

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE- IV<sup>th</sup> SEMESTER-EXAMINATION – MAY/JUNE- 2012****Subject code: 142203****Date: 29/05/2012****Subject Name: Geology - 2****Time: 10:30 am – 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.

**Q.1** (a) What is the difference between magma and lava? Explain the various structures developed due to mobility of magma or lava in igneous rocks. **07**

(b) What is metamorphism? Explain factors of metamorphism. **07**

**Q.2** (a) Write down the various deposits of non-clastic sedimentary rocks formed by chemical and organical processes. **07**

(b) What is an igneous intrusion? Explain discordant type of igneous intrusions in igneous rocks. **07**

**OR**

(b) Explain types of metamorphism. **07**

**Q.3** (a) What are the Isoseismals? Add a note on tectonic earthquakes. **07**

(b) What is volcano? Classify the volcanoes on the basis of their state of activity. **07**

**OR**

**Q.3** (a) What are the seismic waves? Write a note on magnitude of an earthquake. **07**

(b) Explain the stages of development for tectonic mountains. **07**

**Q.4** (a) What is the difference between joint and fault? What are the causes of jointing? **07**

(b) Give the structural investigations in rocks at dam sites. **07**

**OR**

**Q.4** (a) Explain schistosity and lineation in rocks **07**

(b) Explain preventive measures for landslides. **07**

**Q.5** (a) Write a note on Thar of Rajasthan. **07**

(b) Give the distribution, lithology, economy and life of Lower Gondwana system. **07**

**OR**

**Q.5** (a) Write a note on Jurassic of spiti. **07**

(b) Write down lithological characters and origin of Indo-gangetic Alluvium. **07**

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