

Roll No.....

**MASTER OF PHYSICAL EDUCATION**

**M.P.Ed. SEMESTER-I**

**2023**

**MPE-0704(ii) Subject Specialization**

**Sports Biomechanics**

**Time: 3 Hours**

**Max Marks: 50**

(Write your Roll No. on the top right side

Immediately on the receipt of this question paper)

Attempt any five questions

All questions carry equal mark

1. Discuss on work, power, energy and their application with examples from physical education and sports. 10
2. Define types of levers and explain their mechanical advantages and disadvantages with special reference to physical education and sports applications. 10
3. State and discuss the Law of inertia, Law of moment of inertia and Law of momentum in reference to their applications in physical education and sports. 10
4. Discuss observing and analyzing performance emphasizing on the nature of skills, overall performance, objective of skill and the analysis process of skill. 10
5. Define speed, velocity, acceleration, uniform acceleration, momentum and their applications with suitable examples from physical education and sports. 10
6. Define friction and types of friction and explain their mechanical advantages and disadvantages with special reference to physical education and sports applicants. 10
7. Explain the concept related to controlling balance during movement in physical education and sports activities. 10
8. Write a note on application of hydrodynamics in swimming performance. 10

