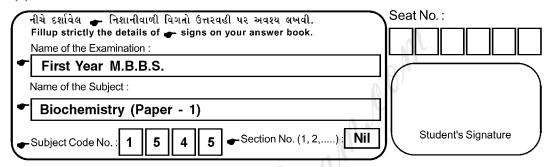


RO-1545-R First Year M.B.B.S. Examination June - 2010 Biochemistry (Paper - I)

Time: 2 Hours [Total Marks: 50

Instructions:

(1)



- (2) Figures to the **right** indicate full marks.
- (3) Draw diagrams where appropriate.
- Write down different types of protein structures. How different structure of protein are stabilized?

OR

11

- 1 Describe Heam synthesis and its regulation, enumerate porphyrias. 11
- Read the following case and answer the following questions:

 A three day old neonate was brought to pediatric nursery with yellow discoloration of sclera and skin. His total bilirubin was 9 mg/dl (Normal range: 0.1-1.0 mg/dl). Pediatrician diagnosed as a case of physiological jaundice. The patient was advised phototherapy and recovered in 24 hrs.
 - (a) What is the cause of physiological jaundice?
 - (b) What is the difference between direct and indirect bilirubin?
 - (c) What is the role of phototherapy in this case?
 - (d) What are other causes of unconjugated hyperbilirubinimia?
 - (e) What type of hyperbilirubinimia is seen in obstructive jaundice?

RO-1545] 1 [Contd...

3 Write short notes on : (any three) 9 Lysosomes and Peroxysomes (b) **ELISA** Eicosanoids (c) (d) Applications of radioisotops in medicine Bile salts. (e) 4 Write notes on: (any two) 10 (a) Functions of plasma proteins (b) Mucopolysaccharides (c) Electrophoresis (d) Structure of collagen. Comment on / justify in 2-3 sentences : (any five) 10 5 Sucrose is a non-reducing disaccharide. (a) HDL cholesterol is "Good cholesterol". (b) (c) Allopurinol is used in the treatment of gout. (d) Denaturation of proteins in food is biologically advantageous. Glucose is required for the absorption of Na⁺. (e)

Proline does not allow forming alpha helix.

Selective COX2 inhibitors reduce gastric side effects of

(f)

(g)

NSAIDS.