

BIOCHEMISTRY

Paper - 2

MAY 2003

(2 ½ hours)

Total marks : 50

SECTION – B

2. Write short answers (any 5 of 6) :

10

- a) State the causes of primary dehydration.
- b) Formation and breakdown of cyclic AMP.
- c) Biochemical functions of phosphorus.
- d) Compare and contrast starch and glycogen.
- e) Give one example each for :
 - i) Phospholipid.
 - ii) PUFA
 - iii) Lipotropic factor
 - iv) Bile acid.
- f) What is metabolic acidosis ? Name any two pathological conditions which lead to metabolic acidosis.

3. Solve (any 2 of 3) :

08

- a) What are the commonly used tumor markers? Explain the chemical use of each.
- b) Lipoproteins.
- c) Blood Galactose levels were found to be elevated in an infant. Galactose was also detected in the urine. :
 - i) Name the disease.
 - ii) Give the biochemical step(s) related to the disease and point the metabolic defect.
 - iii) What are the clinical manifestations of the disease?

SECTION – C

4. Describe the mechanism of hormone action.

09

OR

Explain Glycogenesis and its regulation.

5. Answer (any 2 of 3) :

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a) Absorption, transport and storage of iron.

b) Glycosaminoglycans.

c) Explain the role of various blood buffers in the maintenance of blood pH.

