

**M. SC. (ENVIRONMENTAL
SCIENCE) (MSCENV)**

Term-End Examination

June, 2025

MEV-013 : ENVIRONMENTAL CHEMISTRY

Time : 3 Hours

Maximum Marks : 100

Note : (i) Answer any **ten** questions.

(ii) Each question carries 10 marks.

1. Define Environmental Chemistry. Discuss the scope and concepts of Environmental Chemistry. 2+8
2. Differentiate adsorption and absorption with suitable examples. 10

3. Explain the catalytic cycle with a neatly labelled diagram. 10
4. What are oxidising and reducing agents ? Explain with suitable examples. 10
5. Why are radionuclides hazardous ? Explain. 10
6. Discuss the advantages and disadvantages of biogas. 10
7. What is the hydrological cycle ? Explain its importance with a diagram. 10
8. Write a brief note on PCBs and polychlorinated biphenyls with an emphasis of their role in the environment. 10
9. Describe a soil profile with a neat diagram. 10
10. Explain the importance of micro- and macro-nutrients in soil. 10

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11. Describe the effects of global warming. 10

12. Why do we add alum to purify water ?

Explain. 10

13. Differentiate IR spectroscopy and UV-Vis
spectrometry. 10

14. Discuss the applications of a mass
spectrometer. 10

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