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 mea uring angles. **07**

**(b)** Describe the various methods of tacheomeric 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 le eling. **07**

**(b)** Describe the procedure of omitted measurements of traversing. **07**

**OR**

**Q-5.** **(a)** Explain temporary adjustments of transit theodlite. **07**

**(b)** Give the classifications of the Triangulation survey? **07**

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