



PAPER ID-310039

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Subject Code: BP401T

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**BPHARM**  
**(SEM IV) THEORY EXAMINATION 2023-24**  
**PHARMACEUTICAL ORGANIC CHEMISTRY III – THEORY**

**TIME: 3 HRS****M.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.	What is sequence rule?
b.	Give the reaction involved in birch reduction.
c.	Give necessary conditions for any compound to show GI.
d.	Give the reaction involved in Dakin's reaction.
e.	Draw the structures of quinoline and isoquinoline.
f.	Give any one synthesis of pyrrole.
g.	What is atropisomeric?
h.	Define optical activity with diagram.
i.	Explain in brief about racemic modification.
j.	Give medicinal uses of furan and thiophene.

**SECTION B**

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

a.	Discuss reaction, mechanism and synthetic importance of Schmidt rearrangement or Claisen-Schmidt condensation.
b.	Comment on basicity of pyridine. Also give its reactions and medicinal uses.
c.	Explain in detail about different types of naming systems for geometrical isomers.

**SECTION C**

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

a.	Write synthesis and medicinal uses of pyrimidine and purine.
b.	Give the reaction, mechanism, and synthetic importance of metal hydride reduction.
c.	Discuss synthesis, reactions and medicinal uses of pyrazole or imidazole.
d.	Classify heterocyclic compounds with proper example.
e.	Write synthesis, reaction, and medicinal uses of pyridine.
f.	Comment on conformational isomerism in n-butane and cyclohexane.
g.	Discuss RS nomenclature system of optical isomers.