



Paper ID : 260682

Printed Page: 1

Subject Code:BOE086

Roll No:

BTECH

(SEM. VIII) THEORY EXAMINATION 2025-26

QUALITY MANAGEMENT

TIME: 3 HRS

M.MARKS: 70

**Note:** Attempt all Sections. In case of any missing data; choose suitably.

## SECTION A

1. Attempt *all* questions in brief.

02 x 7 = 14

| Q no. | Question                                                           | CO  | Level |
|-------|--------------------------------------------------------------------|-----|-------|
| a.    | What is the modern concept of quality as per TQM?                  | CO1 | K2    |
| b.    | Name any one method for evaluation of supplies before procurement. | CO1 | K2    |
| c.    | What is a quality circle?                                          | CO4 | K2    |
| d.    | Name any two categories of quality costs.                          | CO2 | K2    |
| e.    | What does UCL stand for in control charts?                         | CO3 | K2    |
| f.    | What is the full form of MTTF?                                     | CO4 | K2    |
| g.    | Name the Japanese philosophy of continuous improvement.            | CO5 | K2    |

## SECTION B

2. Attempt any *three* of the following:

07 x 3 = 21

| Q no. | Question                                                                                                                     | CO  | Level |
|-------|------------------------------------------------------------------------------------------------------------------------------|-----|-------|
| a.    | Explain the concept of customer focus in quality management. What is the importance of continuous improvement (Kaizen)?      | CO1 | K3    |
| b.    | Write a note on the organization structure and design of quality management. Explain the cost of quality and its components. | CO2 | K3    |
| c.    | Explain the theory of control charts. Describe the construction of Mean ( $\bar{X}$ ) chart and R chart.                     | CO3 | K3    |
| d.    | Describe the process of defect study and identification. How does defect diagnosis differ from simple inspection?            | CO4 | K3    |
| e.    | Discuss the origin and evolution of ISO-9000 series. Explain the benefits of implementing ISO-9000.                          | CO5 | K3    |

## SECTION C

3. Attempt any *one* part of the following:

07 x 1 = 07

| Q no. | Question                                                                                                                               | CO  | Level |
|-------|----------------------------------------------------------------------------------------------------------------------------------------|-----|-------|
| a.    | Explain the concept of benchmarking in quality management. Discuss its types and significance in improving organizational performance. | CO1 | K3    |
| b.    | Describe the quality planning process and its importance in achieving organizational objectives.                                       | CO1 | K3    |



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4. Attempt any *one* part of the following:

07 x 1 = 07

| Q no. | Question                                                                                                                          | CO  | Level |
|-------|-----------------------------------------------------------------------------------------------------------------------------------|-----|-------|
| a.    | Differentiate between centralized and decentralized quality functions with examples. Discuss the human factors affecting quality. | CO2 | K3    |
| b.    | Explain the economics of quality conformance. Discuss the categories of quality costs and how to optimize them.                   | CO2 | K3    |

5. Attempt any *one* part of the following:

07 x 1 = 07

| Q no. | Question                                                                                                                       | CO  | Level |
|-------|--------------------------------------------------------------------------------------------------------------------------------|-----|-------|
| a.    | Explain process capability study. How do control charts help determine whether a process is capable of meeting specifications? | CO3 | K3    |
| b.    | When is a C-chart preferred over a P-chart? Explain the construction and analysis of C-charts.                                 | CO3 | K3    |

6. Attempt any *one* part of the following:

07 x 1 = 07

| Q no. | Question                                                                                                                   | CO  | Level |
|-------|----------------------------------------------------------------------------------------------------------------------------|-----|-------|
| a.    | Define reliability. Explain MTTF and how it differs from MTBF. Discuss strategies for building reliability into a product. | CO4 | K3    |
| b.    | Explain the concept of zero defects and quality circles. Discuss the challenges in implementing a zero-defect culture.     | CO4 | K3    |

7. Attempt any *one* part of the following:

07 x 1 = 07

| Q no. | Question                                                                                                                         | CO  | Level |
|-------|----------------------------------------------------------------------------------------------------------------------------------|-----|-------|
| a.    | Explain the Taguchi method philosophy. Define Quality Loss Function (QLF) and how it differs from traditional tolerances.        | CO5 | K3    |
| b.    | Describe Just-In-Time (JIT) manufacturing. Explain the pull system vs push system. How does JIT expose hidden waste and defects? | CO5 | K3    |