

## Lesson Plan

**MCM DAV College for Women, Sector – 36A, Chandigarh**  
**Monthly Teaching Plans (Even Semester)**  
**Session – (2025-26)**

**Name of the Teacher/s:** Dr. Swatika Sharma

**Department:** Chemistry

**Class:** M.Sc. II  
**ENVIRONMENT CHEMISTRY**

**Subject:**

S. No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	24-07-2025	11-08-2025	UNIT 1 Environment Introduction. Composition of atmosphere, vertical temperature, heat budget of the Earth atmospheric system, vertical stability atmosphere. Biogeochemical cycles of C,N,P,S and O. Biodistribution of elements. Environmental Toxicology Chemical solutions to environmental problems, biodegradability, principles of decomposition, better industrial processes. Bhopal gas tragedy.	Lecture method, Online sources
2	12-08-2025	16-09-2025	UNIT 2 Industrial Pollution Cement sugar, distillery, drug, paper, thermal power plants, nuclear Power plants, metallurgy. Polymers, drug etc. Radionuclide analysis. Disposal of wastes and their management and Minamata disasters. Soils Composition, micro and	Lecture method

			macro nutrients, pollution-fertilizers, pesticides, plastic and metals.	
3	17-09-2025	08-10-2025	<p>UNIT 3</p> <p>Hydrosphere</p> <p>Chemical composition of water bodies-lakes, streams, rivers and wet lands etc.</p> <p>Hydrological cycle. Aquatic pollution – inorganic, organic, pesticide, agricultural, industrial and Sewage, detergents, oil spills and oil pollutants. Water Quality parameters –Dissolved oxygen, biochemical oxygen demand, solids, metals, content of Chloride, sulphate, phosphate, nitrate and micro-organisms. Water quality Standards. Analytical methods for measuring BOD,DO,COD,F,Oils,metals (As,Cd,Cr, Hg,Pb,Se etc.), residual chloride and chlorine demand. Purification and treatment of water.</p>	Lecture Method, Online Sources
4	09-10-2025	Till exam	<p>UNIT-4</p> <p>Atmosphere</p> <p>Chemical composition of atmosphere – particles, ions and radicals and their formation. Chemical and photochemical reactions in atmosphere, smog formation, oxides of Chlorofluorohydrocarbons, Ozone depletion, Global warming. Green house effect, acid rain, air pollution controls and their chemistry. Analytical methods for measuring air pollutants. Continuous monitoring instruments</p>	Lecture Method, Online Sources

<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>	
27 <sup>th</sup> August, 2025	The teachers have completed the scheduled chapters and topics as shown in the lesson plan
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>	
24 <sup>th</sup> September, 2025	The teachers have completed the scheduled chapters and topics as shown in the lesson plan
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>	
29 <sup>th</sup> October, 2025	The teachers have completed the scheduled chapters and topics as shown in the lesson plan
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>	
10th November, 2025	The teachers have completed the scheduled chapters and topics as shown in the lesson plan

**\*Any of these** – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc. Other Methods adopted by the teacher – Please write the specific teaching method