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.

\*\*\*\*\*\*