

# BIOCHEMISTRY

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## Paper - 1

**WINTER 2012**

**(2 ½ hours)**

**Total marks : 40**

### SECTION – B

**2. Brief answer question : (any 6 of 7) :**

**(6x4=24)**

- a) Write short note on a reverse transcription.
- b) Isoenzymes and their clinical application.
- c) Genetic code.
- d) Define an antioxidant. Name antioxidant enzymes. Vitamins and minerals.
- e) Purine salvage pathway.
- f) Deficiency manifestations of Vitamin A.
- g) A 2 year old boy was brought to paediatric OPD with complaints of listlessness, apathy and recurrent infection. O/E the child had puffy face and oedema on feet. The hair was light in colour and dry serum total protein value was 5 gm/dl and albumin was 2 gm/dl.
  - i) What is the probable diagnosis.
  - ii) Give the biochemical basis of the findings.
  - iii) Give the outline of the treatment.

### SECTION – C

**3. Solve (any 2 of 3) :**

**(2x8=16)**

- a) Describe the catabolism of hemoglobin with its significance.
- b) Describe the pathway for biosynthesis of urea from ammonia. Add a note on a metabolic disorders of urea cycle.
- c) Describe the process of oxidative phosphorylation.