2903/206 2922/206 2906/206 COST ACCOUNTING July 2017

Time: 3 hours



### THE KENYA NATIONAL EXAMINATIONS COUNCIL

# DIPLOMA IN SUPPLY CHAIN MANAGEMENT DIPLOMA IN BUSINESS MANAGEMENT DIPLOMA IN PROJECT MANAGEMENT MODULE II

COST ACCOUNTING

3 hours

#### INSTRUCTIONS TO CANDIDATES

This paper consists of SEVEN questions.

Answer any FIVE questions in the answer booklet provided.

All questions carry equal marks.

Show ALL your workings.

Candidates should answer the questions in English.

This paper consists of 8 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing. (a) Superb Driving School has two branches; City and Rural. The following information relates to the branches for the year 2015.

|                                      | City   | Rural  |
|--------------------------------------|--------|--------|
| Number of vans                       | 12     | 8      |
| Annual insurance fee per van (Ksh.)  | 20,000 | 20,000 |
| Annual distance covered per van (km) | 36,500 | 29,200 |
| Charge per student (Ksh.)            | 6,000  | 5,500  |
| Fuel cost per km (Ksh.)              | 100    | 100    |
| Maintenance cost per km (Ksh.)       | 30     | 45     |
| Number of instructors                | 12     | 8      |
| Number of students                   | 9,800  | 7,500  |
| Monthly salary per instructor (Ksh.) | 24,000 | 20,000 |

### Additional information:

- Administration costs and security costs for City and Rural for the year were
   Ksh. 800,000 and Ksh. 600,000 respectively.
- Administration costs and security costs are to be apportioned according to the number of vans in each branch.
- (i) Prepare annual operating income statement for each branch.
- (ii) The management intends to close one of the branches based on performance. Using the results obtained in (i) above; advise the management.

(9 marks)

1.

(b) County Contractors were awarded a contract to construct a county assembly hall at a price of Ksh. 60,000,000. The work started on 1 January, 2014.

The following details relate to the contract for the year ended 31 December, 2015.

|  |                                   | Ksh.       |
|--|-----------------------------------|------------|
| Direct materials:                        | Balance (1 January 2015)          | 200,000    |
|  | Delivered direct to site          | 7,000,000  |
|  | Issued from stores                | 500,000    |
|  | Returned from site                | 85,000     |
|  | Sold from site (cost Ksh. 70,000) | 42,000     |
|  | Balance (31 December, 2015)       | 225,000    |
| Direct wages:                            | Paid                              | 2,050,000  |
|  | Accrued                           | 36,000     |
| Plant: Balance (1                        | January, 2015)                    | 850,000    |
| Sent to site                             | <u>-</u>                          | 1,020,000  |
| Balance (31 Dece                         | mber, 2015)                       | 700,000    |
| Direct expenses:                         | Paid for the year                 | 310,000    |
| •  | Paid in advance                   | 24,000     |
| Site overheads                           |                                   | 192,000    |
| Allocated head of                        | fice expenses                     | 299,000    |
| Cost of work completed but not certified |                                   | 2,100,000  |
| Cash received in r                       | espect of work certified          | 27,000,000 |

#### Additional information:

- Retention money has been agreed at 10% of work certified.
- It is the company's policy to transfer a third of notional profit to the income statement.

Prepare contract account for the year ended 31 December, 2015.

(11 marks)

easytyet.com

2. (a) Sweetest Bakers produces loaves of bread in batches of 600 pieces using two types of materials ( $M_1$  and  $M_2$ ) and two types of labour ( $L_1$  and  $L_2$ ). The following are the costs associated with a single batch:

| *                    |                           | Quantity | Price       |
|----------------------|---------------------------|----------|-------------|
|                      |                           | Kg.      | Ksh.        |
| Direct material:     | $\mathbf{M}_{_{1}}$       | 90       | 75          |
|                      | $M_2$                     | 50       | 40          |
|                      |                           | Hours    | Rate (Ksh.) |
| Direct labour:       | $\mathbf{L}_{\mathbf{i}}$ | 5        | 200         |
|                      | $L_2$                     | 5        | 150         |
|                      |                           | Ksh.     |             |
| Production overheads |                           | 6,000    |             |
| Other overheads      |                           | 7,500    |             |

Mark up is at 25%.

Determine the:

- (i) cost price per loaf;
- (ii) selling price per loaf.

(8 marks)

(b) Turbo Enterprises has received a job order from a customer. The job will pass through two departments: A and B.The following costs relate to the job.

|               |                  | Ksh.    |
|---------------|------------------|---------|
| Department A: | Direct materials | 140,000 |
|               | Direct labour    | 60,000  |
| Department B: | Direct materials | 88,000  |
|               | Direct labour    | 80,000  |

Overhead absorption rates are as follows:

Department A - 60% of prime cost
Department B - 30% of direct material cost

- (i) Prepare job cost sheet.
- (ii) The customer is willing to pay Ksh. 500,000 for the job.Advise the management on whether to accept the order or not.

3. (a) Explain four duties of a cost accountant in a manufacturing firm.

(8 marks)

(b) Mapato Enterprises values material issues using First In First Out (FIFO) method. The information below relates to material MM-17 for the month of May 2016.

