Roll No. | | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 12

B.Pharma (Sem.-2)

PHARMACEUTICAL ORGANIC CHEMISTRY-I

Subject Code : BP-202T

M.Code : 74968

Date of Examination : 15-12-22

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. Briefly write about the following :

a) What is electromeric effect?

b) Write two different types of nucleophillic substitution reactions of alkyl halides.

c) Differentiate between E_1 and E_2 reactions.

d) Write the tautomer of ethylaeetd acetate and functional isomer of acetone.

e) What is the hybridisation and geometry of ethene?

f) Give chemical test to distinguish between formic acid and methyl formate.

g) Why dimethylamine is more basic than trimethylamine in an aqueous solution?

h) Give any one isomer of bromobutane most reactive towards SN1 reaction.

i) Give the structure and uses of vanillin.

j) What is iodoform test?

SECTION-B

2. Explain in detail the kinetics involved, order of reactivity of alkyl halides and rearrangements of carbocations involved in E_1 and E_2 reactions.

3. Write down the structure and uses of following compounds:

   a) Chlorobutanol

   b) Benzyl alcohol

   c) Vanilin

   d) Paraldehyde

   e) Hexamine.

4. Account for the following :

   a) Effect of substituent on Acidity of benzoic acid

   b) Qualitative tests to differentiate between various types of alcohols.

SECTION-C

5. Name various therapeutically used carboxylic acids. Give their structures and uses.

6. Comment upon the stability of conjugated dienes. Give any two reactions of 1,3- butadiene.

7. Give the basicity order of various types of amines. Justify.

8. Comment upon various factors affecting SN1 and SN2 reactions.

9. Explain Ozonolysis.

10. Classify structural isomerism giving example of each class.

11. Give an account of Benzoin condensation reaction.

12. Explain various tests carried out to detect the presence of carboxylic acids and carboxamides.

13. Write a short note on structural isomerism in organic compounds.

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