

VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM
(Deemed to be University)

Pharm.D DEGREE EXAMINATION - July 2019
First Year

PHARMACEUTICAL ORGANIC CHEMISTRY

Time: Three hours

Maximum: 70 marks

I. Write essays on any **TWO** questions: (2 x 15 = 30)

1. What are electrophilic addition reactions? Explain any two reactions in detail
2. Explain the mechanism of following naming reactions.
a) Aldol condensation b) Knoevenagel reaction c) Michael addition
3. Explain about the resonance stabilization of benzyl radical.
Discuss about activating and deactivating O, P and M directing groups.

II. Write short answers on any **SIX** questions: (6 x 5 = 30)

4. Define isomerism with suitable examples.
5. What are cycloalkanes? Give an example. Discuss the preparation of cycloalkanes.
6. Explain the mechanism of E1 and E2 reaction.
7. Basicity of amines.
8. Orbital picture of Allyl radical.
9. Protic and Aprotic solvents.
10. Phase transfer catalysis.
11. Write the structure, preparation, assay and medicinal uses of sodium lauryl sulphate.

III. Write short notes on any **FIVE** question: (5 x 2 = 10)

12. Carbocation.
13. Write any one method of conversion of acid to ester.
14. 1,4- addition and 1,2-addition reactions of Dienes.
15. Inter molecular forces.
16. Tollens reagent.
17. What are Aldehydes and Ketones?
