

2506/301  
2507/301  
INDUSTRIAL ORGANISATION  
AND MANAGEMENT  
June/July 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 the following for this examination:*

*Answer booklet;*

*Non-programmable scientific calculator.*

*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) (i) State the difference between structured and unstructured interviews.
  - (ii) Highlight **four** weaknesses of interviews during staff recruitment. (6 marks)
- (b) Explain **four** benefits of training to an organisation. (8 marks)
- (c) (i) Define job analysis.
  - (ii) Outline **four** applications of job analysis in an organisation. (6 marks)
2. (a) State **two** functions of an office. (2 marks)
- (b) Explain **three** methods of filing documents in an office. (6 marks)
- (c) The following information was extracted from the books of a company for a given month:

Item	Cost
Cost of designs and drawings	10,000
Cost of transporting raw materials	50,000
Cost of raw materials	250,000
Depreciation of plant and machinery	10,000
Salaries of production workers	120,000
Selling and distribution costs	12,000
Rent	100,000
Support staff salaries	40,000
Insurance	5,000
Stationery and office expenses	4,000

- (i) Classify the costs into either prime costs or production overheads.
- (ii) Calculate the:
  - I. total prime costs;
  - II. total production overheads.
- (iii) If 20,000 units were produced during this period, calculate the production cost per unit. (12 marks)

3. (a) Outline **four** characteristics of formal authority. (4 marks)
- (b) Explain **four** essentials for effective delegation in an individual organisation. (8 marks)
- (c) Highlight **four** factors considered by managers when evaluating alternatives during the decision making process. (4 marks)
- (d) Explain why companies continue to introduce management by objectives despite its shortcomings. (4 marks)
4. (a) (i) Outline **four** characteristics of classical approach to management.
- (ii) List **two** criticisms of classical approach to management. (6 marks)
- (b) Highlight **four** activities of an industrial organisation as perceived by Henri Fayol. (4 marks)
- (c) Explain **five** principles of planning according to Koontz and O'Donnel. (10 marks)
5. (a) State **five** factors considered by an organisation when buying a new machine or equipment. (4 marks)
- (b) Outline **four** duties of a storekeeper. (4 marks)
- (c) Explain **three** factors considered by purchasing department when evaluating suppliers. (6 marks)
- (d) The cost of placing an order for an item is Ksh 2,000. For an annual demand of 30,000 units, carrying costs amount to 10% of the annual inventory value. If the selling price for each unit is Ksh 100, determine:
- EOQ = 2 x 2000*
- (i) Economic Order Quantity;
- (ii) Number of orders during the year. (6 marks)
6. (a) (i) Define work study.
- (ii) Explain **three** objectives of work study. (8 marks)
- (b) Identify **four** applications of work study data in an industrial organisation. (4 marks)
- (c) (i) Differentiate between time-based and work-based preventive maintenance.
- (ii) Outline **six** activities involved in a preventive maintenance system. (8 marks)

7. (a) Highlight **four** difficulties encountered when measuring national income. (4 marks)
- (b) Explain the following terms as used in Economics:
- (i) balance of payments;
  - (ii) producer goods;
  - (iii) inelastic demand. (6 marks)
- (c) (i) Illustrate the difference between movement along the demand curve and shift in demand curve.
- (ii) Explain **three** possible causes of a shift in demand curve. (10 marks)
8. (a) State **four** characteristics of job production. (4 marks)
- (b) Describe the following documents used in production planning and control:
- (i) route sheet;
  - (ii) instruction sheet. (6 marks)
- (c) (i) Explain the term 'production control'.
- (ii) Outline **four** items that are controlled during the production process. (6 marks)
- (d) Compare process layout and product layout in terms of the following criteria:
- (i) work flow;
  - (ii) space utilisation. (4 marks)

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