

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BPHARM 1022]

**OCTOBER 2022
(AUGUST 2022 EXAM SESSION)**

Sub. Code: 4252

B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)

FIRST YEAR (Regulation 2009-2010)

PAPER II – PHARMACEUTICAL ORGANIC CHEMISTRY

Q.P. Code: 564252

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. What are amines? How are they classified? Discuss the general methods of preparations and properties of Aliphatic amines.
2. a) Classify Alcohols with examples. Give the preparation and reactions of alcohols.
b) Explain the mechanism of Electrophilic addition reaction across a double bond.

II. Write notes on:

(8 x 5 = 40)

1. Explain the facts supporting Kekulé structure of Benzene.
2. Explain Markownikoff's rule and peroxide effect.
3. Outline the general methods of preparation of alkynes.
4. Write note on Inductive effect.
5. What are carbenes? Give examples and explain about stability.
6. Explain mechanism of Halogenation of alkanes. Discuss selectivity of halogens in this reaction.
7. Write short notes on mesomeric effect.
8. Mention the methods of preparation and reactions of aldehydes.

III. Short answers on:

(10 x 2 = 20)

1. Oxidation of secondary alcohols.
2. Define polynuclear hydrocarbons.
3. What is dipole moment?
4. Explain Polarity.
5. Define Hybridization.
6. What is Diels-Alder reaction?
7. What is hyperconjugation?
8. Define Tautomerism.
9. 4n + 2 rule.
10. Define boiling point and melting point.