Purchases:

|         | Date  | Units | Price per unit (Ksh.) |
|---------|-------|-------|-----------------------|
|         | May 3 | 250   | 30                    |
|         | 9     | 320   | 32                    |
|         | 16    | 410   | 35                    |
|         | 24    | 360   | . 33                  |
| Issues: |       |       |                       |
|         | May 5 | 280   |                       |
|         | 18    | 700   |                       |
|         | 27    | 350   | •                     |

Inventory as at 1 May 2016 was composed of 130 units valued at Ksh. 3,900.

Prepare stores ledger account for the month of May 2016.

(12 marks)

- 4. (a) Explain each of the following terms:
  - (i) Product costs;
  - (ii) Period costs;
  - (iii) Variable costs;
  - (iv) Fixed cost.

(8 marks).

(b) Agula is an employee of Kingsize Suppliers. He is paid a basic monthly salary of Ksh. 12,000. In addition, units delivered are paid for as per the following schedule:

| Units delivered | Rate per unit (Ksh.) |
|-----------------|----------------------|
| First 400       | 30                   |
| Next 600        | 35                   |
| Next 800        | 40                   |
| above 1,800     | 50                   |

During the month of January 2016, he delivered 2,100 units.

- (i) Calculate his total earnings for the month.
- (ii) Determine the number of units he has to deliver in order to earn Ksh. 97,250 in the month of February 2016.

5. (a) The following forecasts have been made by the cost accountant of Tawa Manufacturers for the year 2017.

Output (Units)

12,000

| Overheads                     | Ksh. 4,800,000  |
|-------------------------------|-----------------|
| Direct materials              | Ksh. 19,200,000 |
| Direct labour (24, 000 hours) | 9,600,000       |

Calculate overhead absorption rate (OAR) based on:

- (i) output;
- (ii) percentage on direct materials cost;
- (iii) direct labour hours;
- (iv) percentage on direct labour.

(8 marks)

(b) Mara Limited produces a single product that passes through two processes, I and II.

The following information relates to the processes for the month of June 2016.

|                                   | Process |         |
|-----------------------------------|---------|---------|
|                                   | ĭ       | II      |
|                                   | Ksh.    | Ksh.    |
| Materials introduced (70 units)   | 28,000  | -       |
| Additional direct materials       | 180,000 | 160,000 |
| Direct labour                     | 58,000  | 95,000  |
| Normal loss (percentage on input) | 10%     | 5%      |
| Scrap value per unit (Ksh.)       | 1,000   | 3,000   |
| Actual output (units)             | 60      | 58      |

Production overheads amounting to Ksh. 80,000 was apportioned to Process I and Process II in the ratio of 7:3, respectively.

## Prepare:

- (i) process I account;
- (ii) process II account;
- (iii) abnormal loss account;
- (iv) abnormal gain account.

6. (a) The following data relating to material NP-009 has been provided by Nyota Processors for the month of January 2016.

| Maximum consumption    | 420 kg per day |
|------------------------|----------------|
| Minimum consumption    | 400 kg per day |
| Reorder quantity       | 4,400 kg       |
| Maximum reorder period | 5 days         |
| Minimum reorder period | 3 days         |

#### Calculate:

- (i) reorder level;
- (ii) minimum stock level;
- (iii) maximum stock level;
- (iv) average stock level.

(8 marks)

(b) Sonny Manufacturers has three production departments: P, Q and R. The following are the budgeted costs for the year 2017.

|              |                  | Ksh.      |
|--------------|------------------|-----------|
| Factory mai  | ntenance         | 960,000   |
| Rent and rat | tes              | 160,000   |
| Depreciation | n (plant)        | 400,000   |
| Insurance:   | - Plant          | 1,000,000 |
|              | - Stock in trade | 120,000   |
|              | - Buildings      | 400,000   |
|              | - Motor vehicles | 300,000   |

## Additional information:

|                                      | Department |       |       |
|--------------------------------------|------------|-------|-------|
|                                      | P          | Q     | R     |
| Area (m²)                            | 80         | 60    | 20    |
| Value of plant (Ksh. '000')          | 300        | 400   | 100   |
| Value of buildings (Ksh. '000')      | 400        | 400   | 200   |
| Average stock (Ksh. '000')           | 160        | 50    | 90    |
| Value of motor vehicles (Ksh. '000') | 2,000      | 3,000 | 5,000 |

Prepare an overhead analysis sheet.

- .7. (a) Explain **four** internal checks that can be used to prevent fraud in wage payment.

  (8 marks)
  - (b) The following information relates to process X in a firm for the month of May 2016. The output of process X is transferred to finished goods account. At the start of the month, 5,500 units were introduced into process X at the following costs:

|                      | Ksh.      |
|----------------------|-----------|
| Materials introduced | 4,400,000 |
| Additional materials | 3,120,000 |
| Labour               | 265,000   |
| Overheads            | 787,500   |

During the month 5,000 units were transferred to finished goods account. At the end of the month, the closing work-in-progress was 500 units which were at the following stages of completion:

|                      | Percentage |
|----------------------|------------|
| Materials introduced | 100        |
| Additional materials | 40         |
| Labour               | 60         |
| Overheads            | 50         |

- (i) Prepare a statement of equivalent production.
- (ii) Determine the value of closing work-in-progress.
- (iii) Prepare process X account.

(12 marks)

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