

GUJARAT TECHNOLOGICAL UNIVERSITY**BE – SEMESTER V • EXAMINATION – WINTER - 2012****Subject code: 152202****Date: 12-01-2013****Subject Name: Surface Mine Production****Time: 02:30 pm to 05:00 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) Give the layout of bench and explain the terms bench, bench height, bench width, cut and face angle. **07**
(b) Write a note on width and height of the bench with illustrative diagram. **07**
- Q.2** (a) Define surface mining. Explain characteristic of open cast work. **07**
(b) List out ground preparation equipment. Explain any one type of it. **07**
OR
(b) What is stripping ratio? How it will help in determining choice of mining? **07**
- Q.3** (a) List out criteria for selection of drill. **07**
(b) Explain major operation in surface mining. **07**
OR
- Q.3** (a) Explain: twin bench blasting and secondary blasting. **07**
(b) Describe merits and limitations of open cast mining. **07**
- Q.4** (a) Explain the factor influencing choice of excavating. **07**
(b) Explain over casting by dragline with its method. **07**
OR
- Q.4** (a) Explain different drilling patterns. **07**
Q.4 (b) Write down the parameters with equation for designing the blasting pattern. **07**
- Q.5** (a) What is explosive? Explain coyote blasting and multi row blasting. **07**
(b) Explain the factors affecting the choice of a transport system in opencast mining. **07**
OR
- Q.5** (a) Point out the comparison between diesel shovel and electrical shovel. **07**
(b) What is Reclamation? Explain land reclamation. **07**
