

Reg. No:.....

**First Year Post Basic B.Sc Nursing Degree Regular/Supplementary
Examinations August 2021**

**Biochemistry & Biophysics
(2016 Scheme)**

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: 113011

Section A – Biochemistry

Marks: 40

Short Essays:

(2x7=14)

1. Describe in detail the pathway of de novo synthesis of fatty acids
2. How is blood glucose levels are regulated in our body

Short Notes:

(2x5=10)

3. Formation of ketone bodies
4. Digestion and absorption of carbohydrates

Answer briefly:

(4x4=16)

5. Nucleus
6. Protein Energy Malnutrition (PEM).
7. Essential amino acids
8. Micelle

QP Code: 114011

Section B- Biophysics

Marks: 35

Short Essays:

(3x7=21)

1. Explain law of reflection and law of refraction. Mention the errors of refractions with their corrections. (3+4)
2. Define ultrasound. Mention its types. Give biomedical application of ultrasound. (1+1+5)
3. Define radioisotopes. Explain the biomedical applications of radioisotopes. (2+5)

Short Notes:

(2x4=8)

4. Explain the effect of gravity on human health.
5. Describe the regulation of human body temperature.

Answer Briefly:

(2x3=6)

6. Define density and specific gravity.
7. Give the advantages and disadvantages of MRI scan
