THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN ELECTRONIC ENGINEERING
DIPLOMA IN TELECOMMUNICATION 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.

Answer any FIVE of the following EIGHT questions.
All questions carry equal marks.
Maximum marks for each part of a question are as shown.
1. (a) List FOUR factors which affect the span of management. (4 marks)
   (b) Explain FOUR functions of an organisation chart. (8 marks)
   (c) With the aid of charts, describe the following bases of departmentation:
       (i) product
       (ii) functional. (8 marks)

2. (a) List FOUR benefits that may be realised by a firm practising method study. (4 marks)
   (b) Explain the following techniques as applied to manpower planning:
       (i) Work sampling
       (ii) Work measurement. (6 marks)
   (c) An operator takes 10 minutes to assemble an electric switch. If the rating is
       120% and an allowance of 10% is provided for the operation, determine the:
       (i) normal time
       (ii) standard time
       (iii) number of pieces in an 8-hour working shift. (10 marks)

3. (a) List FOUR factors that can influence the rise or fall in supply of commodities. (4 marks)
   (b) Explain THREE causes of inflation. (6 marks)
   (c) Outline THREE difficulties which are faced in measuring the national income of
       a country. (6 marks)
   (d) Explain TWO main causes of inequality of distribution of national income. (4 marks)

4. (a) List SIX characteristics of a matrix structure as a form of organisational design. (6 marks)
   (b) Powertronics Engineering Ltd undertakes a project. Table 1 gives the estimates
       of the time for the activities involved in completing the project.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Preceding Activity</th>
<th>Duration (days)</th>
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<tbody>
<tr>
<td>A</td>
<td>-</td>
<td>6</td>
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<td>B</td>
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<td>K</td>
<td>J</td>
<td>7</td>
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5. (a) State FOUR reasons why employees tend to resist change. (4 marks)
(b) Outline the steps a supervisor should take in handling a grievance. (8 marks)
(c) Explain FOUR syndromes that can hamper effective managerial decision making. (8 marks)

6. (a) List FOUR duties of a Resident Engineer in construction works. (4 marks)
(b) Describe the following tendering procedures:
   (i) Open tenders
   (ii) Invited tenders
   (iii) Negotiated contract. (6 marks)
(c) Describe THREE documents used in tendering for a building project. (6 marks)
(d) Explain:
   (i) why a price fluctuation clause should be included in a contract.
   (ii) what is contained in a price fluctuation clause. (4 marks)

7. (a) (i) Outline FOUR circumstances that may lead to winding up of a company by the court. (4 marks)
       (ii) List FOUR duties of the official receiver in a compulsory winding up of a company. (4 marks)
(b) Describe THREE documents which must be filed when making an application for registration of a company. (6 marks)
(c) Explain THREE ways in which a company may alter its share capital. (6 marks)

8. (a) Explain the following elements of preventive maintenance:
      (i) Inspection
      (ii) Planning and scheduling
      (iii) Records and analysis. (6 marks)
(b) Explain THREE reasons for replacement of factory equipment. (6 marks)
(c) Outline the steps involved in the development of a new product. (8 marks)