

**DIPLOMA IN INDUSTRIAL SAFETY,
HEALTH AND ENVIRONMENT
MANAGEMENT
DM (ISHE)**

Term-End Examination

December, 2010

**BIS-014 : HAZARDS, RISK, ANALYSIS AND
SAFETY IN USE OF CHEMICALS**

Time : 3 hours

Maximum Marks : 70

Note : (i) Answer five questions in all. Question No.1 and 2 are compulsory.

(ii) All questions carry equal marks.

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1. Define *any four* of the following : **4x3½=14**
- (a) Hazards
 - (b) Static Electricity
 - (c) Combustible gas
 - (d) Explosive Chemicals
 - (e) On site emergency
2. Write short notes on *any four* of the following :
- (a) Job safety analysis **4x3½=14**
 - (b) Occupational health hazards in chemical industries
 - (c) Chemical & biological hazards
 - (d) Toxicity and flash point
 - (e) Storage and Transportation of chemicals.

3. What are the five leading causes of accidents in a chemical industry ? 14
 4. Describe the following types of airborne contaminants : dust, fumes, smoke, mists, gases in a chemical industry. 14
 5. Explain the four factors that make robots more potentially dangerous than other machines. 14
 6. Discuss the major categories of "elements at risk". 14
 7. Discuss the Bhopal Gas Tragedy bringing out the lessons learnt. 14
 8. Describe briefly the impact of industrial effluents and highlight the industry- specific treatment schemes. 14
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