

[AHS 0321] MARCH 2021 Sub. Code: 5017

(AUGUST 2020 EXAM SESSION) B.Sc. MEDICAL LABORATORY TECHNOLOGY SECOND YEAR (From 2010-2011 onwards) PAPER II – BIOCHEMISTRY - I

O.P. Code: 725017

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(3 \times 10 = 30)$

1. Explain in detail about urea cycle and the clinical importance of elevated blood urea.

- 2. Write the dietary sources of Iron, daily requirements and explain the iron absorption, transport and storage.
- 3. What is glycolysis? Write the reactions and energetics of glycolysis.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Steps in cholesterol synthesis.
- 2. Biochemical functions of thyroid hormones, hypo and hyper thyroidism.
- 3. Heme catabolism.
- 4. Growth hormone and its function.
- 5. Energetics of TCA cycle.
- Normal serum level of Uric acid, causes and clinical features of increased Uric acid level.
- 7. Glycogen synthesis.
- 8. Haemoglobin derivatives.

III. Short answers on:

 $(10 \times 3 = 30)$

- 1. Define electrophoresis, mention its uses.
- 2. Creatinine and its normal serum level.
- 3. Biochemical functions of phosphate.
- 4. Myoglobin.
- 5. Diabetes insipidus.
- 6. Congenital erythropoietic porphyria.
- 7. Name 3 prostaglandins and its functions.
- 8. Normal serum level of calcium and clinical features of tetany.
- 9. Glucose transporters.
- 10. Albumin and its function.
