

APRIL 2003

[KI 227]

Sub. Code : 2952

SECTION B — (40 marks)

(BIOCHEMISTRY)

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. Describe the various parts of the respiratory tract giving their chief functions. How is respiration regulated? (20)
2. What is Haemostasis? Describe the process of the blood clotting mechanism in detail. Name two anti-coagulants and give their physiological basis of action. (20)
3. Write short notes on : (5 × 4 = 20)
 - (a) Rh-factor
 - (b) Heart sounds
 - (c) Plasma clearance
 - (d) Cerebellar functions
 - (e) Anti-diuretic hormone.

4. Describe the synthesis and breakdown of Glycogen in the body. What are the hormones which regulate them? (20)

5. Write briefly on : (5 × 4 = 20)

- (a) 'Good' cholesterol
- (b) Ketone bodies
- (c) Anti oxidants
- (d) Heparin
- (e) Ascorbic acid.