

Total Page - 2

UG/2nd Sem/Physio/H/19

2019

B.Sc.

2nd Semester Examination

**PHYSIOLOGY (Honours)**

Paper - C3T

Full Marks : 40

Time : 2 Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

1. Answer any *five* questions : 5×2
- (a) What kind of impulses do mixed nerve carry ? 2
  - (b) What is nerve excitation ? 2
  - (c) What is resting length of skeletal muscle ? 2
  - (d) What are the dense bodies in smooth muscle ? 2
  - (e) Which are the characteristics of cardiac muscle? 2

[ Turn Over ]

(f) How can you explain staircase phenomenon in the light of all or none law ? 2

(g) How do synapses work ? 2

(h) What is optical centre of eye ? 2

2. Answer any *four* questions : 4×5

(a) Compare the excitation contraction coupling in skeletal, cardiac and smooth muscle. 5

(b) Describe the structure of one typical chemical synapses with a labelled diagram. 5

(c) Discuss the transduction mechanism in auditory hair cells. 5

(d) Discuss the neurophysiological mechanism of Visual acuity and the factors affecting it. 5

(e) Draw and describe the pain pathway. 5

3. Answer any *one* question : 1×10

(a) What is Fenn effect ? Discuss the energy metabolism of skeletal muscle during muscle contraction. 3+7

(b) What is autorhythmicity of heart ? Why cardiac muscle does not become fatigue ? 4+6