

Reg. No:.....

**First Year Post Basic B.Sc Nursing Supplementary Examinations
April 2019**

**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 in detail the various factors affecting enzyme activity.
2. Describe the TCA cycle

Short Notes:

(2x5=10)

3. Urea cycle
4. Digestion and absorption of fats

Answer briefly:

(4x4=16)

5. Gout
6. Essential amino acids
7. Mitochondria
8. Sources and normal level of cholesterol

QP Code: 114011

Section B- Biophysics

Marks: 35

Short Essays:

(3x7=21)

1. Define radioisotopes. Explain the biomedical applications of radioisotopes. (2+5)
2. Define arterial blood pressure. Give its normal values. Add a note on hypotension. (2+1+4)
3. Define light. Explain the applications of light in therapy. (2+5)

Short Notes:

(2x4=8)

4. Explain the Newton's laws of motion with suitable example.
5. Explain the effect of gravity on human health.

Answer Briefly:

(2x3=6)

6. Define pressure. Give the Pascal's law.
7. Define the terms voltage, current and give their units.
