

**Q.P. CODE: 113016**

**Reg. No: .....**

**First Year B.Sc Perfusion Technology Degree Regular/Supplementary  
Examinations February 2025**

**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. Define enzymes. Give the IUBMB classification of enzymes. Add a note on the role of substrate concentration on enzyme activity. (1+6+3)
2. Discuss in detail the steps of beta oxidation of palmitic acid and its energetics. (8+2)

**Short notes:**

**(6x5=30)**

3. Renal regulation of blood pH
4. Glycogen metabolism
5. Structure and functions of lipoproteins
6. Metabolic derangements in Diabetes mellitus
7. Degradation of heme
8. Biochemical functions of vitamin C

**Answer briefly:**

**(10x3=30)**

9. Essential fatty acids
10. Non-Competitive inhibition of enzymes with examples
11. Enzyme markers of Obstructive jaundice
12. Beriberi
13. Dietary factors affecting iron absorption
14. Key enzymes of gluconeogenesis
15. Reducing disaccharides
16. Homocystinuria
17. Glycated haemoglobin
18. Creatinine clearance

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