APRIL 2018 **1709320/UBYM51A**

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer any TEN questions.

Each questions carries 2 marks.

1. What are endo and exo enzymes? Give examples.
2. List any two properties of enzymes.
3. What is Km? Give its significance
4. Define temperature quotient.
5. What is meant by salt fractionation?
6. List the uses of α -amylase in industry.
7. What are the advantages of immobilised enzyme?
8. Define specific activity of an enzyme.
9. What are called anion exchange resins? Give example.
10. What is activation energy?

11. Distinguish any two features of reversible and irreversible inhibition.

12. Define a coenzyme with example.

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions.

Each questions carries 5 marks.

13. Discuss Koshland's induced fit models.

14. Explain multi enzyme complex with example.

15. Describe Line Weavers Burk equation.

16. Describe feedback inhibition of enzyme activity. Give examples.

17. Describe gel filtration as a method of protein purification.

18. Describe the applications of immobilized enzymes. Give examples.

19. Write short notes on metallo enzyme and metal activated enzymes.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

Each questions carries 10 marks.

20. Describe in detail about the IUB systems of classification and nomenclature of enzymes.

21. Derive Michaelis-Menton equation.

22. Write an account on the extraction, isolation and purification of enzymes.

23. What are the different methods used for enzyme immobilization and its applications?

24. Explain the following :

    (a) Any two factors that affect enzyme activity.

    (b) Different types of inhibition with examples.

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