

GUJARAT TECHNOLOGICAL UNIVERSITY
B. E. - SEMESTER – VII • EXAMINATION – WINTER 2012

Subject code: 172201**Date: 26/12/2012****Subject Name: Mine Planning****Time: 10.30 am - 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** What do mean by mine planning? Describe mine planning components? **07**
(b) Write a note on role of planning in mining ventures. **07**
- Q.2 (a)** What is the function of feasibility report? List out the main points of it. **07**
(b) Explain the design of haul road and importance of it. **07**
- OR**
- (b)** Which are the challenges posed in mine planning? **07**
- Q.3 (a)** What is the life of mine? Give the example for determination of life of mine. **07**
(b) What is the cut off grade and how you determine the cut off grade of limestone mines supplying limestone ore to captive cement plant? **07**
- OR**
- Q.3 (a)** Explain as follow: **07**
1) Inferred reserve
2) Indicated reserve
(b) Define the following terms: **07**
1. Bench height 2. Bench width 3. Face angle 4. Bench face
- Q.4 (a)** What do you understand by detailed project report? **07**
(b) Write a note on Ultimate pit configuration. **07**
- OR**
- Q.4 (a)** Explain optimal geometrical size of a mine. **07**
Q.4 (b) What is the difference between Open cast mining and underground mining? **07**
- Q.5 (a)** Explain the planning and scheduling of production in an open cast mine. **07**
(b) What is the importance of haul road in opencast mine? Describe the parameters affecting haul road design. **07**
- OR**
- Q.5 (a)** Write a note on rate of production and mining losses. **07**
(b) What is reserve estimation? Explain any one method of reserve estimation. **07**
