GENERAL AGRICULTURE

SCHEME OF EXAMINATION

There will be three papers, Papers 1, 2 and 3 all of which must be taken. Papers 1 and 2 will be a composite paper to be taken at one sitting.

PAPER 1: Will consist of fifty multiple-choice objective questions all of which must be answered within 1 hour for 50 marks.

PAPER 2: Will consist of 10 essay questions divided into five Sections, A, B, C, D and E covering the following areas of the syllabus:

- Section A: Introduction to Agriculture and Farm Mechanization
- Section B: Soil Uses and Management
- Section C: Crop production
- Section D: Animal Production
- Section E: Agricultural Economics, Agribusiness and Extension.

Each section will consist of two questions. Candidates will be required to answer one question only from each section for 16 marks. The paper will last 2 hours.

PAPER 3: Will be a practical test for school candidates or alternative to practical work test for private candidates. Each version will consist of four questions all of which must be answered within 2 hours for 60 marks.

SAMPLE QUESTIONS

PAPER 1

(OBJECTIVE TEST)

1. A major disadvantage of monoculture is that
   A. farm cannot be mechanized.
   B. soil texture is destroyed.
   C. soil nutrients are leached.
   D. diseases and pests build up.

2. A tractor is connected to a tractor through the
   A. power take-off shaft.
   B. check chains.
   C. drawbar.
   D. three-point linkage.
3. Continuous irrigation of farmlands leads to
   A. increased soil porosity.
   B. formation of tillage pans.
   C. increased soil fertility.
   D. loss of soil fertility.

4. Which of the following crops is biennial?
   A. Onion
   B. Pepper
   C. Rice
   D. Tomato

5. A farming system in which food crops are planted between rows of leguminous trees is called
   A. alley cropping.
   B. continuous croppings.
   C. ecological farming.
   D. ley farming.

6. Water of volume 250cm$^3$ was poured on a soil sample. If 75% of the water drained through the soil, determine the amount of water that was left in the soil.
   A. 25.0 cm$^3$
   B. 62.5 cm$^3$
   C. 175.0 cm$^3$
   D. 187.5 cm$^3$

7. Acaricides are used to control
   A. birds.
   B. mites.
   C. monkeys.
   D. rodents.

8. Freshly cut grass fed to sheep is called
   A. fodder.
   B. hay.
   C. pasture.
   D. silage.

9. For an effective extension education, the extension agent must be
   A. aggressive.
   B. resourceful.
   C. rich.
   D. young.
10. An example of a long-term liability of a farmer is
   A. capital.
   B. interest charges.
   C. salary.
   D. taxes.

**PAPER 2**

*(ESSAY)*

1. (a) Name **two** aquatic *invasive alien species*.  

   **[2 marks]**

   (b) Explain **two** effects of invasive alien species in agriculture.  

   **[4 marks]**

   (c) Outline **five** ways to control invasive alien species.  

   **[10 marks]**

2. (a) Explain the term *weathering*.  

   **[2 marks]**

   (b) Describe the following chemical processes of weathering:
   (i)  solution;
   (ii)  hydrolysis;
   (iii) hydration.  

   **[9 marks]**

   (c) Explain how climate influences the type of soil formed at a place.  

   **[5 marks]**

**PAPER 3**

*(PRACTICAL)*

**List of specimens**

Specimen A - Top - pan weighing scale
Specimen B - Bottle
Specimen C - Open - top cylindrical can

1. (a)  
   (i) Identify **each** of the illustrated devices.
   (ii) Mention **one** agricultural use of **each** of the devices.
   (iii) State **one** advantage and **one** disadvantage of the use of **each** of the devices in measurements.
   (iv) Mention **one** precaution that should be taken in using **each** of the devices to ensure accurate measurements.  

   **[15 marks]**
1. The figure below is an illustration of part of a farm animal. Study it carefully and answer the questions that follow.

(a) Name the parts labelled I and III. [2 marks]

(b) (i) State the management practice that has been carried out on the part labelled II.

(ii) Give two reasons for carrying out the management practice stated in (i).

(iii) Mention two devices that could be used to carry out the management practice stated in (i).

(iv) State two precautions that should be taken when carrying out the management practice stated in (i). [9 marks]

(c) Name four diseases that could affect the farm animal illustrated. [4 marks]

2. The information below is a financial data on Johnson Farms from January 1, 2012 to December 31, 2012.

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<tr>
<th>Item</th>
<th>Amount (Ghana Cedis)</th>
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Use the information above to prepare a balanced sheet for the farm as December 31, 2012. [5 marks]