



[LG 824]

FEBRUARY 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 Section A and B in a SEPARATE answer book.**

**SECTION A  
(BIOCHEMISTRY)**

**I. Essay:** (1 x 15 = 15)

1. Give a detailed account of TCA cycle. How many molecules of ATP are produced on complete oxidation of one molecule of glucose?

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

1. Enzyme profile in clinical diagnosis
2. Urea cycle
3. Essential amino acids

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

1. Endoplasmic reticulum
2. Gout
3. Normal level of urea and cholesterol in serum
4. Night blindness
5. Wilson's disease

**SECTION B  
(BIOPHYSICS)**

**I. Essay:** (1 x 15 = 15)

1. Give an essay on the physiology of hearing.

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

1. Law of conservation of energy
2. Instruments used for detecting ionizing radiation

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

1. Derived units
2. Law of floatation
3. Inclined plane
4. Ocular pressure
5. Hypermetropia

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