

**Q.P. Code: 31195**

**Maximum Marks: 75**

**Duration: 2 Hours & 30 Minutes**

- Note: 1) All questions are compulsory, Subject to internal choice.  
 2) Figures to the right indicate full marks.

**Q 1 A) Fill in the Blanks (Any 8)**

08

- 1) \_\_\_\_\_ is the process of transforming raw material into finished goods for sale. ( Marketing / Production / Packaging)
- 2) \_\_\_\_\_ means determining the shape, standard & pattern of the product. ( Product Design / Product Process / Product Sale )
- 3) \_\_\_\_\_ is the ratio between what is produced to what is required to produce it. ( Quality / Quantity / Productivity)
- 4) ISO stands for \_\_\_\_\_ organization for Standardisation. ( Indian / International / Institutional)
- 5) \_\_\_\_\_ is the art & science of moving, packaging & storing of material in any form. ( Material Management / Material Handling / Material Procuring )
- 6) \_\_\_\_\_ refers to the quantity ordered to be purchased at the lowest total cost. (EOQ / ABC / XYZ)
- 7) \_\_\_\_\_ pertains to planning of the space available for production activities. ( Plant Layout / Plant Location / Plant Management)
- 8) \_\_\_\_\_ should be aimed at the needs of the customer, present & future. (Quantity / Quality / Productivity)
- 9) Under \_\_\_\_\_ process, 99.99966% of products created are expected to be statically free from defects. ( Kaizen / Six Sigma / Lean )
- 10) \_\_\_\_\_ defines quality in terms of the social loss, loss to producer & consumer. ( Deming / Taguchi / Kepner & Tregor)

**Q 1 B) Match the Column (Any 7)**

07

Group A		Group B	
1	Process Production	A	Appraisal Cost
2	Batch Production	B	Failure Cost
3	MBNQA	C	Paints & Vehicles
4	Deming Prize	D	Crude Oil & Sugar
5	Cost of Poor Quality	E	Based on Nature of Supplier
6	Cost of Good Quality	F	For American Company
7	GOLF Analysis	G	For Japanese Company
8	SDE Analysis	H	Minimize Waste
9	Lean Thinking	I	To change for better
10	Kaizen	J	Based on Problem of Procurement



- Q 2 A) Define Production Management. Discuss the Components of Production Management. 08  
 B) Explain the characteristics of a good product design. 07  
**OR**  
 C) Define Six Sigma. Explain the DMAIC & DMADV methodology in brief. 08  
 D) Discuss in brief procedure for registration for ISO certification. 07

- Q 3 A) Explain in brief various types of Material handling Equipments. 08  
 B) Explain the objectives of Materials Management. 07  
**OR**  
 C) Define Quality. Explain the characteristics of Quality. 08  
 D) Discuss the service dimensions of Quality. 07

- Q 4 A) Explain in brief any 4 Inventory Control Techniques. 08  
 B) What are the types of Plant Layout? 07  
**OR**  
 C) Explain Taguchi's Quality Engineering. 08  
 D) Explain Edward Deming's Philosophy & approach to Quality. 07

- Q 5 A) ABC Ltd. Purchases computer chips at the rate of Rs. 50 each. The annual consumption of chip is 36,000 units. If the ordering cost is Rs.250 per order & carrying cost is 25%p.a., what would be the EOQ and Total Cost? If the supplier offers a discount of 10% for ordering 6,000 units. Per order, do you accept the discount offer? 08  
 B) Calculate partial & Total Productivity. 07

Output	1000,000	Raw Material	175,000
Labour	150,000	Electricity	50,000
Capital	200,000	Other Misc. Exp.	25,000

- OR**  
 C) Write a Short Notes : (Any 3) 15  
 1. Quality Circle  
 2. Lean Thinking  
 3. Production System  
 4. Deming's Application Prize  
 5. Ishikawa Fish Bone Diagram