

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-IV (NEW) EXAMINATION – WINTER 2024****Subject Code:3142208****Date:26-11-2024****Subject Name:Mining 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 importance of petrology in Mining?	03
	(b) Write a note on seismology.	04
	(c) Describe type of Igneous rocks.	07
Q.2	(a) How are igneous rocks formed?	03
	(b) Write a note on stratification.	04
	(c) Explain textures of sedimentary rocks	07
	OR	
	(c) Define Dam? Discuss geological hurdles in the design of a Dam.	07
Q.3	(a) List out different types of Metamorphic structures.	03
	(b) Write a note on types of volcano.	04
	(c) Describe how metamorphic rocks are formed?	07
	OR	
Q.3	(a) What is texture?	03
	(b) Give the difference between a fault and a fold.	04
	(c) Describe various textures observed in Igneous rocks.	07
Q.4	(a) Describe how mountains are formed.	03
	(b) Describe the “mesozoics of Gujarat”.	04
	(c) Discuss what geological factors influence the construction of tunnel.	07
	OR	
Q.4	(a) Explain the causes of earthquake.	03
	(b) Describe different agents of metamorphism.	04
	(c) Classify and describe Synite, Quartzite, Shale.	07
Q.5	(a) What is landslide?	03
	(b) Describe structures of metamorphohic rocks.	04
	(c) What are the reasons of landslide?	07
	OR	
Q.5	(a) What is schistosity?	03
	(b) Describe Thar desert.	04
	(c) Describe crystallization process of magma.	07
