

First Year BPT Degree Supplementary Examinations August 2018

(2010 scheme)

Biochemistry and Nutrition

Time : 3 hrs

Max marks : 100

- **Answer all questions**
- **Draw diagrams wherever necessary**

Essays:

(2x10=20)

1. Define glycolysis. Describe the steps of glycolysis and a note on energetics and regulation. **(1+5+2+2)**
2. Explain the sources, biochemical functions and deficiency manifestations of vitamin A **(1+5+4)**

Short notes:

(10x5=50)

3. Formation and utilization of ketone bodies
4. Components of electron transport chain
5. Classification of enzymes
6. Renal regulation of pH
7. Biochemical functions of calcium
8. Significance of TCA cycle
9. Compounds formed from phenylalanine
10. Electrophoresis
11. Different types of RNA
12. Basal metabolic rate

Answer briefly:

(10x3=30)

13. Mitochondrial DNA
14. Niacin
15. Albumin/Globulin ratio
16. Body mass index
17. Deleterious effects of smoking
18. Biochemical functions of prostaglandins
19. Essential fatty acids
20. Glutamic acid
21. Fatty liver
22. Metabolic syndrome
