

Date: 11-02-2015

# First Year MBBS Examination

## I MBBS Biochemistry Paper 1

Time: 3 hours

Max Marks: 50

*Instructions: 1. Answer to the points. 2. Figure to the right indicates marks. 3. Use separate answer books for each section. 4. Draw diagrams wherever necessary. 5. Write legibly.*

### Section 1

1. Write Short notes on (any two) (6)
  - a. Protein energy malnutrition (PEM)
  - b. BMR
  - c. Metabolic adaptation during starvation

### Section 2

4. Write Short notes on (any two) (10)
    - a. Physiologically important substances synthesized from tyrosine
    - b. Copper metabolism
    - c. Inhibitors of translation
  5. Write Short notes on (any three) out of five) (9)
    - a. Disorders of Pyrimidine metabolism
    - b. Purine salvage pathway
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- c. Biologically important nucleotides
  - d. Protein structure
  - e. Vitamin A and visual cycle
6. Write Justification of following statements: (any six) :One evening, a smart 40 years old male business executive entertained 3 party in which much food and alcohol (6) had been consumed. In the next early morning, he woke: Up with excruciating pain in ankle. He was admitted in the hospital, on examination, he had fever, his ankle joint was swollen and red felt hot to touch. Routine peripheral smear revealed mild granulocytosis. The laboratory data were Blood glucose 130 mg/dl. Blood Urea 38 mg/dl: Serum creatinine: 1 mg/dl; Serum Uric acid: 10 mg/dl: Urine PH was found to be 2
- a. What is the most probable diagnosis?
  - b. Why in lactic acidosis secondary gout occurs?
  - c. What is HGPRT?
  - d. What are the causes for primary hyperuricemia?
  - e. What are the causes for secondary hyperuricemia?
  - f. Why patients with Von Gierke's disease have hyperuricemia?
  - g. Which type of food will precipitate an attack of gout?

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