

This question paper contains 4+2 printed pages]

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

S. No. of Question Paper : 8671

Unique Paper Code : 249301

C

Name of the Paper : BCHT-304 : Proteins and Enzymes

Name of the Course : B.Sc. (H) Bio-Chemistry Part II

Semester : III

Duration : 3 Hours

Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt *Five* questions in all.

Question No. 1 is compulsory.

Use of scientific calculator/log tables may be allowed.

1. (A) State true or false with justification :

- (a) Competitive inhibition is reversible.
- (b) Enzymes allow substrates to increase their activation energy to facilitate product formation.
- (c) Allosteric enzymes obey Michaelis-Menten kinetics at high substrate concentration.
- (d) K_{cat}/K_m is a measure of catalytic efficiency.
- (e) Fibrous proteins have only one type of secondary structure.

P.T.O.

(B). Give a suitable example for each of the following:

- (i) Metalloprotein
- (ii) Allosteric enzyme
- (iii) Biotin containing enzyme
- (iv) Multienzyme complex
- (v) Zymogen
- (vi) Only β -sheet containing protein
- (vii) Lyase
- (viii) Endopeptidase
- (ix) Isozyme
- (x) Non-proteinaceous enzyme.

(C) Give the contributions of the scientists :

- (i) Perutz;
- (ii) Anfinsen;
- (iii) Kuhne;
- (iv) Sumner.

(10,5,4)