

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

Subject Code: 172201**Date: 22-05-2014****Subject Name: Mine Planning****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) How mine planning is done? What are the components of mine planning? **07**
(b) What are various technical considerations for optimization of mining? **07**
- Q.2** (a) Explain the role of feasibility report for metallic and non-metallic minerals. **07**
(b) How mine reserve estimation is done? Explain any 1 methods of estimation. **07**
OR
(b) How optimization of mine size is done? **07**
- Q.3** (a) What are the economical considerations to be taken care in mine design? **07**
(b) Explain Taylor's mine life rule. **07**
OR
- Q.3** (a) What are grade tonnage curves? How it is computed? **07**
(b) How is mining loss calculated? How it affects mine life? **07**
- Q.4** (a) Prepare detail project report for mining which has ore depth of 50 meters and monthly production of 8000 tons. **07**
(b) What are the advantages and disadvantages of open cast mining? **07**
OR
- Q.4** (a) What is the importance of design of haul road? **07**
(b) Differentiate Geological reserve and mineable reserve. **07**
- Q.5** Write note on any two:- **14**
1. Dump planning.
2. Underground Mining.
3. Cut off grade of mineral reserve.
4. Geometric size of mine.
