## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## **BE - SEMESTER-IV EXAMINATION – SUMMER 2025**

Subject Code:3142208 Date:17-05-2025

**Subject Name: Mining Geology** 

Time:10:30 AM TO 01:00 PM Total Marks:70

## **Instructions:**

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.
- 4. Simple and non-programmable scientific calculators are allowed.

			MARKS
Q.1	(a)	What is study of rock?	03
	<b>(b)</b>	What are types of rock how their formation takes place?	04
	(c)	Explain Igneous textures.	07
Q.2	(a)	What is metamorphic rock?	03
	<b>(b)</b>	Explain formation of sedimentary rocks.	04
	(c)	What are the textures of sedimentary rocks?	07
		OR	
	(c)	Describe types of volcanoes.	07
Q.3	(a)	What is sedimentary rock?	03
	<b>(b)</b>	How metamorphic rocks are formed?	04
	<b>(c)</b>	What are the tectures of metamorphic rocks?	07
		OR	
Q.3	(a)	What is tremor?	03
	<b>(b)</b>	How earthquake scaling is done?	04
	(c)	Write note on seismic zones of India.	07
Q.4	(a)	Define Volcano.	03
	<b>(b)</b>	What are different types of Volcanoes?	04
	(c)	Explain different structures of Igneous rocks.	07
		OR	
Q.4	(a)	Define schistosity.	03
	<b>(b)</b>	Ecplain dyke and sill as structure.	04
	(c)	Explain the rocks – Conglomerate, Gneiss, Basalt.	07
Q.5	(a)	What is lineation?	03
	<b>(b)</b>	Write a note on Deccan Trap.	04
	(c)	How geology affects tunnel work?	07
		OR	
Q.5	(a)	Define tunnel	03
	<b>(b)</b>	What are problems in tunnel excavation?	04
	(c)	How landslide can be prevented?	07

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