

BIOCHEMISTRY

Paper - 1

JUNE/JULY 2004

(2 ½ hours)

Total marks : 35

SECTION – B

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

10

- a) Name any two biologically important compounds derived from Glycine and give their importance.
- b) What is purine salvage pathway? Name the tissues in which it is operating.
- c) Name origins and one function each of any two peptide hormones.
- d) Indicate diagrammatically in sites of ATP synthesis in E.T.C.
- e) Give the coenzyme form and deficiency manifestation of vitamin B12.
- f) 2 example of enzymes inhibitors used as drugs.

3. Solve (any 2 of 3) :

08

- a) Transmethylation Reactions.
- b) A 10 year old boy is hospitalized with symptoms of weight loss, digestive disorders, dermatitis, depression and dementia :
 - i) Name the disorder
 - ii) Disorder is due to deficiency of which biomolecule.
 - iii) Name the active forms of the biomolecule.
 - iv) Give one reaction where the active form is used.

SECTION – C

4. Describe the metabolism of Phenylalaine and Tyrosine with special reference of two inborn errors.

09

OR

Diagrammatic representation of various steps involved in biosynthesis of protein. Indicate the site of inhibition of protein synthesis by antibiotics.

5. Answer (any 2 of 3) :

08

a) Functional and Nutritional classification of proteins.

b) Walds visual cycle.

c) Name the free radicals and explain the role of vitamins in scavenging them.

