

2506/301

2507/301

**INDUSTRIAL ORGANISATION
AND MANAGEMENT**

Oct./Nov. 2021

Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

**DIPLOMA IN AERONAUTICAL ENGINEERING
(AIRFRAMES AND ENGINES OPTION)
(AVIONICS OPTION)**

MODULE III

INDUSTRIAL ORGANISATION AND MANAGEMENT

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

Answer booklet;

Non-programmable scientific calculator.

This paper consists of EIGHT questions.

Answer any FIVE questions in the answer booklet provided.

All questions carry equal marks.

Maximum marks for each part of a question are as shown.

Candidates should answer the questions in English.

This paper consists of 4 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

1. (a) State **five** traits of an autocratic manager. (5 marks)
- (b) Explain **three** factors that may affect the level of stock in an organisation. (6 marks)
- (c) The following information relates to material Q used by Wazi limited.

Maximum consumption	= 3500 units per week
Minimum consumption	= 1500 units per week
Lead time	= 2-4 weeks
Re-order quantity	= 12 000 units

Determine the:

- (i) re-order level;
- (ii) minimum stock level;
- (iii) maximum stock level.

(9 marks)

2. (a) Explain each of the following types of maintenance:

- (i) routine maintenance;
- (ii) corrective maintenance;
- (iii) opportunistic maintenance.

(6 marks)

- (b) State **four** costs which are associated with plant maintenance. (4 marks)

- (c) (i) State the meaning of a formal organization structure.
- (ii) Highlight **four** advantages of a formal organization structure. (6 marks)

- (d) Highlight **four** disadvantages of a closed office layout. (4 marks)

3. (a) Explain **four** factors that may cause a rightward shift in the supply curve. (8 marks)

- (b) Highlight **four** advantages of participative type of management. (4 marks)

- (c) (i) State the meaning of Last in First Out (LIFO) method of valuing stock.

- (ii) Explain **three** limitations of the Last in First Out (LIFO) method.

(8 marks)

4. (a) Outline **five** factors that may make a manager reluctant to delegate authority. (5 marks)
- (b) (i) Define routing as applied in production planning and control.
(ii) Highlight **four** activities performed at the routing stage. (6 marks)
- (c) Describe the steps involved in the management by objective (MBO) process. (6 marks)
- (d) State **three** stockholding costs. (3 marks)
5. (a) Explain each of the following types of demand:
(i) joint demand;
(ii) competitive demand;
(iii) composite demand. (6 marks)
- (b) Explain each of the following principles of management as proposed by Henry Fayol:
(i) centralization;
(ii) discipline;
(iii) unity of command. (6 marks)
- (c) Explain four disadvantages of recruiting workers from within the organization. (8 marks)
6. (a) Outline **four** features of mass production. (4 marks)
- (b) Explain **three** characteristics of a good filing system. (6 marks)
- (c) Bellah Limited manufactures and sells a single product K. The following information relates to the product:
- | | |
|------------------------|------------------------|
| Fixed costs | Ksh. 200,000 per annum |
| Variable cost per unit | Ksh. 50 |
| Selling price | Ksh. 90 |

Determine the number of units that should be sold in order to:

- (i) break even;
- (ii) earn a profit of Ksh. 40,000. (6 marks)

7. (a) Outline **five** benefits of cost control in an organisation; (5 marks)
- (b) Explain **three** limitations of a free market economy. (6 marks)
- (c) Explain each of the following techniques used in work measurement:
- (i) synthesis from elemental data;
 - (ii) pre-determined motion time system (PMTS). (4 marks)
- (d) Highlight **five** benefits of production planning and control to an organization. (5 marks)

8. (a) Explain each of the following terms as used in economics:
- (i) opportunity cost;
 - (ii) scarcity;
 - (iii) production possibility frontier. (6 marks)
- (b) Highlight **four** causes of breakdown of machines in an organisation. (4 marks)
- (c) Distinguish between job description and job specification as used in man power planning. (4 marks)
- (d) The following information shows the sales cost and profit record of Baraka Limited.

	Kshs. ('000)
Sales	260,000
Direct material cost	60,000
Direct labour cost	40,000
Variable overheads	25,000
Profit	60,000

Determine the:

- (i) total variable costs;
- (ii) total fixed costs. (6 marks)

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