# QP Code 1501 Reg. No.:.....

First Professional MBBS Degree Examinations - September 2011

### **BIOCHEMISTRY - PAPER I**

Time: 3 hrs Max marks: 50

- Answer all questions
- Draw diagrams wherever necessary

Essay (10)

1. Define  $\beta$ -oxidation. Explain the reactions of  $\beta$ -oxidation of palmitic acid. Add a note on its energetics. (2+5+3=10)

## Discuss the following:

(2x5=10)

- 2. Define and classify enzymes. Give one example for each class and mention the reaction catalysed.
- 3. Define Urea cycle and describe the reactions of urea cycle.

### Write short notes on:

(5x3=15)

- 4. Phenylketonuria.
- 5. Classify lipoproteins and mention the function of each.
- 6. What is substrate level phosphorylation and mention two examples.
- 7. Define transamination and give two examples.
- 8. Define HMP shunt pathway and mention its significance.

Answer briefly: (5x2=10)

- 9. Name two plasma transport proteins and mention their role.
- 10. Mention two glycogen storage diseases with their deficient enzyme.
- 11. Write the clinical significance of glycated heamoglobin estimation
- 12. Name the bile salts and mention its functional significance
- 13. What is Gaucher's disease. Mention two clinical features.

#### Give precise answers:

(5x1=5)

- 14. Linkage present in sucrose.
- 15. Name two sulphur containing aminoacids.
- 16. Mention the enzyme defect in Galactosemia.
- 17. Mention the chemical name of lecithin.
- 18. Define K<sub>m</sub> value.

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