

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN  
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)  
Chromepet, Chennai - 600 044.

B.Sc.CND - END SEMESTER EXAMINATIONS - NOV'2024  
SEMESTER - V

**20UNDCT5010 - Sports Nutrition**

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

**Section B**

Answer any **SIX** questions ( $6 \times 5 = 30$  Marks)

1. Define physical fitness and discuss its components.
2. Interpret the role of carbohydrates in exercise and explain the concept of carbohydrate loading.
3. Explain the importance of hydration and the risks of dehydration in athletic performance.
4. Describe the concept of ideal body weight and its significance in sports performance.
5. Describe the energy pathways involved in muscle force generation during exercise.
6. Predict the role of fat before, during, and after exercise.
7. Explain the role of antioxidants in sports nutrition.
8. Evaluate the impact of eating disorders on athletic performance and methods for their prevention.

**Section C**

Answer any **THREE** questions ( $3 \times 10 = 30$  Marks)

9. Relate the relationship between physical fitness and exercise physiology, focusing on the role of the pulmonary and neural systems.
10. Classify the metabolic adaptations of skeletal muscles to regular exercise and the factors that influence fuel choice during physical activity.
11. Justify the importance of proteins in exercise, outlining protein needs before, during, and after athletic activities.
12. Predict the importance of electrolyte balance and fluid intake guidelines for athletes, particularly in thermoregulation and performance.
13. Appraise the types and effects of anabolic steroids and the role of the World Anti-Doping Agency (WADA) in regulating their use.

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