

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***M.E DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025***Third Semester**Construction Engineering and Management***PCNE2417- Quality Control and Assurance in Construction***Regulations - 2024**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.	Define a Quality Circle.	L1	1	2
2.	Name the key stages of Juran's Trilogy.	L1	1	2
3.	Why is quality-related training crucial for a QMS?	L1	2	2
4.	Mention the key principles of ISO 9001:2015.	L1	2	2
5.	State Taguchi's concept of the "quality loss function".	L2	3	2
6.	Enumerate the term "Inspection and Test Plan" (ITP).	L2	3	2
7.	Distinguish between Quality Assurance (QA) and Quality Control (QC).	L2	4	2
8.	List the human-related factors that critically influence construction quality.	L1	4	2
9.	How do detailed drawings influence construction quality?	L1	5	2
10.	Define "environmental safety" on a construction site.	L1	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 Classify the structure, objectives, and problem-solving process of Quality Circles.	L4	1	16
	Or			
	b Examine the quality management roles and responsibilities of stakeholders in a construction project.	L4	1	16
12.	a Build the purpose of ISO 9000, 9001, and 9004, and clarify how they interrelate.	L3	2	16
	Or			
	b Construct the hierarchy and purpose of ISO 9001 quality system documents like the Quality Manual and Procedures.	L3	2	16
13.	a i Explicate the importance of consumer satisfaction and ergonomics as quality indicators in construction.	L2	3	8
	ii Describe Genichi Taguchi's concepts of "quality loss function" and "robust design".	L2	3	8

Or

	b	i	Describe the contract documents and construction schedules serve as a baseline for ensuring project quality.	L2	3	8
		ii	Discuss the importance of documentation in construction quality management and describe four types of quality records.	L2	3	8
14.	a		Examine the essential methods and techniques required for a comprehensive construction QA/QC program. Or	L4	4	16
	b		Dissect the various dimensions of construction quality and how they are appraised throughout a project.	L4	4	16
15.	a		Develop the key social, environmental, and site safety considerations for large infrastructure projects. Or	L3	5	16
	b		Identify the concept, stages, and application of Life Cycle Costing (LCC) for building projects.	L3	5	16