

First Year M.Sc Medical Physiology Degree Examinations, October 2013

(FOUNDATION COURSE)

Time: 3 hrs

Max.Marks:- 70

PAPER II-BIOCHEMISTRY

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

Essay: (2x10=20)

1. Explain the steps of TCA cycle indicating the enzymes involved in each step. List the four functions of TCA cycle. (6+4=10)
2. What is the normal pH of blood. What are the renal mechanisms of acid base regulation. Add a note on metabolic acidosis. (1+6+3=10)

Short Notes: (6x5=30)

3. Deficiency manifestations of vitamin A
4. Functions of calcium
5. DNA replication
6. Tumor markers
7. Enzymes in the diagnosis of myocardial infarction
8. Functions of HMP shunt pathway

Answer briefly: (10x2=20)

9. Essential amino acids
10. Glucose transporters
11. Cori's cycle
12. Glycated hemoglobin
13. Alkaptonuria
14. Hormone sensitive lipase
15. Dietary fiber
16. Acute intermittent porphyria
17. A/G ratio
18. Radioimmunoassay

