

(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