

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

Term-End Examination

June, 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. Which type of reactions and reaction sequences we should prefer while planning a synthesis for the given compound ? Give

reason(s). Why should the use of catalysts be encouraged ? 5

Or

2. What is PAC ? Give its advantages and disadvantages. What was the alternative of using PAC ? What were the other uses of this inhibitor ? 5

Answer any *five* questions from the following :

3. What aspects should be taken into account while considering the harmful effects of chemicals to wildlife ? 4
4. Give the scheme of reactions of green synthesis of ibuprofen starting from isobutyl benzene. 4
5. How does nitrous acid cause depletion of ozone in ozone layer ? Give the reactions involved. How is ozone layer depletion harmful to humans ? 4

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6. Give the advantages of using TAML activators. 4
7. While selecting the reagent(s) for a particular synthesis, what criteria should be used to choose the best reagent ? 4
8. Why should the use of green chemistry be encouraged in chemistry laboratories ? 4

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