



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 Test I – August 2025
III Semester

Class: II UG

Major: Physical Education

Max Marks: 60

Time: 2 hours

23BPEC09 Fitness education and nutrition

Course Outcomes:

1. Familiarise the student with fitness education and training
2. Develop skills to establish daily fitness prescription for the clients
3. Acquaint student with principles of sports nutrition
4. Understand the relationship between fitness training and nutrition
5. Construct individualized nutrition plan for specific events

Part –A

Choose the Correct Answer

6 x1 = 6

1. Components of fitness
(a) physical fitness (b) health fitness
(c) a and b (d) none of above **CO3K1**
2. A substance needed by the body for growth, energy, repair and maintenance is Called
(a) carbohydrate (b) nutrient (c) calories (d) fatty acid **CO1K2**
3. Which macronutrient is the primary source of energy for the body?
(a) Protein (b) Fat (c) Carbohydrate (d) Fiber **CO3K3**
4. Which muscle group is targeted by squats?
(a) Biceps (b) Quadriceps (c) Hamstrings (d) Triceps **CO2K2**
5. Which of the following is an example of cardiovascular exercise?
(a) Weightlifting (b) Swimming (c) Yoga (d) Stretching **CO3K1**
6. What is the recommended duration for moderate-intensity aerobic exercise per week?
(a) 30 minutes (b) 60 minutes (c) 90 minutes (d) 120 minutes **CO3K3**

Part B

Each answer should not exceed 400 words or two pages

3x6=18

- 7.a. Define fitness and its components **CO3K2**
(or)
- 7.b. Define warm up & warm down and its importance **CO2K3**
- 8.a. Short notes on aerobic metabolism **CO2K4**
(or)
- 8.b. Define bioenergetic and short notes on estimation of energy intake **CO3K1**
- 9.a. Short notes on how exercise impact on adaptation to exercise **CO3K2**
(or)
- 9.b. Describes the various estimation of energy storage and transfer **CO5K1**

Part C

Each answer should not exceed 800 words or two pages

3x12=36

- 10.a. Explain about on components of fitness **CO2K3**
(or)
- 10.b. Illustrate Benefits and principle of physical fitness **CO2K2**
- 11.a. Describe about the anaerobic metabolism & aerobic metabolism **CO3K2**
(or)
- 11.b. Related to the three-energy system **CO4K3**
- 12.a. Summarize of the consequence of energy imbalance & energy value of food **CO4K3**
(or)
- 12.b. Interpret of how exercise impact metabolism and body's need energy **CO2K3**

Incharge staff: Mrs. R. Muneeswari

Total no of paper :20