

**U.G. 2nd Semester Examination - 2021**

**PHYSIOLOGY**

[HONOURS]

Course Code : PHYSIOL-H-CC-T-03

(Physiology of Nerve & Muscle Cells)

Full Marks : 20

Time : 1 Hour

*The figures in the right-hand margin indicate marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

**GROUP-A**

1. Answer any **five** questions:  $1 \times 5 = 5$
- i) What are the functions of myelin sheath?
  - ii) Enumerate the different muscle proteins.
  - iii) Name different types of glial cells.
  - iv) What do you mean by saltatory conduction?
  - v) What is triad?
  - vi) What is chronaxie?
  - vii) What is calcium rigor?
  - viii) Name the drugs that block neuromuscular transmission.

2. Answer any **one** question:  $5 \times 1 = 5$
- i) What are the morphological features of cardiac muscle? What is the difference between sarcotubular system of heart and skeletal muscle?  $3 + 2 = 5$
  - ii) What is the source of energy in a smooth muscle? What are the types of a smooth muscle fibres? Where are they located?  $1 + 2 + 2 = 5$
  - iii) Write a short note on Myasthenia gravis. 5
3. Answer any **one** question:  $10 \times 1 = 10$
- i) Describe the structure of actin and myosin filaments with diagram. 10
  - ii) Describe the structure of neuromuscular junction with proper diagram. 10
  - iii) Classify nerve fibres. Write the properties of nerve fibres in brief.  $3 + 7 = 10$

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