FORECASTING & INVENTORY MANAGEMENT

UNIT I: FORECASTING Introduction, Demand patterns, Factors affecting demand, Demand Forecasting - Need, Types, Objectives and Steps. Overview of Qualitative and Quantitative methods, Forecasting techniques, Impact of forecasting on inventory management.

UNIT II: INVENTORY Need of Inventory, Importance & Scope of Inventory Control, Costs Associated with Inventory, Profit through Inventory Management.

UNIT III: INVENTORY MANAGEMENT

Raw Materials, WIP, Finished goods, Spare Parts Inventories, Inventory Evaluation: FIFO, LIFO, Average Cost, Specific Cost

UNIT IV: INVENTORY MANAGEMENT TECHNIQUES

Selective Inventory Control: ABC, VED, FSN and XYZ, Economic Order Quantity, Re-Order point and Safety Stocks, Safety Stock determination considering service level and stock-out probability.

UNIT V: INVENTORY MODELS

Fixed Order Size Systems: Deterministic and Probabilistic inventory models, EOQ and EBQ models for uniform and variable demand with and without shortages. Quantity discount models. Fixed Order Interval Systems: Deterministic and Probabilistic inventory models

REFERENCES:

- 1. Principle of Inventory and Materials Management: Richard J. Tersine, Prentice Hall; 4 edition (11 August 1993)
- 2. Inventory Control and Management: Donald Waters, Wiley; 2 edition (October 10, 2003)

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