

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.

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