

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

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

First Semester

Construction Engineering and Management

PCNT2403 / CN4103 - Construction Equipment and Management

Regulations – 2021 & 2024

Duration : 3 Hrs

Maximum : 100 Marks

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

Q.No	Questions	BLT	CO	Marks
1.	List down the various factors which cause an accident.	RE	1	2
2.	Define cost control in equipment planning.	RE	1	2
3.	How can scrapers help to increase the speed of construction?	UN	2	2
4.	What is the role of 'finishing equipment' in construction industry?	RE	2	2
5.	List the factors affecting the selection of drilling equipment.	RE	3	2
6.	Enlist the different types of dewatering techniques.	RE	3	2
7.	Write about concrete pouring equipment.	RE	4	2
8.	How does asphalt paver's function?	UN	4	2
9.	List the components of forklifts.	RE	5	2
10.	Write about industrial trucks.	RE	5	2

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

Q.No	Questions	BLT	CO	Marks
11.	a List down and discuss the factors which affect the selection of construction equipment. What cost components you will consider while deciding the cost of owning and operating?	UN	1	13
	Or			
	b i Explain briefly the methods of calculating depreciation.	UN	1	6
	ii Briefly discuss about safety management.	UN	1	7
12.	a i Justify the statement "Tractor is basic equipment for earth moving machinery". Describe its construction.	UN	2	7
	ii Explain the factors governing the selection of equipment for earthwork.	UN	2	6
	Or			
	b i Mention the various types of earthwork equipment and also give their uses.	UN	2	7
	ii Explain about different types of self-loading scrapers.	UN	2	6
13.	a Illustrate about the different types of drilling machines used at construction project.	AP	3	13

Or

	b	i	Explain the process of dewatering and the uses of stand by plant equipment for underground open excavated.	AP	3	7
		ii	Illustrate the procedure involved in tunneling techniques.	AP	3	6
14.	a	i	List out and discuss about the different aggregate production equipment's.	AP	4	7
		ii	Explain about different types of sleep-foot rollers.	AP	4	6
			Or			
	b		Enumerate the factors in selecting a pump. Discuss about the various pumping equipment used in construction industry.	AP	4	13
15.	a	i	Discuss any three-hoisting equipment's with neat sketch.	AP	5	6
		ii	Explain the modern trends in material handling.	AP	5	7
			Or			
	b		Discuss the advantages and disadvantages of a belt conveyor system. Show their basic parts and discuss their function.	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	Explain in detail the importance of concrete mixtures in construction work. Mention the points which are to be carefully paid attention to when the concrete mixtures are used.	AN	4	15
			Or		
	b	What are the components of truck cycle time? Discuss the advantages and disadvantages of small trucks compared with large trucks.	AN	2	15