INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

Answer booklet;
Mathematical tables/Scientific calculator.

Answer any FIVE of the following EIGHT questions.
All questions carry equal marks.
Maximum marks for each part of a question are shown.

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.
1. (a) State the six key activities of an industrial organisation as perceived by Henri Fayol.

(b) Modern management theorists have identified different key issues that are shaping management practice today. Highlight six such issues.

(c) Explain three principles of management.

(d) Describe the managerial function of staffing.

2. (a) State four advantages of decentralising organisations.

(b) (i) Define the term human wants.

(ii) State four characteristics of human wants.

(c) Explain four factors that influence the demand of a commodity apart from its price.

(d) Outline five documents presented to the Registrar of companies when registering a new company.

3. (a) State four functions of the international monetary fund.

(b) Explain four methods used by the central bank to control the national economy through monetary policy.

(c) State four rules that govern the acceptance of an offer.

(d) Explain each of the following remedies entitled to aggrieved parties under the law of contract:

   (i) damages;

   (ii) injunction.

4. (a) (i) Define the term ‘organisation structure’.

   (ii) Highlight four considerations that need to be addressed when designing an organisational structure that will best sustain the success of an enterprise.

(b) (i) Differentiate between delegation and empowerment.

   (ii) Organisations have been pressed into delegating more widely nowadays because of emerging trends and challenges. Explain four such challenges.
5. (a) (i) With the aid of a diagram, describe the features of the process layout of a manufacturing plant.

(ii) State two advantages of this type of layout.

(b) (i) Outline three circumstances that can make an organisation to embark on a facility location study.

(ii) Table 1 shows a matrix developed by k-strips limited to determine the best among four identified sites for the location of their new branch. The sites were rated on a scale of 0 to 10 points, in terms of their suitability. Determine the best site.

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>FACTOR WEIGHT</th>
<th>POTENTIAL SITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Power</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Laws and Taxation</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Pollution</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Transportation</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

6. (a) State four technical factors considered when an industrial organisation is buying a new machine or equipment.

(b) Differentiate between a closed tender and a single tender.

(c) (i) Outline four duties of a store keeper.

(ii) Highlight four advantages of perpetual inventory over annual stock-taking in an organisation.
The following data relates to a stock item in a company that uses the simple re-order level system.

Normal usage - 100 units per day
Minimum usage - 80 units per day
Maximum usage - 150 units per day
Lead time - 20-30 days
Previous EOQ - 4000 units

Determine the following stock levels:

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

(6 marks)

7. (a) Explain the responsibility of each of the following departments of an organisation in promoting quality:

(i) marketing;
(ii) research and development;
(iii) production.

(6 marks)

(b) Explain the following terms as used in acceptance sampling:

(i) process variability;
(ii) standard error;
(iii) acceptance quality level.

(4 marks)

(c) The following data relates to a product which was undergoing a statistical quality control process.

\[
\begin{align*}
\text{Process mean, } (\bar{x}) &= 70.2 \text{ mm} \\
\text{Mean Range, } (R) &= 0.2 \text{ mm} \\
\text{Sample size, } n &= 3 \\
\text{Hartley's constant, } d_n &= 1.69
\end{align*}
\]

Compute the action and warning lines for the mean chart.

(6 marks)

(d) State four objectives of preventive maintenance.

(4 marks)
8. (a) State **four** methods that are used to carry out time study. (4 marks)

(b) Many employees are usually apprehensive of work study. **Outline four** strategies that organisation should put in place to boost the workers **confidence** in a work study exercise. (6 marks)

(c) Table 2 shows the activities of a certain project

<table>
<thead>
<tr>
<th>Activity</th>
<th>Predecessor</th>
<th>Duration (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>B</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>B</td>
<td>7</td>
</tr>
<tr>
<td>D</td>
<td>A, B</td>
<td>6</td>
</tr>
<tr>
<td>E</td>
<td>C, D</td>
<td>4</td>
</tr>
<tr>
<td>F</td>
<td>C, D</td>
<td>4</td>
</tr>
<tr>
<td>G</td>
<td>F</td>
<td>7</td>
</tr>
<tr>
<td>H</td>
<td>E, G</td>
<td>2</td>
</tr>
</tbody>
</table>

(i) Draw the project network.
(ii) Determine the critical activities.
(iii) Determine the free float of the non-critical activities. (10 marks)