

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE- SEMESTER-VII (NEW) EXAMINATION – WINTER 2020****Subject Code:2172507****Date:21/01/2021****Subject Name:Quality Engineering & Management****Time:10:30 AM TO 12:30 PM****Total Marks: 56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

	MARKS
<b>Q.1</b> (a) Explain the process of Benchmarking.	<b>03</b>
(b) Write a short note on quality circle.	<b>04</b>
(c) Explain various dimensions of Quality in brief.	<b>07</b>
<b>Q.2</b> (a) Explain the term quality standards. Give suitable Example.	<b>03</b>
(b) Explain different types of quality audits.	<b>04</b>
(c) Define ISO along with its benefits of the certification. Briefly describe the quality management standard ISO 9000.	<b>07</b>
<b>Q.3</b> (a) Differentiate prevention costs and appraisal costs.	<b>03</b>
(b) Describe Ishikawa's contribution to TQM and fishbone diagram.	<b>04</b>
(c) Enlist Deming's 14 points of his contribution to TQM.	<b>07</b>
<b>Q.4</b> (a) Explain cost of quality of services.	<b>03</b>
(b) Discuss internal and external cost of quality with a suitable example.	<b>04</b>
(c) Briefly explain the eight pillars of TPM.	<b>07</b>
<b>Q.5</b> (a) Differentiate Producer's and Consumer's risks	<b>03</b>
(b) Write a short note on Six-Sigma.	<b>04</b>
(c) What are the advantages of using quality function deployment? What are some key ingredients that are necessary for its success?	<b>07</b>
<b>Q.6</b> (a) Differentiate between variables & attributes.	<b>03</b>
(b) Write a short note on Design of Experiment.	<b>04</b>
(c) Describe OC Curve in brief.	<b>07</b>
<b>Q.7</b> (a) Write short-note on Trade-marks.	<b>03</b>
(b) Differentiate between patent & copyright.	<b>04</b>
(c) Explain double sampling plan in detail.	<b>07</b>
<b>Q.8</b> (a) Discuss Taguchi's loss function in detail.	<b>03</b>
(b) List different intellectual properties.	<b>04</b>
(c) Discuss QFD and its application.	<b>07</b>

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