

SEMESTER EXAMINATION-2021
CLASS – B.PHARM III SEM
Subject: Pharmaceutical Organic Chemistry II – Theory
PAPER CODE: BP301T

Time: 3 hour

Max. Marks: 75

Min. Pass: 50%

Note: Question Paper is divided into two sections: **A and B**. Attempt both the sections as per given instructions.

SECTION-A (SHORT ANSWER TYPE QUESTIONS)

Instructions: Answer any five questions in about 150 words each. Each question carries six marks. (5 X 7 = 35 Marks)

Question-1: Write a short note on alkylation of benzene.

Question-2: What is Huckel's rule? Explain the aromaticity of benzene and pyridine

Question-3: Write a short note on fats and oils & its reaction.

Question-4: What is saponification value and iodine value? Write the procedure of determination in short.

Question-5: Define drying of oils and rancidity of oils?

Question-6: Discuss the reactions of cyclopropane and cyclobutane.

Question-7: How will you synthesize cyclopentane from diethyl adipate?

Question-8: Write the method of preparation of aniline. Describe its important reactions.

Question-9: Write the resonance structure of anthracene and phenanthrene.

Question-10: Explain the nitration, and Friedel-Craft acylation of naphthalene

SECTION-B (LONG ANSWER TYPE QUESTIONS)

Instructions: Answer any FOUR questions in detail. Each question carries 10 marks. (4 X 10 = 40 Marks)

Question-11: Discuss Baeyer strain theory. What are limitations of this theory?

Question-12: Discuss the substituents and effect of substituents on reactivity and orientation of mono substituted benzene compounds towards electrophilic substitution reaction.

Question-13: Discuss the preparation and reactions of phenols

Question-14: Describe the preparation, physical and chemical properties of aniline.

Question-15: Explain the effects of substituents on reactivity of monosubstituted benzene. (ortho, para and metadirectors)

Question-16: Explain the aromatic acids with preparation and chemical reactions.

Question-17: Write a notes on (any two):

- (a) Chemical properties of oils
- (b) Determination of acid value
- (c) Simple and mixed triglycerides

Question-18: Describe the chemistry of Naphthalene and Phenanthrene,

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