

GUJARAT TECHNOLOGICAL UNIVERSITY**BE – SEMESTER- VII EXAMINATION-SUMMER 2023****Subject Code: 3172507****Date: 19/06/2023****Subject Name: Quality Engineering and Management****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.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) What do you mean by quality assurance?	03
	(b) Define and discuss about benchmarking.	04
	(c) Explain Taguchi method in experimental design.	07
Q.2	(a) Define quality circle. What are the objectives of the quality circles?	03
	(b) What is the quality management? What are the functions of quality management?	04
	(c) Discuss W.Edward's contribution to TQM.	07
	OR	
	(c) Discuss Juran's contribution to TQM.	07
Q.3	(a) Differentiate between prevention costs and appraisal cost.	03
	(b) Define and discuss TPM.	04
	(c) Discuss your view on quality journey and quality management in India.	07
	OR	
Q.3	(a) What is service quality?	03
	(b) Differentiate between internal failure costs and external failure cost.	04
	(c) Explain in detail cost of quality system.	07
Q.4	(a) Write the limitation of Six Sigma.	03
	(b) Which are the benefits of QFD?	04
	(c) Explain the seven magnificent quality tools.	07
	OR	
Q.4	(a) Define QFD.	03
	(b) Discuss Taguchi's loss function in detail.	04
	(c) Explain the concept of Six Sigma with the help of a Normal Distribution curve.	07
Q.5	(a) What is vendor rating?	03
	(b) What is the role of IPR in today's business environment?	04
	(c) Define the terms Producer's risk and Consumer's risk with respect to O.C curve.	07
	OR	
Q.5	(a) What is an OC curve?	03
	(b) Differentiate between patent and copyright.	04
	(c) Describe the processes of Single and Double sampling plans.	07
