

Roll No..

**FT - 704**

**B.E. VII Semester**

Examination, December 2015

**Safety Engineering and its Industrial Application**

*Time : Three Hours*

*Maximum Marks : 70*

- Note:** i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.  
 ii) All parts of each question are to be attempted at one place.  
 iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.  
 iv) Except numericals, Derivation, Design and Drawing etc.

**Unit - I**

1. a) Explain unsafe conditions with examples.
- b) Write short note on safety policy.
- c) Describe frequency rate and severity rate for monitoring safety performance.
- d) Describe the hazards and their control measures in material handling work.

OR

Write summary on principles of accident Causation.

**Unit - II**

2. a) Explain respiratory personal protective equipments.
- b) How will you manage safety in a confined space where toxic and inflammable gas is suspected?
- c) Explain Local exhaust ventilation and its utility.
- d) Describe methodology of inspection of a factory.

OR

Describe the possible hazards which are possible on ignoring the principles of ergonomics.

**Unit - III**

3. a) How will you control hazards due to exposure of excessive heat?
- b) Describe role of management in accident prevention in factories.
- c) How a production supervisor can be helpful in accident prevention?
- d) Describe safety measures for lift and E.O.T. crane.

OR

How can you prevent accidents while operating various types of machines?

**Unit - IV**

4. a) Advise safety measures for industries using corrosive liquids. <http://www.rgpvonline.com>
- b) Write short note on "On Site Emergency Plan".
- c) How will you manage safety in hazardous process industry?
- d) Describe hazards and their control measures for industries using flammable compressed gases.

OR

Differentiate between a normal inspection and a safety audit.

**Unit - V**

5. a) How will you control hazards in industry using refractory materials?
- b) Describe the hazards in a viscose rayon industry.
- c) Describe safety measures for a solvent extraction plant.
- d) Describe control measures for hazards in LPG bottling plant.

OR

Describe measures for accident prevention in a fertilizer industry.

\*\*\*\*\*