- Note: 1) All Questions Are Compulsory
 - 2) All Questions Carry Equal Marks
 - 3) Use Examples Wherever Necessary

Q. 1 Answer the Following (Any Two)

15

- 1) Explain in detail components of production function?
- 2) Explain classification of product in Detail with appropriate example?
- 3) Define Plant Layout and explain characteristics of efficient plant layout?

Q. 2 Answer the Following (Any Two)

15

- 1) Define material management and explain objectives of materials management?
- 2) Explain ABC analysis in Detail?
- 3) Following detail are given by the company

NO.	PARTICULARS	AMOUNT
1.	Purchase department expenses	1 million
2.	Stores personnel expenses	1 million
3.	Collections charges	80,000
4.	Hire charges of warehouse	4,20,000
5.	Expenses for bills payment	2lakh
6.	Interest charges	8%
7.	Insurance charges	4%
8.	Obsolete cost	20000
9.	Inspection cost	1 lakh
10.	Material handling in stores	3 lakh

The company places 10,000 orders per year and has an average total of 2 million. Calculate ordering cost and inventory carrying cost?

2. 3 Answer the Following (Any Two)

15

- 1) Explain modes of calculating productivity?
 - a) Total Productivity Factor
 - b) Partial Productivity Factor
- 2) Explain Cost of Quality in Detail?
- 3) Explain Problem solving techniques Kaizen in detail with its features?

Q. 4 Answer the Following (Any Two)

- Define Lean Thinking and Explain Features of lean Thinking?
- 2) Explain Fish-bone Analysis in Detail?
- 3) Write in Detail About ISO 9000?

Q. 5 Case Study

Retail Inventory management is probably one of the most complexes of all inventory management departments. In Retail management, there are greater variety of products to store and a great deal more of each product. In fact, a warehouse may never be big enough to hold all the merchandise that a store needs to keep in stock, and it can be difficult to maintain the right number of any particular item at any given time.

Retail inventory management should never be the job of a single individual but should be divided into departments and classified accordingly. For example, in a supermarket, there are two major departments-grocery and non-grocery and each has several sub categories. Under grocery, there are such department as meat, dairy, frozen, canned and more.

Depending on the size of the store, retail inventory management could be divided into two main categories and delegated to two individuals who would be responsible for the management of entire inventory, or it can be broken down further, having an employee in charge of each smaller division. This would allow the individual to gain an intimate knowledge of how quickly each product sold and how often it needed to be reordered. This would easily allow the store to account for excess stock in some areas while others remained fairly empty.

The important thing to remember in retail inventory management is that there is limited space for storage for an enormous array of product. Therefore, it is necessary to determine which product are more important and which are less important.

- 1) Why is inventory management, a challenging task for retail store?
- 2) How can perpetual inventory system solve this problem?

— The End —