

0819E379

**First Year MBBS Examination
I MBBS Biochemistry Paper 2**

Date: 10-01-2014

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 (10)

- a) Structure and functions of DNA (A. 556) (C.73)
- b) Medical applications of Recombinant DNA technology (A.600) (C.579)
- c) Metabolic role and deficiency manifestations of Vit.A (A.454) (C.119)

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

- a) Primary structure of protein (A. 36) (C.52)
- b) Metabolic changes in starvation (A. 122) (C. 383)

- c) t-RNA (A. 578) (C. 81)
- d) Gout (A. 548) (C. 394)
- e) Biologically important nucleotides

3. Discuss Any TWO (6)

- a) Specific dynamic action (A. 512) (C.505)
- b) BMR (A. 512) (C.504)
- c) Dietary fibres (A. 514) (C.508)

Section 2

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

- a) Trace elements (A. 491) (C.405)
- b) Transdeamination (A. 256) (C.334)
- c) Metabolic role of sulfur containing amino acids (A.272) (C.358)

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

- a) Rickets (A. 459) (C.127,408)
- b) Calcium homeostasis (A. 493) (C. 407)
- c) Synthetic analogues of nucleotides used in medicine (A.546, 551)(C.73)
- d) Metabolic role of Vitamin B-6 (A. 471) (C.134)
- e) Inhibitors of protein biosynthesis (A. 584) (C.558)

6. Give your comments with justification of Any SIX: A middle aged fair lady came to

surgical OPD with severe spasmodic pain in the right upper abdomen. She jaundice (6)

and palpable liver. Her serum Total Bilirubin was 9 mg% (normal 0.2-1 mg%) & Alkaline phosphatase level was 150 KAU/dl (Normal 3-13 KAU/dl). Prothrombin time was grossly elevated. The case was diagnosed as "Obstructive jaundice due to gall stone". The surgeon prescribed Vit K (Injectable form) prior to surgery of removal of gall bladder.

- a)** What are the functions of Vitamin K?
- b)** How Vit K is related with prothrombin time?
- c)** Correlate her alkaline phosphatase level with the cause of jaundice.
- d)** What is the name of injectable form of Vit K?
- e)** How prolong antibiotic therapy causes Vit K deficiency?
- f)** What are the sign symptoms of Hypervitaminosis of Vit K?
- g)** How the drug Warfarin has an interaction with Vit K?
- h)** What is hemorrhagic disease of new born?