

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE- VI<sup>th</sup> SEMESTER-EXAMINATION – MAY- 2012****Subject code: 162205****Date: 19/05/2012****Subject Name: Mine Surface Environment****Time: 10:30 am – 01:00 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 the chemistry of Acid rock drainage. **07**  
(b) What is land degradation? Explain the various land reclamation methods. **07**

- Q.2** (a) What are the air pollutants? Give the various effects of air pollution to human health and ecology. **07**  
(b) What are the planning necessary for land reclamation? **07**

**OR**

- (b) What are the major environmental incidents and effects caused by Acid mine drainage? **07**

- Q.3** (a) Give the different measures for prevention, control and abatement of air pollution. **07**  
(b) List out the different health hazards due to mining activities. Explain the various conditions effects on the health of the persons engaged in mines. **07**

**OR**

- Q.3** (a) Explain Land-use pattern and landscape planning. **07**  
(b) Describe the preventive and controlling measures to health hazards in mining industry. **07**

- Q.4** (a) What is blasting? Give the environmental aspects of ground vibrations and air-blast. **07**  
(b) What are the various aspects and purposes for social impact assessment in mining? **07**

**OR**

- Q.4** (a) Explain formation of flyrock due to blasting. Give their various effects to environment. **07**  
(b) Explain the steps for social impact assessment in mining. **07**

- Q.5** (a) Which are the major safety hazards in mining? **07**  
(b) Give the impacts of mining activities on surface and sub-surface water bodies. **07**

**OR**

- Q.5** (a) Explain dust hazards in mines. Add a note on dust control by the respiratory system. **07**  
(b) Give the impacts of surface and underground mining activities in ecological environment. **07**

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