

First Year Post Basic B.Sc Nursing Examinations- November 2015

**BIOCHEMISTRY AND BIOPHYSICS**

**Time: 3 Hours**

**Total Marks: 75**

- Answer all questions. Draw diagrams 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: **103011**      **Section A - BIOCHEMISTRY**

Marks: **37½**

**Essay:** (10)

1. Explain how lipids are digested and absorbed from the body.

**Short notes:** (4x5=20)

2. Urea cycle
3. Glucose tolerance test
4. Diagnostic importance of enzymes
5. Properties and functions of water in human body

**Answer briefly:** (3x2 ½ =7 ½)

6. Hypoglycemia
7. Mention the normal level of fasting blood glucose, serum cholesterol, serum creatinine, serum potassium and serum uric acid level.
8. Mitochondria

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QP CODE: **104011**      **Section B- BIOPHYSICS**

Marks: **37½**

**Essay:** (10)

1. Describe the regulation of body temperature. Mention the use of heat for sterilization (5+5=10)

**Short notes:** (4x5=20)

2. Define simple machines and explain the different types of simple machines.
3. Newton's law of motion with suitable examples
4. Relative humidity and its application in nursing
5. ECT

**Answer briefly:** (3x2½=7½)

6. Measurement of ocular pressure.
7. Biological effects of light.
8. Radiation hazards.