

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VII (NEW) EXAMINATION – WINTER 2024

Subject Code:3172507

Date:16-12-2024

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) Explain the term quality with suitable example.	03
(b) Explain the role of International Organization for Standardization.	04
(c) Write a brief note on Quality circle.	07
Q.2 (a) Define: Total Quality Management.	03
(b) What is Quality assurance?	04
(c) Write a short note on Deming's Contribution to TQM.	07
OR	
(c) Write a short note on Juran's Contribution to TQM.	07
Q.3 (a) Define: Total Productive Maintenance.	03
(b) Write a short note on Quality Function Deployment.	04
(c) Write a short note on various types of services with suitable example.	07
OR	
Q.3 (a) Define PDCA cycle.	03
(b) What is the meaning of six sigma? Why it is important?	04
(c) Write a brief note on Prevention cost and appraisal cost.	07
Q.4 (a) Define QFD. Write its application.	03
(b) What is SQC?	04
(c) Write a brief note on Taguchi method of Experimental design.	07
OR	
Q.4 (a) Define Process capability.	03
(b) Explain benefits of quality control.	04
(c) Write a short note on operating characteristic curve.	07
Q.5 (a) Define Patent along with its importance.	03
(b) Explain Continuous sampling plan.	04
(c) Write a short note on vendor rating.	07
OR	
Q.5 (a) What is copyright? Why it is required?	03
(b) Differentiate between single and double sampling plan.	04
(c) Write a note on industrial design and trademark.	07
