

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2023****Subject Code:3172217****Date:14-12-2023****Subject Name: Safety Engineering****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.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) List the causes of accident in mines.	03
	(b) Discuss the importance of Safety education and training in mine.	04
	(c) Describe the role of workmen inspector in mines.	07
Q.2	(a) List the various safety instructions during working in open cast coal mining.	03
	(b) List the various types of accidents takes place in mines. Explain any one.	04
	(c) Write a brief note on Personal protective equipment used in mines.	07
	OR	
	(c) Explain development of industrial safety in mining operation.	07
Q.3	(a) Discuss the role of vocational training centre for enhancing safety of employees.	03
	(b) Write the process of determining the accident proneness of mining operation.	04
	(c) Describe the role & responsibility of safety officer in mines.	07
	OR	
Q.3	(a) Discuss the basic functions of vocational training centre.	03
	(b) Write a note on accident compensation.	04
	(c) Explain the role & function of pit safety committee.	07
Q.4	(a) What is the role of Directorate General of Mines Safety (DGMS) for improving safety?	03
	(b) Explain risk analysis with flow chart diagram	04
	(c) Explain the appraisal of safety program.	07
	OR	
Q.4	(a) Write a note on job safety analysis.	03
	(b) Describe the different aids for the motivation of workers.	04
	(c) Explain the purpose and procedure for investigation of accident.	07
Q.5	(a) Discuss the role of supervisor in mines.	03
	(b) Write a short note on accident records and statistics.	04
	(c) Explain assessment and evaluation of training schemes.	07
	OR	
Q.5	(a) How is the training schemes assessed and evaluated in mining?	03
	(b) Explain the publicity and propaganda for safety.	04
	(c) As a mining engineer prepare a report on an accident occurred in a mine. Assume your own parameters.	07
