

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VI • EXAMINATION – SUMMER 2015

Subject Code: 162204**Date: 14/05/2015****Subject Name: MINE HAZARDS****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.

- Q.1** (a) What is mine fire? Describe fire as a hazard in mining? **07**
(b) Explain the coal dust explosion as a mining hazard. **07**
- Q.2** (a) Explain the different methods of fire fighting? **07**
(b) Explain the factors that play a major role in the inflammability of coal seam. **07**
- OR**
- (b) Explain the construction of dust sampling apparatus with diagram. **07**
- Q.3** (a) How does dust formed in mining? What are its preventive measures? **07**
(b) What are the scientific methods of spontaneous coal seam heating? **07**
- OR**
- Q.3** (a) What are the radiation hazards in radioactive mining? **07**
(b) Describe the setup of standard rescue station on a mine site. **07**
- Q.4** (a) What are the dangers in reopening of a mine? **07**
(b) What are the water blast dangers in mining? **07**
- OR**
- Q.4** (a) What are the types of rescue equipments used for mine hazard? **07**
(b) Explain different methods of reopening of mines. **07**
- Q.5** Write short note on any two : **14**
1. Water dams.
 2. Dust sampling apparatus.
 3. Accidental fires.
 4. Recovery of flooded mines.
