



Department of Nutrition and Food Engineering
Faculty of Health and Life Sciences
B.Sc. in Nutrition and Food Engineering
Midterm Examination Summer 2026

Course Code: 0511-1105

Course Title: Basic Human Nutrition

Level and Term: L-1, T-1

Section: 262 All

Course Teacher Initials: AS, SIS, MS, MRH, FKS

Time: 1 hour 30 minutes

Total Marks: 25

Maintaining the order of the questions is highly encouraged

- | | | Marks |
|---|--|-------|
| 1 | (a) What is meant by nutrition and what are nutrients? [CLO1,PLO1,C2] | 2 |
| | (b) Illustrate the UNICEF Conceptual Framework of Malnutrition and analyze how immediate, underlying, and basic causes interact to affect child nutritional status. [CLO1,PLO1,C1] | 3 |
| 2 | (a) Apply the hierarchical order in human body organization along with examples for each level. [CLO2,PLO1,C3] | 2 |
| | (b) Analyze why collagen is considered both fibrous and elastic? [CLO2,PLO1,C3] | 3 |
| 3 | (a) Compare the nutrient composition of whole grains and refined grains, and explain how refining affects their nutrient composition. [CLO2,PLO1,C4] | 3 |
| | (b) A snacks item contains 35 g of carbohydrates, 15 g of fats and 10 g of proteins. Calculate the total number of Kcal of the snacks. [CL23,PLO1,C3] | 2 |
| 4 | (a) Classify carbohydrates based on their structural unit. [CLO3,PLO1,C1] | 3 |
| | (b) Differentiate between Glycemic Load and Glycemic Index. [CLO3,PLO1,C2] | 2 |
| 5 | (a) Examine the consequences of consuming excessive empty calorie foods. [CLO3,PLO1,C2] | 2 |
| | (b) A nutritionist is comparing two foods for a diabetic patient. Food A is <u>boiled brown rice</u> providing <u>45 g</u> of available carbohydrates with a Glycemic Index (GI) of <u>50</u> , while Food B is fresh watermelon providing <u>only 10 g</u> of available carbohydrates but with a higher GI of 72. Calculate the <u>GL</u> for both foods and determine which food would be a better choice for a diabetic individual. Justify your answer based on your calculations. [CLO3, PLO1,C1] | 3 |