

SIDO - KANHU MURMU UNIVERSITY, DUMKA

Question Bank

Subject: chemistry

Class: semester 6

Some important questions of chemistry for semester VI DSE III (Green chemistry), are given below-

1. What is green chemistry?
2. Write down the twelve basic principles of Green chemistry.
3. Explain any six principles of Green chemistry with the help of examples.
4. Provide Green Route of synthesizing of the following compounds:
 - (a) Disodium iminodiacetate
 - (b) Citral
 - (c) Urethane
 - (d) Ibuprofen
 - (e) Furfural
5. Explain the green route for the synthesis of Adipic acid, methyl methacrylate and paracetamol.
6. What do you mean by atom economy? Compare the atom economy of substitution and addition reactions with suitable examples.
7. Explain the solvent free synthesis.
8. Discuss the thermal solvent free synthesis with examples.
9. What are the advantages and disadvantages of solvent free synthesis?
10. What are ionic liquid and what are the advantages of ionic liquids over volatile organic solvents?
11. Explain the following terms:
 - (a) Auxiliary substances
 - (b) Designing of Green synthesis
 - (c) Sonochemistry
 - (d) Goals of Green chemistry
 - (e) Biocatalysis
 - (f) Sustainability
12. What is supercritical CO₂? Also discuss its advantages.
13. What are the characteristics of ionic liquid?

14. Give different techniques of minimizing Hazardous wastes.
15. Green chemistry is sustainable chemistry. Explain the statement.
16. Write short notes on :
 - (a) Surfactants for carbon dioxide
 - (b) Ionic liquids
 - (c) Green energy and sustainability
17. How can you improve the atom economy of a reaction?
18. What do you mean by microwave synthesis?
19. Discuss the advantages of microwave synthesis.
20. What type of reaction vessels are used in microwave reactions?