S. No. 2017

Roll No.....

Master of Physical Education
M.P.Ed./Semester-II-May -2016
Paper-MPE-0804(ii): Subject Specialization
(Sports Biomechanics)

Time: 3 Hours

Maximum Marks: 50

(Write your Roll No. on the top immediately on receipt of this question paper)

Note: Attempt any five questions. All questions carry equal marks

Q.1. Write Short notes on the following (any five):

(a) Functional aspects of the muscular system.
(b) Types of muscular tension.
(c) Functions of muscles.
(d) All and none law.
(e) Strength of contraction.
(f) Group action of muscles.
(g) Reciprocal innervations.
(h) Muscular fatigue.

Q.2. Discuss on application of Biomechanics to Neuromuscular fitness activities emphasizing on. (any five)

(a) Aspects of fitness
(b) Resistance devices used in training.
(c) Strength
(d) Muscular endurance.
(e) Muscular power and
(f) Flexibility.

Q.3. Explain the concept related to Linear movement and kinetic energy emphasizing on:

(a) Linear Momentum
(b) Linear impulse
(c) Conservation of linear momentum and
(d) Kinetic energy.

Q.4. Write a note on Angular momentum emphasizing on:

(a) Angular Momentum
(b) Angular impulse
(c) Conservation of angular momentum within a system.
(d) Vector resolution of angular momentum.

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Q.5. Give performance Analysis of throw like movements emphasizing on:

(a) Biomechanics of throw like patterns.
(b) Analysis of sports skills using the kinetic link principle.
(c) Comparisons of similar skills within the same pattern.
(d) Performance errors: teaching and coaching applications and
(e) Development pattern: teaching implications.

Q.6. Give an analysis of activities in which the body rotates while supported.

Q.7. Analyse any one fundamental skills from the following:

(a) Throwing
(b) Pulling
(c) Pushing
(d) Jumping

Q.8. Analyse biomechanically any one technique from a sport/game of your choice.