

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV (New) EXAMINATION – WINTER 2015

Subject Code:2142202**Date:30/12/2015****Subject Name: Basic Mine Surveying****Time: 02:30pm to 05:00pm****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) Describe construction and various used of Miners dial. **07**
(b) Explain test and adjustment of Mimers dial. **07**
- Q.2** (a) List out various types of Theodolite. Explain any one of them in brief with neat sketch. **07**
(b) Write a note on Temporary adjustment of theodolite. **07**
- OR**
- (b) Write a note on Permenant adjustment of theodolite. **07**
- Q.3** (a) Explain theodolite traversing in brief. **07**
(b) Describe closing error and it's adjustment. **07**
- OR**
- Q.3** (a) Write a note on Omitted measurement. **07**
(b) Write a note on various Levelling instruments. **07**
- Q.4** (a) Describe Fly Levelling in brief. **07**
(b) Explain measurement of depth of shaft. **07**
- OR**
- Q.4** (a) Write a note on underground levelling and subsidence survey. **07**
(b) Write principle of tacheometric surveying. Explain additive and Multiplying constants. **07**
- Q.5** (a) Describe various characteristics of Contours. **07**
(b) Explain Basic Concept of Triangulation Surveying. **07**
- OR**
- Q.5** (a) Write a note on measurement of Horizontal Angles and Vertical Angles. **07**
(b) Explain Tubular and Through Compass in brief. **07**
