

M.P.Ed. Semester-III Examination 2014

Course Code : MPED-232

(Exercise and Sports Biomechanics-II)

Time : Three Hours

Full Marks : 40

Questions are of value as indicated in the margin

Answer **one** question from each unit

UNIT - I

1. What do you understand by Bio-mechanical analysis? Discuss qualitative and quantitative bio-mechanical analysis with suitable examples. 2+3+3=8

OR

Name the tools used for qualitative and quantitative Bio-mechanical analysis. Briefly write down different kinematic and kinetics variables using different tools. 1+1+3+3=8

UNIT - II

2. Write down the fundamental movements and mechanically analyze 'jumping'. 2+6=8

Or

Write down the phases involved in a running cycle and explore the mechanical principles applied in running. 2+6=8

UNIT - III

3. Explain Bio-mechanical analysis of volleyball 'spiking'. 2+6=8

Or

Bio-mechanically analyze basket ball 'Jump Shot'. 8

UNIT - IV

4. Discuss the role played by center of gravity in performing a motor skill. 8

Or

What is center of gravity? Explain 'joint point method' to determine the location of center of gravity in the human body. 2+6=8

UNIT - V

5. Explain in detail about the videography technique for mechanical analysis of a skill. 2+6=8

Or

Write about the uses of Goniometer or power timer in the field of research in sports Bio-mechanics. 8
