



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 an 'A++' Grade by NAAC CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment I - August 2025

V Semester

Class : III BSc

Time:2hrs

Branch : Bachelor of Physical Education

Max. Marks : 60

23BPEC17 – Kinesiology and Biomechanics

Course Outcomes:

1. Understand the Skeletal structure of human body by identifying the origin and insertion of various muscles .
2. Orient the students in basic structure and functions of primary joints of the body
3. Relate and interpret the role of various mechanical principles in human movements .
4. Know the effectiveness of human movement using mechanical principles .
5. Develop physical conditioning programs based on scientific principles designed to develop physical fitness and improve athletic performance .

Part A

6 x 1 = 6

Choose the Correct Answer

1. Which muscle is involved in the elevation of arm? CO1K2
a) Deltoid b) Biceps c) Triceps d) Quadriceps
2. Function of long bones in the body is to CO1K3
a) Give strength b) Give protection c) Act as lever d) Provide surface area for muscle
3. Force generation but fiber lengthening is also known as CO2K1
a) Eccentric contraction b) Isotonic contraction c) Isometric contraction. d) Lateral back curve
- 4 Hamstring' muscle CO3K2
a) extends knee b) flexes knee c) extends elbow d) flexes elbow
5. Which of the following planes of the body divides it into upper and lower parts? CO2K4
a) Sagittal b) Transverse c) Frontal d) Vertical Plane
6. How many bones are there in the corpus of human beings? CO4K1
a) 8 b) 9 c) 10 d) 11.

Part B

3 x 6 = 18

Answer ALL questions

Each answer should not exceed 400 words or two pages

- 7.a. Define kinesiology & Biomechanics CO1K2
(or)
7. b. Brief the types of Joints
8. a. Draw the Carpal bones CO3K1
(or)
- 8.b. Draw the Tarsal bones
- 9.a. Define Planes and write the types. CO2K1
(or)
- 9.b. Write the types of muscle Contraction

Part C

3 x 12 = 36

Answer ALL questions

Each answer should not exceed 800 words or four pages

- 10.a. Enumerate the need & importance of Kinesiology CO1K2
(or)
- 10.b. List any 10 muscles with its muscular grouping designing and Kinesiological grouping
- 11.a. Draw the bones of the Lower Limbs. CO2K3
(or)
- 11.b. Draw the bones of the Limbs.
12. Explain the Origin, Insertion & action of Deltoid muscle and Trapezium muscle CO4K1
(or)
- 12.b. Explain the Origin, Insertion & action of Quadriceps muscle and Plantaris muscle