

**Avinashilingam Institute for Home Science and Higher Education for Women**

**Coimbatore**

**Continuous Internal Assessment II April 2021**

Class II BPEd

Time 2 Hrs

Semester IV

Max Marks: 30

**18BPDC25 Kinesiology and Biomechanics**

**Course outcome**

*CO1. Identify biomechanical, health, physiological, and psychological limitations to and interventions for improving physical performance.*

*CO2. Analyse and explain the mechanisms underlying biomechanical, physiological, and psychological changes that occur during after acute and chronic exercise.*

*CO3. Develop physical conditioning programs based on scientific principles designed to develop physical fitness and improve athletic performance.*

*CO4. Understand mechanical principles can be applied to the analysis of human movement to assess and improve performance and reduce risk of injury.*

*CO5. Know effectiveness of human movement using mechanical principles.*

**PART – A**

**Answer all the Question**

**6 x 1 = 6**

1. Muscles which cause the joints to bend are called CO1K2
  - a. Flexors
  - b. Extensors
  - c. Abductors
  - d. Adductors
2. Lever system prevalent in human arm is CO2K2
  - a. Class I
  - b. Class II
  - c. Class I
  - d. Class I&II
3. In isometric contraction the muscle CO3K1
  - a. Shortens
  - b. Lengthens
  - c. Neither shortens nor lengthens
  - d. Shortens as well as lengthens
4. The branch of mechanics that describes the cause of force is CO2K2
  - a. Kinetics
  - b. Kinematics
  - c. Biomechanics
  - d. Fluid Mechanics
5. At the time of release of discus CO1K3
  - a. Centripetal force is more than centrifugal force
  - b. Centrifugal force is more than centripetal force
  - c. Centripetal and Centrifugal forces becomes zero
  - d. Centripetal force and centrifugal force is high
6. Hunch back is also known as CO2K1
  - a. Back pain
  - b. Scoliosis
  - c. Lordosis
  - d. Kyphosis

**PART – B**

**Answer the following (any two)**

**2 X 6 = 12**

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|---|-------|
| 7. Describe in detail about the Newtons law of motion     | CO1K2 |
| 8. Define Levers and explain its types with examples      | CO2KI |
| 9. Describe the factors influencing projectiles in sports | CO3K3 |
| 10. Explain in detail about the linear kinematics         | CO1K2 |

**PART C**

**Answer the following (any one)**

**1X12=12**

Answer should not exceed 800 words or four pages

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|--|-------|
| 11 Briefly explain about the types of muscular contractions            | CO1K4 |
| 12. Explain the biomechanical principles in different games and sports | CO3K5 |