

Enrollment No./Seat No.:

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

Subject Code: 3132203

Date: 06-06-2025

Subject Name: Geology

Time: 02:30 PM TO 05:00 PM

Total Marks: 70

Instructions

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

	Marks
Q.1 (a) Define Geology.	03
(b) State Internal structure of earth with diagram.	04
(c) What is mineral? What are properties of mineral and explain any two with example.	07
Q.2 (a) What are different branches of geology?	03
(b) Explain yardangs and mushroom rock.	04
(c) Classify the types of fold on the basis of axial plane.	07
OR	
(c) Describe Sand Dunes.	07
Q.3 (a) What are type of joints?	03
(b) Explain transportation process of wind erosion.	04
(c) Describe plate movement and its effect.	07
OR	
(a) Explain plate tectonics	03
(b) Explain transportation process of water erosion	04
(c) Describe plate movement	07
Q.4 (a) What is chemical weathering?	03
(b) Describe the arvalis of Gujarat and Rajasthan	04
(c) Differentiate types of Faults	07
OR	
(a) Define physical weathering.	03
(b) Explain types of glaciers	04
(c) Describe physical process of weathering.	07
Q.5 (a) Define remote sensing.	03

- (b) What are the advantages of remote sensing? 04
- (c) Explain subsurface exploration process. 07
- OR**
- (a) Define stratigraphy. 03
- (b) Explain types of folds. 04
- (c) Classify fault on the basis of fault axis. 07
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III (NEW) EXAMINATION – SUMMER 2024

Subject Code:3132203

Date:06-07-2024

Subject Name: 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) Define Mineral.	03
	(b) What are the elements of remote sensing?	04
	(c) Explain different branches of geology?	07
Q.2	(a) Define the layers of Earth.	03
	(b) What important branches of geology needed in Mining Engineering?	04
	(c) Describe the internal structure of earth with neat sketch.	07
	OR	
	(c) Explain the theory of Plate Techtonics.	07
Q.3	(a) What is Weathering?	03
	(b) Differentiate Weathering and Erosion.	04
	(c) Write a note on river valley.	07
	OR	
Q.3	(a) Define hardness and streak of mineral.	03
	(b) Describe Form and Structure of a mineral as a property.	04
	(c) Write a note on Sand dunes.	07
Q.4	(a) Define Continental Drift.	03
	(b) Describe the types of plates.	04
	(c) Explain bedding plain, dip and strike.	07
	OR	
Q.4	(a) Define fault.	03
	(b) Classify the fault on basis of axial plane.	04
	(c) Explain fold and its type.	07
Q.5	(a) Define Unconformity.	03
	(b) What is aerial photography?	04
	(c) Explain Subsurface exploration.	07
	OR	
Q.5	(a) Define river delta.	03
	(b) Explain in detail process of chemical weathering.	04
	(c) Write a note on Sand dunes.	07

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III(NEW) EXAMINATION – SUMMER 2023****Subject Code:3132203****Date:01-08-2023****Subject Name:Geology****Time:02:30 PM TO 05:00 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 are type of joints?	03
	(b) Explain transportation process of wind erosion.	04
	(c) Classify the types of fold on the basis of axial plane.	07
Q.2	(a) What is plate tectonics?	03
	(b) Explain yardangs and mushroom rock.	04
	(c) Explain internal structure of earth with diagram.	07
	OR	
	(c) What is Delta? Explain types of delta and its formation.	07
Q.3	(a) What are different agents of weathering?	03
	(b) Describe the Mesozoics of Gujarat and Rajasthan	04
	(c) Describe Sand Dunes.	07
	OR	
Q.3	(a) Define Mineral and give its type.	03
	(b) Explain structural geology?	04
	(c) Explain color and streak as mineral properties.	07
Q.4	(a) What is Weathering? Explain various physical and mechanical properties of Weathering.	03
	(b) Explain minerals physical properties	04
	(c) Describe plate movement and its effect.	07
	OR	
Q.4	(a) How remote sensing is used for mineral exploration?	03
	(b) List the limitations of percussive drilling.	04
	(c) Differentiate types of Fault.	07
Q.5	(a) What is remote sensing?	03
	(b) Explain types of Unconformity.	04
	(c) Classify the types of fault on the basis of relative movement.	07
	OR	
Q.5	(a) Explain aerial photography.	03
	(b) Explain in detail process of chemical weathering.	04
	(c) Explain meandering and Ox-bow lake.	07

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– III (NEW) EXAMINATION – SUMMER 2022****Subject Code:3132203****Date:18-07-2022****Subject Name:Geology****Time:02:30 PM TO 05:00 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 application of geology in mining engineering?	04
	(c) Explain internal structure of earth with diagram.	07
Q.2	(a) What is plate tectonics?	03
	(b) Explain yardangs and mushroom rock.	04
	(c) Describe Sand Dunes.	07
	OR	
	(c) What is Delta? Explain types of delta and its formation.	07
Q.3	(a) What are different agents of weathering?	03
	(b) How erosion by ground water is done?	04
	(c) Describe plate movement and its effect.	07
	OR	
Q.3	(a) What is Mineral?	03
	(b) Explain structural geology?	04
	(c) Explain color and streak as mineral properties.	07
Q.4	(a) Explain feldspar family.	03
	(b) Explain minerals physical properties	04
	(c) Explain types of fold.	07
	OR	
Q.4	(a) State 3 laws of stratigraphy?	03
	(b) What is an out crop? Discuss factors which help in constructing the geological section.	04
	(c) Differentiate types of Fault.	07
Q.5	(a) What is remote sensing?	03
	(b) Explain types of Unconformity.	04
	(c) Explain Vindhyan super group.	07
	OR	
Q.5	(a) Explain aerial photography.	03
	(b) Write a note on geological time scale of earth.	04
	(c) Explain meandering and Ox-bow lake.	07
