



[LJ 824]

AUGUST 2016

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 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. Kwashiorkor & 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 Charles's law.
2. What is the use of calorimeter?
3. Explain arterial and venous blood pressure.
4. What is astigmatism?
5. Define Osmosis.

