



**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY : PUTTUR  
(AUTONOMOUS)**

**Siddharth Nagar, Narayanavanam Road – 517583**

**QUESTION BANK (DESCRIPTIVE)**

**Subject with Code : OPERATIONS MANAGEMENT (25MB9014)**

**Course & Branch: MBA**

**Year & Sem: I-MBA & II-Sem**

**Regulation: R25**

**UNIT - I**

**INTRODUCTION AND OVERVIEW OF OPERATIONS MANAGEMENT**

1	a)	Explain the concept, nature, and scope of Operations Management.	[L2][CO1]	[6M]
	b)	Describe the role of Operations Management in manufacturing and service organizations.	[L2][CO1]	[6M]
2		Describe the role of Operations Management in manufacturing and service organizations.	[L2][CO1]	[12M]
3	a)	Discuss the transformation process model with a neat diagram.	[L3][CO1]	[6M]
	b)	Explain the decision areas of Operations Management in detail.	[L3][CO1]	[6M]
4		Describe the role and responsibilities of an Operations Manager.	[L2][CO1]	[12M]
5	a)	Explain the interface of Operations Management with Marketing.	[L2][CO1]	[6M]
	b)	Discuss the interface of Operations Management with Finance and Human Resources.	[L2][CO1]	[6M]
6		Explain the importance of Operations Management in achieving organizational competitiveness.	[L4][CO1]	[12M]
7	a)	Discuss the strategic role of Operations Management in business organizations.	[L4][CO1]	[6M]
	b)	Explain the challenges faced by Operations Management in the modern business environment.	[L4][CO1]	[6M]
8		Discuss productivity and its importance in Operations Management.	[L2][CO1]	[12M]
9		Explain the differences between production management and operations management.	[L2][CO1]	[12M]
10	a)	Describe the evolution of Operations Management.	[L2][CO1]	[6M]
	b)	Explain the impact of globalization on Operations Management.	[L4][CO1]	[6M]

**UNIT - II**  
**OPERATIONS CONTROL**

1	a)	Explain the concept and importance of Quality Control.	[L2][CO2]	[6M]
	b)	Discuss Quality Assurance and its role in operations control.	[L2][CO2]	[6M]
2		Explain the concept, objectives, and benefits of Quality Circles.	[L2][CO2]	[12M]
3	a)	Discuss Statistical Quality Control and its applications.	[L3][CO2]	[6M]
	b)	Explain control charts for variables with suitable illustrations.	[L3][CO2]	[6M]
4		Describe $\bar{X}$ and R charts and their construction.	[L3][CO2]	[12M]
5	a)	Explain control charts for attributes with examples.	[L3][CO2]	[6M]
	b)	Discuss the causes of variation in quality and their control.	[L4][CO2]	[6M]
6		Explain Acceptance Sampling Plans and their types.	[L3][CO2]	[12M]
7	a)	Discuss the advantages and limitations of acceptance sampling.	[L4][CO2]	[6M]
	b)	Explain the purchase function and its importance in operations.	[L2][CO2]	[6M]
8		Describe the purchasing procedure followed in organizations.	[L2][CO2]	[12M]
9		Explain automation and its role in operations control.	[L3][CO2]	[12M]
10	a)	Discuss technology management in operations control.	[L4][CO2]	[6M]
	b)	Explain waste management practices in modern organizations.	[L4][CO2]	[6M]

**UNIT - III**  
**MANAGING FOR QUALITY**

1	a)	Explain the basic concepts and dimensions of quality.	[L2][CO3]	[6M]
	b)	Discuss Juran's Quality Trilogy in detail.	[L3][CO3]	[6M]
2		Explain Deming's 14 principles of management.	[L3][CO3]	[12M]
3	a)	Discuss quality improvement techniques in organizations.	[L4][CO3]	[6M]
	b)	Explain the relationship between quality and cost reduction.	[L4][CO3]	[6M]
4		Describe ISO 9000:2000 standards and their clauses.	[L2][CO3]	[12M]
5	a)	Discuss the coverage and benefits of ISO 9000 certification.	[L4][CO3]	[6M]
	b)	Explain the concept and methodology of Six Sigma.	[L3][CO3]	[6M]
6		Discuss productivity and factors affecting productivity.	[L2][CO3]	[12M]
7	a)	Explain methods of measuring productivity.	[L3][CO3]	[6M]
	b)	Discuss techniques for improving productivity.	[L4][CO3]	[6M]
8		Explain the concept of new product development.	[L2][CO3]	[12M]
9		Describe the stages involved in product design and development.	[L3][CO3]	[12M]
10	a)	Discuss the role of quality in product design.	[L4][CO3]	[6M]
	b)	Explain Total Quality Management (TQM) principles.	[L5][CO3]	[6M]

