

BIOCHEMISTRY

Paper - 2

MAY/JUNE 2009

(2 ½ hours)

Total marks : 40

SECTION – B – (SAQ)

2. Write short answers :(any 6 of 7) :

(6x4=24)

a) Mechanism of steroid hormones.
b) Application of radioisotopes in medicine.
c) Different types of chromatography techniques.
d) Define detoxification and explain phase I reaction with examples.
e) Biochemical changes in starvation.
f) A forty year old woman admitted with recurrent pain in abdomen developed jaundice two days after admission. Ultrasonography revealed enlarged head of pancreas. A routine urine examination showed the presence of bile pigments, but urobilinogen was absent. Stool examination revealed chalky white coloured stools.

1) State the type of Jaundice.
2) What is the most likely cause?
3) Explain the findings in urine.
4) Which are the laboratory tests to be carried out in blood sample of the patient?

g) A 17 year old girl was admitted in hospital with coma. Several days before she complained of excessive thirst and polyuria. She was dehydrated, breathing was deep and breath had fruity odour.

1) Name the disease and mention its cause.
2) Which are the biochemical investigations to be carries out ?
3) Mention the major metabolic changes associated with this disease.
4) What is the suggestive mode of treatment?

SECTION – C

3. Answer (any 2) :

(2x8=16)

- a) Describe in detail the pathway of Denovo synthesis of fatty acids and its regulation.
- b) What is acid base balance ? Write about acid base imbalance and its causes.
- c) Describe in detail about homeostasis of blood sugar.

