



JL-014-1042003

Seat No. \_\_\_\_\_

M. P. M. (Sem. II) (CBCS) Examination

August / September - 2019

BP - 202T : Pharmaceutical Organic Chemistry - I

Faculty Code : 014

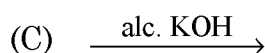
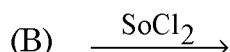
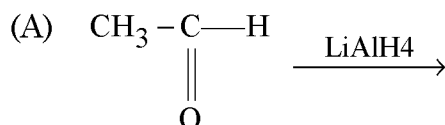
Subject Code : 1042003

Time : 3 Hours]

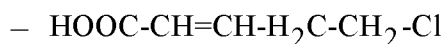
[Total Marks : 75

1 Answer the following questions : 20

- (1) Give the uses of Paraffins.
- (2) Mention any two qualitative test for the identification of aliphatic amine.
- (3) How will you distinguish between alkyl halide and alkene ?
- (4) Explain  $sp^2$ , Hybridization of Alkene.
- (5) Justify: E2 is regioselective and stereoselective reaction.
- (6) Identify A,B, and C :



- (7) Write the structural formula and give IUPAC name for all isomeric alcohols of the molecular formula  $C_4H_{10}O$ .
- (8) What happens when acetic acid is treated with  $PCl_5$  ?
- (9) Why boiling point of carboxylic acid is higher than corresponding alcohols? Discuss.
- (10) Give the IUPAC name of the following :



- 2** Answer the following questions : (any **two**) **20**
- (1) Give the uses of carboxylic acid. Discuss about acidity of carboxylic acid. Give any three methods for preparation and reactions of aldehyde and ketone.
  - (2) Give structure and uses of following compounds :
    - (a) Ethanolamine
    - (b) Citric Acid
    - (c) Paraldehyde
    - (d) Propylene glycol
    - (e) Iodoform
  - (3) Write a short note on stability of conjugated diene. Discuss about electrophilic addition and free radical addition reactions of conjugated dienes. Write a brief note on Diel-alder reaction.
- 3** Answer the following questions : (any **seven**) **35**
- (1) Explain SN1 versus SN2 reactions in alkyl halide.
  - (2) Explain Saytzeffs orientation for addition reaction of alkene. Discuss about factor affecting E1 and E2 reactions.
  - (3) Write a brief note on basicity of aliphatic amine. What are the effects of substituents on basicity? Give the structure and use of Amphetamine.
  - (4) Discuss about aldol condensation and cross aldol condensation reaction with examples.
  - (5) What is the difference between organic and inorganic compound ? Classify the organic compound with suitable examples. Write a brief note on structural isomerism of organic compound.
  - (6) Draw the structure of the following :
    - (a) Cinnamaldehyde
    - (b) Chlorbutanol
    - (c) Benzyl benzoate
    - (d) Chloral hydrate
    - (e) Salicylic acid
  - (7) Write a brief note on Benzoin and Perkin condensation reaction.
  - (8) How will you distinguish between ethyl alcohol and methyl alcohol ? Give any three reaction of alcohol.
  - (9) Discuss in detail about Grignard reaction for the synthesis of Alkanes and Alcohols.