

**63112****First B.P.Th. (2012) Examination, Summer 2016
HUMAN PHYSIOLOGY**

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) :**(5x3=15)**

- a) Platelets.
- b) Functions of bile.
- c) Parathormone.
- d) Factors affecting GFR.
- e) Facilitated diffusion.
- f) Dark adaptation.

2. Short answer question (**any five** out of six) :**(5x7=35)**

- a) Draw and write details of ECG in lead 2.
- b) Carbon dioxide transport in the body.
- c) Cardiorespiratory changes during moderate exercise.
- d) Physiological changes at high altitude.
- e) Enumerate functions of cerebellum.
- f) Strength duration curve.

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SECTION — B LAQ (30 Marks)

3. Long answer question (**any one** out of two) : **(1x 15=15)**
- a) Define motor unit. Describe in detail the factors controlling the tension development in the skeletal muscle.
 - b) Draw neat label diagram of sarcoplasmic reticulum in skeletal muscle. What are the differences in sarcoplasmic reticulum of skeletal and cardiac muscle ? Write the process of excitation contraction coupling in a skeletal muscle.
4. Long answer question (**any one** out of two) : **(1 x1 5=15)**
- a) Define and classify synapse. Draw well labelled diagram of the synapse. Enumerate and Explain various properties of synapse.
 - b) Define cardiac cycle. Explain various events in cardiac cycle. Draw well labelled diagram of pressure volume changes in the left ventricle.
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