

APRIL/MAY 2018

**BBT21 — BIOCHEMISTRY**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is glycosidic bond?
2. Write the key enzymes involved in glycogenolysis.
3. What is oxidative deamination reaction?
4. Give an example for aromatic aminoacids.
5. Write the functions of essential fatty acids.
6. Name the regulatory enzymes of cholesterol synthesis.
7. What are the types of DNA.
8. Draw the structure of adenine.
9. Write any two deficiency disorders of vitamin A.
10. Write the functions of vitamin D.

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Describe the structure and function of disaccharides.

Or

- (b) Write the energetics of TCA cycle.

12. (a) Highlight the importance of essential aminoacids.

Or

- (b) Explain the secondary structure of proteins.

13. (a) Discuss the digestion and absorption of lipids.

Or

- (b) Discuss the biological functions of lipids.

14. (a) What are the salient features of IUB system of enzyme classification?

Or

- (b) Describe the Watson and Crick model of DNA structure.

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15. (a) Draw the structure of thyroxine and its functions.

Or

- (b) Describe the principles of SDS-PAGE.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. What is gluconeogenesis? Give the reactions involved.

17. Explain in detail about the urea cycle and its significance.

18. Elaborate on the biosynthesis of cholesterol and its importance.

19. Discuss the mechanism of enzyme action.

20. Describe the sources, functions and deficiency disorders of vitamin C.

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