

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII (NEW) - EXAMINATION – SUMMER 2018

Subject Code: 2181920

Date: 02/05/2018

Subject Name: Quality Engineering(Department Elective III)

Time: 10:30 AM to 01:00 PM

Total Marks: 70

Instructions:

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

		MARKS
Q.1	(a) Define quality engineering.	03
	(b) Define variable and attribute quality characteristics.	04
	(c) Write a short note on quality improvement practices in Indian industries.	07
Q.2	(a) Draw conceptual frame work for quality management.	03
	(b) Analyze the contribution of any one quality guru in your language.	04
	(c) A travel agency is attempting to enter a market where several competitors currently exist. What are the various customer needs that they should address? How will quality be measured?	07
	OR	
	(c) As natural resources become scare, discuss the role of ISO 14000 in promoting good environmental management practices.	07
Q.3	(a) What do you mean by quality awards?	03
	(b) Explain national and International quality awards.	04
	(c) Enumerate importance and application of design of experiments.	07
	OR	
Q.3	(a) Discuss W.Edward's contribution to TQM.	03
	(b) Explain how TQM can be ensured.	04
	(c) Explain and Enumerate the quality documents and systems needed in TQM.	07
Q.4	(a) Define quality function deployment.	03
	(b) Explain quality function deployment failure mode and effect analysis.	04
	(c) Discuss Taguchi's philosophy for quality Improvement. Discuss his loss function and its contributions.	07
	OR	
Q.4	(a) Explain your understanding about importance of quality in service sector.	03
	(b) Explain Six Sigma.	04
	(c) Explain JIT with real field application.	07
Q.5	(a) List meaning each S in 5S.	03
	(b) Describe 5S as base of TPM.	04
	(c) Explain world class manufacturing.	07

OR

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| Q.5 | (a) Characteristics of Service Sectors. | 03 |
| | (b) Short description of real life implementation of quality engineering. | 04 |
| | (c) Write in brief contemporary trends in quality engineering and management. | 07 |
