M. SC. (CHEMISTRY) /

M. SC. (ANALYTICAL CHEMISTRY) (MSCCHEM/MSCANCHEM)

Term-End Examination

December, 2024

MCH-019: GREEN CHEMISTRY

Time: 1 Hour Maximum Marks: 25

Note: (i) Answer either question no. 1 or question no. 2.

(ii) Answer any five questions from questionno. 3 to question no. 8.

Note: Answer any one of the following questions.

Discuss the principle of 'designing chemical products'. Also illustrate its importance giving suitable examples.

Or

What are CFCs ? Explain how they are responsible for the destruction of ozone layer.
 Discuss the harmful effects of depletion of ozone layer.

Note: Answer any five of the following questions.

- (a) Describe the advantages of using catalysts in chemical reactions according to Green Chemistry.
 - (b) Briefly explain the process of Analytical Chemistry. 2
- 4. Before using a particular compound for synthesizing a given molecule, what aspects about it should be explored in the available literature to know its safety to human beings and environment?
- 5. Differentiate between smog and photochemical smog. Give their harmful effects.
- 6. Give the advantages of using DCOI over TBTO.

- 7. Briefly explain the steps involved in the production of paper. What is chlorine-free paper?
- 8. What are scales chemically? What are the disadvantages of scale formation? Give the full form of the scale inhibitor PAC.