

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III • EXAMINATION – WINTER 2013****Subject Code: 132203****Date: 26-11-2013****Subject Name: Geology - I****Time: 02.30 pm - 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) What are the different branches of Geology? What are their applications to engineering geology? **07**
(b) What are the different physical properties of minerals? Explain Hardness and Streak. **07**
- Q.2** (a) What is plate tectonics? Explain different types of plate boundaries. **07**
(b) Explain the process of physical weathering. **07**
- OR**
- (b) Explain the process of chemical weathering. **07**
- Q.3** (a) Write about erosional features of wind. **07**
(b) Write a note on pre forming minerals. **07**
- OR**
- Q.3** (a) Explain a typical fold terminology with neat diagram. **07**
(b) Classify the fault on the basis of position of fault plane. **07**
- Q.4** (a) What are the principles of stratigraphy? Explain Archean of India. **07**
(b) What is unconformity? Explain types of unconformity. **07**
- OR**
- Q.4** (a) What is sub-surface exploration? Write about its different methods. **07**
(b) What is drilling? Also write about drilling methods. **07**
- Q.5** **Write note on any 2 :-** **14**
1. Stalactites and Stalagmites.
 2. Anticline and Syncline.
 3. Aerial Photography.
 4. Geological maps.
