



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<br>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)

**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<br>Sh. | Sales<br>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 |
| <b>Variable cost per unit (Sh):</b>  |           |       |       |       |
| 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 | Process |         |        |
|----------------------|------------|---------|---------|--------|
|                      |            | 1       | 2       | 3      |
|                      | Sh.        | Sh.     | Sh.     | 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)**
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