

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

[BPHARM 0522]

**MAY 2022
(SEPTEMBER 2021 EXAM SESSION)**

Sub. Code: 2031

**B.PHARM. DEGREE EXAMINATION
PCI Regulation 2017 – SEMESTER III
PAPER I – PHARMACEUTICAL ORGANIC CHEMISTRY – II
Q.P. Code: 562031**

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Define & classify Polynuclear hydrocarbons. Enumerate the synthesis and reactions of naphthalene.
2. Briefly explain about the acidity of aromatic acids and the effect of substituents on acidity.
3. Explain the stability of cyclo alkanes on the basis of Bayer strain theory and brief out its limitations.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Give an account on the Friedel crafts alkylation and Friedel crafts acylation reaction with mechanism.
2. Write a note on the synthetic utility of aryl diazonium salts.
3. Write a note on the determination of acid value in fats and oils.
4. Brief out on Fries rearrangement with mechanism.
5. Write a note on the effect of electron withdrawing groups on electrophilic aromatic substitution reaction in benzene.
6. Write the synthesis of aryl alkyl ethers from phenol.
7. Give an account for reactions of anthracene.
8. Write the methods of synthesis of aromatic amines.
9. Write a note on the types of rancidity and the methods for prevention of rancidity.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Write the structure and uses of Saccharin and Chloramine.
2. Give a short account on primary, secondary and tertiary amines with examples.
3. What is Reichert- Meissl value?
4. Brief out on reduction reaction of phenanthrene.
5. Define fats, oils and waxes
6. Write the reaction of esterification of benzoic acid
7. Write on Wurtz Fittig reaction.
8. Mention the drawbacks of Friedel crafts alkylation.
9. Write the catalytic reduction reaction of propane.
10. Write a note on Elb's reaction.
