

**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. Explain the process of Gluconeogenesis.

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

1. Write a brief note on Gout.
2. Role of liver in fat metabolism.
3. Explain oxidative phosphorylation.

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

1. Name some of the electrolytes and their sources.
2. Lock and key model.
3. Name any two of the plasma proteins and their functions.
4. Write some factors affecting the absorption of carbohydrates.
5. Ketone bodies.

**SECTION - B
(BIOPHYSICS)**

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

1. Describe briefly the use of various electronic equipments in patient care.

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

1. Instruments used for detecting ionizing radiation.
2. What is radioactivity? Give the names of two isotopes and their applications in medicine.

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

1. Myopia and Hyper-metropia.
2. Law of conservation of energy.
3. Temperature scales.
4. Noise pollution.
5. Half-life of a radio-active element with an example.
