

BIOCHEMISTRY

Paper - 2

MAY/JUNE 2008

(2 ½ hours)

Total marks : 40

SECTION – B

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

(6x4=24)

- a) Metabolic changes during starvation.
- b) Functions of Albumin.
- c) Lipoproteins.
- d) Glycosamine glycans.
- e) Oncogenes.

f) A 50 year old man admitted with recurrent pain in abdomen, developed jaundice two-days after admission. Ultrasonography reveals enlarge head of pancreas. A routine urine examination show the presence of bile pigments but urobilinogen was absent. Stool examination revealed chalky white coloured stools.

- i) What is the type of jaundice?
- ii) What is the most like cause?
- iii) Explain the findings in urine.
- iv) Which are the blood tests to be done in this patient?

g) A 50 year old man admitted to the hospital in a confused and semiconscious state. Several days before admission, he was complaining of undue thirst and also started to get up several times during the night to urinate. His breath had fruity odour. Following is the data of his laboratory investigations.

- i) Blood glucose (random) – 480 mgm/dl
- ii) Rothera's test on urine – Purple ring
- iii) Urine sugar – Present (++++)

- i) What is the probable diagnosis?
- ii) Describe the biochemical basis giving rise to following conditions.
 - Increased thirst and frequency of urination.

- Fruity odour to the breath.

SECTION – C

3. Solve (any 2 of 3) :

(2x8=16)

- Enumerate fate of acetyl CoA. Describe the process of fatty acid synthesis.
- Give role of various enzymes in Liver functions tests.
- Describe in detail the tricarboxylic acid with its energetics. Describe its amphibolic nature.

