

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

# GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V- EXAMINATION – SUMMER 2016

Subject Code: 152204

Date: 06/05/2016

Subject Name: Advance Mine Surveying

Time: 02:30 PM to 05:00 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) What are the different methods of curve ranging? Explain. **07**  
(b) Explain the elements of compound curve. **07**
- Q.2** (a) What are different methods of correlation? **07**  
(b) How correlation survey is useful in steeply inclined shafts? **07**
- OR**
- (b) How underground survey is carried in mines? **07**
- Q.3** (a) What is tape triangulation method of stop survey? When it is used? **07**  
(b) Describe different mine models **07**
- OR**
- Q.3** (a) Explain Weisbach Traingle. **07**  
(b) How plans and sections are prepared with respect to mining? **07**
- Q.4** (a) Explain gyro-theodolite, its uses and advantages. **07**  
(b) The coal seams dip S 20° W at 2 in 7 and are 40 mts apart vertically. Calculate a level cross measure drift driven in the direction of S 25° W. **07**
- OR**
- Q.4** (a) Explain eidograph and pentagraph with neat diagram. **07**  
(b) What is the application of GPS in mining survey? **07**
- Q.5** Write note on any two : **14**
1. Planimeter.
  2. Miner's Dial and Hanging Compass.
  3. GIS and Survey
  4. Plans and Sections.

\*\*\*\*\*