**UNIT - IV****INVENTORY AND INVENTORY MODELS**

<b>1</b>	<b>a)</b>	Explain the concept and importance of inventory control.	[L2][CO4]	[6M]
	<b>b)</b>	Discuss different systems of inventory control.	[L3][CO4]	[6M]
<b>2</b>		Explain various costs associated with inventory.	[L2][CO4]	[12M]
<b>3</b>	<b>a)</b>	Describe different types of inventories used by firms.	[L2][CO4]	[6M]
	<b>b)</b>	Explain ABC analysis and its advantages.	[L3][CO4]	[6M]
<b>4</b>		Discuss VED analysis and its applications.	[L3][CO4]	[12M]
<b>5</b>	<b>a)</b>	Explain the concept of value analysis.	[L2][CO4]	[6M]
	<b>b)</b>	Discuss the importance of value analysis in cost reduction.	[L4][CO4]	[6M]
<b>6</b>		Explain the concept of safety stock.	[L3][CO4]	[12M]
<b>7</b>	<b>a)</b>	Discuss inventory control systems in detail.	[L3][CO4]	[6M]
	<b>b)</b>	Explain Just-in-Time (JIT) inventory system.	[L3][CO4]	[6M]
<b>8</b>		Discuss Vendor Managed Inventory (VMI).	[L3][CO4]	[12M]
<b>9</b>		Compare traditional inventory systems with JIT.	[L4][CO4]	[12M]
<b>10</b>	<b>a)</b>	Explain inventory models used in organizations.	[L3][CO4]	[6M]
	<b>b)</b>	Discuss the role of inventory management in organizational efficiency.	[L5][CO4]	[6M]

**UNIT - V****INTRODUCTION TO INDUSTRY 4.0**

<b>1</b>	<b>a)</b>	Explain the concept and evolution of Industry 4.0.	[L2][CO6]	[6M]
	<b>b)</b>	Discuss various industrial revolutions.	[L2][CO6]	[6M]
<b>2</b>		Explain digitalization and the networked economy.	[L3][CO6]	[12M]
<b>3</b>	<b>a)</b>	Discuss the drivers of Industry 4.0.	[L3][CO6]	[6M]
	<b>b)</b>	Explain the enablers of Industry 4.0.	[L3][CO6]	[6M]
<b>4</b>		Discuss the compelling forces behind Industry 4.0 adoption.	[L4][CO6]	[12M]
<b>5</b>	<b>a)</b>	Explain the challenges faced in implementing Industry 4.0.	[L4][CO6]	[6M]
	<b>b)</b>	Discuss the benefits of adopting Industry 4.0 model.	[L4][CO6]	[6M]
<b>6</b>		Explain smart factories and cyber-physical systems.	[L3][CO6]	[12M]
<b>7</b>	<b>a)</b>	Discuss the role of IoT in Industry 4.0.	[L3][CO6]	[6M]
	<b>b)</b>	Explain the application of Industry 4.0 in manufacturing.	[L4][CO6]	[6M]
<b>8</b>		Discuss Industry 4.0 applications in service industries.	[L4][CO6]	[12M]
<b>9</b>		Explain the impact of Industry 4.0 on operations management.	[L4][CO6]	[12M]
<b>10</b>	<b>a)</b>	Discuss future trends in Industry 4.0.	[L5][CO6]	[6M]
	<b>b)</b>	Evaluate the readiness of Indian industries for Industry 4.0.	[L5][CO6]	[6M]

Prepared by:

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