

QP Code: 105001 Reg. no.: ......

First Professional MBBS Degree Supplementary Examinations, February 2013

## **BIOCHEMISTRY-PAPERI**

Time: 3 Hours Total Marks: 50

- Answer all questions
- Draw diagrams wherever necessary

Essay (10)

Describe by a flow diagram the reactions of glycolysis giving names of enzymes involved. Explain its regulation and add a note on the energetic in aerobic & anaerobic conditions.

Short essays (2x5=10)

 What are essential fatty acids. Enumerate them. List two functions and one deficiency manifestation. (1+2+2=5)

3. Explain the digestion and absorption of carbohydrates.

(2+3=5)

Short notes (5x3=15)

- 4. Alpha helix
- 5. Explain, why blood is collected in a fluoride tube for glucose estimation.
- 6. Glucose Alanine cycle
- 7. Enzymes as markers of myocardial infarction
- 8. Transamination

Answer briefly (5x2=10)

- 9. What is substrate level phosphorylation. Mention one example.
- 10. What are lipotropic factors. Name any two lipotropic agents.
- 11. Four functions of cholesterol
- 12. Why TCA cycle is called amphibolic.
- 13. Two co-enzymes roles of NADPH

## **Give precise answers**

(5x1=5)

- 14. One therapeutic use of enzyme
- 15. Compound that facilitates the release of O<sub>2</sub> from oxyhaemoglobin
- 16. Lipoprotein involved in reverse cholesterol synthesis
- 17. Enzyme deficiency in Mc Ardle syndrome
- 18. Enzyme defect in Lactose intolerance

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