

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-V • EXAMINATION – SUMMER • 2014

Subject Code: 152202

Date: 13-06-2014

Subject Name: Surface Mine Production

Time: 10.30 am - 01.00 pm

Total Marks: 0

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) | Advantages and disadvantages of surface mining. | 07 |
| Q.1 (b) | Define following terms with diagram.
i) Bench height ii) Bench width iii) Bank width iv) Berms v) Ramp
vi) Overall slope angle | 07 |
| Q.2 (a) | DGMS norms related to bench parameters. | 07 |
| Q.2 (b) | Describe Major operations in surface mining. | 07 |
| | OR | |
| Q.2 (b) | Explain inclined drilling. | 07 |
| Q.3 (a) | Shortnote:Bulldozer. | 07 |
| Q.3 (b) | Describe coyote blasting. | 07 |
| | OR | |
| Q.3 (a) | Shortnote:Scraper. | 07 |
| Q.3 (b) | Explain Secondary blasting. | 07 |
| Q.4 (a) | Difference between high explosives and low explosives. | 07 |
| Q.4 (b) | Factors influencing choice of excavating machines. | 07 |
| | OR | |
| Q.4 (a) | Various blasting patterns of multirow blasting. | 07 |
| Q.4 (b) | Describe continuous surface miner. | 07 |
| Q.5 (a) | Explain belt conveyor transport system. | 07 |
| Q.5 (b) | Explain reclaimers. | 07 |
| | OR | |
| Q.5 (a) | Planning methods of reclamation for opencast mining. | 07 |
| Q.5 (b) | Factors influencing stability of slopes. | 07 |
