

First Post Basic B.Sc Nursing Examinations-September 2013

**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. Do not mix up questions from section A and section B.**

**QP CODE: 103011 Section A - BIOCHEMISTRY**

**Marks: 37½**

**Essay: (10)**

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

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

2. How ketone bodies are formed and utilized in the body.
3. Functions of plasma proteins
4. Oxidative phosphorylation
5. Factors affecting enzyme activity

**Answer briefly: (3x2 ½ =7 ½)**

6. Name the lipoproteins and its functions
7. Mention the normal level of fasting blood glucose, blood urea, S creatinine, Serum sodium and serum uric acid level.
8. Endoplasmic reticulum.

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

**Marks: 37½**

**Essay: (10)**

1. Define isotopes and explain the phenomenon of radioactivity. List the applications of radioactive isotopes in medicine (5+5=10)

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

2. Effects of gravitational force on human body.
3. Centre of gravity and their applications in nursing
4. Pacemakers
5. EEG

**Answer briefly: (3x2½=7½)**

6. Specific gravity
7. Uses of ultra sound
8. How intracranial pressure is measured.