PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS) • M&CV07/! 4-Scoo^J

BSc DEGREE EXAMINATION MAY 2017

(Second Semester)

Branch-BIOCHEMISTRY

ENZYMOLOGY

Time : Three Hours Maximum : 75 Marks,

SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks ' (10 x 2 = 20)

1 Write the functions of coenzyme FMN.
2 Define turn over number of an enzyme.
3 What is meant by enzyme active site?
4 Give an example for feed back inhibition.
5 Give the biological role of pyruvate dehydrogenase.
6 Define - Allosteric site.
7 Define — Isoenzymes.
8 Give any three diagnostic importance of LDH.
9 Define — Enzyme immobilization.
10 Write any three applications of restriction endonuclease enzyme.

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 5 = 25)

11 a Write an account on nomenclature and classification of enzymes.

OR

b What is Line Weaver-Burk plot? Explain its significance.

12 a Explain feed back enzyme inhibition with an example.

OR

b Describe reversible enzyme inhibition with an example.

13 a Give the mechanism of action of chymotrypsin.

OR

b Give a note on mechanism of carboxypeptidase.

14 a Write briefly about subcellular localization of enzymes.

OR

b Illustrate the diagnostic importance of alkaline phosphatase enzyme.

15a Explain the classification and applications of restriction endonucleases.

OR

b What is biosensor? Explain.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

16 Derive MM equation with significance of K_{ra} and V max-
17 Describe competitive enzyme inhibition with suitable example.
18 Explain the mechanism of general acid base catalysis.
19 Elaborate on the industrial application of soluble enzymes.
20 Explain the methods of immobilization of enzymes with its application.

Z-Z-Z END