

[LM 824] **FEBRUARY 2018** Sub. Code: 4884

POST BASIC BACHELOR OF SCIENCE IN NURSING DEGREE EXAMINATION FIRST YEAR - NON SEMESTER PAPER III – BIOCHEMISTRY AND BIOPHYSICS

Q.P. Code: 684884

Time: Three hours Maximum: 75 Marks

Answer Section A and B in a SEPARATE answer book.

SECTION A (BIOCHEMISTRY)

I. Elaborate on: $(1 \times 15 = 15)$

1. Explain the biosynthesis of proteins in the cells.

II. Write notes on: $(3 \times 5 = 15)$

- 1. Mechanism of enzyme action.
 - 2. Explain the glycogenolysis process.
 - 3. Write notes on cholesterol biosynthesis.

III. Short answers on: $(5 \times 2 = 10)$

- 1. Hyperglycemia.
- 2. Essential amino acids.
- 3. Normal level of urea and cholesterol in blood.
- 4. Phenyl ketonuria.
- 5. Nucleus.

SECTION B (BIOPHYSICS)

I. Elaborate on: $(1 \times 15 = 15)$

1. What is radio activity? Explain the use of radio isotopes in medicine.

II. Write notes on: $(2 \times 5 = 10)$

- 1. Sphygmomanometer.
- 2. States of equilibrium with examples.

III. Short answers on: $(5 \times 2 = 10)$

- 1. Types of lenses.
- 2. Refraction and reflection.
- 3. Differentiate between vector and scalar quantities.
- 4. Biological effects of electric shock.
- 5 Acceleration
