GOVERNMENT COLLEGE (AUTONOMOUS)

RAJAMAHENDRAVARAM

(Re-Accredited by NAAC with "A⁺" Grade)

(W.e.f. 2023-24 Admitted Batch)

I Year BBA-Logistics - Semester – II

Forecasting and Inventory Management

UNIT:I FORECASTING

Essays

1. Explain the need and importance of Forecasting in Logistics

2. Explain the sources of demand.

3. Distinguish between demand planning v/s Forecasting

4. What are the types of demand forecasting?

Shorts

1. Types of forecasts

2. Supply Chain dynamics

3. Sources of Demand

4. Demand Forecasting

Very Shorts

1. Forecasting

2. demand Planning

3.

4. Suppliers

MCQS

1. What is the primary objective of forecasting in business?

A) To eliminate uncertainties

B) To accurately predict future events

C) To analyze historical data

D) To increase Inventory levels

2. Which of the following is a qualitative forecasting method?

A) Moving averages

B) Exponential smoothing

C) Delphi technique

D) Time series analysis

3. What type of data is typically used in quantitative forecasting?

A) Expert opinions

B) Historical Data

C) Market Survey

D) Focused group feedback

4. Which forecasting method is best suited for short-term predictions with seasonality?

A) Time series analysis

B) Delphi method

C) Exponential smoothing

D) Market research

5. What role does technology play in modern forecasting?

A) Legal

B) Social

C) Technological

D) Political

UNIT-II SALES AND OPERATIONS PLANNING

Essays

1.Explain the goals and objectives of Sales and Operations Planning.

2.Discuss the cyclic decomposition techniques and Short-term forecasting techniques

3. Explain technology forecasting and methodologies

4. Explain Role of Technology Information Forecasting and Assessment Council (TIFAC).

Shorts

1.Objectives of sales and Operations Planning

2.Types of Collaborative Planning

3. Forecasting and Replenishment

4. Short term forecasting techniques

Very Shorts

1. Sales and Operations Planning

2. Collaborative Planning

3. Replenishment

4. TIFAC

MCQS

1.What is the primary goal of Sales and Operations Planning?

 A) To maximize short-term profits

 B) To minimize production costs

C) It increases forecast errors

D) To eliminate inventory levels

2. How does S&OP contribute to effective forecasting?

A. By ignoring demand fluctuations

B. By increasing production costs

C. By aligning sales forecasts with production plans

D. By eliminating the need for inventory management.

3. What role does collaboration play in S&OP forecasting?

A It hinders decision-making processes.

B. It hinders decision-making processes

C. It promotes alignment across departments.

D. It increases inventory levels

4. What is a common benefit of integrating financial planning into S&OP forecasting?

A. Increased lead times

B. Improved cost management

C. Lower sales forecasts accuracy

D. Reduced customer satisfaction

5. What is the primary output of the S&OP process in forecasting?

A. Increased production costs

B. A balanced and achievable operational plan

C. Reduced transparency in forecasting

D. Lower sales forecasts accuracy

UNIT-III   INVENTORY

Essays

1. Discuss the Evaluation of performance of Materials Function.

2. Write about the Multi-Echelon Inventory Systems

3. Explain Use of Computers in Inventory Management
4. What are the latest trends in Inventory Management? Explain in detail

