

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

M.E DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025

First Semester

Construction Engineering and Management

PCNT2401 - Modern Construction Materials

Regulations - 2024

Duration : 3 Hrs

Maximum : 100 Marks

PART - A (ANSWER ALL QUESTIONS) (Marks 10*2=20)

Q.No	Questions	BLT	CO	Marks
1.	Write about annealing of steel.	L2	1	2
2.	What is epoxy coated reinforcement?	L1	1	2
3.	Compare drywalls and anchors.	L2	2	2
4.	Develop a flow chart for the manufacturing process of paint.	L2	2	2
5.	What is reinforced polymer?	L1	3	2
6.	List out the applications of FRP.	L1	3	2
7.	Give the salient features of high-performance concrete.	L1	4	2
8.	What do you mean by aspect ratio?	L2	4	2
9.	Distinguish between smart and intelligent materials.	L2	5	2
10.	Write the significance of Nano concrete.	L1	5	2

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

Q.No	Questions	BLT	CO	Marks
11.	a Discuss the manufacturing process and civil engineering applications of steel.	L2	1	16
	Or			
	b Explain the properties and advantages of aluminum and its products.	L2	1	16
12.	a What are the different waterproofing compounds? Explain any two in detail.	L2	2	16
	Or			
	b Explain the types of non-weathering materials and its uses.	L2	2	16
13.	a List out the different types of FRP and discuss in detail the strengthening of structural element by FRP composites.	L2	3	16
	Or			
	b Explain the Recent applications of glass in construction industry for architectural purpose.	L2	3	16

14.	a	With a stress-strain curves explain the properties of fiber reinforced concrete. Explain the different types of fibers.	L3	4	16
	Or				
	b	What is meant by high performance concrete? Explain the properties, uses and manufacture of high-performance concrete.	L3	4	16
15.	a	Explain the barriers faced in adoption of smart materials in construction industry.	L5	5	16
	Or				
	b	With a Case study explain the applications of smart & Intelligent Materials in construction.	L5	5	16