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

## [BPHARM 0921] SEPTEMBER 2021 Sub. Code: 4252 (FEBRUARY 2021 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:  $(2 \times 20 = 40)$ 

1. Explain the Preparation and reactions of Alkenes.

2. What are Polynuclear Hydrocarbons? Write the synthesis and properties of (a) Napthalene (b) Anthracene.

II. Write notes on:  $(8 \times 5 = 40)$ 

- 1. Give the Synthetic utility of Diazonium Salts.
- 2. Distinguish Primary, Secondary and Tertiary Amines.
- 3. Write the preparation and medicinal uses of (a) Saccharin (b) Amphetamine.
- 4. What are Carbenes? Give examples and explain about stability.
- 5. Describe Coulson and Moffitt's Modification.
- 6. Write the preparation and properties of Anthracene.
- 7. Explain Mechanism of Halogenations of Alkanes. Discuss the selectivity of halogens in this reaction.
- 8. Write short notes on Mesomeric effect.

## III. Short answers on:

 $(10 \times 2 = 20)$ 

- 1. Write the structure and medicinal use of Methyl Salicylate.
- 2. Define Tautomerism.
- 3. Brief about Polarity of bond.
- 4. Give the structural formula of urethane and Acetanilide.
- 5. Define Nucleophiles.
- 6. Write the method of preparation of Iodoform.
- 7. Two reactions of Cycloalkanes.
- 8. Define Covalent bond.
- 9. Write a note on Cannizzaro reaction.
- 10. Define inductive effect.

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