

First Professional MBBS Degree Examinations - August 2015

BIOCHEMISTRY - PAPER II

Time : 3 hrs

Max marks : 50

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

Essay (10)

1. Describe the process of transcription. What are the post transcriptional modifications. Mention two inhibitors of transcription. (6+3+1=10)

Short essays (2x5=10)

2. Describe uric acid formation and mention the clinical significance of its estimation.
3. Mention the normal level of serum calcium. Explain the hormonal regulation of serum calcium

Short notes (5x3=15)

4. Acute intermittent porphyrias.
5. Mention the normal sodium level and clinical manifestation of hyponatremia.
6. Applications of radio activity.
7. Metabolic acidosis.
8. Creatinine clearance test.

Answer briefly (5x2=10)

9. List two reactions where the folic acid is the co-enzyme.
10. Principles of colorimetry.
11. How benzoic acid and sulfanilamide are detoxified in human body.
12. Explain why edema develops in hypo albuminemia.
13. List the different classes of immunoglobulins and mention the functional role of any one.

Give precise answers (5x1=5)

14. List anti vitamins and mention one example.
15. Co-enzyme functions of biotin.
16. Name two biochemical markers of cancer.
17. Reverse transcriptases.
18. Proto-oncogenes.