

SECOND SEMESTER INTEGRATED P.G. DEGREE (REGULAR)
EXAMINATION APRIL 2021 (FOR 2020 ADMISSIONS) AND APRIL 2022
[FOR 2021 ADMISSIONS]

M.Sc. Psychology

PSG 2I C02—HUMAN PHYSIOLOGY—II

Time : Two Hours

Maximum : 60 Marks

Draw neat labelled diagrams wherever needed.

A) One sentence :

- 1 Name two neuromuscular blockers.
- 2 Define isotonic contraction.
- 3 Define end-systolic volume.
- 4 Define cardiac output.
- 5 What is tidal volume ?
- 6 Peak expiratory flow rate.
- 7 Define action potential.
- 8 Aphasia.
- 9 EEG.
- 10 FEVI.

(10 × 1 = 10 marks)

B) Short Answer :

- 11 Structure of sarcomere.
- 12 Myasthenia gravis.
- 13 Heart block.
- 14 Conductive system of the heart.
- 15 Why cardiac muscle cannot be tetanized ?
- 16 Brain ischemic reflex.

Turn over

- 17 Respiratory membrane.
- 18 Non-respiratory functions of lungs.
- 19 Dead space.
- 20 Brodmann's area.

(5 × 2 = 10 marks)

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

- 21 Excitation contraction coupling in smooth muscle.
- 22 Draw a labelled diagram of the motor end plate.
- 23 His bundle electrocardiogram.
- 24 Factors regulating stroke volume.
- 25 Renin angiotensin aldosterone system.
- 26 Coronary circulation.
- 27 Mechanics of breathing.
- 28 Parkinson's disease.

(5 × 4 = 20 marks)

D) Essay Type. Answer any *two* :

- 29 Describe the structure of the neuromuscular junction with help of a diagram and explain the mechanical transmission of nerve impulses across it.
- 30 What is shock, how do you classify shock ? Discuss the cardiovascular compensatory changes during shock.
- 31 Explain the oxygen transport in the blood, and discuss the ODC.
- 32 What are the functional division of cerebellum, Describe its functions with relevant connections.

(2 × 10 = 20 marks)