



First P.B.B.Sc. (Nursing) Examination, (Phase - III) Winter - 2021
BIOCHEMISTRY AND BIOPHYSICS

Total Duration : 3 Hours

Total Marks : 75

- Instructions :**
- 1) Use **blue/black** ball point pen only.
 - 2) **Do not** write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.
 - 3) **All** questions are **compulsory**.
 - 4) The number to the **right** indicates **full** marks.
 - 5) Draw diagrams **wherever** necessary.
 - 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
 - 7) Use a common answer book for all sections.

SECTION "A" (45 Marks)

Biochemistry

1. Short answer question (**any five** out of six) : [5 × 5 = 25]
- a) Write a note on malabsorption syndrome.
 - b) Describe the classification of lipids with example.
 - c) Give the international classification of enzymes with examples.
 - d) Give an account on classification of carbohydrates.
 - e) Describe various lipoproteins and give their significance.
 - f) What are plasma proteins? Give the functions of various plasma proteins.

2. Long answer question (**any two** out of three) :

[2 × 5 = 10]

- a) Describe the fate of Glucose in the body.
- b) What are Enzymes? Describe various factors affecting enzyme action.
- c) Classify proteins based on their structure. Add a note of urea cycle.

3. Short answer question (**any two** out of three) :

[2 × 5 = 10]

- a) Describe ketone body formation and their uses.
- b) Give the structure and functions of RNA.
- c) Give the causes and clinical symptoms of dehydration.

SECTION "B" (30 Marks)

Biophysics

4. Short answer questions (**any four** out of five) :

[4 × 5 = 20]

- a) What is traction? Explain the application on human body.
- b) What is binocular vision? Mention the advantages.
- c) Explain short wave diathermy.
- d) Use of radio-isotopes in cancer therapy. Explain.
- e) Describe clinical thermometer.

5. Long answer question (**any one** out of two) :

[1 × 10 = 10]

- a) Explain the use of ultrasound in medical diagnosis.
- b) State the laws of reflection. Describe applications of light.

