

First Semester B.Sc. Nursing Examination, Summer - 2023  
(Phase - III)

APPLIED ANATOMY & APPLIED PHYSIOLOGY

Total Duration : Section A + B = 3 Hours

Section B Marks : 62

**SECTION - B**

- Instructions :**
- 1) Use **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 section B.

2) Long Answer Question (Solve any 1 Out of 2) : [1 × 10 = 10]

- a) Describe the Thyroid gland under the following headings.
  - i) Relations
  - ii) Blood supply
  - iii) Applied Anatomy
- b) Draw a labeled diagram of heart and explain the following :
  - i) Position
  - ii) Structure
  - iii) Blood supply of heart

3) Short Answer Question (Solve any 3 Out of 4) : [3 × 5 = 15]

- a) Define Reflex arch, the components and mechanism of stretch reflex.
- b) Classify synovial joints and give examples.
- c) Explain anatomy of Liver with a labeled diagram.
- d) Explain types, characteristics and functions of Muscle tissue.

- 4) **Short Answer Questions (Solve any 3 Out of 4) :** [3 × 2 = 6]
- Define Broca's area and Wernicke's areas.
  - Identify the parts of Lymphatic system.
  - Name the mesenteries and their functions.
  - List the types of T-lymphocytes.
- 5) **Long Answer Questions (Solve any 1 Out of 2) :** [1 × 10 = 10]
- Define and label the deflection waves of normal electrocardiogram (ECG). Explain the physiology of Cardiac muscle contraction.
  - Define Menstrual cycle. Explain the phases of menstrual cycle and list the signs of Ovulation.
- 6) **Short Answer Question (Solve any 3 Out of 4) :** [3 × 5 = 15]
- Draw and describe Neuromuscular junction and synapse.
  - Describe Physiology of hearing.
  - Spermatogenesis.
  - Explain the composition and function pancreatic juice.
- 7) **Short Answer Questions (Solve any 3 Out of 4) :** [3 × 2 = 6]
- Nerve supply to the Tongue.
  - Write a note on Semilunar valves of the heart.
  - Identify the movements of the thumb.
  - Define Action potential and Resting membrane potential.

