

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

[BPHARM 0522]

MAY 2022

Sub. Code: 4252

(FEBRUARY 2022 EXAM SESSION)

**B. PHARMACY DEGREE EXAMINATION
FIRST YEAR – (NON-SEMESTER)
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. Explain the Nucleophilic aromatic substitution reaction of Benzene.
2. Describe the mechanism, reaction and orientation of E₂ reactions.

II. Write notes on:

(8 x 5 = 40)

1. Write the methods of preparation of Amines.
2. Differentiate Primary, Secondary and Tertiary Alcohols.
3. Explain the preparation, stability, fate and applications of Free radicals.
4. Write the methods of preparation of Alkanes.
5. Describe Huckels rule.
6. Mention the methods of preparation and reactions of Ketone.
7. Write the preparation and synthetic utility of Grignard reagent.
8. Explain Bayer's strain theory and its limitation.

III. Short answers on:

(10 x 2 = 20)

1. Define Covalent bond.
2. Hoffmann degradation of amines.
3. Explain Conjugation.
4. What is Inductive effect?
5. Citric acid.
6. Anthracene.
7. Define Resonance effect.
8. Define Electrophile.
9. Carbanion.
10. What is Hinsberg test?.
