Roll No. | | | | | | | | | | | |

Total No. of Pages :02

Total No. of Questions : 18

Pharm. D (Sem.–1)

PHARMACEUTICAL ORGANIC CHEMISTRY

Subject Code : 1.4

Paper ID : [D0167]

Time : 3 Hrs. Max. Marks : 70

INSTRUCTION TO CANDIDATES :

1. SECTION-A contain SEVEN questions. Attempt any FIVE questions. Each question will carry TWO marks each.
2. SECTION-B contains EIGHT questions (Short Essay Type). Attempt any SIX questions. Each question will carry FIVE marks.
3. SECTION-C contains THREE questions (Long Essay Type). Attempt any TWO questions. Each question will carry FIFTEEN marks.

SECTION-A

1. Define protic and aprotic solvents.
2. Explain Isomerism.
3. Define Nucleophiles and leaving groups.
4. Explain mechanism of friedel craft alkylation.
5. Explain peroxide effect.
6. Explain Kolbe reaction.
7. Give preparation and medicinal uses of Dimercaprol.

SECTION-B

8. Explain Bayer strain theory in detail.
9. Describe phase transfer catalysis.
10. Explain E2 and El mechanisms.

11. Give orbital picture and resonance stabilization of allyl radicals.

12. Explain electrophilic aromatic substitution.

13. Explain mechanism of aldol condensation.

14. Write a short note on Hoffman rearrangement.

15. Give the test for purity, assay and medicinal uses of Glyceryl trinitrate.

SECTION-C

16. Compare and contrast SN1 versus SN2 with respect to mechanism kinetics, stereochemistry and reaction conditions.

17. Write the detailed mechanism involved in Cannizzaro reaction and Wittig reaction.

18. Write a detailed note on Nucleophilic aromatic substitution.