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Total No. of Pages : 02

Total No. of Questions : 11

B.Sc. (Honours) Chemistry (Sem.-1)

ORGANIC CHEMISTRY-I

Subject Code : BHCL-102-19

M.Code : 77224

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of EIGHT questions carrying TWO marks each.
2. SECTION-B contains EIGHT questions carrying FOUR marks each and students have to attempt any SIX questions.
3. SECTION-C will comprise of two compulsory questions with internal choice in both these questions. Each question carries TEN marks.

SECTION-A**1) Write briefly :**

- a) What is the optical activity?
- b) What are localized and de-localized chemical bonds?
- c) What are aromaticity?
- d) Explain the third law of thermodynamics.
- e) What are geometrical isomers?
- f) What is markownikoff's rule?
- g) Explain the boat and chair form in cyclohexane.
- h) Explain the Saytzeff rule.

SECTION-B

- 2) Explain the Clathrates with examples.
- 3) Explain the reactivity order of carbocation and factors affect this order.
- 4) What are enantiomers and properties of enantiomers?
- 5) Explain Thero and Erethro isomer form.

- 6) Explain the D and L system with examples.
- 7) Explain the Bayer's strain theory.
- 8) Explain the 1,2-addition in dienes.
- 9) Explain the synthesis of DDT.

SECTION-C

- 10) Explain the Hydroboration-oxidation of alkenes.

OR

Explain Diel's Alder reaction with suitable example.

- 11) What do you understand by SN1 and SN2 mechanism? Illustrate your answer by considering the hydrolysis of alkyl halides.

OR

Explain the Birch Reduction with example.

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.