

APRIL 2001

[KD 227]

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. What is cardiac cycle? Enumerate the various events that occur during one cardiac cycle. Describe in detail the origin and spread of cardiac impulse. (20)
2. Give the composition and functions of the pancreatic juice. How is its secretion regulated? (20)
3. Write short notes on : (5 × 4 = 20)
 - (a) Sarcomere
 - (b) Glomerular filtration rate
 - (c) Lateral spinothalamic tract
 - (d) Parathormone
 - (e) Plasma proteins.

4. Write in detail about the synthesis, metabolism, fate and clinical importance of cholesterol in the body. (20)

5. Write briefly on : (5 × 4 = 20)

- (a) Ketone Bodies
- (b) One carbon units
- (c) Unsaturated fatty acids
- (d) Gluconeogenesis
- (e) Cardiac Enzymes.