

**B.Tech. MECHANICAL ENGINEERING  
(COMPUTER INTEGRATED  
MANUFACTURING)**

**Term-End Examination**

**June, 2015**

00025

**BME-030 : SAFETY ENGINEERING**

*Time : 3 hours*

*Maximum Marks : 70*

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**Note :** Answer any *five* questions. All questions carry equal marks.

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1. (a) What are the diseases commonly suffered by industrial workers ?  
(b) Explain the importance of record-keeping on incidents of ill health and injuries in an industry. 7+7
  
2. (a) Define hazard. How is hazard analysed ? Describe the steps of activities taken during preliminary hazard analysis.  
(b) Describe the various components that make the cost of an accident. How can the cost of an accident be reduced ? Explain. 7+7

3. (a) List the various pollutants of water. What are the effects of these pollutants on human beings? 7+7
- (b) Define an industrial environment and distinguish it from general meteorological conditions. 7+7
4. (a) Discuss the role of UNO in protecting the environment. 7+7
- (b) What are the different convention declarations made by UNO in respect of environmental protection? Explain. 7+7
5. (a) What is Municipal Solid Waste? Describe the different categories of MSW. 7+7
- (b) What is industrial waste? Describe the different types of industrial wastes based on physical state. 7+7
6. (a) What is Household Hazardous Waste (HHW)? Give examples of HHW. Why is disposal of HHW costly? 7+7
- (b) Distinguish between short term acute hazard and long term environmental hazard. 7+7

7. (a) What is a disaster ? Distinguish between a man-made disaster and a natural disaster.
- (b) What is meant by safety promotion in a company ? How is safety promotion established ? 7+7
8. (a) What is the role of first aid in responding to emergency ? Describe the contents of a first aid kit.
- (b) Why does a fire occur ? Describe the fire classes and portable extinguishers used against these fire classes. 7+7
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