Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD (now MoE)
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test I– February 2026
IV - SEMESTER

Class : II BPEd **Time: 2 hours**
Major: Physical Education **Maximum Marks :60**

23BPDC25 Kinesiology and Biomechanics

Course Outcomes:

CO1.Demonstrate and apply basic mechanical and physics principles to human movements and implements used in various sports
CO2 Identify the relationship between anatomical structure, physiological function and mechanical principles as they relate to the performance of basic and complex motor skills.
CO3. Explain the knowledge and appreciation of the importance of the study of kinesiology as a foundation for further studies in biomechanics and performance analysis
CO4. Analyze sport movements and design movement -oriented exercise prescriptions and view the performance of physical activity skills critically and evaluate performance in terms of principles of efficient movement
CO5. Describe the methods used to achieve the goals of exercise and sports biomechanics.

Part-A **6x1=6**

Choose the correct answer

1. Which of the following is a joint of reciprocal innervations? CO1K2
   a. Pivot joint b. Saddle joint c. Condyloid joint d . Hinge joint

2. On set command the sprinter is in CO1K2
   a. Stable equlibrium b. Unstable equlibrium c.Neutral equlibrium d. All the above

3. The study of muscles are called as CO3K3
   a. Otology b.Anthropology c. Myology d. Anthropometry

4. In isometric contraction the muscle CO3K2

   a. Shortens b. Lengthens
   c. Neither shortens nor lengthens d. Shortens as well as lengthens

5. The branch of mechanics that describes the cause if force is CO2K2
   a. Kinetics b. Kinematics
   c. Biomechanics d. Fluid mechanics
6. A forward upward movement of the foot at the ankle joint is CO3K3
   a. Planter flexion b. Dorsi flexion
   c. Inversion d. Eversion

Part- B **3x6=18**

Answer ALL Questions
Each answer should not exceed 400 words or two pages

7. a. Define Kinesiology and Biomechanics explain its importance CO2K2

(or)

7. b Write about Centre of Gravity CO2K2
8. a. Describe about Equilibrium CO2K2

(or)

8.b. Explain about the Angle of pull and all or none law CO3K3

9. a. Describe about the classification of muscles with diagram CO3K3

(or)

9. b Write about the Reciprocal innervations CO3K3

Part-C **3x12=36**

Answer ALL questions

Each answer should not exceed 800 words or four pages

10. a. Describe about the Axes and plane for movements CO2K2

(or)

10.b. Briefly explain about the fundamental movements of joints CO2K2

11. a. Explain about the different types of muscular contractions CO2K2

(or)

11.b. Define posture and explain its types CO2K2

12. a. Elucidate the importance of good posture CO2K2

(or)

12 b Enumerate the different types of joints with diagram CO2K2

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Staff in-charge: Dr.T. Shanmugavalli