

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- VIth SEMESTER-EXAMINATION – MAY- 2012

Subject code: 162202

Date: 11/05/2012

Subject Name: Under Ground Metal Mining

Time: 10:30 am – 01:00 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) Explain cut and fill method in u/g metal mines. **07**
(b) Explain electrical and mechanical methods of secondary breaking . **07**
- Q.2** (a) Explain stopping of super- imposed veins and parallel ore bodies **07**
(b) Explain sub-level caving method with sketch. **07**
- OR**
- (b) Explain top slicing method with sketch. **07**
- Q.3** (a) Explain block caving method and their variants. **07**
(b) Describe design and construction of draw points. **07**
- OR**
- Q.3** (a) What is mechanics of draw and draw control procedures? **07**
(b) Explain sand gathering plant & procurement of backfilling material. **07**
- Q.4** (a) Explain theoretical aspect of slurry transportation **07**
(b) Describe pneumatic and mechanical methods of backfill. **07**
- OR**
- Q.4** (a) Explain with figure ; (1) grizzlies , (2) skip-pockets **07**
(b) What are various parameters involved in selection of stoping methods. **07**
- Q.5** (a) Explain stope layouts and stop preparation work in u/g metal mining. **07**
(b) Advantages of supported stoping methods **07**
- OR**
- Q.5** (a) Explain advantages of square set stoping methods. **07**
(b) Explain Blast hole and vertical crater retreat methods & their disadvantage. **07**
