



**(B) State whether the following statements are true or false. (Attempt any 7) (07)**

- (1) Production is the ratio between what is produced to what is required to produce it.
- (2) Construction of the building is project type production.
- (3) Productivity and efficiency are different.
- (4) Masaaki Imai introduced the concept of "Kaizen" in 1986.
- (5) Product is anything that can be able to meet the needs and wants of target customers.
- (6) Lean thinking is also called Toyota Production System (TPS).
- (7) The location decision falls under long term planning.
- (8) ISO stands for Indian Organisation for Standardisation.
- (9) Six Sigma quality is achieved when long-term defect levels are below 3.4 defects per million opportunities.
- (10) Material management is concerned with the planning, identification, procuring, storage, receiving & distribution of materials.

- Q.2 (a) Explain the principles of a good product layout. (07)
- (b) Explain the different classifications of products. (08)

**OR**

- Q.2 (c) Elaborate in detail intermittent and continuous production management systems. (15)
- Q.3 (a) Explain in brief any four inventory control techniques. (08)
- (b) Write a note on Economic Order Quantity (EOQ). (07)

**OR**

- Q.3 (c) Explain the objectives of materials management. (07)
- (d) Following information refers to pedestal lamp: (08)
- Annual demand = 500,000 units
- Unit price of a pedestal lamp = Rs. 8,000
- Ordering cost = Rs. 2000 per order
- Inventory Carrying cost = 25%
- Find the EOQ.

**Q.4 (a) Calculate Partial & Total Productivity of the following:**

**(15)**

Output	8,00,000	Raw Material	2,00,000
Labour	75,000	Electricity	25,000
Capital	4,00,000	Other Misc. Exp.	12,000

**OR**

**Q.4 (b) Elaborate on the factors affecting quality.**

**(07)**

**(c) Enlist and explain the key principles of TQM in detail**

**(08)**

**Q.5 (a) What is Deming's application prize? Explain its criteria.**

**(07)**

**(b) Elaborate on the benefits of ISO 9000.**

**(08)**

**OR**

**Q.5 (c) Write short notes on (Attempt any 3)**

**(15)**

**(1) SERVQUAL**

**(2) Just in time method (JIT)**

**(3) Lean thinking**

**(4) New product development process**

**(5) DMAIC**

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