

(2012 Scheme)

**PHARMACEUTICAL CHEMISTRY III
(Advanced Organic Chemistry)**

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. Explain the mechanism of E1 and E2 reactions with valid examples.
2. Discuss on the mechanism and applications of Beckmann and Hoffmann rearrangement.
3. Explain the preparation and two important reactions of acridine, pyridazine, pyrazine and azepine.

Short notes

(14x5=70)

4. Aromaticity of naphthalene and naphthacene.
5. Preparation and reactions of isoquinoline and oxepine.
6. Michael addition reaction.
7. Stereochemistry of nitrogen compounds- explain.
8. Structure and aromatic character of any two poly nuclear hydrocarbons.
9. Mechanism of catalytic hydrogenation.
10. How do you determine configuration under geometrical isomerism.
11. Clemmenson's reduction.
12. Stereochemistry of oximes.
13. Properties of quinazoline and diazepine.
14. Stereochemistry of biphenyl.
15. How is oxidation with selenium oxide performed and where is it applied.
16. Oxazole and isoxazole.
17. What do you mean by resolution of racemic modification. Explain.
