

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.

| Q. 1 | Attempt the following. | [15] | Course Outcome | Knowledge Level |
|--------------------------------------|--|--|--------------------------|-----------------|
| <div> <div></div> <div></div> </div> | (a) Fill in the blanks with an appropriate answer from the alternatives given. | [08] | CO1 CO2 CO3 CO4 | L1 – L2 |
| | 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 | | |

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|-------------|------|--|------------------------------------|----|----------------------------|------|--------------------------|------------------------|
| | | 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) | State whether the following statements are true or false. | | | | [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 | | Attempt any TWO of the following. | | | | [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 |
| | | OR | | | | | | |
| | (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 |

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| 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 |
| | | OR | | | |
| | (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 |
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