

QP CODE: 211020

Reg. No:

**Second Year B.Sc Medical Biochemistry Degree Regular/Supplementary
Examinations May 2022
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. Describe the steps involved in fatty acid synthesis. Add a note on Fatty acid synthase complex and regulation.
2. Define gluconeogenesis. Describe the steps involved in gluconeogenesis. Add a note on gluconeogenic substrates and regulation.

Short Essays

(2x10=20)

3. Describe the components of Electron Transport Chain (ETC). Add a note on inhibitors of Electron Transport Chain (ETC).
4. Describe irreversible and reversible reactions of Hexose Monophosphate Shunt (HMP).

Short Answer

(6x5=30)

5. Digestion and absorption of lipids.
6. Specialised products of tyrosine.
7. Urea cycle.
8. Amphibolic nature of citric acid cycle.
9. Glycolysis
10. Carnitine shuttle.

Comment on

(10x2=20)

11. Polyamines and their functions.
12. Phenylketonuria.
13. Functions of bile salts.
14. Biogenic amines.
15. Eicosanoids.
16. Substrate level phosphorylation.
17. Lipases in the body and their functions.
18. Lactose intolerance.
19. Albinism.
20. Glucose - 6 - Phosphate Dehydrogenase deficiency.
