

**POST GRADUATE DIPLOMA IN
MANAGEMENT IN INDUSTRIAL SAFETY,
HEALTH & ENVIRONMENT PGDM (ISHE)**

Term-End Examination

December, 2011

**MIS-012 : HAZARDS RISK ANALYSIS AND
SAFETY IN USE OF CHEMICALS**

Time : 3 hours

Maximum Marks : 70

- Note :** (i) *Attempt five questions. Questions no. 1 and 2 are compulsory.*
(ii) *All questions carry equal marks.*

1. Define *any four* of the following : **4x3½=14**
 - (a) Risk identification
 - (b) Physical hazard
 - (c) Occupational hygiene
 - (d) Industrial Safety Officer
 - (e) On site emergency

2. Write short notes on *any four* of the following : **4x3½=14**
 - (a) Job safety analysis.
 - (b) Occupational health hazards in chemical industries.
 - (c) Toxic (poisonous) and corrosive chemicals.
 - (d) Storage and transportation of chemicals.
 - (e) Toxicity and flash point.

3. In terms of the effects of global warming, do you think that a change in climate patterns and storm frequency and intensity is likely to be more serious than a global rise in sea level ? Illustrate your answer with specific problems and areas where the problems are likely to occur. 14
4. Explain the classification of chemicals and its safety parameters with precautions for safe working. 14
5. What are the safety requirements in use of biological materials and effluent treatment in industry ? 14
6. (a) Give brief details of combustible gases and vapours. 2x7=14
(b) Write the details of gas rules to be followed in storage of cylinders.
7. Explain different treatments given to hazardous waste before final disposal. Why are such treatments necessary ? Give names of such disposal methods which do not require pre - treatments. 14

8. Enlist the causes of chemical disasters and explain how they differ from other types of disasters ? **14**
On the basis of your observation suggest the essential elements of the preparedness and response activities for mitigation of chemical disasters.
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