BP-202T

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

SHAMBHUNATH INSTITUTE OF PHARMACY

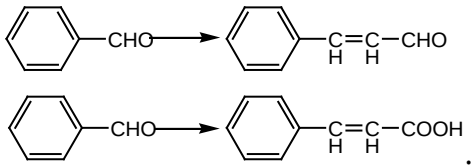
B. PHARM. FIRST YEAR (2nd Sem.)
PHARMACEUTICAL ORGANIC CHEMISTRY-I
Model Paper-2018-19

Time: 3.00 Hours. *Marks: 75*

SECTION-A

1. Attempt all questions: **(2×10=20)**

(a) Write the comparison of E_1 and E_2 reaction.
(b) What is functional isomerism?
(c) Write Ozonolysis reaction for alkene.
(d) Write Lucas test.
(e) Draw the structure of Iodoform and trichloro ethylene.
(f) Write Hinsberg test for aliphatic amine.
(g) Explain why acetic acid is a weaker acid than formic acid, while chloro acetic acid is stronger acid.
(h) How will you distinguish a ketone and aldehyde by chemical methods?
(i) Why are aldehyde are more reactive than ketones when undergo nucleophilic addition reaction?
(j) How will you convert-



SECTION-B

2. Attempt *any seven* question **(5×7=35)**

(a) Draw the structure and uses of Citric acid, Oxalic acid and Succinic acid.
(b) Discuss effect of substituents on the acidity of monocarboxylic acid.
(c) Draw the structure and write uses of **any four-**
i. Citric acid iv. Dichloromethane
ii. Benzyl alcohol v. Aspirin
iii. Ethylene diamine
(d) Discuss the behaviour of alcohols towards- (a) Ester formation (b) Dehydration
(e) Draw the structure and uses of **(any four)-**
i. Methyl salicylate iv. Benzoic acid
ii. Salicylic acid v. Glycerol
iii. Cinnamaldehyde
(f) What are carbonyl compound? Discuss the reactivity of carbonyl group towards Nucleophilic attack.
(g) Give structure and uses of – (**any four**)
i. Hexamine iv. Paraldehyde
ii. Vanillin v. Chloral hydrate
iii. Benzyl benzoate
(h) Write about structural isomerism with suitable example.
(i) Discuss the free radical addition reaction of conjugated diene with suitable example

SECTION-C

3. Attempt *any two* question. **(2×10=20)**

(a) What are SN_1 and SN_2 reaction? Explain giving mechanism of each reaction. Write factor affecting on SN_1 and SN_2.
(b) Write short note on- (**any three**)
i. Markonikov's rule iii. Cannizaro reaction
ii. Perkin reaction iv. Aldol condensation
(c) Draw the structure and write uses of any four compounds-
i. Chlorobutanol
ii. Propylene glycol iv. Amphetamine
iii. Cetosteryl alcohol v. Oxalic acid