

**VINAYAKA MISSION'S RESEARCH FOUNDATION  
(DEEMED TO BE UNIVERSITY), SALEM**

**B.PHARM. DEGREE EXAMINATION – JULY 2019  
Fourth Semester**

**PHARMACEUTICAL ORGANIC CHEMISTRY - III**

Time : Three hours

Maximum: 75 marks

I. Write essays on any **TWO** questions: (2 x 10 = 20)

1. a) Define optical activity and specific rotation and give examples of meso compound. (5)
- b) Write about asymmetric synthesis. (5)
2. a) Explain about reaction and mechanism involved in Claisen-Schmidt reaction. (5)
- b) Discuss the mechanism involved in Clemmensen reduction reaction. (5)
3. Write synthesis, chemical properties of pyrazole and Imidazole and discuss the basicity of pyridine. (10)

II. Write short answers on any **SEVEN** questions: (7 x 5 = 35)

4. Describe about geometrical isomerism and explain with examples.
5. Give the synthetic importance of Birch reduction.
6. Write the reactions of Chiral molecules.
7. What is Racemic modification and explain with examples?
8. Describe the significance of Acridine, ISO quinaline derivatives.
9. Discuss about metal hydride reduction.
10. Write the synthesis and importance of pyridine.
11. Discuss about elements of symmetry with examples.
12. Discuss about conformational isomerism in ethane and n-butane.

III. Write short notes on : (10 x 2 = 20)

13. Define enantiomerism with examples.
14. Write about aromatic character of pyrrole.
15. Give two examples for RS system of nomenclature.
16. What is resolution of Racemic mixture explain with example.
17. Give two examples for E and Z nomenclature.
18. Write the synthetic importance of Beckmanns rearrangement reaction.
19. Explain about chemical properties of oxazole.
20. Define stereospecific synthesis.
21. Write the medicinal uses of Pyrazole and Indole.
22. Discuss the basicity of pyridine.