

Register No: _____

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

M.E DEGREE END SEMESTER THEORY EXAMINATIONS, NOV /DEC 2024

Second Semester

Construction Engineering Management

CN4201 – Advanced Construction Techniques

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 meant by sinking cofferdam?	RE	1	2
2.	Write any two functions of sheet piles.	UN	1	2
3.	Identify the main purpose of vacuum dewatering in concrete flooring?	RE	2	2
4.	List out the precautions to be taken while erecting light weight components on tall structures?	RE	2	2
5.	Infer the primary objective of rigging in transmission line construction?	RE	3	2
6.	In which situations articulated structures can be adopted?	AP	3	2
7.	List the methods adopted to overcome low member strength in concrete structures.	AN	4	2
8.	Under what situations the use of underpinning is necessary.	EV	4	2
9.	Name any four Engineered demolition techniques for RC Structures.	RE	5	2
10.	Mention the pre-planning activities to be done before demolition of a structure.	EV	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*13 = 65)

<i>Q. No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Describe the procedure involved in underwater construction of diaphragm walls and basement. Or	UN	1	13
	b What is dewatering? And briefly explain the various types of dewatering techniques.	UN	1	13
12.	a Explain the general requirements in Launching techniques for heavy decks. Or	UN	2	13
	b Describe about the pre-stressed concrete used in the High rise structure.	UN	2	13
13.	a Explain about the Bow-string bridge and cable-stayed bridges with neat sketches. Or	EV	3	13
	b Develop the support structures required for heavy equipments and machineries in industries.	EV	3	13

14.	a	Under what condition strengthening of foundation is required? Explain how Beams, columns and slab strengthened by section enlargement technique with the help of neat sketch.	UN	4	13
		Or			
	b	Categorize the different methods of soil stabilization techniques? Explain.	AP	4	13
15.	a	Evaluate the procedure for demolishing main structural members like columns, beams and slabs with the help of neat sketch.	AP	5	13
		Or			
	b	Explain the advantages and limitations of robotic demolition machines.	AP	5	13

*PART – C (Marks 1*15 = 15)*

<i>Q. No</i>		<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
16.	a	Classify the different Tunneling techniques with respect to its suitability of implementation.	AN	1	15
		Or			
	b	Categorize the various erection techniques used in the construction of tall structures with case studies.	AN	2	15