

**First Year B.Sc Perfusion Technology Degree Supplementary  
Examinations August 2023**

**Biochemistry**

**(2016 Scheme)**

**Time: 3 Hrs**

**Max. Marks: 80**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essays:**

**(2x10=20)**

1. What are enzymes. Write the IUBMB classification of enzymes. Add a note on any two types of enzyme inhibition with examples.
2. What is the beta oxidation. Discuss the steps of beta oxidation of fatty acids. Add a note on its energetics.

**Short notes:**

**(6x5=30)**

3. Sources, RDA and functions of vitamin A
4. Regulation of blood calcium
5. Glycogen synthesis and degradation
6. Plasma buffers
7. Enzymes used in diagnosis of liver diseases
8. Gluconeogenesis- key enzymes and regulation

**Answer briefly:**

**(10x3=30)**

9. Benedict's test
10. Pellagra
11. Biochemical findings in different types of jaundice.
12. Causes of increase in blood urea levels
13. Synthesis and fate of chylomicrons
14. Atherosclerosis
15. Three products obtained from tyrosine
16. Functions of proteins in our body
17. Iron deficiency anaemia
18. Ketone bodies

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