24101013

Reg. No................................

Name....................................

B.P.Ed. DEGREE EXAMINATION, MARCH 2024

Fourth Semester

Core Course—KINESIOLOGY AND BIOMECHANICS

(2022 Admissions—Regular/2021 and 2020 Admissions—Supplementary/2016, 2017, 2018 and 2019 Admissions—Mercy Chance)

Time : Three Hours

Maximum Marks : 80

Part A

Answer any **nine** *of the following questions.*

Each question carries 2 marks.

1. Sutural joint.

2. Sternum.

3. Concentric muscle contraction.

4. Friction.

5. Hinge joint.

6. Adduction.

7. Inertia.

8. Medial plane.

9. Centre of gravity.

10. Momentum.

11. Trajectory.

12. Fulcrum.

Turn over

13. Reciprocal innervation.

14. Antero-posterior axes.

(9 × 2 = 18)

Part B

Write short note on any **six** *of the following.*
Each question carries 4 marks.

15. Antagonistic muscles.

16. Mass and weight.

17. Acceleration and velocity.

18. Inertia and momentum.

19. Angular acceleration.

20. Distance and displacement.

21. Speed and velocity.

22. Linear kinetics and angular kinetics.

(6 × 4 = 24)

Part C

Explain any **three** *of the following.*
Each question carries 6 marks.

23. Explain the physiology of muscle contraction.

24. Explain the types of joint.

25. Explain the types of levers.

26. Explain the factors affecting stability.

27. Explain the parallelogram law of forces.

(3 × 6 = 18)

Part D

Write an essay on any **two** *of the following.*

Each question carries 10 *marks.*

28. Describe the axes and Planes of human body.

29. Explain the importance of kinesio logy in sports coaching and physical education.

30. Write an essay on angular kinematics.

31. Write an essay on different types of levers.

$(2 \times 10 = 20)$