



## (2010 scheme)

### Biochemistry and Nutrition

Time : 3 hrs

Max marks : 100

- Answer all questions
- Draw diagrams wherever necessary

#### Essays:

(2x10=20)

1. Discuss the oxidation of acetyl CoA in the citric acid cycle and its energetics
2. Explain the sources, dietary requirement and metabolism of iron

#### Short notes:

(10x5=50)

3. Classification of enzymes
4. Biologically important peptides
5. Regulation of calcium level
6. Synthesis and functions of nitric oxide
7. Mechanism of oxidative phosphorylation
8. Explain vitamin D as a hormone
9. Ketogenesis
10. Rappaport-Leubering cycle
11. Biological membrane
12. Vitamin A deficiency

#### Answer briefly:

(10x3=30)

13. Isoenzymes
14. Respiratory acidosis
15. Ceruloplasmin
16. Lipotropic factors
17. Types of RNAs and its functions
18. Kwashiorkor
19. Compounds synthesized from tyrosine
20. Dehydration
21. Chromatography
22. Pellagra