

GUJARAT TECHNOLOGICAL UNIVERSITY

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

Subject Code:3142208

Date:01-07-2024

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) Importance of petrology in Mining Engineering?	03
(b) What are different Seismic Zones of India?	04
(c) How Sedimentary Rocks are classified?	07
Q.2 (a) Define igneous rocks formation.	03
(b) Write a note on Schistosity.	04
(c) Explain different structures of Igneous rocks	07
OR	
(c) What is Dam? Evaluate the geological issues to be taken care in the design of a Dam.	07
Q.3 (a) Define sedimentary rocks.	03
(b) How are sedimentary rocks formed?	04
(c) Describe how metamorphic rocks are formed?	07
OR	
Q.3 (a) Define texture and structure?	03
(b) Differentiate a fault and a fold.	04
(c) Explain textures observed in sedimentary rocks types.	07
Q.4 (a) Write agents of metamorphism.	03
(b) Discuss “Jurassics of Kutch”.	04
(c) Discuss how the geological issues that are encountered in selection of tunnel sites.	07
OR	
Q.4 (a) Define earthquake.	03
(b) Describe kinds of metamorphism.	04
(c) Classify and describe Basalt, Limestone, and Marble.	07
Q.5 (a) Define landslide?	03
(b) What are typical structures of metamorphic rocks?	04
(c) How landslide can be prevented?	07
OR	
Q.5 (a) Define Sill and Dyke?	03
(b) What are different types of mountain?	04
(c) Describe types of Volcanoes.	07
