

Reg. No:.....

First Post Basic B.Sc Nursing Examinations-October 2012

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: **37 1/2**

Essay:

(10)

1. What is the normal fasting blood glucose level. Explain the regulation of blood glucose.

Short notes:

(4x5=20)

- 2 Urea cycle
- 3 Role of liver in fat metabolism.
- 4 Mention the diagnostic importance of alkaline phosphatase ,amylase, alanine aminotransferase, aspartate aminotransferase and creatine kinase
- 5 Mitochondrial electron transport chain

Answer briefly:

(3x2 1/2= 7 1/2)

- 6 Mention normal blood levels of cholesterol, potassium, uric acid, total protein and albumin.
- 7 Transamination
- 8 Name the hormones formed from tyrosine

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Section B- BIOPHYSICS

Marks: **37 1/2**

Essay:

(10)

1. Explain the principles and applications of any three common electronic equipments used in patient care

Short notes:

(4x5=20)

2. Measurement of Intracranial pressure
3. Laws of reflection
4. Define atomic number and atomic weight. What are isotopes, give examples
5. Electroencephalography :principle and applications

Answer briefly:

(3x2 1/2=7 1/2)

6. Convection
7. Boyle's law
8. Units of measurement of energy and work
