

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