

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER 2017****Subject Code: 2162205****Date: 03/05/2017****Subject Name: Mine Surface Environment****Time: 10:30 AM to 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.

| | | MARKS |
|------------|---|--------------|
| Q.1 | Short Questions | 14 |
| | 1 What is environment? | |
| | 2 What is the land use pattern? | |
| | 3 What is demography? | |
| | 4 What is Acid Mine Drainage? | |
| | 5 What is land degradation? | |
| | 6 Define air pollution. | |
| | 7 What is airborne repairable dust? | |
| | 8 What are the air pollutants? | |
| | 9 How is the intensity of noise measured? | |
| | 10 Define flora and fauna. | |
| | 11 How air pollution takes place in mining? | |
| | 12 What is landscape planning? | |
| | 13 What are the chemical and physical processes of active treatment? | |
| | 14 What are the parameters of socio-economic environment? | |
| Q.2 | (a) Explain the assessment of impacts of land use. | 03 |
| | (b) Discuss the effect of acid mine drainage. | 04 |
| | (c) Explain environmental issues in mineral industries. | 07 |
| | OR | |
| | (c) Discuss the impacts of mining on surface and sub-surface waters. | 07 |
| Q.3 | (a) How airborne dust is generated? | 03 |
| | (b) Explain the various land reclamation method. | 04 |
| | (c) Write note on treatment and control of acid mine drainage. | 07 |
| | OR | |
| Q.3 | (a) What are the factors responsible for degradation of soil? | 03 |
| | (b) Discuss the impacts of mining on ground water table. | 04 |
| | (c) Describe the effects of mining on flora and fauna in brief. | 07 |
| Q.4 | (a) Describe the formation of Acid Mine Drainage | 03 |
| | (b) Explain harmful physiological effects and its control of airborne repairable dust | 04 |
| | (c) Explain the direct and indirect economic impact of mining? | 07 |
| | OR | |
| Q.4 | (a) What are the impacts of ecological environment? | 03 |
| | (b) Write a short note on landscape planning in mining. | 04 |
| | (c) Explain measurement and control of air pollution sources. | 07 |
| Q.5 | (a) How the mine environment affects the human population. | 03 |
| | (b) Write a short note on land use pattern. | 04 |
| | (c) Explain the environmental aspects of ground vibrations and air-blast. | 07 |

OR

- Q.5** (a) What are the socio-cultural effects of mining industry? **03**
(b) Explain natural drainage pattern. **04**
(c) Explain gaseous and particulate air pollution sources. **07**
