QP CODE: 24803817

24803817

Reg No : .....

Name : .....

INTEGRATED MSC DEGREE EXAMINATION, JULY 2024

Fourth Semester

INTEGRATED MSC BASIC SCIENCE-CHEMISTRY

CORE - ICH4CR03 - GREEN CHEMISTRY

2020 Admission Onwards

11AB61D7

Time: 3 Hours Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. Which of the principle of green explain prevention of wsate or by product?
2. What are the main sources of waste?
3. What is the inherent safer principle of ISD in green chemistry?
4. How to minimize the generation of hazardous substances in chemical processes?
5. How to synthesis adipic acid by means of green chemistry?
6. Check whether the conversion of methylbenzoate to benzoic acid is a green synthesis or not?
7. What are the pollution problems in the dye industry?
8. What are the advantages of green chemistry practice in education?
9. What is multifunctional reagents?
10. Briefly explain your views on green chemistry in sustainable development.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Define the term green chemistry & discuss the limitations of green chemistry.
12. Discuss the atom economy of rearrangement,addition,substitution & elimination reaction.
13. What is the importants of reducing toxicity risk hazardous exposure?

14. Discuss the various factors that have to be considered while selecting a starting material for a given green synthesis.

15. Discuss the differnt types of catalysis in green chemistry.

16. What are right fit azo pigments? Explain its advantages over organic and inorganic pigments.

17. Analyse the method for the production of No Trans-fats & oils.

18. Explain the water quality parametres specific conductance,fluoride, sulphide & ammonia.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Give a detailed description of green protocols.

20. Explain the use of microwave and ultrasound as an alternative source of energy.

21. Explain the roles of green solvents in various reactions with suitable example.

22. Explain a)microwave assisted reactions in water & b)microwave assisted reactions in solvents.

(2×5=10 weightage)