

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

**B.PHARM. DEGREE EXAMINATION – July 2021
Second Semester**

PHARMACEUTICAL ORGANIC CHEMISTRY I

Time : Three hours

Maximum: 75 marks

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

1. a) How will you distinguish primary, secondary and tertiary amines (3+3+3=6)
b) Discuss the basicity of amines the effect of substituent. (4)
2. a) Write a note on Peroxide effect with example. (5)
b) Explain Ozonolysis reaction with its application . (5)
3. Explain the mechanism, reactivity and kinetics of S_NI and S_N2 reaction. (5+5=10)

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

4. Halogenation of alkanes.
5. Explain Saytzeffs rule with examples.
6. Define hybridization. Describe the molecular orbital structure of ethane.(2+3=5)
7. Explain about Markownikoff's rule of alkene.
8. IUPAC nomenclature of alkane.
9. Detail about elimination reactions of alkylhalides and explain with examples. (2.5+2.5=5)
10. Write a note on aldol condensation with its mechanism (2.5+2.5=5)
11. How to differentiate primary, secondary and tertiary alcohols?
12. Explain Diels Alder reaction with examples

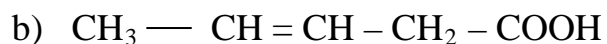
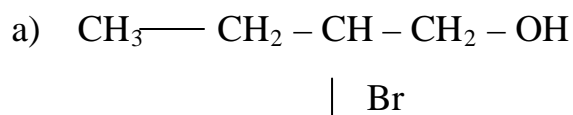
III. Write short notes on : (10 x 2 = 20)

13. Define optical isomerism with one example.

(p.t.o)

-- (2) --

14. Write the IUPAC name of



15. Define conjugated dienes with examples.

16. What is tautomerism?

17. Write any two qualitative tests of esters.

18. Write the structure and uses of Iodoform trichloroethylene.

19. Structure and use of formaldehyde and paraldehyde.

20. Write the qualitative tests of carbonyl compounds.

21. Write the structure and uses of Dimethyl phthalate methyl salicylate.

22. Define electromeric effect.

(Sl.No. M21929)