

BIOCHEMISTRY

Paper - 1

22nd OCTOBER, 2002

(2 ½ hours)

Total marks : 35

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

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- a) Draw and label the structure of Mitochondria.
- b) Give four functions of Nucleotides.
- c) Give four differentiating points for TIGHT (T) & Relaxed (R) form of Haemoglobin.
- d) Give two examples each of allosteric enzyme activators and inhibitors.
- e) Define "Peptide". Give the important functions of two biologically important peptides.
- f) Give four causes of Secondary Gout.

3. Write notes on : (any 2 of 3) :

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- a) Thalassaemias.
- b) Protein energy malnutrition.
- c) A five year old girl had bleeding gums, anaemia and complained of pain in the joints.
 - i) What is the probable diagnosis?
 - ii) Which factor is deficient in the diet ?
 - iii) What is the daily requirement of this factor?
 - iv) Name the rich sources of this factors.

SECTION – C

4. Describe the role of enzymes and isoenzymes in various clinical disorders. 09

OR

Describe the metabolism and inherited disorders of Phenylalanine and Tyrosine.

5. Attempt : (any 2 of 3) :

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1) Purine Salvage Pathway.

2) Lac Operon Concept.

3) Vitamin B12 – Chemistry, functions and deficiency manifestation.

