* A C - 1 7 9 7 *

AC-1797

M. Sc. (Integrated Biotechnology) (Sem. IV) Examination

April / May – 2015

C1C2 : Enzymes & Coenzymes

Time : 2 Hours] [Total Marks : 50

Instructions :

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ M. SC. (INTEGRATED BIOTECHNOLOGY) (SEM. IV)

Name of the Subject :

☛ C1C2 : Enzymes & Coenzymes

☛ Subject Code No. : 1 7 9 7 ☛ Section No. (1, 2,.....) : Nil

Seat No. :

Student's Signature

(2) Figures to the right indicate full marks.

(3) Draw neat and labelled diagrams wherever necessary.

Q-1: Write in short **Any Four**: **(8)**

(a) Define: Regulatory Enzyme.
(b) What are Homotropic Modulators?
(c) Define Enzyme and Coenzyme.
(d) Define the term: Competitive inhibitors.
(e) Who first isolated and crystallized Enzyme?

Q-2: Attempt **Any Two**: **(14)**

(a) Give detailed account on Fisher "Lock and Key" Hypothesis.
(b) Discuss in detail about Stereospecificity of enzymes.
(c) Write a note on Thiamine pyrophosphate with necessary structure.

Q-3: Explain in detail **Any Two**: **(14)**

(a) Flavin nucleotides.
(b) Derivation of Michaelis-Menten equation.
(c) Effect of pH on enzymatic reaction.

Q-4: Attempt **Any Two** of the following: **(14)**

(a) Discuss in detail: Noncompetitive inhibition.
(b) What do you understand by the term Allosteric enzymes? Explain its kinetic behaviour.
(c) Explain: How do non covalent modulator binding affect the regulatory enzyme?