



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)
Re-accredited with 'A++' Grade by NAAC. Recognized by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test II- April- 2025
IV - SEMESTER

Class : II BPEd
Major: Physical Education

Time : 2 hours
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. In first class lever effort and load moves in CO1K2
a. Perpendicular direction b. The same direction
c. Opposite direction d. Directions depending upon the load
2. Which of the following is a closed kinetic chain exercise? CO2K2
a. Bench press b. Leg press c. Squat thrust d. Lateral pulldown
3. The branch of mechanics which deals with the force that produces CO2K3
a. Kinematics b. Statistics c. Biomechanics d. Kinetics
4. Acceleration of an object will increase as the net force increases depending on its CO3K2
a. Density b. Mass c. Shape d. Volume
5. In Basketball game which of the law of motion is implemented CO2K2
a. First b. Second c. Third d. Fourth
6. Boxer's muscles are CO3K3
a. Trapezius b. Sterno cleio mastoid
c. abdominal d. Serratus anterior

Part- B

3x6=18

Answer ALL Questions

Each answer should not exceed 400 words or two pages

7. a. Define Force and explain its types. CO2K2
(or)
7. b Write about levers and its types. CO2K2
8. a. Describe about Newton's law s of motion. CO2K3
(or)
8. b. Explain about Projectiles. CO3K3
9. a. Describe about the Angular Kinetics. CO3K3
(or)
9. b Write about the factors influencing projectile trajectory. CO3K3

Part-C

3x12=36

Answer ALL questions

Each answer should not exceed 800 words or four pages

10. a. Describe about the Linear kinetics. C02K2

(or)

10.b. Briefly explain about the mechanical principles involved in basketball game. C02K2

11. a. Explain about the Angular Kinematics. C02K2

(or)

11.b. Define force and explain its application to sports activities. C02K2

12. a. Elucidate the linear kinetics. C02K3

12 b Enumerate the mechanical principles involved in any one game of your choice. C02K3

No. of Copies: 35

Staff in-charge: Dr.T. Shanmugavalli