

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER–VIII (NEW) - EXAMINATION – SUMMER 2017****Subject Code: 2182207****Date: 09/05/2017****Subject Name: Geological Exploration Mineral Deposits(Departmental Elective - III)****Time: 10:30 AM to 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) Define exploration. Explain the basic principle of exploration. **07**
(b) What is aerial photography? Explain its application. **07**
- Q.2** (a) Explain various operation stages of aerial photography. **07**
(b) List out different methods of exploration. Explain any two of them. **07**
- OR**
- (b) Write a note on selection of site for boreholes. **07**
- Q.3** (a) Write a note on core recovery. **07**
(b) Explain different methods of geochemical exploration? **07**
- OR**
- Q.3** (a) Differentiate between surface and sub-surface exploration. **07**
(b) What is Geophysical Exploration? What are its principles? Explain magnetic method in brief. **07**
- Q.4** (a) Write a note on remote sensing techniques used in exploration. **07**
(b) Explain gravity methods of exploration in brief. **07**
- OR**
- Q.4** (a) Explain hydro-geochemical exploration. **07**
(b) Discuss the difficulties faced in boring. **07**
- Q.5** (a) Define boring. Differentiate between percussive and rotary boring. **07**
(b) Write short note on Underground mapping. **07**
- OR**
- Q.5** (a) Write a note on bore hole deflection. **07**
(b) What is seismic method? List out the instruments used in it and its application. **07**
