

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. Sem-IV Examination June 2010

Subject code: 142203

Subject Name : GEOLOGY- 2

Date: 19 / 06 / 2010

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) Discuss the crystallization of Unicomponent magma with diagram. **07**
(b) Discuss the origin of sedimentary rocks giving examples. **07**
Q.2 (a) Explain Prof. H. F. Reid's "Elastic Rebound Theory". **07**
(b) Why volcanic eruption occurs? Give the types of volcanoes based on their activity with suitable examples. **07**

OR

- (b) Write a note on Solid volcanic products and the Pacific ring of fire. **07**
Q.3 (a) What is the importance of texture? Discuss any three textures of igneous rocks. **07**
(b) Describe sedimentary structures giving diagrams. **07**

OR

- Q.3** (a) Discuss concordant intrusive structures of igneous rocks. **07**
(b) Describe the agents responsible for the process of metamorphism. **07**
Q.4 (a) How faults differ from joint? Discuss the formation of columnar joints. **07**
(b) Describe the Deccan Trap system with reference to mode of origin, age and economic importance. **07**

OR

- Q.4** (a) Discuss how Folds and Faults are identified in geological maps. **07**
(b) .Write an account of the Lower Gondwana rocks of Peninsular India. **07**
Q.5 (a) What are tunnels? Discuss various types of tunnels with examples. **07**
(b) Write a note on selection of dam site. **07**
OR
Q.5 (a) Describe the preventive measures adopted to avoid landslide? **07**
(b) Which geological criteria are considered in tunneling project? **07**
