

First Year BPT Degree Examinations - September 2012

Biochemistry and Nutrition

Time: 3 hrs

Max marks : 100

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

Essays:

(2x10=20)

1. Describe the process of glycolysis with its energetics.
2. Describe the source, functions and deficiency manifestations of vitamin A.

Short notes:

(10x5=50)

3. Essential fatty acids and its functions.
4. Purine and pyrimidine bases.
5. Enzyme inhibition.
6. Oxidative phosphorylation .
7. GTT.
8. Phenyl ketonuria and albinism.
9. Factors affecting calcium absorption.
10. Types of jaundice.
11. Difference between kwashiorkor and marasmus.
12. Transaminases and its significance.

Answer briefly:

(10x3=30)

13. Mitochondria.
14. Color reactions of amino acids.
15. Define Km.
16. Ketosis.
17. Biological actions of prostaglandins.
18. Maple syrup urine disease.
19. Ketone bodies.
20. Cytochrome P 450.
21. Chargaff's rule.
22. Anion gap.