Seat No.:	Enrolment No

Subject Code: 142202

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV • EXAMINATION – WINTER • 2014

Date: 29-12-2014

Subject Name: Basic Mine Surveying Time: 02:30 pm - 05:00 pm **Total Marks: 70 Instructions:** 1. Attempt all questions. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. 0.1 What is Theodolite? Describe various uses of theodolite in mine surveying. 07 Explain why a theodolite more accurate than other instruments. What are the uses of miner's dial? Give the tests and adjustments of it. 07 **(b)** 0.2 (a) Describe the various methods of tachometric survey 07 (b) Describe various uses of theodolite in mine surveying. Explain why the 07 Theodolite is more accurate than other instruments. What is closing error? Write a note on Bowditch's rule. 07 0.3 Define leveling? What are the principle and object of leveling? 07 (a) What are the contour lines? Give uses of contour lines on mine plans **(b)** 07 OR Write a short note on shaft depth measurement by leveling with neat sketch Q.3 07 (a) What are the contour lines? Write the notes on contouring on flat and **(b)** 07 steep grounds. Give classification of leveling. Add a note on fly leveling. 07 0.4 (a) **(b)** Explain Shaft depth measurement employing a plumb wire **07** 0.4 (a) Explain in brief method of Subsidence measurement. 07 Give classification of triangulation system. List out various methods are used for 07 balancing the traverse? Explain any two in brief. Define contouring. Write a note on contouring on flat ground. **Q.5** (a) 07 **(b)** Differentiate between Tubular and through compass. 07 OR Q.5 (a) What is Triangulation method? What are the classifications of the triangulation 07 (b) Explain Repetition method of horizontal angle measurement. 07
