

Reg. No:.....

**First Year Post Basic B.Sc Nursing Degree Regular/Supplementary
Examinations October 2024**

**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. What is Gluconeogenesis. Enumerate the different substrates and write in detail the synthesis of Glucose from Lactate. (1+2+4)
2. Digestion and absorption of Proteins.

Short Notes:

(2x5=10)

3. Name the plasma proteins. Write any three functions of Albumin
4. Name the different lipoprotein. Write the significance of any two

Answer briefly:

(4x4=16)

5. Fluid mosaic model of Bio membrane.
6. Ketone bodies and its utilization.
7. Factors affecting enzyme action
8. Gout

QP Code: 114011

Section B- Biophysics

Marks: 35

Short Essays:

(3x7=21)

1. Define the boiling point and melting point. What is the importance of relative humidity in the medical field. What is the relation between Joule and Calorie.
2. What is a half-life period. Explain the use of radioisotopes in medicine.
3. Explain intracranial pressure. Differentiate between systolic and diastolic pressure

Short Notes:

(2x4=8)

4. Explain the use of ultrasound in medical diagnosis
5. Narrate in detail about the radiation hazards and precautions to prevent the radiation hazard.

Answer Briefly:

(2x3=6)

6. What is myopia. How it can be corrected.
7. What is thermal conductivity. Why is mercury used as a thermometer liquid
