

[BPHARM 0921]

SEPTEMBER 2021
(SEPTEMBER 2020 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. Details the mechanism of reactions of Benzene with various electrophiles. Brief notes on orientation of second substituent in mono substitutes Benzene.
2. Discuss the principle involved in the determination of analytical constants of Fats and Oils. Write their clinical importance.
3. Enumerate the necessary modifications suggested by Coulson – Moffit for cyclo alkanes. Give the reactions of Anthracene.

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

1. Draw the orbital picture of Benzene and write a note about it.
2. Give the preparations for the following with mechanism:
i) meta-Dinitro benzene and ii) m – Cresol.
3. Replacement reactions of Diazonium Chloride with mechanism.
4. Brief about the basicity of Amines.
5. Haworth synthesis of Naphthalene.
6. Preparations and reaction of Diphenylmethane.
7. One medicinal compound with uses belonging to Triphenylmethane, Phenanthrene and Anthracene.
8. Draw the picture of i) Stable cyclohexane and ii) Angle strain in Cycloalkanes.
9. Resonance hybrid structure for Phenanthrene and write about its Resonance energy.

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

1. Why oils become rancid?
2. Saponification value.
3. Structure and medicinal uses of any two diphenylmethane derivatives.
4. Classify phenols with examples.
5. Structure and medicinal uses of DDT and BHC.
6. Give reason for the acidity of the phenols with the help of their resonance structure.
7. Schotten –Baumann reaction.
8. Compare their acidity: Salicylic acid, Benzoic acid and Nitro benzoic acid.
9. Give the reaction that yields soap and glycerol from fats and oils.
10. Define the value that is useful in finding the number of alcoholic groups present in fats and oils.