

GUJARAT TECHNOLOGICAL UNIVERSITY
B.E SEM-V Examination-Nov/Dec.-2011

Subject code: 152202**Date: 24/11/2011****Subject Name: Surface Mine Production****Time: 02.30 pm-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, Face angle, Cut, Berm and Catch Bench. **07**
- (b) Explain Major operations in surface mining. **07**

- Q.2** (a) Explain the concept of stripping ratio in detail. **07**
- (b) Explain overburden in detail and state the disposal of overburden. **07**

OR

- (b) Explain Open pit mining with neat sketches. **07**

- Q.3** (a) Explain performance of different types of drilling equipments. **07**
- (b) Describe the parameters with proper equation for designing the blasting patterns. **07**

OR

- Q.3** (a) List out the factors affects drill performance. **07**
- (b) What is explosive? Explain the properties of explosive which importance to its user. **07**

- Q.4** (a) Explain the factors influencing choice for selection of excavators. **07**
- (b) Differentiate: Diesel Shovel and Electric Shovel. **07**

OR

- Q.4** (a) Explain How to deploy a dragline in the surface mining. **07**
- Q.4** (b) Explain BWE and Front end loader. **07**

- Q.5** (a) Explain the factors affecting to choice of a transport system in opencast mines. **07**
- (b) Explain Dumpers and Belt conveyer transportation. **07**

OR

- Q.5** (a) Which are the planning methods of reclamation for different types of open cast mines? **07**
- (b) Describe the Slop failure and its various types. **07**