Shorts

1. Purpose of Inventory

2. Types of goods

3. General management of Inventory

4. Multi-Echelon Inventory System

Very Shorts

1. Inventory Management

2. Material function

3. trends in Inventory Management

4. Optimum Inventory

MCQS

1. What is the primary purpose of inventory management in forecasting?

   A. To maximize storage space

   B. To minimize production costs

   C. To balance supply and demand

   D. To eliminate stockouts

2. How does accurate demand forecasting impact inventory levels?

   A. It increases safety stock levels

   B. It reduces the need for inventory management

   C. It optimizes inventory levels based on expected demand

   D. It leads to stockouts

3. What is safety stock in inventory management?

   A. Excess inventory used for promotions

   B. Inventory kept as a buffer against demand variability

C. Inventory reserved for high-demand periods

D. Inventory ordered based on forecasts

4. Which of the following is a cost associated with holding inventory?

A. Ordering costs

B. Forecasting costs

C. Marketing costs

D. Administrative costs

5. How does the Economic Order Quantity (EOQ) model impact inventory management?

A. It increases safety stock levels

B. It reduces order quantities and holding costs

C. It leads to stockouts

D. It eliminates the need for inventory turnover

UNIT-IV

Essays

1. What is the requirement of codes? Explain.
2. What are the costs associated with inventory?
3. Explain the advantages of codification and classification in Inventory management.
4. Explain the procedure for coding structure and design.

Shorts

1. International codification

2. EOQ

3. Right Quantity

4. Models in Logistics

Very Shorts

1. Codification

2. Classification

3. Inventory cost

4. Coding structure

MCQS

1. **What is the primary purpose of codification in forecasting?**

        A. To organize and structure information

        B. To eliminate data collection

        C. To increase data complexity

        D. To reduce forecasting accuracy

2. What is the difference between codification and classification in forecasting?

        A. Codification involves assigning codes to data, while classification involves grouping similar data.

        B. Codification groups data, while classification assigns codes.

       C . Codification is used for quantitative forecasting, while classification is for qualitative forecasting.

        D. Codification is subjective, while classification is objective

3. How does codification contribute to efficient forecasting?

    A. By increasing data complexity

    B. By reducing data organization

    C. By facilitating data retrieval and analysis

    D. By eliminating data categorization

4. What is a characteristic of a hierarchical coding system in forecasting?

    A. It assigns codes randomly

    B. It groups data based on levels of importance or categories

    C. It ignores data organization

    D. It limits data access

5. How does effective codification and classification contribute to forecasting accuracy?

    A. By increasing data duplication

    B. By reducing data retrieval efficiency

    C. By improving data organization and accessibility

    D. By limiting data categorization

UNIT-V INFLUENCE OF PRODUCTION POLICY ON INVENTORY LEVELS

Essays

1. Explain the Inventories and customer service level

2. What are the steps to improve inventory management?

3. Describe the influenceof production policy on Inventory levels.

4. Explain the procedure for calculation of safety stocks.

Shorts

1.Customer service level

2. Inventory Management Uncertainity

3. Calculation of safety stock

4. fixed order quantity

Very Shorts

1. Inventories

2. Production policy

3. Safety stock

4. Lead time management

MCQS

1. What is the primary influence of a "Just-In-Time" (JIT) production policy on inventory levels?

   A. Increases inventory levels

   B. Decreases inventory levels

   C. Maintains constant inventory levels

   D. Has no impact on inventory levels

2. **How does a "Make-to-Stock" production policy affect inventory levels?**

   A. Inventory is produced based on actual customer orders.

   B. Inventory is produced without considering customer demand.

   C. Inventory is constantly replenished based on real-time demand.

   D. Inventory levels are determined by production capacity.

3. What impact does a "Build-to-Order" production policy have on inventory levels?

A) Increases inventory levels due to stockpiling raw materials

B) Decreases inventory levels by producing only upon customer orders

C) Leads to constant inventory levels regardless of demand

D) Has no impact on inventory levels

4. What role does demand forecasting play in determining inventory levels under different production policies?

A. Forecasts are not relevant to inventory management

B. Forecasts guide inventory decisions based on expected demand

C. Forecasts are only used in "Make-to-Stock" production policies

D. Forecasts are primarily used for financial planning

5. How does an "Economic Order Quantity" (EOQ) approach influence inventory levels in production?

A. EOQ leads to higher inventory levels to reduce ordering costs.

B. EOQ optimizes inventory levels to minimize total inventory costs.

C. EOQ has no impact on inventory levels

D. EOQ reduces inventory levels to maximize storage space.