

2506/301

2507/301

**INDUSTRIAL ORGANISATION
AND MANAGEMENT**

Oct. /Nov. 2019

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 a non-programmable electronic calculator for this examination.

Answer any FIVE of the EIGHT 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) Explain **three** characteristics of management science theory. (6 marks)
- (b) Explain **four** criticisms of scientific approach to management by F.W Taylor. (8 marks)
- (c) Explain **three** contributions of bureaucratic theory to the growth of management. (6 marks)
2. (a) Differentiate between line authority and staff authority. (4 marks)
- (b) (i) Illustrate the matrix form of organisation structure.
- (ii) State **two** demerits of this structure. (8 marks)
- (c) Explain **four** factors that influence the extent of delegation in an organisation. (8 marks)
3. (a) State **four** functions of a maintenance department. (4 marks)
- (b) (i) Explain the term 'reliability' with respect to a manufacturing plant.
- (ii) Outline **four** ways of improving reliability of a manufacturing system. (6 marks)
- (c) (i) State **four** objectives of method study in an industry.
- (ii) Outline the procedure for method study. (10 marks)
4. (a) Outline **five** elements of purchasing. (5 marks)
- (b) State **five** tasks involved in stores management. (5 marks)
- (c) **Table I** shows receipts and issues of stores by a company for the months of May and June 2015.

Table I

Date	RECEIPTS		ISSUES	BIN BALANCE UNITS
	UNITS	UNIT PRICE (ksh)	UNITS	
14/5/15	3000	25	0	3000
28/5/15	0	-	1200	?
2/6/15	1500	30	0	?
15/6/15	900	32	1800	?
30/6/15	0	-	1600	?

(i) Determine the bin balance for the dates 28/5/15, 2/6/15, 15/6/15 and 30/6/15.

(ii) Calculate the value of total stock issued using the following methods:

- (I) average cost price;
- (II) First-in-First-out (FIFO);
- (III) Last-in-First-out (LIFO).

(10 marks)

5. (a) Differentiate between a shop manufacturing schedule and a master schedule.

(4 marks)

(b) Outline **six** features of batch production.

(6 marks)

(c) Explain **five** qualities of a well designed product.

(10 marks)

6. (a) Explain:

- (i) **two** internal sources of staff recruitment;
- (ii) **three** advantages of internal staff recruitment.

(10 marks)

(b) Highlight **four** objectives of an employee induction programme.

(4 marks)

(c) (i) Outline the steps involved in the employee appraisal process.

(ii) Highlight **three** weaknesses of graphical rating scales as performance appraisal tools.

(6 marks)

7. (a) State **four** factors that influence the demand for labour in a country.

(4 marks)

(b) Explain the relationship between the following economic concepts:

- (i) scarcity and choice;
- (ii) utility and money value.

(6 marks)

(c) Table 2 shows the demand and supply schedule for a product:

Table 2

Price (Ksh)	Demand (Units)	Supply Units
10	100	10
20	80	20
30	70	40
40	50	60
50	40	80
60	30	100
70	20	120

- (i) On the same axes, draw the demand and supply curves.
- (ii) From the graph, determine the equilibrium price and quantity.

(10 marks)

8. (a) State four advantages of the enclosed office over the open office.

(4 marks)

(b) Explain five features of a good office filing system.

(10 marks)

(c) (i) Define break-even point.

(ii) A manufacturer produces a product which he sells at Ksh 20. The total fixed costs are Ksh 500,000 while the variable costs per unit are Ksh 10.

(I) Calculate the break-even point;

(II) If he has an order to supply 80,000 units, calculate the gross profit he will make from this order.

(6 marks)

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