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Reg. No. :

Code No. : 20398 E

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B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2021.

Fifth Semester

Physical Education — Core

EXERCISE PHYSIOLOGY

(For those who joined in July 2017-2019)

Time : Three hours

Maximum : 75 marks

PART A — ($10 \times 1 = 10$ marks)

Answer ALL questions.

Choose the correct answer :

1. Muscle tissue has not
 - (a) density
 - (b) contractibility
 - (c) extensibility
 - (d) excitability
2. _____ contraction of a muscle generates tension without changing length.
 - (a) An isotonic
 - (b) Concentric
 - (c) An isometric
 - (d) An Eccentric

3. Peripheral Nervous System includes
- (a) Brain (b) Spinal cord
 - (c) Nerves (d) Eyes
4. In the nervous system, a _____ is a structure that permits a neuron to pass an electrical signal to another neuron.
- (a) Synapse
 - (b) Central nerve
 - (c) Peripheral nerve
 - (d) Nerve cell
5. Normal respiratory rate for healthy adult is between _____ breaths per minute.
- (a) 12-20 (b) 22-30
 - (c) 10-12 (d) 30-40
6. Intra pulmonary pressure is the pressure
- (a) Inside the blood vessels
 - (b) Inside the heart
 - (c) Inside the nasal cavity
 - (d) Inside the lungs

7. Normal Blood Pressure for health adults is
- (a) 100/90 mm Hg
 - (b) 120/80 mm Hg
 - (c) 80/120 mm Hg
 - (d) 90/100 mm Hg
8. The amount of blood pumped out from the heart in one minute is
- (a) Cardiac cycle
 - (b) Stroke volume
 - (c) Heart rate
 - (d) Cardiac output
9. The ability to overcome resistance with high speed is called
- (a) Explosive strength
 - (b) Maximum strength
 - (c) Strength endurance
 - (d) Relative strength
10. _____ is the resistance ability against fatigue.
- (a) Speed
 - (b) Strength
 - (c) Endurance
 - (d) Flexibility

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write the meaning of muscular fatigue.

Or

- (b) Comment on sliding filament theory.

12. (a) How is energy released?

Or

- (b) Write the fat metabolism.

13. (a) How does gas exchange take place?

Or

- (b) What is meant by Vital Capacity?

14. (a) Comment on Blood flow.

Or

- (b) What do you mean by Cardiac output.

15. (a) Write the effect of drugs on athletic performance.

Or

- (b) Why do athletes go for high altitude training?

PART C — ($5 \times 8 = 40$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Diagrammatically explain the structure of skeletal muscle.

Or

- (b) Discuss the types of muscular contraction.

17. (a) What is integration in the nervous system?

Or

- (b) Comment on synapse.

18. (a) Explain Internal and External Respiration.

Or

- (b) Write the effects of exercise on pulmonary ventilation.

19. (a) Diagrammatically explain the circulatory system.

Or

- (b) Explain the effect of exercise on circulatory system.
20. (a) Write the physiological aspects of strength development.

Or

- (b) How does smoking affect the performances of athletes?
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