Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII • EXAMINATION - SUMMER 2013

	Subject Code: 181905 Subject Name: Industrial safety and Maintenance engineering Time: 10:30 am TO 01:00 pm Instructions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the wight indicate full modes.		
		3. Figures to the right indicate full marks.	
Q.1	(a)	Discuss various outcome in terms of improved productivity achieved through better safety conditions in industrial plant	07
	(b)	Discuss various activities involved during safety analysis of a product	07
Q.2	2 (a)	Discuss causes of accidents in industrial plant	07
	(b)	Discuss classification of hazardous conditions in industrial plant OR	07
	(b)	List the personal protective equipments for following human body parts with IS standards (i) Head, (ii) Ear, (iii) Face, (iv) Eye, (v) Overall body, (vi) Foot and leg, (vii) fingers and hands	07
Q.3	3 (a)	Discuss major welfare factors in Factory Act, 1948	07
	(b)	Discuss major benefits covered in ESI Act, 1948 OR	07
Q.3	` '	Discuss various steps involved in Industrial Hygiene.	07
	(b)	What do you mean by occupational diseases? Discuss occupational diseases caused due to physical condition and respiration in dusty environment.	07
Q. 4	(a)	Discuss objectives and advantages of ergonomics	07
	(b)	Discuss objectives and advantages of planned maintenance. OR	07
Q. 4	` '	Discuss reliability and machine availability	07
	(b)	Discuss major causes of equipment breakdown	07
Q.5	5 (a)	Discuss types of costs associated in maintenance	07
	(b)	What is mean by unplanned maintenance? Discuss in details. OR	07
Q.5	(a) (b)	Discuss fault tree analysis Discuss in brief condition checking and trend monitoring with respect to condition monitoring.	07 07
