



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 II –October 2025

Semester- V

23BBCDE2- Concepts of Nutritional Biochemistry

Class: III UG

Time: 2 hours

Major: Biochemistry and Biotechnology

Max. Marks: 60

CO1: Acquire the understanding of the basic concept of nutrition for maintaining normal health

CO2: Realize the biochemical and physiological functions of macronutrients and their integrated role.

CO3: Understand the significance of protein quality and assess the nutritive value of proteins.

CO4: Recognize the importance of micronutrients and the effects of nutritional deficiencies.

CO5: Evaluate the effects of drugs and the therapeutic role of key nutrients in maintaining health under various disease conditions.

PART-A

6 X 1 = 6

Circle the correct answer

- RDA stands for
a) Required Daily Amount b) Recommended Dietary Allowance
c) Regular Daily Advice d) Recommended Dose Allocation
CO1K1
- Vitamin A deficiency causes:
a) Night blindness b) Beriberi c) Pellagra d) Scurvy
CO1K2
- The most common type of obesity Worldwide is
a) Genetic obesity b) Endocrine obesity
c) Exogenous (diet-related) obesity d) Drug-induced obesity
CO3K2
- Kwashiorkor is frequently seen in
a) pregnant women b) old age c) neonatal d) Toddlers
CO2K3
- Marasmus primarily caused by
a) Deficiency of carbohydrates b) Deficiency of proteins
c) Excess calorie intake d) Deficiency of both calories and proteins
CO2K3
- Body Mass Index (BMI) is calculated as
a) $\text{Weight (kg)} \div \text{Height (m)}$ b) $\text{Weight (kg)} \div \text{Height}^2 (\text{m}^2)$
c) $\text{Height (cm)} \div \text{Weight (kg)}$ d) $\text{Weight (kg)} \div \text{Height}^3 (\text{m}^3)$
CO3K2

Part B

3 x 6 = 18

Answer the following

Answers should not exceed 200 words or one page

7. a. Write a detail note on prevention measures associated with marasmus
(or)
CO1K2
7. b. Explain about Kwashiorkor
CO1K1
8. a. Write note on distribution of minerals in the body
(or)
CO2K2
8. b. Write about regulation of water metabolism
CO2K2
9. a. Explain drugs involved in nutritional therapy
(or)
CO3K3
9. b. What is obesity and highlight the genetic factors associated with it
CO3K2

Part-C

3 x 12 = 36

Each answer should not exceed 800 words or four pages

10. a. Describe the factors influencing protein requirement and effect of protein deficiency
(or)
CO2K2
10. b. Elaborate Malnutrition: causes, prevention and curative
CO3K2
11. a. Deficiency diseases associated with vitamin B complex and C
(or)
CO2K2
11. b. Elaborate sources, RDA, function, deficiency and toxicity for molybdenum, zinc and selenium.
CO2K3
12. a. Explain the role of diet and nutrients in the prevention and treatment of diseases
(or)
CO3K2
12. b. Discuss the effects of drugs on food and nutrients
CO3K3