

OCTOBER 2012

P/ID 40230/PBTK

Time : Three hours

Maximum : 100 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 50 words.

Write short notes on

1. Electronegativity
2. Hydrogen atom
3. Homopolysaccharide
4. Enantiomer
5. Peptide bond
6. Prion
7. Monoterpene
8. Exergonic reaction
9. Exoenzyme
10. Apo enzyme

PART B — (5 × 6 = 30 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 250 words.

11. (a) Write a note on ionic and co-valent bonds.

Or

- (b) Illustrate the pH scale and explain.

12. (a) Explain the Haworth perspective formula.

Or

- (b) Write a critical note on glycogen and starch.

13. (a) What are non-protein amino acids? Explain

Or

- (b) Write a critical note on Ramachandran plot.

14. (a) Analyze the nature of triglyceride.

Or

- (b) Illustrate the structure and significance of ATP.

15. (a) Comment on co-factors and metallic activators of enzymes.

Or

- (b) What are the uses of enzymes in medicine?

PART C — (5 × 10 = 50 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 500 words.

16. (a) Write a detailed account on radioactivity.

Or

- (b) Illustrate biological buffer systems.

17. (a) Analyze the structure and properties of Oligosaccharide.

Or

- (b) Write an essay on isomerism and mutarotation.

18. (a) Examine the structure of a protein molecule.

Or

- (b) Write a critical note on the principle and method of SDS-PAGE.

19. (a) Elaborate the structure and importance of Steroids.

Or

- (b) Write critical notes on the laws of Thermodynamics.

20. (a) Write a detailed note on enzyme kinetics.

Or

- (b) Illustrate the methods used for enzyme extraction and purification.
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