

QP CODE: 211020

Reg. No: .....

**Second Year B.Sc Medical Biochemistry Degree Regular/Supplementary  
Examinations January 2024  
Paper VI - Metabolism 1**

**(Carbohydrate, Lipid & Amino Acid Metabolism)**

**(2016 Scheme)**

**Time: 3 hrs**

**Max Marks: 100**

- *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*

**Long Essays**

**(2x15=30)**

1. What are the different pathways of synthesis and break down of Glycine.
2. Show how glycolysis and gluconeogenesis are reciprocally regulated. Why pyruvate is considered as a metabolic junction

**Short Essays**

**(2x10=20)**

3. Explain Ketogenesis, Ketolysis and salient features of Ketoacidosis
4. Events in digestion and absorption of lipids

**Short Answer**

**(6x5=30)**

5. Give an account of the different types of Glycogen storage diseases
6. Give the classification and functions of Eicosanoids. What is the mechanism of action of prostaglandins
7. How is urea cycle and TCA cycle interconnected
8. Causes of fatty liver
9. The electron transport assemblies
10. Glucose transporters

**Comment on**

**(10x2=20)**

11. Significance of HMP pathway
12. Polyamines
13. Glutamine synthetase
14. Nitric oxide
15. Abetalipoproteinemia
16. Fo – F1 particles
17. Decarboxylation of amino acids with example
18. Cyclic AMP
19. Enthalpy
20. Oxidative deamination

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