

Course	: B. Pharmacy	Sem: III
Subject Name	: Pharmaceutical Organic Chemistry-II	Subject Code: BP301T
Max Marks	: 75	Duration : 3 Hr.

**Instructions:**

1. All questions are compulsory
2. Draw diagrams / figures wherever necessary
3. Figures to right indicate full marks

**Q. 1. Objective Type Questions (Answer all the questions) (10 x 2) = 20**

- i) Structure and uses of DDT.
- ii) Define Reichert Meissl Value and give its significance.
- iii) Structure and uses of Resorcinol.
- iv) Write down qualitative test for phenol.
- v) Huckel rule for aromaticity.
- vi) Saponification of oils.
- vii) Any two reactions of benzoic acid.
- viii) Structure and medicinal uses of Naphthalene.
- ix) Any two method for preparation of diphenylmethane.
- x) Coulson and Moffitt's modification.

**Q. 2. Long Answers (Answer 2 out of 3) (2 x 10) = 20**

- i) Define fats and oils with example and give difference between them. Explain acid value, and saponification value with significance.
- ii) What are condensed polynuclear hydrocarbon. Write down Haworth synthesis of Anthracene and any two-chemical reaction of it. Draw the structure of derivatives of it along with uses.
- iii) Explain in detail Friedel Crafts alkylation and acylation in benzene with mechanism of reaction. Give its limitations.

**Q. 3. Short Answers (Answer 7 out of 9) (7 x 5) = 35**

- i) Explain in detail evidences given by Kekule to establish the structure of benzene.
- ii) Explain reaction and mechanism of nitration, halogenation and sulphonation in benzene.
- iii) Write down about effect of substituents on acidity of phenol. Give synthetic uses of aryl diazonium salt.
- iv) Explain in detail hydrogenation of oils. Give preventive major for rancidity of oils.
- v) Explain electrophilic substitution in diphenylmethane. Give its uses.
- vi) Give any three reactions of Phenanthrene. Note on derivatives of it.
- vii) Discuss Baeyer's Strain theory.
- viii) Give reactions of cyclopropane and cyclobutane.
- ix) Define ester value give significance and principle involved in its determination.

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