PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BVoc DEGREE EXAMINATION MAY 2025

(Fifth Semester)

Branch - FOOD PROCESSING TECHNOLOGY

PRINCIPLES OF NUTRITION

Time:	Three Hours Maximum: 50 Marks
	SECTION-A (5 Marks)
	Answer ALL questions
	ALL questions carry EQUAL marks $(5 \times 1 = 5)$
1	The state of consuming the right amount of nutrients to support the body's functions is referred to as
2	A method of measuring quality of protein, DIAAS is expanded as (i) Digestible Indigestible Amino Acid Scheme (ii) Digestible Independent Amino Acid Score (iii) Digestible Indispensable Amino Acid Score
	(iv) Digestible Indispensable Amino Acid Scheme
3	Vitamin B9, also known as, is important for cell growth and function, and for red blood cell formation (i) Niacin (ii) Pantothenic acid (iii) Biotin (iv) Folic acid
4	Which of the following nutrient deficiency causes hair loss? (i) Zinc (ii) Calcium (iii) Phosphorous (iv) Potassium
5	the main organs involved in acid-base balance.
	(i) Lungs and Liver (ii) Lungs and Kidneys (iii) Lungs and Heart (iv) Pancreas and Lungs
	SECTION - B (15 Marks)
	Answer ALL Questions ALL Questions Carry EQUAL Marks (5 x 3 = 15)
	ALL Questions Carry EQUAL Maiks (3 x 3 - 13)
6 a	Define the term Energy and Thermic Effect of foods. OR
b	What are dietary fibers and write the classification of dietary fibers?
7 a	Explain PDCAAS and BV. OR
b	What are the significance of Essential Fatty Acids.
8 a	Bring out a few food sources of Vitamin A, B12 & C. OR
b	Differentiate microcytic and macrocytic anemia.
	Cont

9 a Specify the signs & symptom of Iodine Deficiency Disorder.

OR

- b Summarize the functions of phosphorous.
- 10 a Explain the water composition in human body.

OR

b Describe the functions of electrolytes.

SECTION -C (30 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks

 $(5 \times 6 = 30)$

11 a Elaborate the three components of energy expenditure.

OR

- b Illustrate on the digestion, absorption of carbohydrates.
- 12 a How would you analyze the protein quality?

OR

- b Classify lipids and write the significance of the same.
- 13 a Highlight the functions, Requirements of Vitamin C.

OR

- b Elaborate on the Vitamin A deficiencies.
- 14 a Differentiate Osteomalacia and Osteoporosis.

OR

- b "Iron plays an important role in preventing anemia".- Justify.
- 15 a Illustrate on water balance and role of hormones in water balance.

OR

b Infer the role of electrolytes in fluid balance in the body.

Z-Z-Z END