

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VI • EXAMINATION – SUMMER • 2014**

**Subject Code: 162202**

**Date: 21-05-2014**

**Subject Name: Underground 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) Present status of indian metal mining industry. 7
- Q.1 (b) Define following terms 7
- i) Ore ii) Orebin iii)Wastebin iv) Chute
- v) Raise vi) Stope vii) Reserve station.
- Q.2 (a) Selection parameters of stopping methods. 7
- Q.2 (b) Classification of different mining methods. 7
- OR**
- Q.2 (b) Mechanical method of secondary breaking. 7
- Q.3 (a) Describe overhead stopping with sketch. 7
- Q.3 (b) Explain developement of stope. 7
- OR**
- Q.3 (a) Explain Sublevel stopping with sketch. 7
- Q.3 (b) Describe Shrinkage stopping with sketch. 7
- Q.4 (a) Explain Square set stopping with sketch. 7
- Q.4 (b) Shortnote: Pneumatic method of backfill. 7
- OR**
- Q.4 (a) Explain Cut & fill stopping with sketch. 7
- Q.4 (b) Explain Top slicing method of stopping. 7
- Q.5 (a) Hydraulic method of backfill. 7
- Q.5 (b) Shortnote: Mechanical backfill. 7
- OR**
- Q.5 (a) Draw sand geathering plant for hydraulic backfill 7
- Q.5 (b) Stopping of super imposed veins. 7

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