

25BP12

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Name:

Reg. No:

FIRST YEAR B.P.E. (INTEGRATED) DEGREE EXAMINATION, APRIL 2026

(Regular/Supplementary/Improvement)

CC15UBPE1T2/ CC19UBPE1T2 – BASIC AND SYSTEMATIC ANATOMY

(2015 Admission onwards)

Time: Three Hours

Maximum: 75 Marks

PART A

Answer any **one** question. The question carries 15 marks.

1. Define Anatomy. Explain the importance of Anatomy in Physical Education.
2. Describe the structure of a typical cell. Explain the structure and functions of cell organelles.

(1 × 15 = 15 Marks)

PART B

Answer **all** questions. Each question carries 5 marks.

Explain the following:

3. Structure and Function of bones.
4. Classify synovial joints and explain the types with suitable examples.
5. Describe the structure and important features of **any two** of the following bones:
(a) Radius (b) Rib (c) Vertebra (d) Femur (e) Humerus

(3 × 5 = 15 Marks)

PART C

Answer **all** questions. Each question carries 5 marks.

Explain the following:

6. Describe the working of the heart and explain cardiac output.
7. Differentiate between voluntary and involuntary muscles.
8. Describe the structure and functions of Nephron.

(3 × 5 = 15 Marks)

PART D

Answer **all** questions. Each question carries 1 mark.

Fill in the blanks:

9. _____ is known as the powerhouse of the cell.
10. The longest bone in the human body is the _____.
11. The _____ is the part of the brain responsible for balance and posture.
12. Protein synthesis takes place in the _____ of the cell.
13. The hormone _____, secreted by the pancreas, controls blood sugar level.

(5 × 1 = 5 Marks)

PART E

Answer **all** questions. Each question carries 1 mark.

State True or False:

14. The axial skeleton includes the skull and vertebral column.
15. Veins carry blood away from the heart.
16. Anatomy deals with the study of structure of the human body.
17. Cardiac muscle is voluntary in nature.
18. Hinge joints allow movement in all directions.

(5 × 1 = 5 Marks)

PART F

Answer **all** questions. Each question carries 1 mark.

Write answer in one word:

19. What is the study of functions of the human body?
20. Name the disease caused by deficiency of insulin?
21. Which chamber of the heart pumps oxygenated blood to the entire body?
22. What is the genetic material present inside the nucleus?
23. Which gland is known as the “master gland” of the endocrine system?
24. The space where gas exchange occurs in lungs is called?
25. Which organ maintains the balance of the body?
26. Which type of muscle is attached to bones?
27. Name the light-sensitive layer of eye?
28. The genetic material present inside the nucleus is called?

(10 × 1 = 10 Marks)

PART G

Answer **all** questions. Each question carries 1 mark.

Match the following:

- | | | |
|---------------------|---|------------------------------|
| 29. Mitochondria | - | a. Functional unit of kidney |
| 30. Nephron | - | b. Thigh bone |
| 31. Femur | - | c. Hearing |
| 32. Cerebellum | - | d. Balance and posture |
| 33. Cochlea | - | e. Muscle of respiration |
| 34. Thyroxine | - | f. Regulates metabolism |
| 35. Synovial joint | - | g. Shoulder girdle bone |
| 36. Red blood cells | - | h. Oxygen transport |
| 37. Diaphragm | - | i. Powerhouse of the cell |
| 38. Scapula | - | j. freely movable joint |

(10 × 1 = 10 Marks)
