

# Production & Operation Management

## Unit - 1

### 5 Marks Each

- Q. What is Production Management?
- Q. What is Operations Management?
- Q. Distinguish between Production and Operations Management.
- Q. What are the Objectives and Scope of Production Management?
- Q. What are the Objectives and Scope of Operations Management?
- Q. What are the classifications of Production & Operations Management?
- Q. Define Production Planning & Control.
- Q. What are the Objectives of Production Planning?
- Q. What are the factors determining the Production Planning Procedure?
- Q. Define the concepts of Production Control.
- Q. What influences a Production Plan Process?
- Q. Define "Capacity" in a production Facility. Give Examples.
- Q. How to execute capacity planning?
- Q. Define Production System. Discuss in Detail.
- Q. Explain the planning process in a production process in detail.
- Q. What is a Product? What are the stages of Product Development?
- Q. What is Product Layout?
- Q. What is Aggregate Planning?
- Q. Define RCCP and its Goals.

### 10 Marks Each

- Q. Explain in detail the process of scheduling and its associated activities.
- Q. What are the different levels of decisions taken in a production unit?
- Q. What are the roles of a production manager in a manufacturing facility?
- Q. Discuss the Characteristics of Modern Production and Operations Functions.
- Q. Explain the emerging role of the Production and Operations Manager.
- Q. Discuss the challenges faced by the Production and Operations Manager.
- Q. Discuss in Detail the skills required by the Production and Operations Manager.

- Q. What is the importance of Production Function and Production Management?
- Q. Briefly explain the historical development of Production & Operations management.
- Q. Give your views on current trends in Production and Operations management.
- Q. Production & Operations Management practices are evolutionary. Prove.

## Unit - 2

### 5 Marks Each

- Q. Define Purchase and Purchasing.
- Q. Define Supply and Supplier.
- Q. Define Materials and Inventory.
- Q. What is the Basis of ABC Analysis?
- Q. Briefly explain JIT & EOQ Concepts.
- Q. What are the criteria for selecting materials handling equipment?
- Q. Briefly explain - Standardisation, Codification & Simplification.
- Q. What is Inventory Control and what are its different techniques?
- Q. What is the significance of Inventory control in a production unit?
- Q. How does Inventory Management help in the profitability of the unit?
- Q. What are the principles and practices for material handling equipment?
- Q. How to identify a good supplier? How many suppliers a unit can have?
- Q. Distinguish between ABC & VED Inventory Control Technique.
- Q. Who is responsible for the inventory management and what are the skills required?
- Q. Support the argument that Inventory Management & Materials Handling works together.
- Q. How can shortage of inventory be managed during production?
- Q. Explain the significance of JIT technique in a production unit.
- Q. What are different types of inventories and why is it categorised in a factory?
- Q. Explain the drawback of JIT technique and how it can be solved.
- Q. How to recognize the need of a supplier?

### 10 Marks Each

- Q. Explain in detail the different types of Inventory Control Techniques.
- Q. Explain in detail the inventory management process.
- Q. How would you manage an inventory of a chemical factory?
- Q. What are the methods to ensure inventory meet company standards
- Q. How can shortage of inventory be managed during production?

- Q. Explain the significance of EOQ & FSN technique in a production unit.
- Q. Draft a material handling policy for a new plastic products manufacturing unit.
- Q. Define the compliances of quality control in Inventory Management.
- Q. Define the function of purchasing and suppliers.
- Q. Differentiate Strategic V/S Operational role of Purchasing and suppliers.

### **Unit - 3**

#### **5 Marks Each**

- Q. What is Automation in a manufacturing unit?
- Q. What are different types of Automation?
- Q. What is the significance of ergonomics in a manufacturing unit?
- Q. How does the concept of standard time increase efficiency & profitability?
- Q. How does method study increase efficiency and effectiveness?
- Q. How tools like charts and diagrams help in production management?
- Q. How does the measurement of work increase productivity & Profitability?
- Q. Discuss the advantages and disadvantages of Automation.
- Q. What are the charts used in Method study?
- Q. Describe how Automation contributes to Profitability.
- Q. Differentiate between Flow Diagram and String Diagram
- Q. Differentiate between Time & Motion study.
- Q. How Labour trends affect the decision of Automation in a factory?
- Q. Explain any 6 Reasons for Automation.
- Q. How Productivity of a plan is calculated.
- Q. How different aspects of Method study contribute to productivity.
- Q. How are Simultaneous Operations and Combined Operations different in Automation.?
- Q. How Automation helps in reducing manufacturing lead time?
- Q. Explain with a chart the correlation between product quality and Automation.
- Q. How does synthetic data help in work measurement?

