

2201/305

2203/305

2204/305

2206/305

2208/305

INDUSTRIAL ORGANISATION AND MANAGEMENT

Oct./Nov. 2009

Time: 3 hours

THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN ELECTRONICS ENGINEERING

DIPLOMA IN TELECOMMUNICATIONS ENGINEERING

DIPLOMA IN ELECTRICAL ENGINEERING (POWER)

DIPLOMA IN INSTRUMENTATION & CONTROL ENGINEERING

DIPLOMA IN MEDICAL ENGINEERING

INDUSTRIAL ORGANISATION AND MANAGEMENT

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

Answer booklet;

Mathematical tables/Electronic calculator.

Answer any FIVE of the EIGHT questions in this paper.

All questions carry equal marks.

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

This paper consists of 5 printed pages.

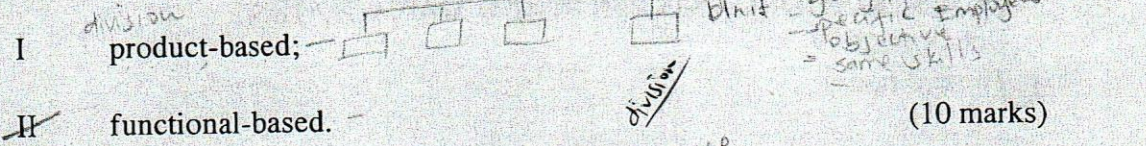
Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

as a chain is incorporated within an org and each is headed by a manager
 authority where a chain of staff → different ppl w/ different skills incorporated within an organization

(a) Differentiate between line and staff authority. (4 marks)

(b) (i) Highlight four limitations of organisational charts. (6 marks)

(ii) Draw organisational charts for two companies whose departments are:



(c) Explain any four factors that influence the degree of delegation in an organisation. (6 marks)

(a) Describe the following types of tests used during the employee selection process:

- (i) aptitude tests; - Based on what one knows mentally
- (ii) personality tests. - based on one's personal attitude. can be without verbal assessment

(b) An organisation intends to carry out a training needs assessment of its employees. Explain three methods it can follow to carry out the exercise successfully. (6 marks)

(c) Outline four reasons for carrying out manpower planning in industrial organisations. (4 marks)

- (i) Explain the meaning of "intrinsic motivation". motivation that comes from inside an individual rather than external reward eg money. basically its pleasure I get from the duty
- (ii) Outline four indicators of demotivated employees. - absconding duties.

3. (a) State three objectives of quality control in a company. (3 marks)

(b) Explain the following systems of inspection:

- (i) floor inspection;
- (ii) centralised inspection. (4 marks)

(c) Explain the following terms as used in statistical quality control:

- (i) sampling by variables;
- (ii) sampling by attributes;
- (iii) assignable cause variation. (6 marks)

- (d) A company's inspection department would like to determine the appropriate sample size to use during inspection. They intend to be within 1% of the true size with 99% confidence level. Past records indicate that the proportion of defectives is usually around 3 in 100.
Determine the sample size which they should use. (7 marks)

- 4 (a) (i) Define a budget.
a budget is a written overview of how the available resources are to be incorporated within a given duration accounting 4 ends unit
- (ii) State three objectives of budgetary control in an organisation. (5 marks)
*Enable an organization know the available resources
- Irrigate organization plan 4 future of e organ in terms of creating resource*
- (b) Outline five reasons which can compel a company to reduce the price of its products. (5 marks)
** Winding up (Liquidation) / Receivership
* sales promotion technique
* Mid 2 accommodate lower class*
- (c) Explain the stages of the life cycle of a product. (10 marks)

5. (a) (i) State three rules observed when making an offer. (6 marks)
- (ii) Highlight three circumstances under which an offer can be terminated. (4 marks)

(b) Distinguish between EXECUTED and EXECUTORY consideration. (4 marks)

- (c) (i) State the meaning of 'breach of contract'. (6 marks)
- (ii) Explain two ways through which a contract may be breached. (6 marks)

(d) Outline four reasons under which a director of a company can vacate office. (4 marks)

6. (a) State four functions of money in an economy. (4 marks)

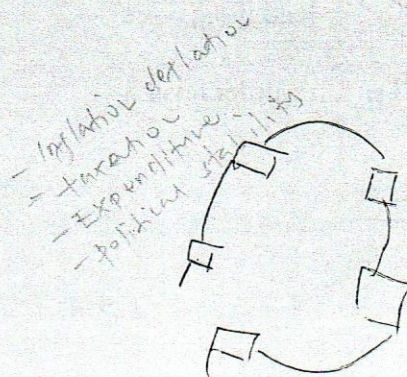
(b) Explain the role played by the Central Bank as a banker to the commercial banks. (6 marks)
*- Loan
- interest*

(c) Outline four factors that determine the wage levels in an economy. (4 marks)

(d) Explain the importance of international trade to a country. (6 marks)

Success
Conditio

*- Taxes
- advisory on projects
- performs organization work*



*- bad quality
- credit from other
- provide currency*

7.

Table 1 shows the activities involved in an engineering project and their duration in weeks.

Table 1

ACTIVITY	PRECEDING ACTIVITY	DURATION IN WEEKS
A	-	9
B	-	3
C	A	8
D	A	2
E	A	3
F	C	2
G	C	6
H	C	1
J	B,D	4
K	F,J	1
L	E,H,C,K	2
M	E,H	3
N	L,M	4

- (a) Draw the project's network.
- (b) Determine the length of each of the paths of the network.
- (c) Determine the total float for each of the non-critical chains of the network.

(20 marks)

8. (a) Explain the following recording techniques used in work study:

(i) process charts;

(ii) string diagrams.

(4 marks)

- (b) (i) State **four** forms of preventive maintenance. ^{Repair}

(ii) Outline **four** activities involved in a preventive maintenance system.

(6 marks)

- (c) (i) State the meaning of the following terms as used in materials management:

I lead time; —

II re-order level.

(2 marks)

(ii) The following data relates to an inventory system:

Cost of placing an order	Ksh 1000
Unit price of product	Ksh 100
Annual demand	20,000 units
Carrying costs	15% of annual inventory value

Determine:

I economic order quantity;

II number of orders during the year.

(8 marks)