Time: 3 Hrs. [Max. Marks: 90]

OP Code - 1005

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary.

LONG ESSAY 2 X 10 = 20 Marks

- Write the steps of aerobic glycolysis. Mention its regulation and calculate the net ATPs formed
- Describe the metabolism of phenylalanine and tyrosine. Indicate the inborn errors associated with this pathway

SHORT ESSAY 10 X 5 = 50 Marks

- Biochemical functions of Vitamin A
- Regulation of glycogen metabolism
- Urea cycle
- 6. Biochemical tests to differentiate types of jaundice
- Isoenzymes in diagnosis
- 8. Name lipoproteins and mention their function
- Vitamin K
- 10. Structure and functions of t-RNA
- 11. Blood calcium Homeostasis
- Post-Transcriptional modifications in eukaryotes

SHORT ANSWERS 10 X 2 = 20 Marks

- 13. Lysosomes and their functions
- Genetic code
- 15. Name the coenzyme forms of vitamin B, and vitamin B12
- 16. Enzyme defects in (a) Hereditary Fructose intolerance (b) Galactosemia.
- Rothera's test
- Alkali Reserve
- Antioxidant enzymes
- Substrate Level Phosphorylation
- Steatorrhea
- 22. Name the components of Pyruvate Dehydrogenase complex

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