Seat No.:	Envalment No
Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII EXAMINATION - SUMMER 2016

	•	Code:181905 Date:16/05/201	
Subject Name: Industrial Safety & Maintenance Engineering (Department Elective II) Time: 10:30 AM to 01:00 PM Instructions: Total Marks: 7			
	1. 2.	Attempt all questions.	
Q.1	(a)	How productivity of any organization is related with industrial safety. Discuss in details.	07
	(b)	Discuss the importance of safety training and safety education.	07
Q.2	(a) (b)	Prevention is better then cure. Discuss with proper illustrations. Discuss the industrial hazards with its causes and remedial. OR	07 07
	(b)	Discuss the cost of accidents.	07
Q.3	(a) (b)	State the safety rules for mechanical work shop. Discuss the preventive maintenance and its importance. OR	07 07
Q.3	(a) (b)	Importance Total productive maintenance. Discuss in details. Differentiate between condition based and risk based maintenance.	07 07
Q.4	(a) (b)	Describe the training tools, models and methods for maintenance personals. What is fault tree analysis? Discuss with illustration. OR	07 07
Q.4	(a) (b)	What is maintenance budget? How maintenance budget is prepared? Describe merits and demerits of centralized and decentralized maintenance systems.	07 07
Q.5	(a)	Explain the terms MTBS (mean time between shutdown), MTBF (mean time between failure), MTTF (mean time to failure), MTTR (mean time to repair) and failure rate.	07
	(b)	What is total productive maintenance (TPM). Discuss its advantages. OR	07
Q.5	(a)	What is 5-S concept and how is it used in maintenance.	07
	(b)	Define maintenance job planning. Discuss the steps of maintenance job planning.	07
