Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – WINTER • 2014

Subject Code: 171906		Code: 171906	Date: 29-11-2014	
Subject Name: Quality and Reliability Engineering Time: 10:30 am - 01:00 pm Instructions:		10:30 am - 01:00 pm	Total Marks: 70	
1115		Attempt all questions. Make suitable assumptions wherever necessary.		
Q.1	(a) (b)	Discuss views of different Quality Gurus. Explain 7 New Quality Improvement Tools	07 07	
Q.2	(a) (b)	Explain Failure Mode and Effect analysis (FMEA) Explain Total Quality Control	07 07	
	(b)	OR Discuss TQM Implementation and Limitations	07	
Q.3	(a) (b)	Explain Steps in experimental design Explain KANBAN system	07 07	
	` /	OR		
Q.3	(a) (b)	Briefly explain Taguchi approach Explain Methods of Total Productive Maintenance	07 07	
Q.4	(a)	Short note (1) Cost of Quality (COQ) system (2) Bench Marking	07	
	(b)	Discuss Advantages and Limitation of Six Sigma OR	07	
Q.4	(a)	Short note (1) Discrete and continuous distribution (2) Bench Marking		
	(b)	Explain Concurrent Engineering list out its merits and de	emerits 07	
Q.5	(a)	Explain Reliability in terms of Hazard rate and failure density probability and multiplication rules	y, Conditional 07	
	(b)	Short note (1) Mean time to failure (2) Mean time between failure	07	
		OR		
Q.5	(a)	Short note (1) Failure data analysis (2) Mean time to repair	07	
	(b)	Explain QS 9000 list out its merits and demerits	07	
