PAPER ID-311351

Roll No:

BPHARM
(SEM III) THEORY EXAMINATION 2023-24
PHARMACEUTICAL ORGANIC CHEMISTRY II

TIME: 3HRS   **M.MARKS: 75**

Time: 3 Hours   *Total Marks: 75*

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1.   **Attempt *all* questions in brief.**   **10 x 2 = 20**

a.	Mention ortho, meta and para directing groups with examples.
b.	Why aromatic amines are less basic than aliphatic amines.
c.	Mention two qualitative tests for phenol.
d.	Write structure and use of Cresol and Resorcinol.
e.	What is the significance of saponification vale?
f.	Write one example of MUFA and PUFA each.
g.	Write structure and uses of Diphenylmethane and triphenylmethane.
h.	What is preferential position for electrophilic substitution reaction in naphthalene.
i.	What synonym is used for Sachse-Mohr theory?
j.	Why cyclopropane is reactive towards ring-opening reactions compared to Cyclobutane?

SECTION B

2.   **Attempt any *two* parts of the following:**   **2 x 10 = 20**

a.	Discuss Aromatic electrophilic substitution reactions. Discuss the reaction and mechanism of Nitration, Friedel-Craft's Alkylation and Friedel-Craft's Acylation Reactions.
b.	Write the synthesis, reactions and medicinal uses of anthracene and phenanthrene.
c.	Discuss Baeyer's strain theory and outline its limitations briefly. What modifications were proposed by Coulson and Moffitt?

SECTION C

3.   **Attempt any *five* parts of the following:**   **7 x 5 = 35**

a.	Write analytical, synthetic evidences in favour of structure of benzene.
b.	Give structure, preparation, and properties of Benzoic acid.
c.	Discuss basicity of amines, and how do different substituents affect their basicity?
d.	What do you mean by hydrolysis, rancidity and drying of oils? How it impacts the quality of oils?
e.	What is iodine value? How it is determined? Enlist methods for determination of iodine vales.
f.	How are polynuclear hydrocarbons classified? Discuss the synthesis and reactions of naphthalene.
g.	Discuss the reactions for cyclopropane and cyclobutane.