

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

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

Fifth Semester

Civil Engineering

CE3009 - Construction Equipment and Machinery

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.	Write the role of equipment management.	RE	1	2
2.	Define capacity of equipment.	UN	1	2
3.	What are the functions of scrappers?	RE	2	2
4.	Define dredging.	UN	2	2
5.	What are all the types of dredgers available in construction field?	RE	3	2
6.	Write the advantages and disadvantages of jet pump.	RE	3	2
7.	What is the purpose of crashing units?	RE	4	2
8.	Define reduction ration of crushers.	UN	4	2
9.	Write any five types of conveyers used in construction industries.	UN	5	2
10.	Define the degree of freedom in trucks.	UN	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 i Discuss in detail the planning procedure of equipments in Construction projects.	RE	1	8
	ii Suggest the steps involved in cost control and cost reduction.	RE	1	5
	Or			
	b Explain the principal and various steps involved in replacement analysis with cost comparing.	RE	1	13
12.	a i Write details about heavy soil compaction equipments.	RE	2	7
	ii Discuss in detail the various parts, applications and output of bulldozer.	UN	2	6
	Or			
	b What is earth moving operation? Explain the components and operations of tractor with neat sketch.	RE	2	13

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| 13. | a | i | Explain about any one type of mobile crane in detail. | RE | 3 | 7 |
| | | ii | Explain in detail the equipments used for dredging. | RE | 3 | 6 |

Or

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| | b | | Explain in detail various methods adopted for dewatering in foundation trenches. | RE | 3 | 13 |
| 14. | a | | For flexible road construction project. Describe the uses of asphalt plant, asphalt pavers, asphalt compacting equipment. | UN | 4 | 13 |

Or

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| | b | | Discuss about the equipment used for concrete batching, mixing and ready mix concrete equipment with pouring equipment in a major dam construction project. | UN | 4 | 13 |
| 15. | a | | Explain types of conveyors with their advantages and disadvantages. | RE | 5 | 13 |

Or

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| | b | | Explain the materials handling equipment which are suitable to the construction of high rise building. | RE | 5 | 13 |
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*PART – C (Marks 1*15 = 15)*

<i>Q.No</i>		<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
16.	a	Write short notes on the following: i. Feeders and screening crushers equipment ii. Batching and mixing equipments	UN	4	15
		Or			
	b	Explain the equipments required for demolition of a building in metro city area.	UN	3	15