

2020 ONLY)

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI**  
**END-OF-SEMESTER EXAMINATIONS : MAY-2023**

**B.Sc. – CHEMISTRY**  
**VI SEMESTER**

**MAXIMUM MARKS: 50**  
**TIME : 2 HOURS**

**PART – IV**  
**GREEN CHEMISTRY**

**SECTION - A****(10 X 1 = 10 MARKS)****ANSWER THE FOLLOWING QUESTIONS.****MULTIPLE CHOICE QUESTIONS.**

1. In which year Clean Air Act was established? (K1)  
a) 1885 b) 1970 c) 1972 d) 1981
2. RACI green chemistry challenges award is given by which country (K1)  
a) Europe b) Australia c) U.K d) Japan
3. Which one of the following is not a ionic liquid (K1)  
a) Sulfonium b) Ammonium c) Thiazolium d) Nitro aniline
4. What is the Critical Temperature of CO<sub>2</sub>? (K1)  
a) 73.8°C b) 31.1°C c) 60°C d) 52°C
5. ----- is called biocatalyst. (K1)  
a) Proteins b) Enzymes c) Vitamins d) Fats

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES**

6. What is meant by Green Chemistry? (K2)
7. What is atom economy? (K2)
8. What is Ionic Liquids and give an example? (K2)
9. What is super critical fluid? (K2)
10. Give two examples for supported metal catalyst. (K2)

**SECTION – B****(5 X 8 =40 Marks)****Answer any five questions out of the eight questions.**

11. Write a note on Environmental protection laws. (K3)
12. Explain briefly the twelve principles of green chemistry. (K3)
13. Explain Prospects and retrospect of Ionic Liquids. (K3)
14. Explain carbon dioxide is a super critical fluid and give its advantages. (K3)
15. Give some examples of solvent free organic synthesis under microwaves. (K3)
16. Give the application of super fluid extraction technology. (K3)
17. Explain the use of bio catalyst and Transition metal catalyst for green synthesis. (K3)
18. Explain oxidation technology for waste water treatment. (K3)