

PROGRAMME: MSc PUBLIC HEALTH
COURSE CODE: PHS802
COURSE TITLE –INTRODUCTION TO PUBLIC HEALTH NUTRITION
CREDIT UNITS: 3
TIME ALLOWED: 2½ HOURS
ATTEMPT ALL QUESTIONS

- 1a. i. What are carbohydrates? (2 marks)
- ii. List ten (10) food sources of carbohydrates (5 marks)
- 1b. Enumerate five (5) functions of carbohydrates in the body (2 ½ marks)
- 1c. Describe the chemical composition of carbohydrates and their classifications. (8 marks)
- 2a. List three (3) macronutrients and five (5) micronutrients that particularly affect early brain development and demonstrate a critical or sensitive period in children (4 marks)
- 2b. Explain why “Growth Monitoring” is important in children (6½ marks)
- 2c. Why is the first 1000 days of life critical in the life of a child? (7 marks)
- 3a. Highlight the major areas covered by the NPSN (8½ marks)
- 3b. List any four (4) Organizations that supports the development of the National Policy on Food and Nutrition (4 marks)
- 3b. Distinguish between the goal of the “National Policy on Food and Nutrition Policy” and the National Plan of Action for Nutrition”. (5 marks)
- 4a. List and explain the classification of food security (7½ marks)
- 4b. With the aid of illustration, describe the Food Insecurity Core concepts related to nutritional state (10 marks)

(TOTAL = 70 MARKS)

(6 marks)

QUESTION FIVE

5a(i). Enumerate the steps required for emission of radiation by an atom or molecule (4 marks)

5a(ii) Calculate the energy of an electromagnetic radiation whose wave length is 100 m (Speed of light $c = 3 \times 10^8$ m/s, Planck constant, $h = 6.6261 \times 10^{-34}$ m²/kg/s = 6.6261×10^{-34} Js). (4 marks)

(5b) Highlight the major features of electronic, vibrational and rotational spectroscopic, stating the source of energy needed for each of them (6 marks)

(5c) On what two parameters is the unit of measurement of electromagnetic radiation based? (1 mark)