

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV (NEW) EXAMINATION – WINTER 2023****Subject Code:3142208****Date: 06-02-2024****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) Define structural geology.	03
	(b) How are rocks formed?	04
	(c) Explain the classification of Igneous rocks.	07
Q.2	(a) Define aggradational geomorphic process.	03
	(b) What are the geological causes of earthquake?	04
	(c) Explain the P, S and L waves of earthquake.	07
	OR	
	(c) What is volcano? Explain the type of volcanoes.	07
Q.3	(a) How are Igneous rocks formed?	03
	(b) Give structures of volcanic rocks.	04
	(c) Explain the textures and structures of Igneous rocks.	07
	OR	
Q.3	(a) Define sedimentary rocks.	03
	(b) How are sedimentary rocks formed?	04
	(c) What are the texture and structure of sedimentary rock?	07
Q.4	(a) Define metamorphic rocks.	03
	(b) What are the agents of metamorphism?	04
	(c) What are the texture and structures of metamorphic rocks?	07
	OR	
Q.4	(a) Define joints.	03
	(b) What is schistosity? Explain.	04
	(c) Describe the different types of unconformities?	07
Q.5	(a) What is a tunnel?	03
	(b) Classify the types of tunnels.	04
	(c) What are the geological hazards in construction of a tunnel?	07
	OR	
Q.5	(a) What is landslide?	03
	(b) How landslides can be prevented?	04
	(c) Explain the mesozoics of Gujarat.	07
