

MARCH 2008

[KS 227]

Sub. Code : 2952

M.Sc. (Non-Clinical) DEGREE EXAMINATION.

Preliminary

(Common to all branches)

Paper II — PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 282952

Time : Three hours

Maximum : 100 marks

Answer Sections A and B in the **SEPARATE**  
Answer books.

Answer ALL questions.

SECTION A — (60 marks)

PHYSIOLOGY

- I. Essay : (1 × 20 = 20)
1. Classify Leucocytes and describe their functions and their variations.
- II. Write short notes on : (10 × 4 = 40)
- (1) Blood Groups
  - (2) Artificial respiration
  - (3) Growth hormone
  - (4) Functions of Large intestine

- (5) E.C.G.
- (6) Anti-diuretic hormone
- (7) Cerebro spinal fluid
- (8) Plasma proteins
- (9) Cretinism
- (10) Functions of hypothalamus.

SECTION B — (40 marks)

BIOCHEMISTRY

- I. Essay : (1 × 20 = 20)
1. Write the structure of Aromatic Amino Acids. Write in detail about the metabolism of phenylalanine and about the Biologically important substances synthesised from it.
- II. Write short notes on : (5 × 4 = 20)
- (1) Mucopolysaccharides
  - (2) Prostaglandins
  - (3) Co-enzyme functions of Biotin
  - (4) Specific dynamic action
  - (5) Conversion of pyruvate to Acetyl CoA.