B.Pharm. First Year (CBCS Pattern) Semester-II

BP202T - Pharmaceutical Organic Chemistry-I

P. Pages : 1 **GUG/S/25/10879**

Time : Three Hours Max. Marks : 75

Notes : 1. Assume suitable data wherever necessary.
2. Illustrate your answers wherever necessary with the help of neat sketches.
3. All questions are compulsory.

1. Solve the following questions. **20**

a) Define position and functional isomers with example.

b) Give IUPAC name of
i) CH2 = CH – CH2 – C ≡ C ii) Br – CH2 – CH = CH – Cl

c) Differentiate between E1 and E2 reaction.

d) Explain Markownikoff's and Anti- Markownikoffs orientation.

e) What is conjugated and nonconjugated dienes.

f) Give physical properties of carbonyl compound.

g) What is lucas test?

h) What is acidity of carboxylic acid.

i) Give uses and Structure of glycerol and formaldehyde.

j) Explain pyrolysis of alkanes.

2. Solve the following **any two**. **20**

a) Explain in detail chemical reactions of alkyl halide with mechanism.

b) Define alkanes. Explain method of preparation and chemical reaction of alkanes.

c) Define alcohol. Give method of preparation and physical properties, chemical reactions of alcohol in detail.

3. Solve **any seven**. **35**

a) Define organic chemistry. Classify organic compounds in detail.
b) Write a note on SP^2 and SP^3 hybridization.
c) Differentiate between SN1 and SN2 reaction. Explain mechanism of it.
d) Explain aldol condensation and crossed aldol condensation reaction with mechanism.
e) Write in detail method of preparation of primary amines.
f) Explain in detail different method of preparation of aldehyde.
g) Write in detail method of preparation of carboxylic acid.
h) Write structures and uses of -
i) Chloroform ii) Ethyl alcohol
iii) Acetone iv) Salicylic acid
v) Ethylenediamine

i) Write methods to prepare alkenes.

****