| Question Paper Code | 12186 |
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## B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2023
Seventh Semester
### Mechanical Engineering
### GE8077 - TOTAL QUALITY MANAGEMENT
(Regulations 2017)

Duration: 3 Hours                                                         Max. Marks: 100

### PART - A (10 × 2 = 20 Marks)
Answer ALL Questions

|  |  | Marks, K-Level, CO |
|---|---|---|
| 1. | Recall the definition of the term quality. | 2,K1,CO1 |
| 2. | List the dimensions of service quality. | 2,K1.CO1 |
| 3. | Explain the term employee empowerment. | 2,K1,CO2 |
| 4. | Interpret the term 5s. | 2,K2,CO2 |
| 5. | Identify the objectives of Benchmarking. | 2,K2,CO3 |
| 6. | Organize the stages of FMEA. | 2,K2,CO3 |
| 7. | Show the key elements of TPM. | 2,K1,CO4 |
| 8. | Name the components cost of internal failures. | 2,K1,CO4 |
| 9. | Explain Quality Audits in an organization. | 2,K1,CO5 |
| 10. | Relate QS 9000 with TS 16949 quality system. | 2,K1,CO5 |

### PART - B (5 × 13 = 65 Marks)
Answer ALL Questions

| 11. | a) | What are the barriers to TQM implementation? How to overcome the same? | 13,K2,CO1 |
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**OR**

| | b) | Discuss the implementation principles of TQM and explain the importance of the Management commitment. | 13,K2,CO1 |
|---|---|---|---|

| 12. | a) | Explain the step by step procedure in strategic quality planning. | 13,K2,CO2 |
|---|---|---|---|

**OR**

| | b) | What do you understand by the term quality statements? Elaborate them with examples. | 13,K2,CO2 |
|---|---|---|---|

| 13. | a) | How is a cause-and-effect diagram constructed? Discuss in detail with an example. | 13,K2,CO3 |
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**OR**

*K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create*                  ***12186***

b) Explain in detail the concept of six-sigma with an example. *13,K3,CO3*

14. a) Examine in detail how the house of quality is constructed citing an example. *13,K3,CO4*

**OR**

b) Explain the Objectives, Features, and Structures of quality circle. *13,K2,CO4*

15. a) Explain the steps followed to get ISO 9000 certification for IT industry. *13,K2,CO5*

**OR**

b) Explain briefly the concept and requirements of ISO 14000. *13,K3,CO5*

## PART - C (1 × 15 = 15 Marks)

16. a) Compare and Contrast the contributions of Deming, Juran and Crosby. *13,K3,CO6*

**OR**

b) How is PDSA cycle prepared? Give example and explain it. *13,K3,CO6*