

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER 2016

Subject Code:2162204

Date:09/05/2016

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 are the different causes of mine fires? **07**
(b) What is spontaneous combustion? How it can be detected? **07**
- Q.2** (a) What are the preventive measures of underground fires? **07**
(b) What are various methods of reopening mines? **07**
- OR**
- (b) Explain various methods of fire fighting. **07**
- Q.3** (a) How dust formation happens in mines? How to prevent it? **07**
(b) Explain the dust sampling apparatus with diagram. **07**
- OR**
- Q.3** (a) What are the causes of fore damp explosion? **07**
(b) What are the factors that affect the inflammability in coal dust explosion? **07**
- Q.4** (a) What are the measures can be taken in water gas explosion? **07**
(b) How can problem of radiation in atomic mineral mines be reduced? **07**
- OR**
- Q.4** (a) Explain different types of rescue equipment in brief. **07**
(b) How is recovery carried out in case of explosion? **07**
- Q.5** Write short note on any two : **14**
1. Causes of mine inundation.
 2. Design and construction of water dam in mining.
 3. Burnside boring apparatus.
 4. Fire fighting organization.
