

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV • EXAMINATION – SUMMER 2013

Subject Code: 142202

Date: 12-06-2013

Subject Name: Basic Mine Surveying

Time: 10:30am – 01:00pm

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)** Write a notes on: (1) Trough Compass (2) Tubular compass. **07**
(b) Define contour. Explain characteristics of contours with ketch sketch. **07**

- Q-2. (a)** Describe with the aid of sketches, a miner's dial. **07**
(b) What is error of closure? List out various method of adjusting traverse.
Explain any one of it in brief.

OR

- (b)** Write a note on 'Leveling staff'. **07**
- Q-3. (a)** Define the follow terms: **07**
(1) Level line (2) Mean sea level (3) Datum (4) Telescope (5) Gyro-Theodolite
(6) Aberration (7) Vertical line.
(b) What do you mean by tacheometry? Describe the instruments used in it. **07**

OR

- Q-3. (a)** Explain the repetition and reiteration methods of measuring angles. **07**
(b) Describe the various methods of tacheometric survey. **07**

- Q-4. (a)** List out the various method of contouring. Add a note on: 'contouring on steep ground'. **07**
(b) Explain the procedure of the leveling to establish underground bench mark. **07**

OR

- Q-4. (a)** Give uses of contour lines on mine plans. **07**
(b) Explain general procedure for field work with reference to tacheometric Survey. **07**

- Q-5. (a)** Give classification of leveling. Add a note on fly leveling. **07**
(b) Describe the procedure of omitted measurements of traversing. **07**

OR

- Q-5. (a)** Explain temporary adjustments of transit theodolite. **07**
(b) Give the classifications of the Triangulation survey? **07**
