Date: 10-01-2011

0819E373

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 of the following (10)

a) Liver function tests and its clinical significance (A. 361) (C.453)

b) Disturbances of acid-base balance with laboratory findings (A. 401) (C.479)

c) Competitive inhibition and its therapeutic importance (A. 63) (C.92)

2.Write Short notes of (any three) (9)

a) Mutarotation (A. 90) (C.14)

b) Phospholipids (A. 108) (C.34)

c) Porphyrias (A. 328) (C.212)

d) Iso enzymes (A. 69) (C. 109)

e) Similarities and differences between starch and glycogen (A. 96) (C.20,21)

3.Discuss Any TWO (6)

a) Bicarbonate buffer system in the blood and significance of Henderson-Hasselbalch equation (A. 398) (C.475)

b) ELISA (A. 437) (C.729)

c) Creatinine clearance test (A. 374) (C.461)

Section 2

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

a) Hexose monophosphate shunt and its significance (A. 144) (C.270)

b) Ketone bodies generation and utilization (A. 205) (C.294)

c) Glycogen metabolism and its hormonal regulation (A. 140) (C183)

5.Write Short notes on (any two)

a) Detoxification by conjugation mechanisms (A. 525) (C.640) **(9)**

b) Components of electron transport chain and sites of ATP synthesis (A. 315) (C.226)

c) Tumor markers (A. 666) (C.691)

d) Functions of plasma proteins (A. 385) (C.183)

e) Malate-Aspartate shuttle (A. 136) (C.234)

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

a) Lead toxicity causes anemia.

b) Cataract is seen in children suffering from galactosemia.

c) Ketone bodies are not utilized by liver.

d) Defective synthesis of VLDL may result in fatty liver.

e) Glucose 6 phosphate dehydrogenase causes anemia.

f) B-oxidation of odd chain fatty acid gives propionic acid.

g) Streptokinase is used in treating acute myocardial infarction.

h) Glucagon as hyperglycemic hormone