(i) Printed Pages : 2 Roll No. .....

(ii) Questions : 9 Sub. Code : 1 7 5 4 8

Exam. Code : 0 0 0 6

B.A. / B.Sc. (General) 6th Semester

(2056)

CHEMISTRY

(Same for B.Sc. Microbial & Food Technology)

Paper–XXII : Organic Chemistry-B

Time Allowed : 3 Hours] **[Maximum Marks : 22**

Note :– Attempt **five** questions in all including question no. **9** which is compulsory and selecting **one** question each from Units I–IV.

UNIT—I

1. (a) Explain the term ribonucleosides and ribonucleotides.

   (b) Give the importance of electrophoresis. 2,2

2. (a) What do you mean by Sanger's method of identification of N-terminal amino acid residue of polypeptides.

   (b) Give the effect of pH on the structure of amino acids. 2,2

UNIT—II

3. (a) Write a short note on Ziegler-Natta Polymerization.

   (b) Explain epoxy resins and polyurethanes. 2,2

4. (a) Give the mechanism of chain-growth polymerization.

(b) Define the term Isotactic, Syndiotactic and Atactic. 2,2

UNIT—III

5. (a) What are enamines and how are they formed ?

(b) Give the alkylation of diethyl malonate. 2,2

6. (a) What do you understand by active methylene compounds ? Explain the stability of enolate of ethyl acetoacetate.

(b) Write a short note on Claisen condensation. 2,2

UNIT—IV

7. (a) Give the role of dry ether in the preparation of Grignard's reagents.

(b) Explain the mechanism of Simmon Smith reaction. 2,2

8. (a) How will you synthesize organometallic compounds using Grignard's reagent ?

(b) Give reason for organolithium compounds being more polar, more stable and least reactive among other organometallic compounds of heavier alkali metals. 2,2

(Compulsory Question)

9. (a) Define acid-base behavior of amino acids.

(b) Write a short note on ionic vinyl polymerization.

(c) Define keto-enol tautomerism.

(d) What are Grignard reagents ? $4 \times 1.5 = 6$