



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

Continuous Internal Assessment Test - February 2020
Semester IV

Class : III BSc
Major/Branch : Physical Education

Time : 2 Hours
Max. Marks: 60

15BPEC26– Kinesiology and Biomechanics

Course Outcomes:

1. Identify biomechanical, health, physiological, and psychological limitations to and interventions for improving physical performance.
2. Analyse and explain the mechanisms underlying biomechanical, physiological, and psychological changes that occur during after acute and chronic exercise.
3. Develop physical conditioning programs based on scientific principles designed to develop physical fitness and improve athletic performance.
4. Understand mechanical principles can be applied to the analysis of human movement to assess and improve performance and reduce risk of injury.
5. Know effectiveness of human movement using mechanical principles.

Part A

Choose the Correct Answer

5 x 1 = 5

1. An athlete covering 100 m distance in 10 seconds, ran at a speed of

CO1 K2

(a) 10m/s (b) 100 m/s (c) 20 m/s (d) 1000 m/s.

2. Which of the following joint is example of gliding joint?

CO2 K1

a. Axial joint b. Shoulder joint c. Carpal and wrist joint d. Elbow joint

3. The terms rest, and motion are studied under

CO1 K3

(a) Biochemistry (b) Anatomy (c) Biomechanics (d) None of the above.

4. The lateral curve of the spine is called as CO2 K3

- a. Lordosis kyphosis c. Scoliosis d. Flat Back

5. Which plane is called as Horizontal plane? CO2 K4

- a. Sagittal plane b. Frontal plane c. Lateral plane d. Transverse plane

Part – B

Answer the following in two or four lines 5 X 2 =10

6. Define Synarthrosis CO1 K2

7. Meaning of Kinesiology CO2 K4

8. Define Passive Movements CO2 K3

9. Define Biomechanics CO1 K2

10. Meaning of Applied Kinesiology CO3 K1

Part – C

Answer the following

Answer in two pages or do not exceed 200 words 3X5=15

11a. Write about the professional objectives of Kinesiology in Physical Education? Or CO2 K3

b. Enumerate the types of motions

12. a. Draw a neat diagram and describe the movements of Spinal column. CO1 K2

Or

b. List out the movements possible in human body

13.a. Briefly explain the type of planes with sports suitable examples CO3 K1

Or

b. Define the following: i. Velocity ii. Acceleration

Part – D

Answer the following

Answer in Four pages or do not exceed 700 words

2x15 = 30

14.a. Describe the history of Kinesiology and Biomechanics (Or) CO2 K1

b. Write the types of joints and its movement possibilities with suitable diagrams?

15.a. Explain the equilibrium and its implications in sports.

CO2 K1

(Or)

b. Write about the Origin and Insertion of the following Muscles

i. Deltoid

ii. Triceps