



# FIJI NATIONAL UNIVERSITY

College of Agriculture, Fisheries & Forestry

School of Agricultural Sciences and Forestry

Department of Crop Production

Bachelor of Science in Agriculture- Year II

Final Examination

Semester I-2019

## HOR 621- Horticultural Vegetables and Flowers

**Total Marks: 100**

**Time Allowed: Three Hours**

*[An extra ten minutes is allowed for reading this paper]*

### INSTRUCTIONS

1. This paper consists of 05 pages. Please check your paper is complete.
2. Write your student number on the front page of your **Answer Book**.
3. Write **all** your answers in the **Answer Booklet** provided.
4. If you use extra sheets of paper be sure to show clearly the number of question being answered and to tie each sheet securely in your **Answer Book** at the appropriate place.
5. There are **three** sections in this paper. Sections A and B are compulsory. Note the **choices** in **Section C**.

### SUMMARY OF QUESTIONS

Section	Guidelines	Total Marks	Suggested Time
A	Part 1: Multiple Choice Part 2: True and False	10	20 minutes
		10	
		<b>20 Marks</b>	
B	Short answers Answer all the questions. Each question is worth 5 marks.	30 Marks	50 minutes
C	Long answers Answer only Five (5) questions from the following. Answer each question in 300 words. Each question carries 10 marks.	50 Marks	110 minutes

**SECTION A****[Compulsory]****[20 marks]**

- Answer all two parts in this section.
- Each part is worth 10 marks.

**PART .1****MULTIPLE CHOICE****[10 marks]**

- A. There are ten multiple-choice questions in this part.  
B. All are compulsory.  
C. Each question is worth 1 mark.  
D. For each question, circle the letter of the **best** answer on the grid provided in the Answer Booklet.

1. Vegetable forcing is a method in which vegetable are grown in \_\_\_\_\_.
  - a. Normal season
  - b. Offseason
  - c. Both (a) & (b)
  - d. None
2. Which of the following is not a constraints in vegetable production \_\_\_\_\_.
  - a. Lack of planning in production
  - b. Availability of improved varieties
  - c. High cost of basic production elements
  - d. Transportation limits
3. Normal size of kitchen garden is \_\_\_\_\_.
  - a. 25x10m
  - b. 35x12m
  - c. 30x30m
  - d. None of the above
4. *Rosa hybrida* is scientific name of \_\_\_\_\_.
  - a. Jasmine
  - b. Mary gold
  - c. Rose
  - d. None of the above
5. The word cole originated form the word “caules” meaning \_\_\_\_\_.
  - a. Root
  - b. Stem
  - c. Leaf
  - d. None of the above
6. Scientific name of Cabbage is \_\_\_\_\_.
  - a. *Brassica oleracea var italica*
  - b. *Brassica oleracea var capitata*
  - c. *Brassica oleracea var botrytis*
  - d. *Brassica oleracea var acephala*

7. Chilli originated from \_\_\_\_\_.
- Mediterranean region
  - Japan
  - Mexico
  - Pakistan
8. Garlic belongs to family \_\_\_\_\_.
- Amaryllidaceae
  - Solanaceae
  - Cucurbitaceae
  - Brassicaceae
9. The response of plants towards water is known as \_\_\_\_\_.
- Phototropism
  - Geotropism
  - Aero tropism
  - Hydrotropism
10. Chromosome number of brinjal is \_\_\_\_\_.
- 32
  - 24
  - 40
  - 36

**Part.2**

**True and False**

**[10 marks]**

- Write 'T' if you think that the statement is correct and 'F' if you think it is incorrect.
- Write your answers in the Answer Booklet provided on the right hand side beside each question number.

- \_\_\_\_\_ 1. Amaranth is a short duration and shallow rooted crop.
- \_\_\_\_\_ 2. The cost of raising vegetables in the kitchen gardening by own labour is more than the vegetables purchased from the market.
- \_\_\_\_\_ 3. Chromosome number of Cassava is 45.
- \_\_\_\_\_ 4. The edible part of Cauliflower is known as curd.
- \_\_\_\_\_ 5. The edible part of Onion is Clove.
- \_\_\_\_\_ 6. Chromosome number of Sweet potato is 90.
- \_\_\_\_\_ 7. Mana is a variety suitable for local consumption.

- \_\_\_\_\_ 8. The scientific name of lettuce is *Brassica oleracea var botrytis*
- \_\_\_\_\_ 9. Leguminous vegetables are rich source of protein.
- \_\_\_\_\_ 10. The typical flavor of Garlic is due to presence of a volatile compound known as allyl propyl disulfide.

**SECTION. B**

**[Compulsory]**

**(30 Marks)**

**SHORT ANSWERS**

- **Answer the following questions.**
- **Each question is worth 5 marks.**
- **There are 6 questions only.**

Evaluate and discuss:

1. Botany of sweet potato.
2. Kitchen gardening and importance of kitchen gardening.
3. Procedure of seed inoculation in leguminous vegetables.
4. Botany and climatic requirement of Cow pea.
5. Apply your knowledge on steps involved in establishment of lawn.
6. Compare: (A) Hydrotropism (B) Phototropism (C) Geotropism.

**Section C**

**Long Answers**

**[50 marks]**

- **There are 6 questions in this section.**
- **Answer only 5 questions.**
- **Each question is worth 10 marks.**
- **Answer each question in approximately 300 words in the Answer Booklet provided.**

1. Apply your knowledge to discuss the main constraints in vegetable production.
2. Apply your knowledge to discuss in detail the physiological disorders of cauliflower.
3. Evaluate your knowledge to discuss the three principle characteristics of light which affects plant growth.
4. Evaluate the cultivation of onion in reference to:
  - a. Importance
  - b. Soil
  - c. Climate
5. Judge your knowledge on cultivation of Amaranths in reference to:

- a. Origin and Distribution.
  - b. Climate and soil.
  - c. Method of sowing.
6. Apply your knowledge to discuss the consideration taken in planning of gardening.

**THE END**