

SEPTEMBER 2002

[KH 227]

SECTION B — (40 marks)

(BIO CHEMISTRY)

M.Sc. (Non Clinical) DEGREE EXAMINATION.

Preliminary (Common to all branches)

Paper II — PHYSIOLOGY AND BIOCHEMISTRY

Time : Three hours      Maximum : 100 marks

Answer ALL questions.

SECTION A — (60 marks)

(PHYSIOLOGY)

1. Define Blood Pressure. Give its normal values in an adult. Discuss in detail how Blood Pressure is regulated in the body. (2 + 2 + 16 = 20)
2. What are the hormones secreted by the Posterior (lobe) Pituitary gland. Discuss the action of any one in detail. (2 + 18 = 20)
3. Write briefly on : (5 × 4 = 20)
  - (a) Glycosuria
  - (b) Stages of Erythropoiesis
  - (c) Defaecation reflex
  - (d) Functions of cerebellum
  - (e) Transport of oxygen by blood.

4. Name the aromatic Amino-Acids. Describe the metabolism of Tyrosine including the inborn errors seen during the process. (20)

5. Write briefly on : (5 × 4 = 20)

- (a) Hyperglycemia
- (b) Poly unsaturated Fatty Acids
- (c) Creatine Phosphokinase
- (d) Serum calcium
- (e) Deficiency of Niacin manifestation.