

**AUGUST 2005**

**[KN 227]**

**Sub. Code : 2952**

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

**Preliminary**

**(Common to all branches)**

**Paper II — PHYSIOLOGY AND BIOCHEMISTRY**

**Time : Three hours      Maximum : 100 marks**

**Sec. A & B : Two hours and forty minutes      Sec. A & B : 80 marks**

**Section C : Twenty minutes      Section C : 20 marks**

**Answer Sections A and B in SEPARATE  
Answer Books.**

**Answer Section C in the Answer Sheet provided.**

**Answer ALL questions.**

**SECTION A — (40 marks)**

**(PHYSIOLOGY)**

**1. Discuss in detail the production, circulation and functions of cerebro spinal fluid. Explain the term blood brain barrier. (15)**

**2. Write short notes on : (5 × 5 = 25)**

- (a) Iron deficiency anemia.**
- (b) Extra cellular fluid.**

- (c) Cushing's syndrome.**
- (d) Functions of saliva.**
- (e) Reflex arc.**

**SECTION B — (40 marks)**

**(BIOCHEMISTRY)**

**3. Describe the structure and synthesis of cholesterol. Name the products formed from cholesterol and its importance. (15)**

**4. Write briefly on : (5 × 5 = 25)**

- (a) Coenzyme A.**
- (b) Structure of Insulin.**
- (c) Functions of Protein.**
- (d) Alkaptonuria.**
- (e) Importance of the assay of Serum Transaminases.**