

CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--

BAU405D

Fourth Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025 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.	With a neat sketch and explain "Hydraulic Type" power shovel.	10	L2	CO1
	b.	Describe the advantages and limitations of dragline equipment.	10	L1	CO1
OR					
Q.2	a.	Comparison between wheel dozer and crawler dozer.	10	L4	CO1
	b.	Write the types of earth moving equipments.	10	L1	CO1
Module – 2					
Q.3	a.	Explain the principle and working of turbocharger, with a neat sketch.	10	L2	CO2
	b.	With a neat sketch explain water cooling system in engines.	10	L2	CO2
OR					
Q.4	a.	What are the drive sprockets? With simple sketch explain.	10	L2	CO2
	b.	Write the advantages and disadvantages of rubber spring suspension system.	10	L3	CO2
Module – 3					
Q.5	a.	Comparison between Automatic Transmission System (AT) and Continuously Variable Transmission System (CVT).	10	L4	CO3
	b.	Explain with a sketch double reduction final drive.	10	L2	CO3
OR					
Q.6	a.	Define tripple countershaft transmission system with a simple sketch.	10	L2	CO3
	b.	Why differtials are used in automobiles? What is its importance?	10	L2	CO3
Module – 4					
Q.7	a.	Explain with a neat sketch vane pump and gear pump used in hydraulic system.	10	L2	CO4
	b.	Define flow control valve with a sketch.	10	L2	CO4
OR					
Q.8	a.	With a simple sketch explain single acting cylinder.	10	L2	CO4
	b.	Write flow chart of hydraulic system and explain the components.	10	L2	CO4
Module – 5					
Q.9	a.	What are the factors to be considered for selection of constructional equipments?	10	L3	CO5
	b.	How to choose the right earth moving equipment for a mining project.	10	L2	CO5
OR					
Q.10	a.	On what basis excavators are selected for earth moving operation?	10	L2	CO5
	b.	What are the safety methods used for earth moving equipments?	10	L2	CO5
