

First Year M.Sc Medical Physiology Degree Examinations, October 2014

(FOUNDATION COURSE)

Time: 3 hrs

Max. Marks:- 70

PAPER II – BIOCHEMISTRY

- ***Answer all the questions***
- ***Draw diagrams wherever necessary***

Essay: **(2x10=20)**

1. Define beta oxidation. Describe briefly the steps of beta oxidation and add a note on its energetics & regulation (1+6+3=10).
2. Explain the sources, biochemical functions and deficiency manifestations of vitamin D (2+4+4=10)

Short Notes: **(6x5=30)**

3. Factors affecting enzyme activity
4. Digestion of carbohydrates
5. Significance of HMP pathway
6. Tumor markers
7. Replication
8. Enzyme linked immunosorbant assay (ELISA)

Answer briefly: **(10x2=20)**

9. Polymerase chain reaction
10. Homocystinuria
11. Biochemical functions of calcium
12. Anion gap
13. Endoplasmic reticulum
14. Essential amino acids
15. Chronic complications of diabetes mellitus
16. Porphyria
17. Mutation
18. Transamination
