

23BP31

(Pages: 2)

Name:

Reg. No:

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

(Regular/Supplementary/Improvement)

CC15UBPE3T12 / CC19UBPE3T12 - KINESIOLOGY

(2015 Admissions onwards)

Time: Three Hours

Maximum: 75 Marks

PART A

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

1. Explain anatomical position, planes, and axes of motion with suitable examples from sports.
2. Explain the role of kinesiology in physical education and sports and discuss its importance in improving performance and preventing injuries.

(1 × 15 = 15 Marks)

PART B

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

Explain the following:

3. Fundamental joint movements.
4. Types of muscle contractions with examples.
5. Reciprocal innervation and inhibition.

(3 × 5 = 15 Marks)

PART C

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

Explain the following:

6. Gradation of muscle contraction.
7. Fundamental and anatomical position.
8. Stretch reflex.

(3 × 5 = 15 Marks)

PART D

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

Fill in the blanks:

9. A muscle that neutralizes an unwanted action is called _____.
10. A muscle that works opposite to the prime mover is called _____.
11. The knee joint is a _____ type of joint.
12. The muscle responsible for abduction of the shoulder joint is _____.
13. The shoulder girdle consists of clavicle and _____.

(5 × 1 = 5 Marks)

PART E

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

State True or False:

14. Brachioradialis assists in elbow flexion.
15. Trapezius elevates and rotates the scapula.
16. Tibialis posterior supports the medial arch of the foot.
17. Popliteus unlocks the knee joint.
18. Serratus anterior helps in scapular protraction.

(5 × 1 = 5 Marks)

PART F

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

Write answer in one word:

19. Movement away from the midline.
20. Muscle responsible for shoulder medial rotation.
21. Muscle that unlocks the knee joint.
22. Prime mover of hip abduction.
23. Type of contraction where muscle length remains constant.
24. Joint between femur and tibia.
25. Process by which muscle force is varied.
26. Axis passing from side to side.
27. Smallest functional unit of a muscle.
28. Ability of muscle to respond to stimulus.

(10 × 1 = 10 Marks)

PART G

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

Match the Following:

- | | | |
|-----------------------|---|---------------------------|
| 29. Subscapularis | - | a. Scapular retraction |
| 30. Brachialis | - | b. Knee extension |
| 31. Latissimus dorsi | - | c. Dorsiflexion |
| 32. Serratus anterior | - | d. Shoulder stabilization |
| 33. Gluteus medius | - | e. Hip abduction |
| 34. Rectus femoris | - | f. Plantar flexion |
| 35. Semitendinosus | - | g. Elbow flexion |
| 36. Soleus | - | h. Scapular protraction |
| 37. Tibialis anterior | - | i. Knee flexion |
| 38. Rhomboids | - | j. Shoulder adduction |

(10 × 1 = 10 Marks)
