

Reg. No:.....

First Year Post Basic B.Sc Nursing Examinations October 2018

**Biochemistry & Biophysics
(2016 Scheme)**

Time: 3 Hours

Total Marks: 75

- **Answer all questions.**
- **Draw diagram wherever necessary**
- **Write section A and section B in separate answer books (32 pages). Do not mix up questions from section A and section B.**

QP Code: 113011

Section A – Biochemistry

Marks: 40

Short Essays:

(2x7=14)

1. Describe the steps of glycolysis.
2. Describe the reactions of urea cycle.

Short Notes:

(2x5=10)

3. Glucose tolerance test
4. Digestion and absorption of proteins

Answer briefly:

(4x4=16)

5. Functions of albumin
6. Essential fatty acids
7. Lactose intolerance
8. Mitochondria

QP Code: 114011

Section B - Biophysics

Marks: 35

Short Essays:

(3x7=21)

1. Define voltage, current and resistance with their units. Explain Ohm's law. (4+3)
2. Define ultrasound. Mention its types. Give biomedical application of ultrasound. (1+1+5)
3. Define heat and temperature. Explain the applications of heat in medical field. (1+1+5)

Short Notes:

(2x4=8)

4. What is meant by lever system. Explain the types of lever system.
5. Explain different radiation dose and their units

Answer Briefly:

(2x3=6)

6. Define velocity and acceleration. Give their units.
7. Convert the temperature 40 degree Celsius to Fahrenheit scale
