

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

**B.PHARM. DEGREE EXAMINATION – JANUARY 2020
Third Semester**

PHARMACEUTICAL ORGANIC CHEMISTRY II

Time : Three hours

Maximum: 75 marks

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

1. Define aromatic electrophilic substitution reactions. Discuss the reaction and mechanism of nitration sulphonation and friedel- craft reaction.
2. Give an account of Bayer's strain theory. Why cycloalkanes having more than seven carbon are difficult to prepare, through there is no angular strain? What are the limitations of this theory?
3. Explain the concept of resonance, taking benzene as example. Give molecular orbital picture.

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

4. Discuss the acidity of aromatic acids.
5. Haworth synthesis of naphthalene.
6. Write the preparation, important reaction and uses of benzoic acid.
7. Write the synthesis and properties of phenanthrene.
8. Explain the resonance structures of benzene.
9. Give the method of reaction of fatty acid.
10. Write the signification and principle involved in determination of Reichert Meissi value.
11. Write the preparation and mechanism of aryl diazonium salts.
12. Saponification value and rancidity of oils.

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

13. Write the structure and uses of DDT.
14. Qualitative tests for phenol.
15. Ester value.
16. Write the structure and uses of Resoreinol.
17. Write the structure and uses of chloramines.
18. Huckel's rule.
19. Preparation of aromatic amines.
20. Acid value.
21. Hydrolysis is fatty acid.
22. Give the example of polynuclear hydrocarbon.