

No. of Printed Pages : 3

**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

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

[ 3 ]

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

x x x x x