

MSc DEGREE EXAMINATION MAY 2018
(First Semester)

Branch – **BIOCHEMISTRY**

ENZYMES & ENZYME TECHNOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION -A (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 x 6 = 30)

- 1 a Write briefly on photo oxidation method.
OR
b What are proteases? How they are used in enzyme modification?
- 2 a Describe the mechanism of action of pyridonal phosphate.
OR
b Give an account on metalloenzymes.
- 3 a Explain the kinetic mechanism in bisubstrate reaction.
OR
b Explain suicide inhibitor and its uses.
- 4 a Illustrate covalent modification of an enzyme with a suitable example.
OR
b Explain the concerted model of allosteric enzyme.
- 5 a Write a brief note on optical biosensors.
OR
b Discuss therapeutic enzymes with suitable example.

SECTION -B (45 Marks)

Answer any **THREE** questions

ALL questions carry **EQUAL** Marks (3 x 15 = 45)

- 6 Write a brief note on (i) TPCK (ii) TLCK.
- 7 Discuss the coenzymatic functions of the following :
(i) Non vitamine derived coenzymes (ii) Vitamine K
- 8 Explain (i) Eadic plot (ii) Hane's plot (iii) L-B plot.
- 9 Explain the mechanism of enzyme action of following enzyme :
(i) Lysozyme (ii) Carbonic anhydrase
- 10 Comment on artificial enzyme.