



FIJI NATIONAL UNIVERSITY
College of Agriculture, Fisheries & Forestry
School of Agriculture Sciences & Forestry
Department of Crop Production
Trade Diploma in Agriculture – Year 2
Final Examination
Semester 1 - 2019
AGO 521 – Field Crop Husbandry

Writing Time: 3:00 hours

Reading Time: extra 10 minutes allowed at the beginning of the exam

Total Marks: 100

INSTRUCTIONS:

1. This paper consists of five pages.
2. Please check to see that all your paper is complete.
3. Answer all questions in the Answer Booklet only.
4. No written or printed material and mobile phones are allowed in the examination hall.
5. Marks allocated for each section appears at the side of each question or in the instructions so allocate your time accordingly.
6. This paper is divided into three sections.

Section A: Multiple Choice

(30 Marks)

Section B: Short answer

(30 Marks)

Section C: Essay

(40 Marks)

Section A: Multiple Choice**(30 Marks)**

This section of the paper is comprised of 15 multiple choice questions with each question being worth 2 marks. You are required to write down the letter of the most suitable choice in the answer booklet provided.

1. What is the scientific name for taro?
 - A. *Manihot esculenta*.
 - B. *Lycopersicon esculentum*.
 - C. *Capsicum annum*.
 - D. *Colocasia esculenta*
 - E. None of the above.

2. Which of the following is an important disease of taro?
 - A. Taro leaf blight.
 - B. Taro leaf rust.
 - C. Taro leaf rot.
 - D. Taro stalk rot.
 - E. Both A and C.

3. Which of the following is also known as dent corn?
 - A. Twisted corn.
 - B. Dent maize.
 - C. Field corn.
 - D. Teosinte.
 - E. None of the above.

4. Which of the following is the most commonly used ratio of NPK applied in Fiji?
 - A. 14:14:22.
 - B. 29:21:13.
 - C. 10:10:10.
 - D. 13:13:21.
 - E. 21:8:19.

5. Early season yam varieties have a potential yield of _____ t/ha.
 - A. 20
 - B. 30
 - C. 40
 - D. 50
 - E. 60

6. Tomato originates from _____.
- A. Argentina.
 - B. Nigeria.
 - C. Bolivia.
 - D. North America.
 - E. China.
7. Cultivation of okra in Fiji requires an approximate seed rate of _____ kg/ha.
- A. 5.
 - B. 6.
 - C. 7.
 - D. 8.
 - E. 9.
8. _____ is regarded as the wild relative of all maize varieties.
- A. Teosinte.
 - B. Tesente.
 - C. Teosente.
 - D. Teasonte.
 - E. Teainte.
9. During the _____ growth phase in taro, the number of leaves increases to support starch production.
- A. establishment
 - B. leaf
 - C. vegetative
 - D. corm
 - E. root
10. Which of the following is the best representation of the number of growth phases in sugarcane?
- A. 1.
 - B. 2.
 - C. 3.
 - D. 4.
 - E. 5.
11. Pigeon pea (*Cajanus cajan*) is an extremely hardy plant and can survive in areas with less than _____ of rainfall.
- A. 650 mm
 - B. 700 mm
 - C. 750 mm

- D. 800 mm
 - E. 850 mm
12. Chilli cultivation is best carried out in Fiji between which months?
- A. January to September.
 - B. December to May.
 - C. August to January.
 - D. September to February.
 - E. June to December.
13. Which of the following is the most accurate representation of yield potential for cassava?
- A. 10-20 t/ha.
 - B. 20-30 t/ha.
 - C. 30-40 t/ha.
 - D. 40-50 t/ha.
 - E. 50-60 t/ha.
14. Which of the following is a recommended variety for maize in Fiji?
- A. Beqa.
 - B. Tausala.
 - C. Pritam.
 - D. Nirala.
 - E. Red fire.
15. How many varieties of yam are grown in Fiji?
- A. 40.
 - B. 70.
 - C. 80.
 - D. 90.
 - E. None of the above.

Section B: Short answer**(30 Marks)****There are a total of 7 questions in this section. All are compulsory.**

1. Analyse and discuss determinate and indeterminate growth habits with two relevant examples for each type. **(5 marks)**
2. Analyse and discuss the growth cycle of Dalo. **(4 marks)**
3. Convey the six recommended varieties of cassava for Fiji and provide the seed rate for planting cassava. **(4 marks)**
4. Analyse and discuss the economic importance of yam in Fiji. **(4 marks)**
5. Analyse and discuss the differences between Asian and African rice. **(4 marks)**
6. Pigeon pea has significant potential to become a food security crop in Fiji. Analyse and discuss the origin and cultivation of pigeon pea globally. **(4 marks)**
7. Sweet potato is an important but underutilized source of food in Fiji. Analyse and discuss the economic importance of this vital crop and briefly describe its yield potential. **(5 marks)**

Section C: Essay**(40 Marks)**

There are a total of NINE (9) options given for answering the essay question in this section. You are required to answer choose FOUR (4) of these to write your answers. Each essay should contain a minimum of 200 words and is worth 10 marks.

Agricultural crops vary significantly in their requirements for production of optimum yield. Together these requirements make up the package of practices. The package of practices itself contains information such as economic importance, soil requirements, recommended varieties, climatic requirements, land preparation, seed rate, spacing and planting, pest and weed control, yield, and harvesting and storage. Keeping this in mind, you are required to choose four (4) crops from the 9 given below and describe the package of practices for that particular crop. Your options are as follows:

- A. Describe the package of practices for Rice.
- B. Describe the package of practices for Maize.
- C. Describe the package of practices for Cassava.
- D. Describe the package of practices for Yam.
- E. Describe the package of practices for Taro.
- F. Describe the package of practices for Sweet Potato.
- G. Describe the package of practices for Pigeon Pea.
- H. Describe the package of practices for Tomato.
- I. Describe the package of practices for Sugarcane.

THE END