PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS) °OS

BSc DEGREE EXAMINATION MAY 2017
(Second Semester)

Branch- BIOTECHNOLOGY

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 NAD.
2 What is "a" in the Arrhenius equation?
3 List any two strategies of enzyme participation.
4 Define active site.
5 What is competitive inhibition?
6 What is the end product of inhibition?
7 What is the plot of Hanes Woolf?
8 Comment on ribonuclease A.
v9 What is extermozyme?
10 What is the difference between ribozyme and abzyme?

SECTION - B (25 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks (5 x 5 = 25)

11 a Explain briefly about the nucleophilic and electrophilic catalysis.
OR
b Write note on cofactor and coenzymes.

12 a What is the induced fir mechanism of enzyme binding?
OR
b What reactions are catalyzed by enzymes?

13 a Explain briefly about induced velocity studies.
OR
b Explain the kinetics of single substrate reaction.

14 a Explain and derive the significance of hill equation.
OR
b Write an account on structural and functional properties multi-enzymes complex.

15 a Write note on potential uses of lipase in the production for food and nutraceutical industries,
OR
b Explain the role of angiotensin converting enzyme in clinical diagnosis.

SECTION - C (30 Marks)
Answer any THREE Questions
ALL Questions Carry EQUAL Marks (3 x 10 = 30)

16 Give a detailed account on structure and function of PLP in reaction pathway.

17 Elaborate the classification and nomenclature of enzymes.

18 Derive Michaelis Menten equation.

19 In detail describe the mechanism of action of chymotrypsin.

20 Explain the industrial enzymatic processes that are carried out with immobilized enzymes instead of free enzymes? What methods of immobilization are actually being used?