



**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's Degree Examination – June 2021**  
**VI Semester**

**Class: III UG**  
**Major: Physical Education**

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

**18BPEC26 Kinesiology and Biomechanics**

**Part A**

**Circle the Correct Answer**

**10 x1 = 10**

1. A study of Kinesiology is
  - a. Human Movement
  - b. Force
  - c. Speed
  - d. Motion
2. Running is facilitated by they use of \_\_\_\_\_ extension
  - a. galiles
  - b. massively
  - c. nicholos
  - d. All the Above
3. Infraspinous fossa of the scapula
  - a. Insertion
  - b. Origin
  - c. Action
  - d. None of the above
4. The anterior inferior iliac spine
  - a. Femoris
  - b. Triceps
  - c. Deltoid
  - d. Biceps
5. Flexion and Extension movements usually occur in
  - a. *Plane*
  - b. Axis
  - c. Contraction
  - d. None of the above
6. The muscular action in which tension is developed without contraction of the muscle
  - a. isometric
  - b. isotonic
  - c. isokinetic
  - d. displacement
7. The study of the structure and function of biological systems by means of the methods of "mechanics"
  - a. Biomechanics
  - b. Kinesiology
  - c. Friction
  - d. Force
8. A state in which opposing forces or influences are balanced.
  - a. Equilibrium
  - b. Force
  - c. Acceleration
  - d. Velocity
9. A object is the energy which it possesses due to its motion
  - a. Kinetic
  - b. Axis
  - c. Plane
  - d. All the above
10. Change in position of an object with respect to time
  - a. Motion
  - b. Axis
  - c. Plane
  - d. All the above

**Part B**

**5 X 6 = 30**

**Answer the following questions**

**Answer should not exceed 400 words or two pages**

- 11.a. Explain the History of Kinesiology.  
(or)  
11.b. Describe about Body movement.
- 12.a. Write about gluteus Maximus.  
(or)  
12.b. Explain about origin and insertion of Hamstring muscle.
- 13.a. Explain about Axis and Plane.  
(or)  
13.b. Explain about Isotonic Contraction with example.
- 14.a. Write short notes on i. Air gravity ii. Water friction.  
(or)  
14.b. What are the factors influencing in motion? Explain it.
- 15.a. Describe about Movement analysis of throwing Explain it..  
(or)  
15.b. Describe about Movement analysis of running.

**Part C**

**5 X 12 = 60**

**Answer the following questions**

**Answer should not exceed 800 words or four pages**

- 16.a. Explain the role of Kinesiology in physical education.  
(or)  
16.b Explain about the classification of synovial joints.
- 17.a. Draw a neat diagram of Biceps muscles with origin, insertion and actions.  
(or)  
17.b. Draw a neat diagram of Trapezius muscles with origin, insertion and actions.
- 18.a. Explain about Types of Muscle Contraction.  
(or)  
18.b. Describe about Muscle designing and kinesiological grouping
- 19.a. Explain about various types of levers with examples.  
(or)  
19.b. Explain various types of motion.
- 20.a. Explain about application and analysing of techniques of different sports and games .  
(or)  
20.b. Explain the biomechanical principles of pushing, jumping and hitting.

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