

## Agricultural Science Paper 2, Nov/Dec 2012

### Question 1

1. State **five** ways in which export of agricultural produce contribute to the economy of West African countries. [5 marks]
2. Mention **three** differences between communal and individual land ownership. [6 marks]
- (c) State **three** ways in which farm surveying is important. [3 marks]
- (d) List **four** uses in which land may be put in a community. [2 marks]

### Question 2

- (a) Outline **five** problems of agricultural development in West Africa. [5 marks]
  1. Mention **two** crop produce used by each of the following agro-based industries as raw materials:
    2. fibre manufacturing industry;
    3. vegetable oil processing industry;
    4. cereal processing industry. [6 marks]
  5. State **three** ways by which the life span of farm machinery could be prolonged. [3 marks]

List **four** farm-surveying equipment.

### Question 3

1. (a) Distinguish between irrigation and drainage. [2 marks]  
(b) List:(i) two systems of irrigation;  
(ii) two systems of drainage.  
[4 marks]
  1. Explain four ways in which each of the following factors affect land availability

for agriculture in West Africa:

2. socio-economic factors;
3. topography.

[8 marks]

- Give two characteristics of a fertile soil.

[2 marks]

#### Question 4

1. Differentiate between macro-nutrients and micro-nutrients as used in

crop production.

[2 marks]

- Mention four ways by which plant nutrients are lost from the soil. [4 marks]
- Discuss the effects of the following farming practices on the soil:
  - clean clearing;
  - crop rotation. [8 marks]
  - State two ways in which soil organisms improve soils for crop growth. [2 marks]

#### Question 4

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  - **State two ways in which soil organisms improve soils for crop growth.** [2 marks]

#### Question 6

- Differentiate between afforestation and deforestation. [6 marks]
- Discuss the viral disease of maize under the following headings:
- name of disease; [1 mark]
- mode of transmission; [2 marks]
- symptoms; [2 marks]
- two control measures [2 marks]
- State four advantages of vegetative propagation. [4 marks ]
- Mention three planting materials for banana cultivation. [3 marks ]

#### Question 7

1. (a) State four benefits derivable from animal production. [4 marks]
- (b) List four types of equipment used in poultry production. [4 marks]
- (c) Name four parts of the digestive system of chicken and give one function of each named part. [8 marks]

#### Question 8

1. List four methods of identification in cattle production [4 marks]
- (b) Mention three malnutrition-related diseases in farm animals. [4 marks]
- (c) State five effects of aquatic weeds in a fish pond. [5 marks]
- (d) State four fishery regulations that govern fishing in your country. [4 marks]

#### Question 9

1. (a) State six factors that affect the demand of agricultural produce. [6 marks]
- (b) A farmer purchased a power tiller in the year 2000 for D12,000.00. In 2009, the power tiller was sold for D3,000.00 as it was no longer economical to keep. Calculate the :
  1. useful life of the power tiller;
  2. salvage value of the power tiller;
  3. total depreciation of the power tiller;
  4. annual depreciation of the power tiller.

[6 marks]
- (c) State four advantages of using mass media as an agricultural extension teaching method. [4 marks]

#### Question 10

1. What is agricultural marketing? [2 marks]

- (b) State three benefits of each of the following marketing services:**
- (i) grading;**
  - (ii) processing;**
  - (iii) packaging. [9 marks]**
- (c) List two factors which influence the use of land for agricultural purposes. [2 marks]**
- (d) State three disadvantages of using mass media as an agricultural extension teaching method. [3 marks]**