

**Date: 10-07-2013**

**0819E373**

**First Year MBBS Examination**

**I MBBS Biochemistry Paper 1**

**Time: 3 hours**

**Max Marks: 50**

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. Give an account of any TWO of the following**
  - a) Role of kidney in acid base regulation (A. 399) (C.477) **(10)**
  - b) Principle and significance of Van Den Bergh's reaction(A.332) (C.455)
  - c) Isoenzymes and their clinical significance (A. 69) (C.112)
- 2. Write Short notes of (any three)** **(9)**
  - a) Glycosides (A. 93) (C.17)
  - ~~b) Essential fatty acid (A. 242) (C.509)~~

- c) Allosteric enzymes (A. 66) (C.95)
- d) Radioisotopes of medical significance (A. 682) (C.717)
- e) Fluid mosaic model of membrane (A. 13) (C.650)

### **3. Discuss Any TWO (6)**

- a) Acute intermittent porphyria (A. 328) (C.212)
- b) Beer-Lambert's Law (A. 437) (C.726)
- c) Active and passive transport (A. 15) (C. 651)

## **Section 2**

### **4. Write Short notes on (any two) (10)**

- a) Steps of beta-oxidation of fatty acids (A. 194) (C.287)
- b) Oxidation of pyruvate (A. 135) (C.252)
- c) Key reactions of Gluconeogenesis (A. 135) (C.258)

### **5. Write Short notes on (any two) (9)**

- a) Immunoglobulins (A. 649) (C.186)
- b) Antioxidants (A. 429) (C.658)
- c) Cori cycle (A. 134) (C. 261)
- d) Substrate level phosphorylation (A. 313) (C.224)
- e) Regulation of citric acid cycle (A. 308) (C.257)

### **6. Give your comments with justification of Any SIX: (6)**

- a) Bile salts are required for digestion of lipids.
- b) Enzymes are proteins.
- c) Sucrose is called as invert sugar.
- d) Cyanide causes instantaneous death.
- e) People with Glucose 6-phosphate deficiency are resistant against malaria.
- f) Phytanic acid cannot be oxidized by beta-oxidation without prior modification of beta carbon atom.
- g) Acetyl CoA is a common metabolic intermediate.
- h) Lysolecithin is formed during snake bite.