

Q.P.Code:102379

REG. No:.....

FIRST YEAR M.Sc. PHYSIOLOGY SUPPLEMENTARY DEGREE
EXAMINATIONS, SEPTEMBER 2012.
(FOUNDATION COURSE)

Time: 3 hrs

Max. Marks:70

PAPER II - BIOCHEMISTRY

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

Essay:

(2x10=20)

1. Define TCA cycle. Reactions of TCA cycle. Energetics of the cycle. Significance and regulation (1+2+5+2=10)

2. Outline the steps of activation, initiation, elongation and termination of protein synthesis. Mention two inhibitors of it by indicating their mechanism of action. Name four post translational modifications. (2+2+2+1+1+2=10)

Short Notes:

(6x5=30)

3. Explain the role of hormones in blood sugar regulation

4. Explain the competitive inhibition and its clinical significance with examples. 5.

Explain the steps of beta oxidation of palmitic acid. Mention its energetic.

6. Classify prophyrias and add a note on acute intermittent porphyria.

7. Enumerate the causes of metabolic acidosis. What are compensatory mechanisms.

8. Biochemical functions and deficiency manifestations of vitamin A.

Answer briefly:

(10x2=20)

9. Define and mention the importance of isoelectric pH.
10. Inhibitors of electron transport chain
11. Laboratory diagnosis of multiple myeloma
12. Mention names and importance of oncofetal antigens.
13. Deficiency manifestations of pyridoxine
14. Role of restriction endonuclease
15. List four importances of radioisotopes
16. Functions of selenium
17. Causes of orotic acidurias
18. Mention two reactions of detoxification involving conjugation reaction.
