



**Department of Nutrition and Food Engineering**  
**Faculty of Health and Life Sciences**  
**B.Sc. in Nutrition and Food Engineering**  
**Final Examination Fall 2025**

**Course Code: 0511-3103**  
**Level and Term: L-3- T-1**  
**Time: 2 Hours**

**Section: 232 All**

**Course Title: Assessment of Nutritional Status**  
**Course Teacher Initials: AIC, LRM**  
**Total Marks: 40**

**Splitting any answer is strictly prohibited**

- |   |                                                                                                                                                               | <b>Marks</b> |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 1 | (a) Define Clinical Nutrition. What are the signs associated with malnutrition of the lips and gums? [CLO2, PLO2, C1]                                         | 1+2          |
|   | (b) Identify the reasons and signs of conjunctival xerosis. [CLO2, PLO2, C3]                                                                                  | 3            |
|   | (c) Which vitamin deficiency causes bow legs, and what are the signs? [CLO2, PLO2, C1]                                                                        | 2            |
| 2 | (a) Outline the process of vitamin A assessment by RDR, along with the criteria of vitamin A status. [CLO2, PLO2, C2]                                         | 3            |
|   | (b) Identify two disorders and their signs, which may occur due to the deficiency of cobalamin. Interpret the deficient values of cobalamin. [CLO2, PLO2, C5] | 2+1          |
|   | (c) Demonstrate the factors that affect the serum 25-hydroxyvitamin D. [CLO2, PLO2, C2]                                                                       | 2            |
| 3 | (a) Categorize the dietary assessment methods. List the uses of data that are derived from the 24-hour recall method. [CLO3, PLO6, C4]                        | 2+2          |
|   | (b) Develop a sample of estimated food record methods. [CLO3, PLO6, C3]                                                                                       | 4            |
| 4 | (a) Suppose you had consumed the following meal yesterday with your family. [CLO3, PLO6, C4]                                                                  | 4            |

| Breakfast                                | Lunch                                                                                          | Snacks              | Dinner                                                                                     |
|------------------------------------------|------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------|
| Boiled Oats with milk, honey, and mango. | Boiled rice, Chicken curry (Chicken, spices, potato, papaya), Lentil soup, sautéed cauliflower | Milk tea with bread | Fried rice (carrots, rice, eggs), Mixed vegetables (Papaya, onion, carrot), Fried chicken. |

Calculate the WDDS based on the following meal information and categorize it.

Please Turn Over



- (b) The following table describes the last 7 days' dietary history of an individual who lives in Bangladesh. [CLO3, PLO6, C5] 4

| Day 1                                               | Day 2                                         | Day 3                                  | Day 4                                 | Day 5                                                 | Day 6                                                       | Day 7                                                                 |
|-----------------------------------------------------|-----------------------------------------------|----------------------------------------|---------------------------------------|-------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------|
| Tortilla, mixed veggies, Lentil soup, rice, chicken | Porota, Egg curry, rice, beef, lentil, yogurt | Cake, lentil, rice, kidney beans, beef | Fish fry, rice, beef, egg, nuts, milk | Rice, porota, veggies, egg fry, potato curry, lentils | Cabbage, carrots, rice, chicken, payesh (milk, rice, sugar) | Mashed potato, rice, beef masala, lentils, eggplant fry, raw chickpea |

Calculate FCS of the following individuals and categorize it.

- 5 (a) Construct a curve on the attached GMP card, and interpret the nutritional status of the following child. Age: 6, 8, 10; and weight: 7kg, 8kg, 7kg, respectively. [CLO3, PLO6, C3] 3
- (b) 'Every child should have a growth chart that tracks his or her growth.' Justify the statement. [CLO3, PLO6, C5] 3
- (c) Divide foods into groups according to MDD-IYCF. [CLO3, PLO6, C4] 2