



**AMREF INTERNATIONAL UNIVERSITY
UNIVERSITY EXAMINATIONS AUGUST 2024
SCHOOL OF PUBLIC HEALTH
FIRST YEAR SEMESTER ONE/ TWO EXAMINATION
DEPARTMENT OF COMMUNITY HEALTH
MASTER OF PUBLIC HEALTH**

MSH 721: Nutrition in the Life Cycle

DATE:

TIME: Three Hours

INSTRUCTIONS

1. This exam is marked out of 100 marks
2. The first question in Section A is compulsory
3. Answer an additional three (3) questions from the other five (5)
4. The exam shall take 3 hours

Section A: Compulsory question

Q1 Account for changes in requirements of the following nutrients after the onset of pregnancy:

- a) Folate (5 marks)
- b) Essential amino acids (5 marks)
- c) Iron (5 marks)
- d) Niacin (5 marks)
- e) Iodide (5 marks)

Section B: Answer any THREE questions in this section

Q2 Evaluate the suitability of vegetarian and vegan diets in child hood, pregnancy and adulthood in the lifecycle of a woman. (25 marks)

Q3: Analyse the factors that affect nutrient and energy requirements during the human life cycle.

Q4. A pregnant woman engaged in moderate physical activity consumes one kg daily of a staple food that has the following composition per 100 g: Moisture – 45 g, carbohydrates – 35 g, Protein- 8 g and lipids-2 g. In addition she consumes one litre of water.

a) Determine the total daily energy intake of the woman (12 marks).

b) Suggest some recommendations to the woman in respect to energy adequacy and the type of food she should consume in her diet to address the situation. (13 marks)

Q5: Gut microflora play an important role in human health. Evaluate the effect of diet on gut health and body's immunity and health.

Q6: Distinguish between the following types of nutrition anaemia:

a) Iron deficiency anaemia (5 marks)

b) Haemolytic anaemia (5 marks)

c) Macrocytic anaemia (5 marks)

d) Microcytic anaemia (5 marks)

e) Megaloblastic anaemia (5 marks)