

Register No : _____

THE KAVERY ENGINEERING COLLEGE

(An Autonomous Institution)

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

Third Semester

Civil Engineering

CE3302 - Construction Materials and Technology

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.	Define the term Efflorescence in bricks.	L3	1	2
2.	Mention the different types of lime used in construction.	L1	1	2
3.	What is TMT bar?	L3	2	2
4.	Define the term seasoning of timber.	L3	2	2
5.	Differentiate between shallow and deep foundation.	L3	3	2
6.	What is damp proofing?	L2	3	2
7.	Distinguish mobile cranes and tower cranes.	L2	4	2
8.	Enlist the key factors to consider while selecting the construction equipment for a project.	L3	4	2
9.	State the importance of construction planning in project management.	L3	5	2
10.	How do you identify the critical path in a network diagram?	L3	5	2

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

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a i What are the important tests conducted on bricks? Discuss their significance.	L3	1	6
	ii Explain the different types of stones used in construction with examples.	L3	1	10
	Or			
	b i Discuss the advantages of using concrete blocks in construction over traditional bricks.	L3	1	6
	ii Explain the manufacturing process of clay bricks.	L3	1	10
12.	a Explain the different types of composite materials used in construction.	L3	2	16
	Or			
	b Describe the applications of FRP and Geo-membranes in earth reinforcement.	L3	2	16

13.	a	Explain about the stone masonry and Brick masonry with sketches.	L3	3	16
		Or			
	b i	Discuss the various methods used for sound insulation and fire protection in a building.	L3	3	8
	ii	Describe different types of roofing systems commonly used in residential buildings.	L3	3	8
14.	a	Describe different types of dewatering systems and pumps used in construction sites.	L3	4	16
		Or			
	b	Discuss the function and application of various vibrators in concrete work.	L3	4	16
15.	a	Explain about the applications of critical path method with an example.	L4	5	16
		Or			
	b	For an activity in a PERT network, the following time estimates are given: Calculate the expected time (TE) and standard deviation (σ) for the activity. Optimistic time = 4 days Most likely time = 6 days Pessimistic time = 10 days	L4	5	16