

**SARDAR PATEL UNIVERSITY**  
**Programme & Subject: M.Sc (Industrial Chemistry)**  
**Semester: IV**  
**Syllabus with Effect from: June-2012**

<b>Paper Code: PS04CICH07</b>	<b>Total Credit: 4</b>
<b>Title Of Paper: Industrial Hygiene &amp; Safety</b>	

<b>Unit</b>	<b>Description in Detail</b>	<b>Weightage (%)</b>
I	Concept of Industrial safety, Accident causes & prevention, Safety committee and policies, Accident Investigation and Analysis.	25%
II	Types of chemical hazards and control, Control techniques, Process flow chart and its importance for safety inspection, Interpretation, use and training of MSDS, UN, HAZCHEM classification of chemicals, chemistry of fire.	25%
III	Transportation of hazardous chemicals, storage hazards and controls, hazards & control in unit processes and unit operations. safety work permit, safety of pipe lines, transportation of hazardous chemicals, safe start up & shut down procedures, emergency shut down.	25%
IV	Personnel protective equipments, house keeping, toxicology. Safety in Chemical Industry: General; Type of chemical hazards	25%

**Basic Text & Reference Books:-**

- Accident prevention manual for industrial operations, national safety council, Chicago, 10<sup>th</sup> edition.
- Safety and accident prevention in chemical operation, 2<sup>nd</sup> edition, Howard H.,
- Handbook of occupational safety and health, Lawrence S.
- MSDS, your guide to chemical safety
- Engg design for control of work place hazards, Richard A.
- Safety managers Handbook, J.J. Keller and Associates Inc. USA.
- Supervising safety for Hazardous Processes, Dr.K.U.Mistry, Safety Health and Environment Association, 1<sup>st</sup> edition.

