

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

[BPHARM 0122]

JANUARY 2022
(MARCH 2021 EXAM SESSION)

Sub. Code: 2031

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)
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. Outline any two preparations and three reactions of Phenol. Explain the acidity of Phenol.
2. a) Explain the Esterification, Hydrolysis and Hydrogenation reactions of Fatty acids.
b) Explain in detail about the determination of Acid value of fats and oils.
3. Give the structure, nomenclature, preparation and reactions of Cycloalkanes.

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

1. Write about the aromatic characters of Benzene and give the nitration reaction of it.
2. What happens if Phenol reacts with Dilute and Conc. Nitric acid?
3. Describe the method of preparation by Gabriel synthesis and the reactions of alkylation, reduction and amide to amine conversion.
4. Outline the Electrophilic substitution reactions of aromatic amines.
5. Give the preparation and properties of Naphthalene.
6. Write a note on Sachse Mohr's theory.
7. Give each one synthesis of Phenanthrene, Anthracene and Diphenylmethane.
8. Discuss the structure of benzene and explain its stability.
9. Give any four reactions of Benzoic acid.

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

1. Benzene treated with acetyl chloride and anhydrous AlCl_3 .
2. Explain Williamson's ether synthesis.
3. Reaction of Phenol with reactive metals.
4. Any one preparation of Biphenyl compounds.
5. Define Adduct with examples.
6. What happens when Diphenylmethane is treated with $\text{K}_2\text{Cr}_2\text{O}_7$?
7. Give the nomenclature for Naphthalene and phenanthrene.
8. What do you mean Rancidity of oils?
Give the structure and uses of the following organic compounds:-
9. a) Saccharin b) BHC
10. a) DDT b) Chloramine