

**MASTER OF PHYSICAL EDUCATION
(M.P.Ed.)/ SEMESTER-IV-May/June- 2024**

Paper- MPE-1004 (ii)- Subject Specialization-Sports Biomechanics

Time-3 hours

Maximum Marks-50

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

1. Explain Recommended procedure for Direct Measurement Techniques emphasizing on the following-
Electrogoniometry and potentiometry (Equipment Specifications, Calibration Procedures and Expected Reliability).
2. Write a note on Mechanical Energy, Work and Efficiency emphasizing on-
 - a) Relevance
 - b) Work-Energy Application to Sport
 - c) Testing Procedures
 - d) The problem of the concept and calculation of Mechanical Efficiency of Athletic performance and
 - e) Interpretation of Test Results.
3. Explain Recommended procedures related to Force Transducers emphasizing on the following-
Pressure Platforms (Design, Basic Consideration in Design and utilization, Procedures and Expected Reliability).
4. Discuss on Cinematography and Computerized Video Analysis emphasizing on the Following-
3-D Cinematography (Equipment Specifications, Calibration and Expected Reliability, other Consideration).
5. Write an essay on Policy Statement regarding the use of human subject and informed consent.
6. Write on EMG and its applications to games and sports.
7. Give an introduction to Isokinetic Measurement and its applications to games and sports.
8. Discuss on Measurements and Applications in Gait Analysis.