CBCS SCHEME

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BAU405D

Fourth Semester B.E./B.Tech. Degree Examination, June/July 2024
Earth Moving Equipment

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

		Module – 1	M	L	C
Q.1	a.	Describe the working principle of Bulldozers with suitable sketch.	10	L3	CO1
	b.	Discuss the advantages, disadvantages and applications of Bulldozers.	10	L2	CO1
		OR			
Q.2	a.	Explain the working principle of excavators with suitable figure.	10	L3	CO1
	b.	Describe the working of Motor graders with relevant sketch.	10	L3	CO1
		Module – 2			
Q.3	a.	Explain the turbochargers in earth moving equipment with relevant figures.	10	L2	CO2
	b.	Describe the drive sprockets used in earth moving equipment with suitable figure.	10	L3	CO2
		OR			
Q.4	a.	Describe the working Rubber spring suspension with suitable figure.	10	L3	CO2
	b.	Explain tyre and tracked vehicles in brief with a suitable simple labelled diagram.	10	L3	CO2
		Module – 3			
Q.5	a.	Discuss the compound transmission with suitable figure.	10	L3	CO3
	b.	Discuss the planetary transmission with a labelled diagram.	10	L3	CO3
		OR			
Q.6	a.	Describe the hydro shift automatic transmission with suitable figure.	10	L2	CO4
	b.	Explain double reduction final drives with suitable figure.	10	L2	CO4
		Module – 4			
Q.7	a.	Discuss the directional control valves with suitable figure.	10	L2	CO4
	b.	Describe the various components of hydraulic systems.	10	L3	CO4
		OR			
Q.8	a.	Explain the various hydraulic cylinders with suitable figure.	10	L2	CO4
	b.	Discuss the pressure control valves with suitable figure.	10	L3	CO4
		Module – 5			
Q.9	a.	Explain the selection of machines based on type of soil.	10	L1	CO5
	b.	Explain the selection of machines based on the haul distance and weather condition.	10	L2	CO5
		OR			
Q.10	a.	Discuss the various safety methods for earth moving equipment.	10	L3	CO5
	b.	Describe the purpose and advantages of maintenance schedules.	10	L3	CO5

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