



QP CODE: 24803670

Reg No :

Name :

MASTER OF PHYSICAL EDUCATION AND SPORTS, JUNE 2024

Second Semester

M.P.E.S

Core - PE030202 - SPORTS BIOMECHANICS AND KINESIOLOGY

2021 Admission Onwards

27C60EBA

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

Answer any **eight** questions.

Weight 1 each.

1. Define sports biomechanics.
2. What are the needs of biomechanics in the field of sports and games ?
3. Explain the terms Kinematics and Kinetics.
4. What are the characteristics of muscle tissue?
5. Origin insertion action of abdominus.
6. Centrifugal force.
7. What is energy? Write the unit of energy.
8. What are force plates?
9. What does Biomechanical Analysis means?
10. Give a brief description about walking gait.

(8×1=8 weightage)

Part B (Short Essay/Problems)

Answer any **six** questions.

Weight 2 each.

11. Explain scope of High Speed Cameras for motion Analysis.
12. Define kinesiology and its use in sports and games.





13. What are the Muscles of Upper extremities?
14. What is angular motion?
15. Difference between work and power.
16. What are the different types of Equilibrium? Briefly explain each one of them.
17. What are the different types of lever? Briefly explain it.
18. Analyse sports skill in Gymnastics

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Explain about bones and joints in human body and its types and movements.
20. Explain Law of inertia in a game situation with suitable example.
21. What are projectiles? Analyse the movement of a Javelin and briefly write about the forces acting on it.
22. Analyse the gait movement of Fosbury flop technique.

(2×5=10 weightage)

