

**BOWEN UNIVERSITY, IWO  
COLLEGE OF HEALTH SCIENCES  
NUTRITION AND DIETETICS PROGRAMME  
2023/2024 FIRST SEMESTER EXAMINATION**

**COURSE CODE: NTD 319  
CREDIT UNIT: 3  
TIME: 3 HRS**

**COURSE TITLE: FOOD CONSUMPTION SURVEY**

**INSTRUCTION: ANSWER FIVE QUESTIONS (At least TWO from each section)**

**Section A**

1. a. Define food composition data 2marks  
b. Mention 2 uses of food composition data 2marks  
c. Highlight 3 major components of food composition table and give two examples each 10marks
2. a. Enumerate three major ways to obtain data on the nutrient content of foods with an example each 6marks  
b. Discuss quality consideration in food composition 5marks  
c. List six methods of ensuring quality considerations in food composition 3marks
3. a. Discuss any two method of ensuring quality considerations in food composition 10marks  
b. Mention two strengths of food composition database 2marks  
c. Mention two weaknesses of food composition databases 2marks

**Section B**

4. Dietary survey is done to assess the quantities of food items and nutrients consumed by the household or an individual. Write briefly on two methods of dietary assessment stating two advantages and disadvantages each. 14marks
5. A given amount of food will give a number of calorie when metabolized. Calculate the food energy value of the food consumed by Kola during breakfast assuming the egg contains 30% protein, 9% fat, 1.5% carbohydrate; cornflakes 70% carbohydrate, 3% fat, 15% protein and the milk 40% protein, 20% fat, and 15% carbohydrate. His food intake was 50g of eggs, 0.9kg of cornflakes with milk and 6 slices of bread. A slice of bread weighs about 25,000mg and the bread is made of 80% carbohydrate, 3% fat, 0.05% and 10% protein. 14marks
6. Adeola, a 21 year old female student, had three wraps of pounded yam at the BBSF cafeteria with 2 serving spoons of efo riro, 2 pieces of ponmo and 1 medium sized fried mackerel fish for lunch. She ate a slice of water melon and drank 75cl of chilled zobo drink afterwards. She consumed 5 pieces each of fried yam and akara and 1 small piece of roasted chicken for dinner along with a glass of orange juice, 35cl. A wrap of pounded yam weighed 98g, and all the efo riro consumed weighed 220g. A piece of ponmo weighed 36g while the fish she consumed was 90g. The water melon was 60g, a piece of fried yam weighed 25g while akara weighed 23g. The roasted chicken weighed 184g. Using the extract from the Nigerian Food Composition Data below, calculate her nutrient intake and the percentage RDA for the day. 14marks



Food item (100g)	Energy (kcal)	Protein (g)	Fat (g)	Carbohydrate (g)	Fiber (g)	Calcium (mg)	Iron (mg)	Sodium (mg)	Vitamin A (mcg)	Riboflavin (mg)
Yam, white, peeled, boiled, pounded	108.95	1.03	1.42	22.21	1.60	42.55	1.17	450	-	-
Amaranthus leaves cooked	54.70	4.00	0.90	7.00	1.30	506	1.70	-	228	0.23
Cow skin, thick, boiled, no salt	224.65	46.90	1.09	6.80	0.02	61	4.3	3	-	-
Mackerel, fried, with bones	137.50	15.70	8.30	-	-	21	0.90	110	-	0.28
Water melon, raw (edible portion)	30.96	0.56	0.24	6.50	0.29	7	0.24	1	28	0.021
Roselle calyx extract - zobo	43.70	0.8	0.70	8.55	-	50.5	0.11	15	-	0.07
Yam, white, fried	277.30	3.00	5.30	53.8	1.20	61	4.60	510	-	-
Beans, soaked in water, dehulled, ground, mixed with salt and pepper, fried with vegetable oil	219.63	12.09	8.47	23.75	-	8.02	1.23	7.97	-	-
Roasted chicken	123.34	-	13.16	-	2.45	-	-	-	16	0.178
Orange juice	64.04	-	-	15.47	1.09	5.81	8.1	9.88	-	0.06
<b>*RDA</b>	<b>2000</b>	<b>46</b>	<b>20</b>	<b>130</b>	<b>28</b>	<b>1000</b>	<b>18</b>	<b>2300</b>	<b>700</b>	<b>1.1</b>