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

Total No. of Pages : 02

Total No. of Questions : 10

B.Pharma (2012 to 2016) (Sem.–2)

PHARMACEUTICAL CHEMISTRY-III (Organic Chemistry)

Subject Code : BPHM-203

M.Code : 46213

Time : 3 Hrs. Max. Marks : 80

INSTRUCTION TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of FIFTEEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains FOUR questions carrying TEN marks each and students have to attempt any THREE questions.**

SECTION-A

Q1. Answer briefly :

a. Write the names and structures of isomers of C_5H_{12}.

b. Differentiate between protic and aprotic solvents.

c. Discuss the Hofmann elimination reaction with example.

d. Why amides are the least reactive?

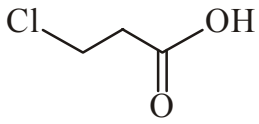
e. What are lewis acid and lewis base?

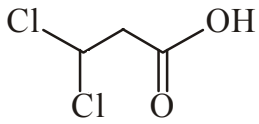
f. Define the enatiomerism.

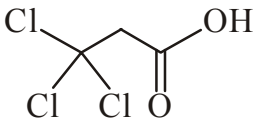
g. Why methylamine is more basic than aniline?

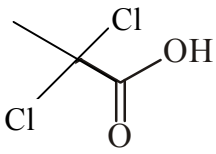
h. Write down the Lucas's test.

i. Write down the acidic order in the following acids with explanation.

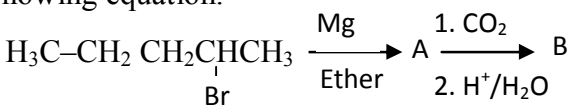
a) 

b) 

c) 

d) 

j. Identify A and B in the following equation.



k. Write down necessary conditions for aromaticity.

l. Why C-O bond in phenol is smaller than alcohol?

m. Why does benzoic acid not undergo Friedel-Crafts Reaction?

n. Write down the equations for Reimer-Tiemann reaction and Kolbe Schmidt reaction.

o. Describe banana bond.

SECTION-B

Q2. Write down the mechanism of Hofmann rearrangement.

Q3. Discuss the basicity of amines with suitable examples.

Q4. Write down the formation of diazonium salt and its synthetic applications.

Q5. Discuss the Aldol condensation.

Q6. Discuss the stability of carbocation.

SECTION-C

Q7. Discuss the S_N1 and S_N2 reactions and suggest the factors affecting them.

Q8. Write note on the following :

a. Markownikoff' Rule

b. Ozonolysis of alkene

Q9. a. Describe the Friedel Crafts alkylation reaction. What is its limitation?

b. Write down the general mechanism for electrophilic aromatic substitution.

Q10. What is Baeyer strain theory? Outline its limitations.

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.