

Name of the course
Paper No.
Name of the paper
Semester

: Master of Physical Education (M. P. Ed.)
: MPE-0704(ii)
: Subject Specialization: Sports Biomechanics
: I-December-2024

Your Roll No.....

Duration: 3 Hours

Maximum Marks: 50 Marks

Instructions for students

- Write your Roll No. on the top right side Immediately on the receipt of this question paper)
- Attempt any five questions. All questions carries equal marks.

Q1. Write a note on biomechanical Instrumentations with examples.

Q2. Explain the concept of buoyancy and flotation, resistive forces in swimming skill, propulsive forces in swimming skill as well as swimming speed and efficiency.

Q3. Explain the concept related to controlling balance during movements in physical education activities.

Q4. Write a note on principal of initial force and conservation of angular momentum with suitable example.

Q5. Define speed, velocity, acceleration, uniform acceleration and momentum (for both linear and angular motion) with suitable examples from physical education.

Q6. Define friction and types of friction and explain their mechanical, advantages and disadvantages with special reference to physical education and sports applications.

Q7. State and discuss on the law of angular momentum, law of action and reaction as well as law of action and reaction (angular motion).

Q8. Write a note on structure of cyclic, acyclic motor action and combination of motor action with suitable examples.