



**Avinashilingam Institute for Home Science and Higher Education for Women**  
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)  
Re-accredited with A+ Grade by NAAC. Recognised by UGC Under Section 12B  
Coimbatore - 641 043, Tamil Nadu, India

**Bachelor of Physical Education Degree Examination – June 2021**  
**IV Semester**

**Class: II B.P.Ed**

**Time : 3 Hours**  
**Max. Marks : 100**

**18BPDC25 Kinesiology and Biomechanics**

**Part A**  
**Choose the Correct Answer**

**10 x 1 = 10**

1. Bio Mechanics is a
  - a. French word
  - b. English word
  - c. Greek word
  - d. Latin word
2. Kinesiology is the study of
  - a. rest
  - b. movement
  - c. motion
  - d. force
3. Carpal joint is the example of
  - a. Condylloid joint
  - b. Hinge joint
  - c. Pivot joint
  - d. Ball and Socket joint
4. The study of the structure of the human body is called
  - a. Anatomy
  - b. Physiology
  - c. Biology
  - d. Psychology
5. Newton's third law is
  - a. Law of interaction
  - b. Law of inertia
  - c. Law of acceleration
  - d. Law of gravity
6. The flight path of an object is
  - a. Projectile
  - b. Trajectory
  - c. Angular motion
  - d. Angular velocity
7. If a particle has negative velocity and negative acceleration, its speed
  - a. Decreases
  - b. Same
  - c. Increases
  - d. Zero
8. The unit of linear acceleration is
  - a. kg-m
  - b. m/s
  - c. rad/s<sup>2</sup>
  - d. m/s<sup>2</sup>
9. Which of the following are developed by handling some type of object?
  - a. Locomotor skills
  - b. Nonlocomotor
  - c. Gymnastics
  - d. Manipulative skills
10. Pick out the non fundamental motor skill
  - a. Locomotor skills
  - b. Nonlocomotor
  - c. Gymnastics
  - d. Manipulative skills

**Part B**

**5 x 6 = 30**

**Answer ALL questions**

**Each answer should not exceed 400 words or two pages**

- 11.a. Write the definition and meaning of kinesiology.  
(or)
- 11.b. Explain the concept of centre of gravity.
- 12.a. List down the classifications of joints and explain  
(or)
- 12.b. Discuss about the importance of good posture.
- 13.a. Write the definition and meaning of Force.  
(or)
- 13.b. What are the factors influencing projectile trajectory.
- 14.a. Give short notes on speed and velocity.  
(or)
- 14.b. Differentiate kinematics and kinetics movements.
- 15.a. What is the meaning of loco motor skills?  
(or)
- 15.b. List down the various manipulative skills and explain any two.

**Part C**

**5 x 12 = 60**

**Answer ALL questions**

**Each answer should not exceed 800 words or four pages**

- 16.a. Explain the importance of sports biomechanics to physical education teacher and coaches.  
(or)
- 16.b. Describe the need and importance of kinesiology in the field of physical education.
- 17.a. Classify the types of Posture and explain.  
(or)
- 17.b. Summarize the fundamental concepts of Reciprocal Innovation.
- 18.a. Explain the different types of Lever with suitable example in sports.  
(or)
- 18.b. Briefly explain the newton's laws of motion.
- 19.a. What is kinematics and explain the various types of kinematics.  
(or)
- 19.b. Define friction and explain the various types of friction.
- 20.a. Describe the Biomechanical analysis of Shot Put.  
(or)
- 20.b. Discuss about the Biomechanical analysis of your game of specialization.

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