

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VIII (NEW) EXAMINATION - WINTER 2018** 

Subject Code: 2182204 Date: 19/11/2018

**Subject Name: Mine Safety Engineering** 

Time: 02:30 PM TO 05:00 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	(a) (b)	Discuss the importance of Safety education and training in mine. List the various types of accidents takes place in mines. Explain any one.	03 04
	(c)	Write a note on the importance of assessment and evaluation of training schemes in mine safety engineering.	07
Q.2	(a)	What is the role of Directorate General of Mines Safety for improving safety?	03
	<b>(b)</b>	As a mining engineer, What are the steps taken by you for improving the safety in Indian mines?	04
	<b>(c)</b>	Explain the function of pit safety committee. <b>OR</b>	07
	(c)	Write a note on job safety analysis.	07
Q.3	(a)	Write note on accident compensation.	03
	<b>(b)</b>	Explain risk analysis with flow chart diagram.	04
	(c)	Explain the development of industrial safety in mining operation.	07
		OR	
Q.3	(a)	List the causes of accident in mines.	03
	<b>(b)</b>	Write the process of determining the accident proneness of mining operation.	04
	(c)	What are the economical impacts of accidents? As a mining engineer prepare a report on an accident occurred in an opencast mine.	07
Q.4	(a)	What is the role of vocational training centre for enhancing safety of employees?	03
	<b>(b)</b>	Write a short note on accident records and statistics.	04
	(c)	Write a note on Personal protective equipment used in mines.	07
		OR	
Q.4	(a)	Write the basic functions of vocational training centre.	03
<b>C</b>	(b)	List the personal protective equipments. Explain any one.	04
	(c)	Explain the accident and incidental analysis.	07
Q.5	(a)	Write a note on appraisal of trainee.	03
	<b>(b)</b>	Write the different aids for the motivation of workers.	04
	<b>(c)</b>	Describe the role of safety officer in mines.	07
o -		OR	
Q.5	(a)	List the various safety instructions during working in open cast coal mining.	03
	<b>(b)</b>	Explain the publicity and propaganda for safety.	04
	(c)	Describe the role of workmen inspector in mines.	07