

Roll No.

Total No. of Pages : 02

Total No. of Questions : 13

B.Pharma (Sem.-4)  
**PHARMACEUTICAL ORGANIC CHEMISTRY-III**

Subject Code : BP-401T

M.Code : 75843

Date of Examination : 01-07-22

Time : 3 Hrs.

Max. Marks : 75

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains THREE questions carrying TEN marks each and student has to attempt any TWO questions.
3. SECTION-C contains NINE questions carrying FIVE marks each and student has to attempt any SEVEN questions.

**SECTION-A**

1. Write short notes on :

- (a) Define optical isomerism.
- (b) Explain chiral versus achiral molecules.
- (c) State Cahn Ingold Prelog sequence rules.
- (d) Draw eclipsed and staggered conformation of ethane.
- (e) Define meso compounds with examples.
- (f) Write structures of indole and imidazole.
- (g) Write chemical structure with numbering of quinoline.
- (h) Write structure and medicinal uses of azepine.
- (i) What is Sodium borohydride used for? What happens when sodium borohydride react with water?
- (j) What is an oppenauer-oxidation reagent?

### SECTION-B

2. Write a brief note on methods of determining configuration of geometrical isomers.
3. Write explanatory note on Beckmann's rearrangement and Schmidt rearrangement.
4. Draw the preferred conformations of Cyclohexane and n-Butane. Give reason for your preference.

### SECTION-C

5. Write in detail about DL system of nomenclature of optical isomers.
6. Explain briefly a relation between elements of symmetry and optical activity.
7. Give an account on absolute 'configuration of biphenyls.'
8. Discuss mechanism and synthetic importance of Claisen-Schmidt condensation.
9. Discuss synthesis and various medicinal uses of pyrrole and thiophene.
10. Write synthesis and important reactions of Purine.
11. Write chemical synthesis of pyridine. Is pyridine a strong base?
12. Discuss briefly about Clemmensen reduction Birch reduction.
13. Write down brief note on stereospecific and stereoselective reactions.

**NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.**