(i) Printed Pages : 2

(ii) Questions : 9

Roll No. .....

Sub. Code : 0548

Exam. Code : 0006

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

(2054)

CHEMISTRY

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

Paper : XXII : Organic Chemistry—B

Time Allowed : Three Hours] [Maximum Marks : 22

Note :— Attempt *five* questions in all including Question No. 9 which is compulsory question and selecting *one* question from each Unit I to IV.

UNIT—I

1. (a) Differentiate between acidic-basic behavior of amino acids with examples.

   (b) Give Double helical structure of DNA. 2,2

2. (a) Give selective hydrolysis of peptides.

   (b) Explain protein denaturation/renaturation. 2,2

UNIT—II

3. (a) Differentiate between natural and synthetic rubbers.

   (b) Explain Ziegler-Natta Polymerization. Give its mechanism. 2,2

4. (a) What are epoxy resins ? Give details of their preparation and also give their uses.

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

UNIT—III

5. (a) Explain keto-enoltautomerism of ethyl acetate.

(b) Explain alkylation and acylation of enamines. 2,2

6. (a) Give the synthesis of ethyl acetoacetate.

(b) What are active methylene compounds ? Give examples. 2,2

UNIT—IV

7. (a) Explain the mechanistic details of Simmon Smith reaction.

(b) Explain organolithium compounds and their uses. 2,2

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

(b) What are organozinc compounds ? Give examples and their chemical reactions. 2,2

(Compulsory Question)

9. (a) What is Solid-phase peptide ?

(b) Define the term polyamides.

(c) Define keto-enoltautomerism.

(d) What are organomagnesium compounds ? $4 \times 1.5 = 6$