Subject Code: BP401T

Roll No:

B.PHARM
(SEM IV) THEORY EXAMINATION 2021-22
PHARMACEUTICAL ORGANIC CHEMISTRY III – THEORY

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.	Define enantiomers with examples.
b.	Define meso compounds with examples.
c.	Distinguish between E and Z isomers with examples.
d.	Discuss sequence rules.
e.	Compare the reactivity and aromaticity of pyrrole, furan and thiophene.
f.	What is the reduction product of furan? Give its reaction.
g.	Discuss the structure and pharmaceutical uses of Oxazole.
h.	Write the pharmaceutical uses of quinoline and isoquinoline.
i.	Write the synthetic importance of Birch reduction.
j.	Discuss the Claisen Schmidt condensation reaction.

SECTION B

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

a.	Outline the various conformations of cyclohexane in detail.
b.	Classify heterocyclic compounds. Discuss the nomenclature of heterocyclic compounds with suitable examples.
c.	Write down the synthesis, reactions and medicinal uses of Imidazole and Thiazole.

SECTION C

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

a.	Describe DL system of nomenclature of optical isomers with suitable example.
b.	Describe stereo isomerism in biphenyl compounds and its conditions for optical activity.
c.	Write down the synthesis, reactions, and medicinal uses of Pyrrole and Thiophene.
d.	Describe in detail about the stereospecific and stereoselective reactions with examples.
e.	Write down the synthesis and medicinal uses of Pyridine also discuss basicity of Pyridine.
f.	Discuss in detail about the synthesis and phannaceutical uses of pyrimidine and purine.
g.	Discuss the reaction and mechanism of Metal hydride reduction.

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