

NATIONAL UNIVERSITY OF LESOTHO
FACULTY OF AGRICULTURE
ANIMAL SCIENCE DEPARTMENT
AGR 3501: FOOD SECURITY & SUSTAINABLE AGRICULTURE
SUPPLEMENTARY EXAMINATION

AUGUST, 2023

MARKS: 100

TIME: 3 HOURS

Instructions:

- Answer all questions
- For Section A choose the correct answer
- Begin each question on a new page

SECTION A

[1] What is food security?

- a. Its component elements include availability, utilization, and stability, as well as access.
- b. It relates to efforts to prevent terrorists from poisoning food supplies.
- c. Food security focuses primarily on ending micronutrient malnutrition.
- d. It is about ensuring everyone's access to food.

[2] What difference will urbanisation make for hunger and malnutrition?

- a. No significant difference; low-income urban and rural people face similar constraints in accessing food and consume similar diets in developing countries.
- b. It will reduce poverty and hunger because these are almost entirely concentrated in rural areas.
- c. Urban dwellers depend more than rural people on purchases to acquire food, have little opportunity to grow their own food, and so are much more vulnerable to food price increases.
- d. Poor city folk eat mainly sorghum, millet, maize and root crops, so a lot more of those foods will need to be produced as the world urbanizes.

[3] Since the initiatives to end hunger and malnutrition started, how has the number of food insecure people in the world changed?

- a. The goal of cutting the number of hungry people in half by 2015 was achieved.
- b. The number decreased, but not by nearly enough to meet the goal.
- c. The number increased slightly.
- d. Because of rising food prices, the number increased dramatically.

[4] What is the approximate definition of sustainable agriculture?

- a. A type of agriculture where crops are rotated and only planted every other year.
- b. A type of agriculture that focuses on producing long-term crops and livestock while having minimal effect on the environment.
- c. A type of agriculture that focuses on producing long-term crops while having minimal effect on the environment.
- d. A type of agriculture that focuses on producing crops and livestock while having minimal effect on the environment.

[5] Which of the following is an example of distributional inequality?

- a. Food is available to a community but is too expensive for many to afford
- b. Food is unavailable due to drought or other natural disasters
- c. Food is plentiful and available at accessible prices.
- d. Food is unavailable and international support is needed for refugee camps.

- [6] During early food security studies, was it correct to think that population growth will outstrip food production growth in the future?
- No, technological and institutional innovations have permitted food supplies to more than keep pace with population growth.
 - Yes, it is only because of widespread famines that population has not overwhelmed food supplies altogether.
 - No, but it is only because of the introduction of genetically modified food that supplies have kept pace with population growth.
 - No, but supplies are not likely to keep pace with population growth over the next 10 years.
- [7] How does agricultural research help reduce hunger and poverty?
- Transnational private-sector firms are the main source of research oriented towards poor farmers and consumers.
 - Agricultural research mainly benefits commercial farmers in developed countries.
 - Testability
 - Research focused on the problems of poor farmers and consumers is a 'public good' with little profit potential but high social benefits; public investment is needed to support it.
 - Pro-poor research should only focus on organic farming.
- [8] Which of the following is an environmental benefit of sustainable agriculture?
- More fossil fuel use
 - Soil quality is maintained
 - Increase in erosion
 - Decreased biodiversity
- [9] What are entitlements to food?
- The term refers to social welfare programmes.
 - It means the pathways through which people access food, whether by production, purchase, social protection programmes or other means.
 - When countries enact right-to-food legislation, then people are entitled to food.
 - The term is a reference to agrarian reform programmes that provide farmers with land titles.
- [10] What role do women play in food security?
- Their main role is preparing meals.
 - They play a central role as producers of food, managers of natural resources, income earners and caretakers of household nutrition.
 - They weed the fields, but never plough or plant them, as only men are strong enough for those activities.
 - Their efforts focus mainly on vegetable gardens and chickens; men are involved with cereal crops and larger livestock.

SECTION B

Question 1

- a) Describe these terms:
- Food security
 - Sustainable agriculture
 - Food systems.
 - Mixed farming [20]
- b) There are a number of drivers to food security. Describe how societal conflicts affect the food security and nutrition. [10]
- c) Intensification in agricultural production is one of the key factors in achieving food security. Discuss the challenges associated with agricultural intensification. [10]

Question 2

- a) Increasing prices show their effects at different levels and categories of the society. Discuss the impacts of rising prices on farmers and producers? [10]
- b) A number of activities support the sustainable agriculture. Explain how mixed farming supports sustainability in agriculture. [10]

Question 3

- a) Explain how the limited financial investment in agricultural sector is affecting agricultural productivity hence the food security situation in most countries. [10]
- b) Market prices of food commodities can be influenced by a number of factors which affects the food security. Discuss how climate change affects food prices. [10]