

**B.Sc. (H) Chem and B.Sc (P) (Semester IV)**

**SEC: Green methods in chemistry**

Q1. What do you mean by Atom economy? Explain with suitable example. How will you differentiate between a rearrangement reaction and elimination reaction using the concept of atom economy?

Q2. Define ionic liquids? Taking suitable example how will you synthesise an ionic liquid.

Q3. Fill in the blanks

a. Microwave heating involves the conversion of \_\_\_\_\_ energy to \_\_\_\_\_.

b. A raw material should be \_\_\_\_\_ rather than \_\_\_\_\_ wherever technically and economically feasible.

Q4. Give the twelve principles of green chemistry. Explain any two with the help of suitable examples.

Q5. How will you synthesise the following compound using green route (a) Catechol (b) adipic acid.

Q6. Water is a green solvent? Explain.

Q7. What is sonication? What effect is responsible for supplying energy in sonication?

Q8. What is SEA-NINE 211?

Q9. Write a reaction of saponification of ester under microwave irradiation.

Q10. What are the goals of green chemistry?

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