

D 54953

(Pages : 2)

Name.....

Reg. No.....

**FIRST SEMESTER INTEGRATED P.G. (REGULAR/SUPPLEMENTARY/
IMPROVEMENT) EXAMINATION, NOVEMBER 2023
(2021 ADMISSION ONWARDS) AND SUPPLEMENTARY/IMPROVEMENT
EXAMINATION, NOVEMBER 2022 (2020 ADMISSIONS ONLY)**

M.Sc. Psychology

PSG11C01—HUMAN PHYSIOLOGY—I

Time : Two Hours

Maximum : 60 Marks

*Draw neat labelled diagrams wherever needed.***A. One sentence :**

- 1 Myofibril.
- 2 Define sensory unit.
- 3 Isometric muscle contraction.
- 4 Ejection fraction.
- 5 Functional residual capacity.
- 6 Cardiac index.
- 7 Define resting membrane potential.
- 8 Stretch reflex.
- 9 ECG.
- 10 MVV.

(10 × 1 = 10 marks)

B. Short answer : (Answer any five) :

- 11 List the properties of skeletal muscle fibre and explain any one.
- 12 Sarco-tubular system.
- 13 AV nodal delay.
- 14 Heart sound.
- 15 Refractory period

Turn over

- 16 Barro receptor reflex of blood pressure control.
- 17 List different lung capacities with normal value.
- 18 Timed vital capacity.
- 19 NREM sleep.
- 20 List major functions of the hypothalamus.

(5 × 2 = 10 marks)

C. Paragraph/Problem Type : (Answer any *five*) :

- 21 Fick principle at its application.
- 22 Excitation contraction coupling.
- 23 Draw a neat labelled diagram Lead II ECG, mention the cause of each wave.
- 24 Ventricular pressure-volume loop.
- 25 Physiological basis of increased heart rate when you are emotionally excited.
- 26 Synapse.
- 27 CSF.
- 28 Hypoxia.

(5 × 4 = 20 marks)

D. Essay Type : (Answer any *two*)

- 29 Describe the factors and functional importance of glial cells
- 30 Define blood pressure, and give its normal value. Describe short-term regulation of blood pressure.
- 31 Describe the transport of Co₂ in the blood.
- 32 Name the nucleus of basal ganglia and describe its function and connections.

(2 × 10 = 20 marks)