#### **10 Marks Each**

- Q. Explain in detail different elements of Method Engineering.
- Q. How Productivity measurement helps in Production planning?

### **Unit-4**

5 Marks Each

- Q. What is a strategy?
- Q. How strategies help a manufacturing unit to achieve efficiency?
- Q. What are different trends in Operational Management?
- Q. What are the frameworks of Operation Management?
- Q. Explain the recent Trends in Operations / Production Management.
- Q. How Volume Flexibility and Customization different?
- Q. Explain the nature of International Operations Management.
- Q. How Production Planning Control Works?
- Q. Give the meaning of the term Operations Management.
- Q. Bring Out Scope of Operations Management in Production.
- Q. How does the Operations management team achieve revenue to achieve profits?
- Q. How behaviour of the employees impacts the organisation's performance?
- Q. Operation Managers decides the plant locations. How?
- Q. Differentiate between cost control and Cost reducing.
- Q. What are the advantages of global presence for a company?
- Q. How low defect rate impacts the cost of a product?
- Q. Faster delivery of products increases customer satisfaction. Prove with an example.
- Q. What is the difference between Volume Flexibility and customization in operation management during production?
- Q. Define the challenges an organisation will face in International Production and operations management.
- Q. How Quality standards of domestic and international markets different?

10 Marks Each

- Q. What Would be the role of an Operation Manager of a Car manufacturing unit?
- Q. Discuss various competitive priorities of a production company
- Q. Define the Key Elements of Operations Management.
- Q. Define the Categories of Competitive Priorities
- Q. Differentiate between International and Domestic Operations Management.
- Q. Define Different Strategies of International Production Operations Management.
- Q. Explain the forced choice model strategy and how it contributes to profitability.

- Q. Explain the Challenges of International Operations Management.
- Q. How can environmental issues due to production be reduced?
- Q. How effective production operations impact the profitability of business?

### Unit - 5

#### 5 Marks Each

- Q. How do you devise the quality control process?
- Q. Define the factors affecting quality.
- Q. What is the need for Quality Control?
- Q. What are the types and Maintenance?
- Q. How can product quality be ensured?
- Q. Briefly Explain the types of Wastes.
- Q. How Predictive maintenance is different from Preventive Maintenance.
- Q. Maintenance is for all types of building and plants. Prove.
- Q. Give an example of a quality control process with Charts.
- Q. Give an example of the acceptance sampling process.
- Q. Quality Control is a continuous process. Prove.
- Q. How Reactive maintenance causes impact on quality and profitability?
- Q. Define how quality is affected by the company's own management.
- Q. Untrained manpower can impact product quality. Prove.
- Q. How does the market set the standards for the quality of the product?
- Q. How is the quality of goods and services measured?
- Q. Quality control prevents defects at source. Explain How.
- Q. How are Quality Control & Inspection different?
- Q. How good vendor-vendee relations can be achieved?
- Q. How losses due to defects become a hit on profitability?

#### 10 Marks Each

- Q. Explain with examples different statistical quality control tools.
- Q. Define modern trends in Quality Management.
- Q. Write Short notes on ISO 9000, ISO 14000, Quality Circles, TQM.
- Q. How to determine the maintenance policies required for a plant. Factors and Implementation.

- Q. How TQM helps in production efficiency and profitability.
- Q. What would be the right maintenance method for a metal fabrication plant and why?
- Q. How customers are benefited with TQM?
- Q. Design a waste management process for a packed milk production plant.
- Q. Explain improper waste management can impact the long-term existence of the company.
- Q. With an example using control charts explain the quality control process of a milk packaging plant.