

SIK ARTHUR LEWIS COMMUNITY COLLEGE **DIVISION OF AGRICULTURE**

CERTIFICATE IN GENERAL AGRICULTURE

2010/11 END OF SEMESTER TWO EXAMINATION

COURSE:

CROP PRODUCTION AND TECHNOLOGY

(CPTIII)

DATE: MAY 2011

DURATION: 2 ½ HOURS

ANSWER ANY FOUR QUESTIONS. BEGIN EACH QUESTION ON A NEW SHEET.

- 1. (a) Define "crop" and "crop production". (5 marks)
 - (b) Discuss three environmental factors that affect crop production. (6 marks)
 - (c) Explain why market, capital and expertise are important factors to consider before even going into production. (9 marks)
- 2. (a) State three objectives of good land preparation. (6 marks)
 - (b) Compare the physical and chemical properties of the three main soil types. Use a table format. (10 marks)
 - (c) Explain why drains are an important component of land preparation. (4 marks)
- 3. (a) State three reasons why water is important to crops. (3 marks)
 - (b) List four methods of testing for soil moisture and explain how any two methods named work. (8 marks)
 - (c) Name three methods of irrigation and give one advantage and one disadvantage of each method named. (9 marks)
- 4. Pests including weeds can have detrimental effects on crop yield
 - (a) (i) Define the term "weed". (1 mark)
 - (ii) List four methods of weed control. (4 marks)
 - (iii) Explain two ways weeds affect crop growth. (4 marks)
 - (b) (i) Insects are a major group of crop pest. Identify insect pests based on their feeding habits. (3 marks)
 - (ii) Suggest to a farmer three ways, apart from chemical application, how to control insect pests. (6 marks)
 - (c) Explain what is meant by integrated pest management. (2 marks)
- 5. The harvest stage is the most rewarding part of the crop cycle.
 - (a) (i) Define the term "yield". (1 mark)
 - (ii) Name the methods of harvest and state two reasons for selecting a particular method.
 - (b) State the two major objectives of post harvest technology. (4 marks)
 - (c) Discuss three ways how these objectives in (b) can be achieved. (9 marks)