

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VI • EXAMINATION – WINTER 2013

Subject Code: 162205**Date: 04-12-2013****Subject Name: Mine Surface Environment****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) Explain Environmental issues in mineral industry. **07**
(b) Describe ecological and sociological impacts of mine environment. **07**

- Q.2** (a) What are the factors responsible for degradation of soil? Explain the reclamation of derelict Lands. **07**
(b) What is demography? Explain how the mine environment affects the human population? **07**

OR

- (b) What are the requirements of landscape planning? Add a note on land capability mapping. **07**

- Q.3** (a) What is acid mine drainage? Explain formation of AMD. **07**
(b) What is the land use pattern? Give the assessment of impacts of land use **07**

OR

- Q.3** (a) Explain the impacts of mining activities on surface and sub surface water bodies. **07**
(b) Which environmental problems are found in contour-strip mining? Add a note on stabilizing The debris dumps in this mining operation. **07**

- Q.4** (a) What is airborne repairable dust? Explain its harmful physiological effects and control. **07**
(b) Explain flora and fauna impacts on mine environment. **07**

OR

- Q.4** (a) Write a short note on environmental management in mining operation. **07**
Q.4 (b) Write a note on underground mining hazards in India. **07**

- Q.5** (a) Write a note on primary causes of Fly rock. **07**
(b) Explain environment aspects of air blast and ground vibration. **07**

OR

- Q.5** (a) What are the anthropogenic changes in ecosystem? Explain with suitable example. **07**
(b) How is the intensity of noise measured? In what way is a miner affected by Exposure to loud noises over long years? **07**
