

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION – SUMMER • 2014

Subject Code: 162204

Date: 28-05-2014

Subject Name: Mine Hazard

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) List out carbon monoxide detectors and explain any two. 7
(b) Define following terms 7
i) Stinkdamp ii) Whitedamp iii) Blackdamp
iv) Afterdamp vi) Firedamp
- Q.2 (a) Accidental causes of fire in mine. 7
(b) Prevention should be taken while dealing with underground mine fire. 7
OR
(b) Define spontaneous heating, prevention should be taken while dealing with seam liable to spontaneous heating. 7
- Q.3 (a) Applications of dust sampling apparatus. 7
(b) Different methods of reopening. 7
OR
- Q.3 (a) Explain fire fighting organization. 7
(b) Describe stone dust barrier. 7
- Q.4 (a) Explain Coward's diagram. 7
(b) Explain Proto-IV self contained breathing apparatus with diagram. 7
OR
- Q.4 (a) Explain coal dust explosion. 7
(b) Explain Proto-V self contained breathing apparatus with diagram. 7
- Q.5 (a) Explain Dewatering of old working. 7
(b) Shortnote: Rescue station. 7
OR
- Q.5 (a) Explain Chemical oxygen breathing apparatus. 7
(b) Problems of radiation in atomic mines. 7
