

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII • EXAMINATION – SUMMER 2013****Subject Code: 182207****Date: 09-05-2013****Subject Name: Geological Exploration of Mineral Deposits****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 Geophysical Exploration? What are its principles? Explain in brief magnetic method. **07**
- (b) What is the basic aim of mineral exploration? Differentiate the surface and sub-surface exploration. **07**
- Q.2** (a) How Remote sensing is used in geological exploration of mineral deposits? **07**
- (b) Explain the principles on which various geological exploratory maps are prepared. **07**
- OR**
- (b) What are the characteristics and principles of stereoscopic images. **07**
- Q.3** (a) What are the applications of gravity methods in mineral exploration? **07**
- (b) What is electrical method of geophysical exploration? Explain the resistivity method. **07**
- OR**
- Q.3** (a) Explain the seismic method of exploration, its data interpretation, and its application. **07**
- (b) Explain in brief various method of geochemical exploration. **07**
- Q.4** (a) What is the use of boring? Write a note on principles of boring. **07**
- (b) What are the various method of boring? **07**
- OR**
- Q.4** (a) Explain the Lithological and stratigraphic guides to ores. **07**
- (b) What are the applications of Ariel photograph in identification of geologic structures? **07**
- Q.5** (a) **Write note on (any 2):-** **14**
- a. Vertical and Oblique aerial photographs.
- b. Scales of mapping.
- c. Bottoming and zoning of mineral deposits.
- d. Difficulties in boring.
