No. of Printed Pages: 04 Roll No.

C65

B. Tech. EXAMINATION, 2020

(Third Semester)

(B Scheme) (Re-appear Only)

(BT)

BT209B

ORGANIC CHEMISTRY

Time: 2½ Hours] [Maximum Marks: 75]

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note: Attempt *Four* questions in all. All questions carry equal marks.

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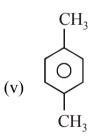
1. Write notes on the following:

- (i) Wagner-Meerwin rearrangement
- (ii) Cope rearrangement
- (iii) Hyperconjugation.

2. Write IUPAC nomenclature of the following:

(iii) CH₃−C≡CH

(iv)
$$H_3C - C = C - CH_3$$
Br



(vi) CH₃CH₂NC.

- 3. Write briefly about the following:
 - (i) Crown ethers
 - (ii) Ring-chain tautomerism
 - (iii) Hydrogen bonding.
- **4.** Write notes on the following:
 - (i) Atropisomerism
 - (ii) Separation of Enantiomers
 - (iii) Projections of Molecules.
- 5. Write briefly about the following:
 - (i) Wolf-Kishner reduction
 - (ii) Clasian condensation
 - (iii) Acid catalysed hydrolysis of esters.
- **6.** (a) Give an account of reformatsky reaction.
 - (b) Give reactions of addition of ammonia and ammonia derivatives to aldehydes and ketones.

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- 7. (a) Explain chain and step growth polymers with suitable examples.
 - (b) Give an account of solid phase peptide bond synthesis.
- **8.** Give organic applications of reducing agents given below:
 - (i) NaBH₄
 - (ii) Pt
 - (iii) LiAlH₄
 - (iv) H₂
 - (v) Tri-nbutyl tin hydride
 - (vi) NH₃.