Sl.No.18414 Course Code: 75217402 / 7520422

## VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM

# **B.P.Ed. DEGREE EXAMINATION – November 2019 Fourth Semester**

#### KINESIOLOGY AND BIOMECHANICS

Time: Three hours Maximum: 75 marks

### $PART - A (10 \times 2 = 20 \text{ marks})$

Answer any **TEN** questions. All questions carry equal marks.

- 1. State the meaning of kinesiology.
- 2. What is line gravity?
- 3. Define plane.
- 4. Name any two joint in the lower body.
- 5. What is displacement?
- 6. Define bio-mechanics.
- 7. Mention any two types of equilibrium.
- 8. List down the classification of lever.
- 9. What is throwing?
- 10. Mention any two fundamental movements.
- 11. Give any two types of plane.
- 12. What is couple?

## $PART - B (5 \times 5 = 25 \text{ marks})$

Answer any **FIVE** questions. All questions carry equal marks.

- 13. Describe the role of kinesiology in Physical Education and Sport.
- 14. Discuss the classification of joints.
- 15. State the Newton's first and third laws of motion.
- 16. Narrate the factors influencing projectile trajectory.
- 17. Briefly explain the biomechanical analysis of running.
- 18. Define axis and explain its types.
- 19. Write short notes on angular kinematics.
- 20. Explain the biomechanical analysis of skill in any one of major game of your choice.

### $PART - C (3 \times 10 = 30 \text{ marks})$

Answer any **THREE** questions. All questions carry equal marks.

- 21. Narrate the history and importance of kinesiology in Physical Education and Sports.
- 22. Write short notes on (a) All or none law (b) Angle of pull (c) Reciprocal Innervations.
- 23. Elaborate the need and importance of bio mechanics in the field of physical education and sports.
- 24. Write an essay on lever.
- 25. Explain the biomechanical analysis of jumping in detail.