

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER–VIII (NEW) EXAMINATION – SUMMER 2022****Subject Code:2181920****Date:02/06/2022****Subject Name:Quality Engineering****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) Discuss Taguchi Approach.	03
	(b) Explain Fundamental Factors Affecting on Quality	04
	(c) Explain The Role of Quality Engineer in Manufacturing Industry.	07
Q.2	(a) Discuss various Quality Costs	03
	(b) Write a short note on ISO:14000	04
	(c) Explain The Role of KAIZEN in Casting Industries.	07
OR		
	(c) Explain The Concepts of QFD. Also Discuss “House of Quality”	07
Q.3	(a) Write steps in Experimental Design in DOE.	03
	(b) Explain BPR.	04
	(c) Discuss Quality Dimensions in Service Sectors.	07
OR		
Q.3	(a) Differentiate between Lean Manufacturing and Agile Manufacturing.	03
	(b) Discuss TQM Models in details.	04
	(c) What is 5 S? Discuss all “S” with suitable Example.	07
Q.4	(a) What is Benchmarking?	03
	(b) Discuss Six sigma Methodology.	04
	(c) Write Seven Tools of Quality Management.	07
OR		
Q.4	(a) How Quality Circle used in Organization?	03
	(b) Write short note on WCM.	04
	(c) Write Short note on Contribution of Renowned Quality Gurus.	07
Q.5	(a) Write Objectives of Just In Time. Also Explain JIT Layout.	03
	(b) What is Concurrent Engineering?	04
	(c) Explain FMEA with suitable Example.	07
OR		
Q.5	(a) Explain PDCA Cycle.	03
	(b) Write short note on Seven Basic Types of Waste.	04
	(c) Discuss National and International Quality Awards.	07
