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MCH-019

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

Term-End Examination

December, 2025

MCH-019 : GREEN CHEMISTRY

Time : 1 Hour

Maximum Marks : 25

Note : Answer either question no. 1 or question no. 2. Answer any **five** questions from question no. 3 to question no. 8.

Answer any *one* of the following questions :

1. State the principle of 'using renewable feedstock' of green chemistry. Explain its importance. Also discuss the implications of using fossil fuels. 5

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2. Discuss the important uses of organic solvents in chemistry laboratories and industries. Name their *two* main categories. Give *two* examples of solvents belonging to each category. 5

Answer any *five* questions from the following :

3. What is the importance of exploring the use of alternatives when we plan the synthesis of a particular compound ? Name the alternatives we should explore from the green chemistry point of view. 4
4. Explain the following reactions giving *one* example for each of them : 4
- (i) Rearrangement reactions
 - (ii) Pericyclic reactions
5. What is global climate change ? Why is it occurring ? Give any *two* effects of global climate change. 4

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6. Write the scheme of synthesis of BHT using toluene as the starting material. Give the harmful effects of toluene on human health.

4

7. What is EPS ? How is it produced ? Why is its utilization increasing ?

4

8. What is PET ? Give its important uses. Name the monomers used in its synthesis.

4

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