

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.**

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|-----------|--|---|
| Q.1 | (a) Present status of indian metal mining industry. | 7 |
| Q.1 | (b) Define following terms
i) Ore ii) Orebin iii)Wastebin iv) Chute
v) Raise vi) Stope vii) Reserve station. | 7 |
| 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 |
