

First B.P.TH. (2012) Examination, (Phase - III) Winter - 2021  
HUMAN PHYSIOLOGY - II

Total Duration : Section A+B = 3 Hours

Total Marks : 80

SECTION - A & SECTION - B

- 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" SAQ (50 Marks)

1. Short answer question (any five out of six) : [5 × 3 = 15]
  - a) Sodium-potassium pump.
  - b) Strength-Duration curve.
  - c) Function of Surfactant.
  - d) Heart sounds.
  - e) Physiological actions of Oxytocin.
  - f) Colour blindness.
  
2. Short answer question (any five out of six) : [5 × 7 = 35]
  - a) Spike potential.
  - b) Sarcotubular system.
  - c) Respiratory membrane.

- d) Origin & spread of cardiac impulse.
- e) Describe factors affecting Glomerular filtration.
- f) Hormonal regulation of menstrual cycle.

**SECTION-"B" LAO (30 Marks)**

3. Long answer question (any one out of two) : [1 × 15 = 15]
- a) Enumerate properties of nerve. Describe production & conduction of nerve impulse. [3 + 12]
  - b) Describe the properties of skeletal muscle & add a note on structure of sarcomere. [12 + 3]
4. Long answer question (any one out of two) : [1 × 15 = 15]
- a) Describe dorsal column medial lemniscus system with a well labeled diagram. Name the sensations carried by this pathway. [12 + 3]
  - b) Give the structure of synapse. Give detail about synaptic transmission & enumerate its properties. [5 + 7 + 3]

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