Code. No: 13190/PCI

FACULTY OF PHARMACY

B. Pharmacy IV-Semester (PCI) (Main) Examination, July / August 2019

Subject : Pharmaceutical Organic Chemistry-III

Time: 3 Hours **Max. Marks: 75**

Note: Answer all Questions from Part-A, any Two Questions from Part-B. and Any Seven Questions From Part-C.

PART- A (10 x 2 = 20 Marks)

1. Write about any two elements of symmetry
2. Draw the conformational isomers of n-butane and cyclohexane.
3. Give conditions for optical activity.
4. Explain DL-system of Nomenclature.
5. Define and classify Heterocyclic compound.
6. Give reason for electrophilic substitution at 2^{nd} position in pyrrole.
7. Draw the structures of Pyrazole and Imidazole.
8. Draw the structures of Pyrimidine and oxazole.
9. Give any two application of Sodium borohydride.
10. Give any two application of Lithium Aluminiumhydride.

PART- B (2 × 10 = 20 Marks)

11. What are sequence rules and explain the RS system of nomenclature of Optical isomers.
12. Write the mechanism involved in Beckmann and Claisen-Schmidt rearrangement.
13. Write any two synthesis, reactions and medicinal uses of pyrazole and Imidazole.

PART- C (7 × 5 = 35 Marks)

14. Write a note on resolution and reactions of chiral molecule.
15. Write a note on Geometrical isomerism and nomenclature of geometrical isomers.
16. Explain Stereoisomerism in biphenyl compounds and give the conditions for optical activity.
17. Give the significance of stereospecific and stereoselective reactions.
18. Write any two synthesis, reactions and medicinal uses of Furan.
19. Write any two synthesis, reactions and medicinal uses of thiophene.
20. Write the metal hydride reactions of sodium borohydride and lithium aluminium hydride.
21. Write the mechanism involved in Wolf-Kishner rearrangement.
22. Compare and contrast the acidity of pyrole and basicity of pyridine.

https://www.osmaniaonline.com/