

NOVEMBER 2017

1709116/UBYM51A

Time : Three hours

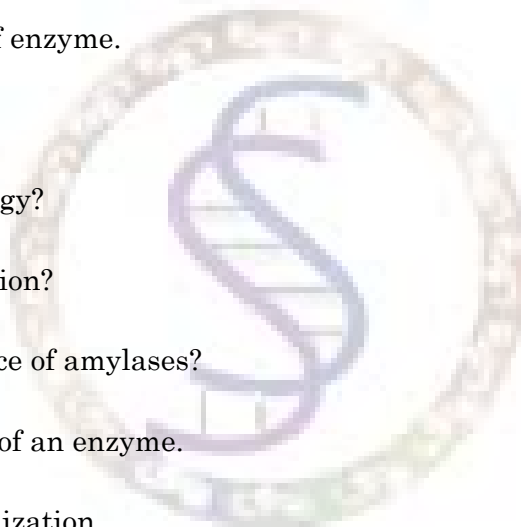
Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer any TEN questions.

(Each question carries 2 marks)

1. What are Zymogens?
2. Define abzymes.
3. Define the active site of enzyme.
4. What is MM equation?
5. What is activation energy?
6. What is enzyme inhibition?
7. What are the importance of amylases?
8. Define specific activity of an enzyme.
9. Define enzyme immobilization.



10. Name the method of enzyme immobilization that utilizes CNBr activation.
11. Define  $K_m$  of an enzyme.
12. What are isoenzymes?

SECTION B — ( $5 \times 5 = 25$  marks)

Answer any FIVE questions.

(Each question carries 5 marks)

13. Write short notes on international enzyme unit' and 'turnover number'.
14. Give an account on co-enzyme.
15. Write an account on 'enzyme specificity'.
16. Explain how the substrate concentration affects the enzyme's activity.
17. Describe the separation methods for enzyme on the molecular size.
18. Discuss the role of enzymes in food industry.
19. Describe the different methods employed for immobilization of enzymes.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

(Each question carries 10 marks)

20. Write a detailed account on metalloenzymes and metal activated enzymes?
21. Discuss in detail about lock and key theory and induced fit hypothesis.
22. Explain the regulation of enzyme activity.
23. Write an account on the extraction, isolation and purification of enzymes.
24. Explain the applications of immobilized enzymes.

