Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 11

M.Sc. (BT) (2018 Batch) (Sem.-2)

ENZYME TECHNOLOGY

Subject Code : MBT-203

M.Code : 76247

Time : 3 Hrs. Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SEVEN questions carrying SIX marks each and students have to attempt any FIVE questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Describe briefly :

(a) Enzyme assay

(b) Catalytic sites

(c) K_m and V_{max}

(d) Lineweaver-Burk plot

(e) Allosteric enzymes

(f) Monomeric enzymes

(g) Plasma enzymes

(h) Enzymes immobilization

(i) Coenzymes

(j) Oligomsric enzymes

SECTION-B

2. Describe briefly identification of binding and catalytic sites of enzymes.

3. Derive Michaelis-Menton equation for determination of K_m and V_{max}.

4. Describe the roles of metals and coenzymes in mechanism of enzyme catalysis.

5. Describe briefly the techniques used for immobilization of enzyme.

6. Describe briefly kinetics of multi substrate enzyme catalysis reactions.

7. Describe briefly classification of enzymes.

8. Describe briefly steady and non-steady state enzymatic reactions with suitable examples.

SECTION-C

9. What is Enzyme Inhibition? Describe briefly competitive, uncompetitive and non-competitive inhibition with suitable examples.

10. Write an essay on the applications of enzymes in industries.

11. Describe the techniques used for extraction and purification of enzymes.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.