

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – SUMMER 2022****Subject Code:3172217****Date:03/06/2022****Subject Name: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.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Discuss the causes behind any accident takes place in mines.	03
	(b) Explain the accident rates for measurements of safety performance.	04
	(c) Discuss the functions and features of emergency organization.	07
Q.2	(a) Explain how accident proneness is determined in mining operation.	03
	(b) Describe the unsafe act of persons and unsafe conditions.	04
	(c) Explain various types of accident takes place in mines.	07
	OR	
	(c) Explain the purpose and procedure for investigation of accident.	07
Q.3	(a) Discuss the role of vocational training centre for enhancing safety of employees.	03
	(b) Describe the different aids for the motivation of workers.	04
	(c) Explain development of industrial safety in mining operation.	07
	OR	
Q.3	(a) Discuss the basic functions of vocational training centre.	03
	(b) Explain accident compensation for mining industry.	04
	(c) Explain the structure of the report of inquiry into an accident.	07
Q.4	(a) Describe are the various techniques employed for training.	03
	(b) Discuss the role of safety officer in mines.	04
	(c) Explain the role of different kind of personal protective equipment used in mining.	07
	OR	
Q.4	(a) Explain the accident costs, safety and productivity.	03
	(b) Discuss the role of workmen's inspector in mines.	04
	(c) Explain the publicity and propaganda for safety.	07
Q.5	(a) Discuss the role of workers in mines.	03
	(b) Describe the importance of Safety education and training in mine.	04
	(c) Explain assessment and evaluation of training schemes.	07
	OR	
Q.5	(a) Discuss the role of supervisor in mines.	03
	(b) Discuss the steps taken for the improvement of safety in Indian mines.	04
	(c) Explain the pit safety committee and its function.	07
