

GUJARAT TECHNOLOGICAL UNIVERSITY

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

Subject Code:3132203

Date:10-12-2024

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) What is erosion?	03
(b) Explain transportation process of water erosion.	04
(c) Classify the types of fault on the basis of axial plane.	07
Q.2 (a) What is Earth Science?	03
(b) Describe various branches of Geology.	04
(c) Explain internal structure of earth with diagram.	07
OR	
(c) What is river meandering? Explain ox-bow lake formation.	07
Q.3 (a) What are different agents of weathering?	03
(b) Explain Mushroom rock.	04
(c) Describe Continental drift.	07
OR	
Q.3 (a) Define Mineral.	03
(b) Explain fold and its part with neat diagram?	04
(c) Explain color and streak as mineral properties.	07
Q.4 (a) Write parts of Internal structure of Earth.	03
(b) Explain physical properties of minerals.	04
(c) Describe theory of plate tectonics and its effects.	07
OR	
Q.4 (a) Application aerial photos in mining?	03
(b) Explain types of fold.	04
(c) Differentiate types of Fault.	07
Q.5 (a) What is remote sensing?	03
(b) Explain types of Unconformity.	04
(c) Explain physical properties of Quartz, Plagioclase, Hematite.	07
OR	
Q.5 (a) Explain dip and strike.	03
(b) Describe Aravalli super group.	04
(c) Describe methods of sub-surface exploration.	07

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III (NEW) EXAMINATION – WINTER 2023

Subject Code:3132203

Date:25-01-2024

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)	What is geology?	03
	(b)	What study of geology is important for mining engineers?	04
	(c)	What are different branches of geology and explain them.	07
Q.2	(a)	Name three layers of earth.	03
	(b)	Explain internal structure of earth with neat diagram.	04
	(c)	Explain theory of plate tectonics.	07
		OR	
	(c)	Explain erosion, weathering, denudation.	07
Q.3	(a)	Define mineral.	03
	(b)	Enlist physical properties of mineral. Explain any two of them.	04
	(c)	Write a note on continental drift.	07
		OR	
Q.3	(a)	List erosional features of wind	03
	(b)	Explain sand dunes.	04
	(c)	Describe the depositional features of water.	07
Q.4	(a)	Define ox-bow lake.	03
	(b)	Explain dip and strike.	04
	(c)	What is fold? Give classification of fold.	07
		OR	
Q.4	(a)	Define fault.	03
	(b)	Classify fault on the basis of axial plane.	04
	(c)	What is the importance of geological maps in mining?	07
Q.5	(a)	What is remote sensing?	03
	(b)	What are the elements of remote sensing?	04
	(c)	Write a note on geophysical exploration.	07
		OR	
Q.5	(a)	Define stratigraphy.	03
	(b)	What is geological timescale?	04
	(c)	Describe aerial photography.	07

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER- III(NEW) EXAMINATION – WINTER 2022****Subject Code:3132203****Date:27-02-2023****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 is Geology?	03
	(b) What are the uses of geology in mining engineering?	04
	(c) Explain the sections of earth with diagram.	07
Q.2	(a) What are the agents of weathering?	03
	(b) What are the erosional features of wind erosion?	04
	(c) What are the depositional features of wind?	07
	OR	
	(c) What are the depositional features of water?	07
Q.3	(a) What is plate movement?	03
	(b) How erosion by ground water is done?	04
	(c) What are the types of plate movement and how it works?	07
	OR	
Q.3	(a) Give definition of mineral.	03
	(b) What is structural geology?	04
	(c) Explain Form and structure, hardness as mineral properties.	07
Q.4	(a) Explain quartz family.	03
	(b) Explain minerals physical properties	04
	(c) Describe types of fold.	07
	OR	
Q.4	(a) What are laws of stratigraphy?	03
	(b) How fold are recognized in field?	04
	(c) Differentiate types of Fault.	07
Q.5	(a) What is strike and dip?	03
	(b) Explain types of Unconformity.	04
	(c) Explain Vindhyan super group.	07
	OR	
Q.5	(a) Explain aerial photography.	03
	(b) Define terms- pitting, trenching, shaft sinking	04
	(c) Note on use of aerial photos for mineral reconnaissance.	07
