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Total No. of Pages : 02

Total No. of Questions : 13

B.Pharma (2017 Batch) (Sem.-4)
PHARMACEUTICAL ORGANIC CHEMISTRY-III

Subject Code : BP-401T

M.Code : 75843

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 activity.
- (b) What are meso compounds? Give one example.
- (c) What is resolution of racemic mixture?
- (d) Draw Eclipsed and Staggered conformation of ethane. Which is more stable?
- (e) Define Geometric Isomers giving suitable example.
- (f) What are stereospecific reactions?
- (g) Write chemical structure with numbering of quinoline.
- (h) Write structures of pyridine and pyrimidine.
- (i) What functional groups does sodium borohydride reduce?
- (j) What are chiral and achiral molecules?

SECTION-B

2. Discuss in detail DL system and RS system of nomenclature of optical isomers.
3. Comment on “*conformational isomerism in n-Butane and cyclohexane*”.
4. Write the synthesis, reactions and medicinal uses of imidazole, purine, acridine and indole.

SECTION-C

5. Write in detail about enantiomerism and diastereomerism.
6. Discuss in detail about partial and absolute asymmetric synthesis.
7. Give an account on optical activity due to chiral axis.
8. Discuss mechanism as well as synthetic importance of Schmidt rearrangement.
9. Write mechanism involved behind Clemmensen reduction and Birch reduction.
10. Write about relative aromaticity and reactivity of thiophene and furan.
11. Explain Oppenauer-oxidation and Dakin reaction.
12. Discuss structure and uses of oxazole, pyrazole and thiazole.
13. Give brief note on elements of symmetry.

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.