

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

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