

BACHELOR OF PHARMACY (B. PHARM.) (CBCS-2019 COURSE)
B. Pharm. Sem-II : WINTER : 2021
SUBJECT: PHARMACEUTICAL ORGANIC CHEMISTRY-I

Day : Wednesday
Date : 12-01-2022

W-20661-2021

Time : 10:00 AM-01:00 PM
Max. Marks: 75

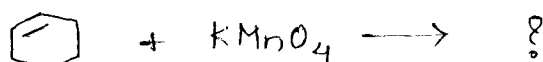
N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.

SECTION-I

Q.1 Answer the following: **(20)**

- a) What is allylic rearrangement?
- b) What is α -elimination reaction?
- c) Predict the product:



- d) What product is obtained when alkenes are treated with peracids?
- e) Define Saytzeff orientation in elimination reaction.
- f) What is Perkin reaction?
- g) Explain effect of substituents on basicity of amines.
- h) Give structure and uses of Ethanolamine.
- i) Why water solubility of alcohols falls rapidly as we go to higher alcohols?
- j) Enlist the uses of paraffins.

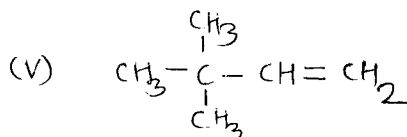
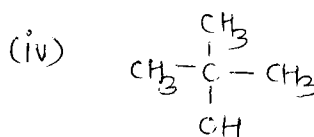
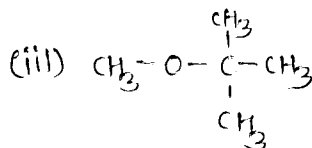
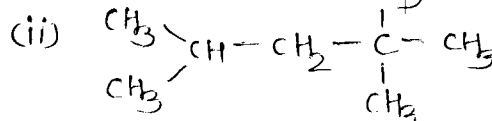
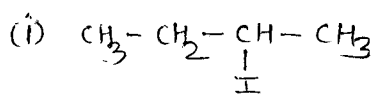
Q.2 Answer any **TWO** of the following: **(20)**

- a) Differentiate between Elimination and Substitution reactions by giving suitable examples.
- b) Give reaction, kinetics, stereochemistry and factors affecting rate of S_N1 reaction.
- c) Give reaction, mechanism and applications of Benzoin condensation. What is crossed Benzoin condensation?

SECTION-II

Q.3 Answer any **SEVEN** of the following: **(35)**

- a) What is aldol condensation? Give its mechanism.
- b) What is structural isomerism? Explain with suitable examples.
- c) Give a short note on Hybridization.
- d) Give structure and uses of formaldehyde.
- e) What is Ozonolysis? Give its mechanism.
- f) Give IUPAC names of following compounds.



- g) Give structure and uses of Benzoic acid, Benzyl benzoate, Methyl salicylate, Acetyl salicylic acid and oxalic acid.
- h) What is Diels-Alder reaction?
- i) Give qualitative tests of:
 - i) Glycerol
 - ii) Benzyl alcohol