

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025***Seventh Semester**Civil Engineering***GE3752 - Total Quality Management****(Common Agricultural Engineering & Chemical Engineering)***Regulations - 2021**Duration : 3 Hrs**Maximum : 100 Marks****PART - A (ANSWER ALL QUESTIONS) (Marks 10*2=20)***

<i>Q.No</i>	<i>Questions</i>	<i>BTL</i>	<i>CO</i>	<i>Marks</i>
1.	Recall any two dimensions of quality.	L1	1	2
2.	Identify factors that improve the quality of a product or service.	L2	1	2
3.	Define customer retention.	L1	2	2
4.	Classify the types of teams commonly used in quality improvement.	L2	2	2
5.	List the seven basic quality control tools.	L1	3	2
6.	Interpret the objectives of attribute charts used in quality analysis.	L2	3	2
7.	Define Total Productive Maintenance (TPM).	L1	4	2
8.	Outline the purpose of Quality Function Deployment (QFD) in design and production.	L2	4	2
9.	Recall the key features of an Environmental Management System (EMS).	L1	5	2
10.	Identify the three primary sections included in QS-9000.	L2	5	2

PART - B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a i Discuss the dimensions of product and service quality in detail.	L2	1	10
	ii Define quality and explain its importance in business.	L2	1	6
	Or			
	b i Define Total Quality Management (TQM) and list its basic concepts.	L2	1	10
	ii Give a brief account of TQM Gurus and their key contributions.	L2	1	6
12.	a i Explain the key elements of Deming's philosophy.	L2	2	10
	ii Define Quality Council and state its main functions.	L2	2	6
	Or			
	b i Define customer satisfaction and explain the Kano model.	L2	2	6
	ii List and briefly describe the types of customer feedback mechanisms.	L2	2	10

13.	a	i	Explain the benchmarking process with suitable examples.	L3	3	8
		ii	Analyze the pitfalls of benchmarking and how they can be avoided.	L3	3	8
			Or			
	b	i	Illustrate the steps in conducting Design FMEA.	L3	3	8
		ii	Compare Design FMEA and Process FMEA with examples.	L3	3	8
14.	a		Describe how QFD helps in improving product development quality.	L3	4	16
			Or			
	b	i	Analyze the importance of performance measures in TPM.	L3	4	8
		ii	Examine how Business Process Reengineering (BPR) supports quality improvement.	L3	4	8
15.	a		Design a complete roadmap for implementing an Environmental Management System (EMS) based on ISO 14001.	L4	5	16
			Or			
	b		Critically assess how integrating ISO 9001 and ISO 14001 can enhance organizational sustainability.	L4	5	16