PART A

Q. 1. Fill in the blanks.

i) -------------- means small, simple and incremental improvement on continuous basis.

ii) Poka yoke devices to support -------------- .

iii) TQM is -------------- centric.

iv) -------------- provides a simple and inexpensive method of encoding text information.

v) -------------- is the process of comparing, measuring and improving products, services, processes, policy and practices.

vi) -------------- is the technique used to determine the quantity & timing requirement of materials used in manufacturing.

vii) -------------- created a diagram to illustrate continuous process known as PDCA cycle.

viii) -------------- national quality award model is divided in seven categories.

Q.2. State True or False

a. TOPP performance measurement uses three dimensions.

b. Quality is not perceived as responsibility of entire organization.

c. JIT manufacturing put the only right materials, parts, and products in right place at right time.

d. CIM, TQC and JIT are the three fundamental approaches to world class manufacturing.

e. The deadly diseases and sins obstacles were referred by Crosby.

f. Kanban means ticket, plate or card.

g. ERP systems work independent of departments.

h. Motion study is determination of best way of doing a work in maximum possible time.
Q.3. Expand the following
   a) MBO
   b) ERP
   c) AMBITE
   d) ARIS
   e) WCM
   f) FMS
   g) SMID
   h) TOC

Q.4. Match A and B

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
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<tbody>
<tr>
<td>1 The way to consider the customers view in designing product is by analyzing the value they see in the end product.</td>
<td>a. E Commerce</td>
</tr>
<tr>
<td>2 It is a multi -criteria productivity management technique which lays stress on performance against objectivities output.</td>
<td>b. Value analysis and value engineering</td>
</tr>
<tr>
<td>3 It encompasses all aspects of organization right from conception of product design &amp; development, manufacturing, distribution and after sales service</td>
<td>c. SIX SIGMA</td>
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<td>4 The disciplined method of using extremely rigorous data gathering &amp; statistical analysis to identify the sources of errors and ways to eliminate them.</td>
<td>d. POP System</td>
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<tr>
<td>5 Continuous improvement in process by use of control charts. The output of process is monitored and plotted on a chart that indicated control limits.</td>
<td>e. SWOT Analysis</td>
</tr>
<tr>
<td>6 Take stock of current business situation both in terms of enterprises itself and the business environment in which it operates</td>
<td>f. Total Quality Management</td>
</tr>
<tr>
<td>7 Based on principal that purge anything that does not add value to product or service and eliminates wastes</td>
<td>g. Statistical Quality Control</td>
</tr>
<tr>
<td>8 Computer to computer transfer of business information.</td>
<td>h. Value Added Engineering</td>
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PART B 48 marks

(Attempt any 3. Each question carry 16 marks)

Q.5.  a) What are the business challenges of the information age?
      b) Highlight the key features of world class manufacturing shop floor practices with suitable illustrations.

Q.6.  a) Discuss Deming’s approach and his fourteen points.
      b) How do you ensure quality in world-class manufacturing?

Q.7.  a) What is Computer Aided Process Planning?
      b) Explain the importance of Bar Codes.

Q.8.  a) What is the purpose of planning of minerals?
      b) Briefly describe recycling of minerals.

Q.9.  Write short notes on any four
      a) MRP
      b) TQM
      c) Zero Defect.
      d) Bench Marking
      e) Strategic uses of IT.

PART C 20 marks

Q. 10. Case study - Compulsory

M/S XYZ LTD and its suppliers are entering a period in which they will work together in new ways. In this brochure M/S XYZ LTD had documented the key elements of their new purchase vision......

M/S XYZ LTD enables people to share information by offering products and services for reproduction, presentation, distribution and management of information.

Because of the changing environment we are changing the scope and focus of purchasing activities. There will be greater focus on the overall quality of our suppliers in terms of engineering capacity, the core competences of suppliers, their role and attitude in the value chain and their capacity to support XYZ LTD in its future developments.

The impact of this changed orientation is that suppliers will be involved in new ways. Key words .... will be long term relationships, systems buying, simultaneous engineering and continuous improvement.
The main issues of purchasing strategy are :-

- We prefer to leave design and part of the industrialization to suppliers who can design to functional requirements.
- We are going to increase the strength of our supply base, raise supplier networks and find more world class suppliers.
- We are going to work more closely together with selected world class suppliers and we are going to establish more long term relationships.
- We will be very selective in choosing suppliers and will do (more business) with less suppliers.
- The purchasing department will focus on value sourcing and strategic management of quality and logistics issues, will increase the access to know-how and technology from main suppliers, will analyse suppliers from competitiveness point of view and will focus on overall cost.

We will continuously be looking for the best suppliers in the world and want them to perform better. We will constantly benchmark our supplier’s performance. We will set changing targets on cost, quality, logistics and functionality. We have to reduce our total value chain related costs by double digit percentage. In doing so we will create world class supply base from which we will benefit.

Questions:

1. How the new policy will benefit the suppliers?
2. What cost advantages the M/S XYZ will get?
3. How the over specification in product is addressed?
4. How it will lead to improve quality?

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