

KAMARAJ COLLEGE (Autonomous)

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

THOOTHUKUDI – 628 003

(5 Pages)

Reg. No:.....

Question Code No : 25002911

Course Code : 24UEPE11

UG Degree - End Semester Examinations, November 2025

First Semester

B.SC PHYSICAL EDUCATION

Anatomy and Physiology

(For those who joined in July 2024 onwards)

Time :3Hours

Maximum : 75 Marks

PART – A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer:

1. The basic structural and functional unit of the human body is

(a) Cell

(b) Tissue

(c) Organ

(d) System

2. Which type of muscle is involuntary and found in internal

organs?

- (a) Skeletal
- (b) Smooth
- (c) Cardiac
- (d) None

3. The main function of the skeleton is _____

- (a) Digestion
- (b) Support
- (c) Breathing
- (d) Circulation

4. Which bone is known as the thigh bone?

- (a) Humerus
- (b) Femur
- (c) Tibia
- (d) Radius

5. The functional unit of the nervous system is _____

- (a) Axon
- (b) Dendrite
- (c) Neuron
- (d) Brain

6. Which organ produces insulin?

- (a) Liver
- (b) Pancreas
- (c) Kidney
- (d) Heart

7. Gas exchange in the lungs takes place in _____

- (a) Bronchi
- (b) Trachea
- (c) Alveoli
- (d) Diaphragm

8. The amount of blood pumped by the heart in one minute is called:

- (a) Stroke volume (b) Cardiac output
(c) Heart rate (d) Blood pressure
9. Which gland is called the “Master gland” of the body?
(a) Thyroid (b) Adrenal
(c) Pituitary (d) Pancreas
10. Which bone protects the brain?
(a) Vertebra (b) Skull
(c) Pelvis (d) Sternum

PART – B (5 X 5 = 25 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 250 words.

11. (a) Explain the need and scope of anatomy and physiology in physical education.

(OR)

- (b) Write short notes on the structure and functions of a cell.

12. (a) Classify bones and mention their functions.

(OR)

- (b) Classify the vertebral column and its importance.

13. (a) Draw and label the structure of a neuron.

(OR)

(b) Draw and label the structure of liver.

14. (a) Explain the structure of the lungs.

(OR)

(b) Write a note on cardiac cycle.

15. (a) List the endocrine glands and write their general functions.

(OR)

(b) Explain the role of the thyroid gland in growth and development.

PART – C (5 X 8 = 40 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 500 words.

16. (a) List down the types of muscles with examples and their functions.

(OR)

(b) List down the types of tissues in the human body and their functions.

17. (a) Examine the classification of joints with suitable examples.

(OR)

(b) Examine the structure and functions of the pelvic bone and

scapula.

18. (a) Explain the central and peripheral nervous systems.

(OR)

(b) Explain the digestive process and functions of pancreas.

19. (a) Give an outline about the respiratory tract and the process of gas exchange in detail.

(OR)

(b) Give an outline about the cardiac output and the factors affecting it.

20. (a) Explain the functions of the pituitary, adrenal and pancreas glands.

(OR)

(b) Explain how endocrine glands regulate body functions.

