



# 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

Trimester I-2018

## HOR 601- Production Technology of 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 Questions	10	40 minutes
	Part 2: Fill in the Blanks	10	
	Part 3: True and False	10	
	Part 4: Matching	10	
		<b>40 Marks</b>	
B	Short answers Answer all the questions. Each question is worth 5 marks.	<b>30 Marks</b>	<b>50 minutes</b>
C	Long answers Answer only three (3) questions from the following. Answer each question in 300 words. Each question carries 10 marks.	<b>30 Marks</b>	<b>90 minutes</b>

**SECTION A**

[Compulsory]

[40 marks]

- Answer all four 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. Which of the following is a specialized branch of pomology \_\_\_\_\_.
  - a. Olericulture
  - b. Ornamental horticulture
  - c. Floriculture
  - d. Viticulture
2. Which of the following crop is a monocot \_\_\_\_\_.
  - a. Garlic
  - b. Brinjal
  - c. Tomato
  - d. Okra
3. Recommended variety of brinjal is \_\_\_\_\_.
  - a. Chahat
  - b. Redfire
  - c. Local long white
  - d. None of the above
4. Scientific name of zucchini is \_\_\_\_\_.
  - a. Cucurbita pepo
  - b. Lagenaria ciceraria
  - c. Cucurbita mixta
  - d. Cucurbita maxima
5. The word cole originated form the word "caules" means \_\_\_\_\_.
  - a. Root
  - b. Stem
  - c. Leaf
  - d. None of the above
6. Scientific name of sprouting broccoli is \_\_\_\_\_.
  - a. *Brassica oleracea var italica*
  - b. *Brassica oleracea var capitata*
  - c. *Brassica oleracea var botrytis*
  - d. *Brassica oleracea var acephala*

7. Cauliflower originated from \_\_\_\_\_.
- Mediterranean region
  - Japan
  - Iran
  - Pakistan
8. Onion belongs to family \_\_\_\_\_.
- Amaryllidaceae
  - Solanaceae
  - Cucurbitaceae
  - Brassicaceae
9. The response of plants towards light is known as \_\_\_\_\_.
- Phototropism
  - Geotropism
  - Aero tropism
  - Hydrotropism
10. Onion originated from \_\_\_\_\_.
- Northwest India
  - China
  - Germany
  - Pacific

**PART 2**

**Matching**

**[10 marks]**

- Match the descriptions in List B with the words in List A.
- Write the letter of the description from List B in the space beside the matching word.

**List A**

**List B**

- |                                                                                         |                                          |
|-----------------------------------------------------------------------------------------|------------------------------------------|
| _____ 1. French bean                                                                    | a. <i>Dacus Carota</i>                   |
| _____ 2. Cauliflower                                                                    | b. <i>Allium cepa</i>                    |
| _____ 3. Onion                                                                          | c. <i>Brassica oleracea var botrytis</i> |
| _____ 4. Pea                                                                            | d. Pruning                               |
| _____ 5. Carrot                                                                         | e. <i>Phaseolus Valgaris</i>             |
| _____ 6. Tomato                                                                         | f. American Carpet Grass                 |
| _____ 7. Short grass and surface layer of soil bound together by its roots are known as | g. <i>Solanum Lycopersicum</i>           |

- \_\_\_\_\_ 8. Popular lawn grass in Fiji is known as \_\_\_\_\_ h. Hedge
- \_\_\_\_\_ 9. Cutting away of some of the branches to encourage new growth is known as \_\_\_\_\_ i. *Pisum sativum*
- \_\_\_\_\_ 10. A fence of close planted shrubs in rows along the boundary are known as \_\_\_\_\_ j. Turf

**Part.3**

**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. Cabbage growth is arrested if temperature goes beyond 25<sup>o</sup>c.
- \_\_\_\_\_ 2. The cost of raising vegetables in the kitchen gardening by own labour is more than the vegetables purchased from the market.
- \_\_\_\_\_ 3. Cultivation of vegetables provide more employment than fruit crops.
- \_\_\_\_\_ 4. The edible part of cauliflower is known as floris.
- \_\_\_\_\_ 5. The edible part of onion is bulb.
- \_\_\_\_\_ 6. Chromosome number of cowpea is 22.
- \_\_\_\_\_ 7. Mana is a variety suitable for local consumption.
- \_\_\_\_\_ 8. The scientific name of taro is *Amorphophyllus hetrophyllus*.
- \_\_\_\_\_ 9. Leguminous vegetables are rich source of proteins.
- \_\_\_\_\_ 10. The typical flavor of onion is due to presence of a volatile compound known as allyl propyl disulfide.

**Part.4**

**Fill in the blanks**

**[10 marks]**

- Write your answers in the space provided in the Answer Booklet.
1. \_\_\_\_\_ deals with the culture of non woody (herbaceous) plants for food.
  2. The seed rate of okra is \_\_\_\_\_.
  3. Pumpkin belongs to family \_\_\_\_\_.
  4. Buttoning is physiological disorder of \_\_\_\_\_.

5. The content of each packet of Rhizobium Inoculant suitable for use in one hectare varies from \_\_\_\_\_.
6. The seed rate requirement of French bean varies from \_\_\_\_\_.
7. Diamond back moth is a major pest of \_\_\_\_\_ crop.
8. A rooting hormone which initiates or promotes root growth is \_\_\_\_\_.
9. The scientific name of Zucchini is \_\_\_\_\_.
10. Vegetable forcing is concerned with the production of vegetables out of their \_\_\_\_\_ season.

## **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. Difference between fruits and vegetables.
2. Kitchen gardening and advantage of kitchen gardening.
3. Climate and sowing method of beet root.
4. Botany and climatic requirement of French bean.
5. Apply your knowledge on steps involved in establishment of lawn.
6. Compare: (A) Hydrotropism (B) Phototropism (C) Geotropism.

## **Section C**

**Long Answers**

**[30 marks]**

- There are 4 questions in this section.
  - Answer only 3 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 importance of Olericulture.
  2. Apply your knowledge to discuss in detail the physiological disorders of cauliflower.
  3. Evaluate greenhouse and demonstrate construction of greenhouse, their advantage and disadvantage.
  4. Evaluate the cultivation of French bean in reference to:
    - a. Soil
    - b. Fertilizer / Manure
    - c. Irrigation

**THE END**