

Affiliated to Rashtrasant Tukadoji
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## **QUESTION BANK**

## PAPER II (ORGANIC CHEMISTRY)

2022 - 2023

## M.sc 1<sup>st</sup> semester

- 1. Explain:
- (i) Hyperconjugation
- (ii) Aromaticity in benezoid compounds.
- 2. Explain the aromaticity in tropane and tropolone. Also give one method of their synthesis.
- 3. Give an account of:
- (i) Crown ethers
- (ii) Catenanes.
- 4. What are stereospecific and stereoselective reactions? Explain them with the help of two examples of each.
- 5. Explain the following terms:
- (i) Chirality and
- (ii) Threo and Erythroisomers.
- 6. What is isotopic labelling? How is it used to establish mechanism of a reaction?
- 7. Write statement and explain the mechanism of Von-Richter reaction.
- 8. Write mechanism of:
- (i) Smiles rearrangement
- (ii) Gatternman Koch reaction.

- 9. Explain the following:
- (i) Electron Donor-acceptor complexes
- (ii) Inclusion compounds.
- 10. Differentiate the following:
- (i) Hard and soft acids
- (ii) Classical and non-classical carbocations.