INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management
Graduate Diploma in Materials Management
PAPER No. 8
Operations Management

Date: 13.06.2017
Time: 10.00 a.m. to 1.00 p.m.
Max. Marks: 100
Duration: 3 Hrs.

Instructions:
1. From Part A – answer all questions (compulsory). Each sub questions carries 1 mark. Total: 32 Marks
2. From Part B – Answer any 3 questions out of 5 questions. Each sub-question carries 16 marks. Total: 48 Marks
3. Part C is a case study (compulsory) with questions. Read the case study carefully and answer the questions. Total: 20 Marks
4. Please read the instructions given in the answer sheet.

Part – A 32 Marks
(Attempt all questions Each sub questions carries 1 mark)

Q1. GIVE THE FULL FORM OF: [ 8 marks ]
1. SMED  2. LOB  3. LCV  4.TPM  5.MADM  6.WWTP  7.MLC  8. PLC

Q2. STATE WHETHER TRUE OR FALSE: [ 8 marks ]

a) Operations Research is the same as Operations Management.
b) Genetic Algorithm is a search technique to solve optimization problem.
c) Polar diagram shows the difference between different products and services.
d) ERP can be applied in any type of industry.
e) Break even analysis is a controlled device.
f) Fish bone diagram is given by Taylor.
g) Kanban means a flag or signal.
h) Kaizen refers to temporary improvement.
Q. 3 FILL IN THE BLANKS: [ 8 marks ]

1) In KAIZEN, KAI means __________.
2) The theory of constraint is given by ________.
3) Pipelines are ________ equipments.
4) Good housekeeping is an element of ________.
5) ________ provides a designed database.
6) ________ leads to dehumanization.
7) In ________ process, metal is heated to a plastic state.
8) ________ is a process to join non-ferrous alloys.

Q.4 MATCH THE FOLLOWING: [ 8 marks ]

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Riveting</td>
<td>a- Cause and Effect Diagram</td>
</tr>
<tr>
<td>2) Sunlight</td>
<td>b- Long term solution</td>
</tr>
<tr>
<td>3) Learning Curve</td>
<td>c- Preventive maintenance</td>
</tr>
<tr>
<td>4) Decibel</td>
<td>d- Ancillary development</td>
</tr>
<tr>
<td>5) ISHIKAWA</td>
<td>e- Sound pollution</td>
</tr>
<tr>
<td>6) Inspection</td>
<td>f- Experience</td>
</tr>
<tr>
<td>7) Core conflict</td>
<td>g- Natural light</td>
</tr>
<tr>
<td>8) Outside supplier</td>
<td>h-Assembly Process</td>
</tr>
</tbody>
</table>

Part – B 48 marks

(Answer any 3 questions out of 5 questions. Each sub-question carries 16 marks.)

Q.5 Explain the steps which make implementation of a project less difficult.
Q.6 Explain the main variables in the operation of MRP.
Q.7 Distinguish between forecasting and prediction.
Q.8 Explain job design.
Q.9 Discuss in detail purchase cycle.
<table>
<thead>
<tr>
<th>YEAR</th>
<th>SALES (Rs. In Lacs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>12</td>
</tr>
<tr>
<td>2013</td>
<td>13</td>
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<td>2014</td>
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<tr>
<td>2015</td>
<td>17</td>
</tr>
<tr>
<td>2016</td>
<td>13</td>
</tr>
</tbody>
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Questions:

Q1. A) Find the trend in sales.
    B) Estimate the sales for 2018.

Q.11. Maximum Consumption = 10,000 Kg

Minimum Consumption = 4,000 Kg

Re-order Quantity = 15,000 Kg

Ordering Period = 3 weeks to 5 weeks

Find – 1) Re-order level

2) Maximum Stock Level

3) Minimum Stock Level

4) Average Stock Level

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