

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2172507****Date:14/05/2019****Subject Name:Quality Engineering & Management****Time:02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

|            |   | MARKS     |
|------------|---|-----------|
| <b>Q.1</b> | (a) What is quality circle?   | <b>03</b> |
|            | (b) What is importance of Benchmarking in improving quality?                            | <b>04</b> |
|            | (c) Write a short note on TQM.  | <b>07</b> |
| <b>Q.2</b> | (a) What is service?  | <b>03</b> |
|            | (b) What is service quality management?   | <b>04</b> |
|            | (c) Classify different quality characteristics for service.                             | <b>07</b> |
|            | <b>OR</b>   |           |
|            | (c) Classify different quality characteristics for product.                             | <b>07</b> |
| <b>Q.3</b> | (a) What is internal failure?   | <b>03</b> |
|            | (b) Explain quality assurance.  | <b>04</b> |
|            | (c) What is prevention cost? Explain which are the main cost that form prevention cost. | <b>07</b> |
|            | <b>OR</b>   |           |
| <b>Q.3</b> | (a) What is external failure?   | <b>03</b> |
|            | (b) Explain quality audit.  | <b>04</b> |
|            | (c) What is appraisal cost? Explain which are the main cost that form appraisal cost.   | <b>07</b> |
| <b>Q.4</b> | (a) What is variable quality characteristic?  | <b>03</b> |
|            | (b) Differentiate between attribute and variable quality characteristic.                | <b>04</b> |
|            | (c) Explain PDCA cycle in detail.   | <b>07</b> |
|            | <b>OR</b>   |           |
| <b>Q.4</b> | (a) What is sampling?   | <b>03</b> |
|            | (b) Explain double sampling plan.   | <b>04</b> |
|            | (c) Explain Strategic Quality Framework.  | <b>07</b> |
| <b>Q.5</b> | (a) What is patent?   | <b>03</b> |
|            | (b) List different intellectual properties.   | <b>04</b> |
|            | (c) Write a short note on Six-Sigma.  | <b>07</b> |
|            | <b>OR</b>   |           |
| <b>Q.5</b> | (a) What is copyright?  | <b>03</b> |
|            | (b) What is the importance of IPR.  | <b>04</b> |
|            | (c) Explain seven quality tools in detail.  | <b>07</b> |

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