

2010 Scheme

Reg. No:.....

First Year Post Basic B.Sc Nursing Supplementary Examinations April (November), 2020

Biochemistry and Biophysics

Time: 3 Hours

Total Marks: 75

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- 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. What are enzymes. Explain the factors affecting activity of enzymes

Short notes:

(4x5=20)

2. Name the subcellular organelle and mention their functions
3. Maintenance of fluid and electrolyte balance in the body
4. Explain the digestion of proteins
5. Biological importance of lipids

Answer briefly:

(3x2 ½ =7 ½)

6. Mention the functions of albumin
7. Mention the normal serum levels of : calcium, potassium and sodium
8. Mention the functions of cholesterol

QP CODE: 104011

Section B - Biophysics

Marks: 37½

Essay:

(10)

1. Explain the laws of reflection. Enumerate the focusing elements of eye. Mention the uses of lenses

Short notes:

(4x5=20)

2. Application of the principles of gravity in nursing
3. Explain the biological effects of light and mention the uses of light in therapy
4. Mention the uses of radioactive isotopes in diagnosis and treatment
5. Measurement of intracranial and ocular pressures and their applications

Answer briefly:

(3x2½=7½)

6. Mention the units of measurement of force, work and energy
7. Define pressure. What is Pascal's law.
8. Define voltage and current and mention their units of measurement
