

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2018

Subject Code: 2173508

Date: 19/11/2018

Subject Name: Safety Health & Environment

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

		<b>MARKS</b>
<b>Q.1*</b>	(a) Define: Hazard, risk and safe	<b>03</b>
	(b) What is ergonomics?	<b>04</b>
	(c) Explain importance of health and safety in detail?	<b>07</b>
<b>Q.2</b>	(a) Why the welfare of people at work is important?	<b>03</b>
	(b) Define Accident, Dangerous occurrences and auto ignition	<b>04</b>
	(c) Explain occupational health in detail?	<b>07</b>
	<b>OR</b>	
	(c) Explain occupational hazard in detail?	<b>07</b>
<b>Q.3</b>	(a) What are the appropriate measures to control the hazard associated with work related ill health for RSI?	<b>03</b>
	(b) How to control risks of DSE?	<b>04</b>
	(c) Explain legionaries disease in detail?	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) Explain types of PPE?	<b>03</b>
	(b) In detail explain Ear protection PPE ?	<b>04</b>
	(c) Explain respiratory equipment in detail?	<b>07</b>
<b>Q.4</b>	(a) What are the factors which effect PPE?	<b>03</b>
	(b) In detail explain hand and arm protection PPE ?	<b>04</b>
	(c) Explain fire detection and alarm system in detail?	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) What are the dangers associated with fire?	<b>03</b>
	(b) Explain fire triangle in detail?	<b>04</b>
	(c) Define: Detonation, Fire point, Flash fire, Ignition, Fuel, Control center and Material factor	<b>07</b>
<b>Q.5</b>	(a) Enlist theories of accident occurrences and explain any one theory?	<b>03</b>
	(b) Explain job safety analysis in detail?	<b>04</b>
	(c) Explain fault tree analysis in detail?	<b>07</b>
	<b>OR</b>	
<b>Q.5</b>	(a) In detail explain failure mode and effects analysis ?	<b>03</b>
	(b) Explain HAZOP in detail?	<b>04</b>
	(c) Explain event tree analysis in detail?	<b>07</b>