

GUJARAT TECHNOLOGICAL UNIVERSITY**BE SEM-VI Regular Examination May 2011****Subject code: 162202****Subject Name: Underground Metal Mining****Date: 17-05-2011****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 basic stope layouts and stope preparation work **07**
(b) Describe cut & fill Method & their variations. **07**

- Q.2** (a) Various parameters for selection of stoping methods. **07**
(b) Describe Ore and waste bins & Chutes with illustrative figures. **07**

OR

- (b) Describe grizzlies & Sumps with illustrative figures. **07**

- Q.3** (a) Briefly write classification of different mining methods. **07**
(b) What is present scenario of Indian metal mining industries? **07**

OR

- Q.3** (a) Describe room and pillar method in u/g metal mining. **07**
(b) Explain with figure ; shaft insets and plats. **07**

- Q.4** (a) Describe Blast hole and vertical crater retreat method in u/g metal mining. **07**
(b) Explain with figure ; skip- pockets & Square set support used in stoping. **07**

OR

- Q.4** (a) various metal mining companies in Gujarat & India. **07**
(b) Describe slurry transportation , Preparation and placement of hydraulic backfill without cement **07**

- Q.5** (a) Describe pneumatic and mechanical method of backfill. **07**
(b) explain stopping of super-imposed veins and parallel ore bodies. **07**

OR

- Q.5** (a) explain design of draw points and draw control procedures , recovery and dilution. **07**
(b) Explain with figure: [1] Haulage & dumping [2] under ground crushing. **07**
