

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 - III

20UNDCT3005 - Human Nutrition - I

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

1. Briefly explain the historical development of nutrition as a science.
2. Explain the different units of energy and describe how the energy value of foods is determined using a bomb calorimeter.
3. Describe the various functions of carbohydrates in the body and their significance in human nutrition.
4. Differentiate between indispensable and dispensable amino acids.
5. Define EFAs, explain their functions, deficiency symptoms, and list common food sources.
6. Summarize the role of fats in diet, recommended fat intake, and common food sources.
7. Explain the relationship between the Respiratory Quotient and Energy output.
8. Describe the various functions of foods in the human body and how they contribute to overall health.

Section C

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

9. Define malnutrition and discuss its various forms with suitable examples.
10. Discuss the factorial methods used to calculate the daily energy requirements of an adult, considering varying degrees of physical activity and energy metabolism during different types of work.
11. Elaborate dietary fiber and distinguish between soluble and insoluble fibers.
12. Evaluate protein quality using different measures such as PER, BV and NPU.
13. Explain the role of phospholipids in cell membranes and other physiological processes.
