

**APPLIED BIOCHEMISTRY & MOLECULAR BIOLOGY**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw diagrams wherever necessary.

**Essay**

**(3x10=30)**

1. Explain in detail about transcription of RNA with suitable illustrations. Add a note on post transcriptional modifications
2. Discuss the metabolism of phenylalanine and tyrosine in detail. Add a note on inborn errors associated with it.
3. Discuss in detail about glycogen metabolism. Add a note on its regulation

**Short notes**

**(14x5=70)**

4. Coenzymes and its biochemical importance
5. Diabetic keto acidosis
6. Essential fatty acids and its importance
7. Types of mutation with suitable examples
8. Prostaglandins
9. Isoenzymes and its diagnostic importance
10. Fatty liver
11. Heteropolysaccharides
12. Hyperuricemia
13. Fatty acid synthase complex
14. Chemiosmotic theory
15. Competitive inhibition
16. Biologically important nucleotides
17. Synthesis of creatinine and its significance

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