

Register No : _____

THE KAVERY ENGINEERING COLLEGE

(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL/MAY 2026

Sixth Semester

Civil Engineering

CE3003- Prefabricated Structures

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>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	What is prefabrication?	L1	1	2
2.	Recall the term standardization.	L1	1	2
3.	List out the types of prefabricated structural components.	L1	2	2
4.	Classify the precast large panel.	L2	2	2
5.	Outline the term joint deformation.	L2	3	2
6.	Interpret the term stacking.	L2	3	2
7.	What is shear joint?	L1	4	2
8.	Name the different types of sealants.	L1	4	2
9.	Interpret the term progressive collapse.	L2	5	2
10.	Illustrate equivalent design loads.	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 Explain briefly the general principles of prefabrication with its advantages and disadvantages.	L3	1	16
	Or			
	b Illustrate the erection principles and transportation of prefabricates.	L3	1	16
12.	a Explain the behaviour of roof and floor slabs construction with suitable sketches.	L3	2	16
	Or			
	b Illustrate the behavior of portal frame in precast structures.	L3	2	16
13.	a Construct the suitable design of cross section based on efficiency of materials in detail.	L3	3	16
	Or			
	b Discuss the necessity of demountable precast concrete systems in detail.	L3	3	16

14.	a	Explain different joints of structures.	L3	4	16
		Or			
	b	Label the connection between Beam to Column and Column to foundation and explain it briefly.	L3	4	16
15.	a	Analyze the concept of equivalent design loads for abnormal effects such as Earthquake and Cyclones.	L5	5	16
		Or			
	b i	Examine the codal provisions for Progressive collapse.	L5	5	8
	ii	Analyze the importance of avoidance of progressive collapse.	L5	5	8