

**NEP - Semester End Examination – October 2025**

Program: SY.B.COM (M S) **III** Course: Production And Total Quality Management  
 Program Code: UGMS02 Course Code: NUMS309

Duration: **2 Hours** Max. Marks: **60**

**Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Draw neat diagrams wherever necessary.

<b>Q. 1</b>	<b>Attempt the following.</b>				<b>[15]</b>	<b>Course Outcome</b>	<b>Knowledge Level</b>
(a)	<b>Fill in the blanks with an appropriate answer from the alternatives given.</b>				[08]		
	I) Which of the following is a characteristic of intermittent production?						
	a.	Mass production	b.	Job shop production			
	c.	Continuous production	d.	Assembly line production			
	II) Which production system produces in large quantities continuously?						
	a.	Job production	b.	Batch production			
	c.	Continuous production	d.	Project production			
	III) Importance of purchase management lies in:						
	a.	Increasing cost of materials	b.	Customer satisfaction.			
	c.	Supplier relationship	d.	Ensuring quality materials at right time.			
	IV) Which is NOT a type of material handling system?						
	a.	Manual handling	b.	Automated systems			
	c.	Mechanized systems	d.	Human resource system			
	V) TQM stands for:						
	a.	Total Quality Management	b.	Timely Quality Management			
	c.	Technical Quality Methods	d.	Total Quantity Management			
	VI) Crosby is known for which philosophy?						
	a.	Zero Defects	b.	Continuous Improvement			

		c.	Fishbone Diagram	d.	PDCA Cycle			
	VII)		Lean Thinking focuses on:					
		a.	Waste reduction	b.	Increasing waste			
		c.	Reducing customer satisfaction	d.	Increasing costs			
	VIII)		ISO 9000 certification relates to:					
		a.	Environmental management	b.	Quality management systems			
		c.	Health and safety	d.	Food safety			
(b)	<b>State whether the following statements are true or false.</b>	[07]	CO1	CO2	CO3	CO4	L1 – L2	
	I)	Production management includes layout, scheduling, and inventory control.						
	II)	ABC analysis classifies inventory based on its consumption value.						
	III)	Six Sigma is a quality certification aimed at reducing defects and variability.						
	IV)	Case studies help students analyze the real-world impact of quality strategies.						
	V)	Kaizen means sudden, large-scale changes in processes.						
	VI)	ISO 9001 is not related to quality management standards.						
	VII)	Quality improvement strategies have no connection with business performance.						
Q. 2	<b>Attempt any TWO of the following.</b>	[15]	Course Outcome	Knowledge Level				
	(a)	Point out and discuss the principles of good product layout. Draw a diagram to support your answer.	[8]	CO1	L1			
	(b)	Analyse the Kaizen philosophy and justify its role as an approach to continuous quality improvement.	[7]	CO3	L5			
		<b>OR</b>						
	(c)	Evaluate and justify the importance of purchase management in production.	[8]	CO1	L4			
	(d)	Point out the objectives of quality circles and justify their relevance to employee involvement.	[7]	CO3	L5			

Q. 3		Attempt any TWO of the following.	[15]	Course Outcome	Knowledge Level
	(a)	Differentiate and describe the different types of products with suitable examples.	[08]	CO2	L4
	(b)	Explain and illustrate the different types of material handling systems with examples.	[07]	CO3	L2 L3
		<b>OR</b>			
	(c)	Describe the concept of productivity and justify its importance in business operations.	[08]	CO2	L2
	(d)	Explain and justify the concept and importance of Total Quality Management (TQM).	[07]	CO3	L2
Q. 4		Read the following case study and answer the following questions:	[15]	Course Outcome	Knowledge Level
		<p>Zenith Textiles Ltd., a leading garment manufacturer, was facing issues of inconsistent product quality, late deliveries, and frequent customer complaints. The management realized that focusing only on end-product inspection was not enough, and they needed to adopt the Principles of Total Quality Management (PTQM) to ensure long-term improvement.</p> <p>The company introduced customer focus, continuous improvement, and employee involvement as the core PTQM principles. Workers were trained to take responsibility for quality at every stage of production. Quality circles were formed, where small teams suggested practical solutions like rearranging the fabric cutting section to reduce wastage. Management also implemented statistical process control (SPC) to monitor and reduce defects.</p> <p>Within a year, Zenith saw a 40% reduction in customer complaints and a significant increase in on-time delivery. Employees felt more engaged, waste levels dropped, and overall productivity improved. The adoption of PTQM not only enhanced product quality but also strengthened the company's market reputation, showing that quality is not just an act but a continuous habit.</p>		CO1 CO4	
	(a)	Analyse how Zenith Textiles Ltd. applied the Principles of Total Quality Management (PTQM) to improve its operations.	[08]		L4
	(b)	Describe the impact of PTQM on customer satisfaction and organizational performance at Zenith Textiles Ltd.	[07]		L2