Date: 01-08-2019

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. Write short notes on the following (10)

a) Tumors markers

b) Type I Fatty Liver

c) Metabolic derangements in Diabetes Mellitus

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

a) Functions of Prostaglandins

b) Homopolysaccharides

c) Acute Intermittent Porphyria

d) Diagnostic Applications of Enzymes

e) Effect of Substrate Concentration and pH on enzyme action

3. Discuss Any TWO (6)

a) Application of ELISA

b) Tests to detect on Glomerular Function

c) Role of Hemoglobin as a buffer

Section 2

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

a) Ketone body Metabolism

b) Amphibolic Role of Tricarboxylic acid (TCA)cycle

c) Gluconeogenesis

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

a) Immunoglobulin structure

b) Inhibitors of Electron Transport chain and oxidative Phosphorylation

c) Oncogenes

d) Therapeutic Application of Radioisotopes

e) Carcinogens

6. Case report: 10 year old boy residing in a slum was brought to the pediatric OPD with compliants of fever, anorexia, nausea vomiting headache, weakness and myalgia (6)

for 2 weeks.The boy had development jaundice since 1 day and also passed dark yellow coloured urine. There were other patients with similar complaints in the neighborhood. Physical examination.Patiant showed signs icterus and tenderness in the right hypochondriac

region.Laboratory/Investigations:Serum Bilirubin:Total-3 mg/dl, indirect-1.2 mg/dl, Direct-1.8 mg/dl, Serum Total protein-7.5 g/dl.Serum albumin-4.9 g/dl,SGOT-500 IU/L, SGPT-675IU/L,Serum Alkaline phosphate-17KAU/100 ml, Urine routine:Fouchet test & Hays sulfur test:+Ve

Answer the following questions (any six)

1) What is your probable diagnosis?

2) The boy is suffering from which type of jaundice?

3) Comment on the levels of liver enzymes.

4) Why both direct and indirect bilirubin have raised?

5) Comment on serum total proteins and

albumin levels.

6) How will you differentiate between three types of jaundice based on enzyme assays

7) What is the causes of dark yellow color urine?

8) How will you confirm the same?