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 x 15 = 15)**

1. Describe the reactions of Urea cycle. Discuss the interrelation of Urea cycle and TCA cycle.

II. Write notes on: **(3 x 5 = 15)**

1. GTT.
2. Clinical importance of enzymes.
3. Kwashiorkar & Marasmus.

III. Short answers on: **(5 x 2 = 10)**

1. Differences between inulin and insulin (any two).
2. Glycosuria.
3. Semi essential amino acid.
4. Induced fit model of enzyme activity.
5. Write any two functions of albumin.

SECTION B
(BIOPHYSICS)

I. Elaborate on :   **(1 x 15 = 15)**

1. Explain the basis of light and its bio-applications in medicine.

II. Write notes on: **(2 x 5 = 10)**

1. CT scan.
2. Radiation protection.

III. Short answers on: **(5 x 2 = 10)**

1. State Boyle's law and Charle's law.
2. What is the use of calorimeter?
3. Explain arterial and venous blood pressure.
4. What is astigmatism?
5. Define Osmosis.

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