage budget. (4 marks)
- Material purchases budget. (4 marks)

(Total: 20 marks)

QUESTION THREE

- (a) In the context of cost estimation, explain the following methods:

- High-low method. (2 marks)
- Account analysis. (2 marks)
- Engineering method. (2 marks)

- (b) Millenium Baby Care Centre Ltd. manufactures two products namely; NN and CL.

The standard cost for the two products are given below:

| | NN | CL |
|--------------------|------------|------------|
| | Sh. | Sh. |
| Direct materials | 40 | 30 |
| Direct labour | 30 | 80 |
| Variable overheads | 20 | 40 |
| Fixed overheads | <u>40</u> | <u>20</u> |
| | <u>130</u> | <u>170</u> |

Additional information:

- The fixed overheads are based on annual production of 50,000 units of NN and 100,000 units of CL.
- The selling prices per unit of NN and CL are Sh.200 and Sh.250 respectively.
- The selling expenses consist solely of sales commission at Sh.10 per unit of each product.
- The fixed selling and administration expenses amount to Sh.1,600,000 and are apportioned to the two products.
- All the fixed overheads are common to the two products and allocation between the two products are purely arbitrary.

Required:

- (i) Assuming budget efficiency is achieved, determine the profit realised if only 80% of the production and sales budget is achieved. (6 marks)
- (ii) Break-even point in units for the company as a whole. (2 marks)
- (iii) Break-even point in units by products at standard mix. (2 marks)
- (iv) If the raw material availability is limited to Sh.4,000,000, compute the maximum profit that could be achieved. (4 marks)

(Total: 20 marks)**QUESTION FOUR**

- (a) Discuss four ways in which a management accountant might utilise cost accounting information in the organisation. (8 marks)
- (b) Genesis Enterprise manufactures an industrial product that goes through four distinct processes before the final product can emerge.

The following information is available from the cost records:

| | Process I | Process II | Process III | Process IV | Total |
|----------------------|-----------|------------|-------------|------------|--------|
| | Sh. | Sh. | Sh. | Sh. | Sh. |
| Materials | 1,600 | 2,600 | 2,000 | 1,025 | 7,225 |
| Direct labour | 3,500 | 2,250 | 3,680 | 1,420 | 10,850 |
| Production overheads | | | | | 7,595 |

Additional information:

- 500 units at Sh.4 per unit were introduced in Process I.
- Production overheads are absorbed as a percentage of direct labour cost.
- The actual output and normal loss of the respective processes are given below:

| | Output (units) | Normal loss as % of input | Value of scrap per unit (Sh.) |
|-------------|----------------|---------------------------|-------------------------------|
| Process I | 500 | - | - |
| Process II | 450 | 10% | 2 |
| Process III | 360 | 20% | 3 |
| Process IV | 270 | 25% | 5 |

- The actual output was as expected.

Required:

- (i) Process I account. (3 marks)
- (ii) Process II account. (3 marks)
- (iii) Process III account. (3 marks)
- (iv) Process IV account. (3 marks)

(Total: 20 marks)**QUESTION FIVE**

The following information was obtained from the financial books of Tengeneza Ltd. for the year ended 30 June 2016:

| | |
|------------------------------------|---------|
| | Sh. |
| Direct materials consumed | 250,000 |
| Direct wages | 100,000 |
| Factory overheads | 380,000 |
| Administrative overheads | 250,000 |
| Selling and distribution overheads | 480,000 |
| Bad debts written off | 20,000 |
| Preliminary expenses written off | 10,000 |
| Legal charges | 5,000 |
| Dividends received | 50,000 |
| Interest on deposit received | 10,000 |
| Sales (120,000 units) | 700,000 |
| Closing stock: | |
| Finished stock (40,000 units) | 120,000 |
| Work-in-progress | 80,000 |

Additional information:

1. Direct material consumption as per the cost accounting records amounted to Sh.280,000.
2. Factory overheads are recovered at 20% on prime cost.
3. Administrative overheads are recovered at Sh.3 per unit of production.
4. Selling and distribution overheads are recovered at Sh.4 per unit sold.

Required:

For the year ended 30 June 2016, prepare:

- | | |
|--|--------------------------|
| (a) Costing profit and loss account. | (6 marks) |
| (b) Financial profit and loss account. | (8 marks) |
| (c) Statement reconciling the profits obtained in (a) and (b) above. | (6 marks) |
| | (Total: 20 marks) |

.....