

Enrollment No./Seat No.:

GUJARAT TECHNOLOGICAL UNIVERSITY
Bachelor of Engineering - SEMESTER - III EXAMINATION - WINTER 2025

Subject Code: BE03022041

Date: 22-12-2025

Subject Name: Mining Geology - I

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 earth science?	03
(b) What is remote sensing?	04
(c) What branches of geology are useful in mining activities?	07
Q.2 (a) What degradation process?	03
(b) Explain mineralogy.	04
(c) Explain meandering process of river.	07
OR	
(c) Describe different physical properties of minerals.	07
Q.3 (a) Explain erosional work of wind.	03
(b) What is dip and strike?	04
(c) Explain fold and fault	07
OR	
(a) Explain typical folds with different terms.	03
(b) Describe quartz, mica, orthoclase	04
(c) Explain plate tectonics	07
Q.4 (a) What is weathering?	03
(b) Explain geological maps.	04
(c) Classify fold on the basis of fold axis.	07
OR	
(a) What is aerial photography?	03
(b) Explain continental drift.	04
(c) What is geophysical exploration?	07
Q.5 (a) Explain geomatics.	03

(b) Write a note on remote sensing application in mining engineering. **04**

(c) Classify fault on the basis of axial plane. **07**

OR

(a) What is pitting and trenching? **03**

(b) Explain geological cross section. **04**

(c) Explain ground water erosion topography. **07**
