Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–IV(OLD) • EXAMINATION – WINTER 2016

Subject Code:142203 **Date:23/11/2016**

Subject Name:Geology-2

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.**

Q.1	**(a)**	Define Earthquake? How is it measured? Also give seismic zones of India.	**07**
	(b)	What are Igneous ricks? Give tabular classification of Igneous rocks.	**07**
Q.2	**(a)**	What are the types of Mountain? Differentiate Mountains on the basis of genesis.	**07**
	(b)	Classify the Igneous rocks on the basis of textures and structures.	**07**
		OR	
	(b)	Explain the Petrological characteristics of – Granite, Gabbro, Rhyolite, Sandstone, Dolomite, Phyllite, and Gneiss.	**07**
Q.3	**(a)**	Explain the formation of Sedimentary rocks. Explain types of Sedimentary rocks.	**07**
	(b)	What are the geological criteria for selection of a dam site?	**07**
		OR	
Q.3	**(a)**	Classify the Sedimentary rocks on the basis of textures and structures.	**07**
	(b)	What is tunnel? What are the geological factors affecting in the design of a tunnel?	**07**
Q.4	**(a)**	Write a note on Mesozoics of Gujarat and Rajasthan.	**07**
	(b)	Explain the types of Metamorphism.	**07**
		OR	
Q.4	**(a)**	Explain different metamorphic facies and grade.	**07**
	(b)	Write a note on Thar desert.	**07**
Q.5	**(a)**	Write short note on Lineation and Schistosity	**07**
	(b)	Explain Seismic zones of India.	**07**
		OR	
Q.5	**(a)**	Write short note on Indogangetic alluvium.	**07**
	(b)	Write short note on Schistosity and joints.	**07**

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