

Date: 06-10-2014 BR 5005

## **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. Give an account of: (any two) (10)
  - a. Blood buffers and its importance (A. 398) (C. 475)
  - b. Hyperbilirubinemia (A. 330) (C. 214)
  - c. Diagnostic importance of Enzymes assay
2. Write Short notes on (any three) (9)
  - a. Prostaglandins (A. 243) (C.644)
  - b. Competitive inhibition (A. 63) (C.92)
  - c. Sickle cell anaemia
  - d. Mucopolysaccharides and its disorders (A. 98) (C.22)
3. Write Short notes on (any two) (6)
  - a. Chromatography (A. 434) (C.719)

- b. Renal function test (RFT) (A. 370) (C. 459)
- c. Active transport (A. 15) (C. 651)

## Section 2

1. Give an account on (any two) (10)
  - a. Metabolism of low density lipoprotein and high density lipoprotein
  - b. Effect of hormones on glucose level in blood
  - c. Significance and regulation of gluconeogenesis (A. 135) (C.258)
2. A. Write Short notes on (any three) (9)
  - a. Cell mediated immunity
  - b. Toxic substances in food stuffs
  - c. High energy compounds
  - d. Tumour markers (A. 666) (C.691)
  - e. Lipid peroxidation
3. Read the following case and answer any six question in two to three lines :A 40 years old woman admitted with recurrent pain in the abdomen developed jaundice (6) two days after admission. History revealed that the pain often aggravated after intake of fatty food. Routine urine examination showed the presence of bile pigments and bile salts urobilinogen was absent. Blood report revealed very high levels of conjugated bilirubin.

- a. What is the most likely cause?
- b. What is the type of jaundice? (A. 332) (C. 216)
- c. Enumerate causes of this type of jaundice
- d. Explain findings in urine
- e. Explain reason for high levels of conjugated bilirubin
- f. Which other tests will be reformed in the patient?
- g. What is the normal range of total unconjugated and conjugated bilirubin in blood/serum?
- h. Name two inherited disorders of bilirubin metabolism in which jaundice occurs

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