

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. (BT) (2018 Batch) (Sem.-3)

ORGANIC CHEMISTRY

Subject Code : BSBT-301-18

M.Code : 76608

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

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

- a) Acetylene has garlic odor why?
- b) Is 1,3 butadiene more stable than 1,4-pentadiene?
- c) Define aromaticity.
- d) Why terminal alkynes are acidic?
- e) Give two industrial applications of ethylene.
- f) What are delocalized bonds?
- g) Explain the Markownikoff's rule.
- h) What are carbon free radical?
- i) Out of boat or chair conformation of cyclohexane which is more stable.
- j) What is resonance?

SECTION-B

2. Explain the aromaticity.
3. What is hyperconjugation?
4. Explain the Kekulé structure.
5. Explain the carbocation and their methods of formation.
6. Discuss the mechanism of addition of a halogen acid to an alkene.

SECTION-C

7. What is carbene? Discuss their formation as well as their relative stability order.
8. Explain the Inductive and electromeric effects.
9. Explain the mechanism of following reactions :
 - a) Kolbe's reaction.
 - b) Reimer Tiemann reaction

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.