

BIOCHEMISTRY

Paper - 2

MAY/JUNE 2013

(2 ½ hours)

Total marks : 40

SECTION – B

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

(6x4=24)

- a) Creatinine clearance test.
- b) Tumor markers.
- c) Digestion and absorption of lipids.
- d) Metabolism of cholesterol & its functions
- e) 17 year old girl, a resident of hostel brought to hospital with complaints of nausea vomiting, and loss of appetite, on examination her eyes showed yellow coloration & urine was dark yellow. Liver was enlarged & tender. Laboratory findings showed Total bilirubin-5.5mg/dl. Conjugate bilirubin- 2.8mg/dl
 - i) Name the probable disorders.
 - ii) Which enzyme will be raised in the blood?
 - iii) Which abnormal pigment will be detected in urine?
- f) 50 years old man admitted to the hospital in a confused and remiconscious state. Several days before admission he was complaining of undue thirst and also used to get up several times during the night for urination. His breath had fruity odour. Following is the data of his laboratory investigations.
 - 1) Blood glucose (random) 480 hm/dl
 - 2) Rothera test on urine-purple ring.
 - 3) Urine sugar-present (++++)
 - i) What is the probable diagnosis?
 - ii) Describe biochemical basis of the following condition.
 - a) Increased thirst and frequent urination.
 - b) Fruity odour to the breath.
 - g) Glycosaminoglycans.

SECTION – C

3. Long answer questions :(any 2 of 3) :

(2x8=16)

a) What is the normal blood pH? How is it maintained? Write in brief disorders associated with acid-base balance.

b) Describe glycogenolysis. Explain its regulation and enumerate Glycogen storage diseases.

c) Write in detail about absorption transport, regulation, functions & deficiency manifestations of calcium.

