

[LH 824]

AUGUST 2015

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 ALL questions****Answer Section A and B in a SEPARATE answer book.****SECTION A****(BIOCHEMISTRY)****I. Essay:** (1 x 15 = 15)

1. Describe the metabolism of glycolysis, its energetics and regulation.

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

1. Importance of vitamins.
2. Urea cycle.
3. Metabolic Acidosis.

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

1. Name any four Trace Elements.
2. Name any two Special proteins.
3. Albinism.
4. Name the types of Jaundice.
5. Golgi complex.

**SECTION B  
(BIOPHYSICS)****I. Essay:** (1 x 15 = 15)

1. a) Explain the four methods of heating the tissues.  
b) Explain the first law of Newton with an example.

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

1. States of Equilibrium with examples.
2. Explain Total internal reflection and the application in medicine.

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

1. Buoyant force.
2. Dalton's law.
3. Law of conservation of energy.
4. What is the difference between Mass and Weight?
5. Give two names of radioisotopes used in Brachytherapy.