## Third Semester B.E./B.Tech. Degree Examination, June/July 2025 Engineering Geology

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.

	T -	Module – 1	M	L	C
Q.1	a.	Explain briefly the internal structure of earth.	8	L2	CO1
	b.	Explain the role of geology in field of civil engineering.	6	L2	CO1
	c.	What are landslides? Describe the causes and control measures.	6	L2	COI
		OR			
Q.2	a.	What is an Earthquake? What are the causes and effects of earthquake?	10	L1	CO1
	b.	Write a short note on: i) Tsunami ii) Cyclones	10	L2	CO1
		Module – 2			
Q.3	a.	What are the requirements of good building stones?	10	L1	CO2
	b.	What is mineral? Define, describe the different physical properties which helps in the identification of minerals.	10	L2	CO2
		OR			
Q.4	a.	Describe the following with mineral examples:  i) Luster and its types  ii) Fracture and its types  iii) Hardness  iv) Structure	10	L2	CO2
	b.	Describe any two of following minerals: i) Quartz ii) Hematite iii) Pyrite iv) Mica	10	L2	CO2
		Module – 3			
Q.5	a.	What is Weathering? Explain causes and types of weathering.	8	L1	CO3
72	b.	What is Soil? Explain soil profile.	6	L2	CO3
	-	Explain soil Horizon with neat sketch.	6	L2	CO3

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Q.6	a.	Explain the effects of weathering on monumental rocks.	10	L1	
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	b.	What are the different types of soil? Differentiate between black cotton soil	10	L2	
		and lateritic soil.			
		Module – 4			
Q.7	a.	Define the terms, i) Dip ii) Strike and iii) Outcrop	8	L1	
	b.	What is fold? With a neat diagram, describe the different parts of fold.	6	L2	
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	c.	What is fault? With a neat diagram, describe the different parts of fault.	6	L2	
		OR			
Q.8	a.	What is Unconformity? Explain the types of unconformity.	10	L1	
	b.	Name different types of faults. What are the engineering considerations of	10	L2	
		faults in civil engineering projects?			
		Module – 5			
Q.9	a.	What is Igneous Rock? Give the classification of Igneous Rocks based on	10	L1	
		origin.			
	b.	Explain the primary structures in sedimentary rocks.	10	L2	
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Q.10	a.	Explain with a neat sketch, ground water investigation by electrical resistivity method.	10	L1	
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	b.	What are the factors affecting permeability?	10	L2	