

Reg. No.....

First Post Basic B.Sc Nursing Supplementary Examinations-June 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: 001311

Section A - BIOCHEMISTRY

Marks: 37½

Essay: (10)

1. Explain the reactions of citric acid cycle. Add a note on its significance. (6+4=10)

Short notes: (4x5=20)

2. Oral glucose tolerance test
3. Explain the factors influencing enzyme activity
4. Outline the formation of ketone bodies. Add a note on ketosis
5. Functions of plasma proteins

Answer briefly: (3x2½=7½)

6. Write the normal serum levels of : urea, creatinine, sodium, bilirubin and calcium.
7. Name the biologically important compounds synthesized from cholesterol.
8. Gout.

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Section B- BIOPHYSICS

Marks: 37½

Essay: (10)

1. Define radioisotopes and name the types of radiations. Enumerate the units of radioactivity. Explain the measurement of radioactivity. (1+2+2+5)

Short notes: (4x5=20)

2. Blood pressure and its measurement
3. Regulation of body temperature
4. Units of length, weight and mass
5. Electromagnetic spectrum

Answer briefly: (3x2½=7½)

6. Use of ultrasound in medicine
7. Pace makers
8. Beer-Lambert's Law
