Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VII(NEW) • EXAMINATION – WINTER 2016

Subject Code:2173508 Date:21/11/2016 Subject Name:Safety Health & Environment Time: 10.30 AM to 1.00 PM **Total Marks: 70 Instructions:** 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. Q.1 07 (a) What do you mean by the term ergonomics and explain its application? Define: Unsafe acts, Unsafe Conditions, Oversight, Dangerous occurrence, 07 **(b)** Accident, Mistakes and Error. **Q.2** (a) What is mean by occupational hazards? Explain physical hazards, chemical 07 hazards and biological hazards in detail? What are the causes of work related ill health and explain importance of **(b) 07** health and safety? OR Explain appropriate measures to control the hazards associated with noise, **07 (b)** repetitive strain and stress? **Q.3** Enlist the factors affecting the selection of personal protective Equipment 07 (a) What is Fire? Give the dangers associated with fire. Explain Some Causes of 07 **(b)** Fire Triangle in detail. OR 0.3 Explain personal protective Equipment (PPE) in detail? 07 (a) What are the control measures to prevent fire and explain fire detection and **07 (b)** alarm system? Explain theories of accident prevention in detail? 07 **Q.4** (a) What are the principles of accident prevention? **07 (b)** OR 0.4 Explain the models of accident prevention in detail? 07 (a) Explain fundamentals of accident prevention in detail? **07 (b) Q.5** Write a short note on even tree analysis. 07 (a) **(b)** Discuss in brief HAZOP. 07 **Q.5** Write a short note on fault tree analysis 07 (a) Explain plant safety inspection in detail? **07 (b)** 

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