



FIJI NATIONAL UNIVERSITY

College of Agriculture, Fisheries & Forestry

Department of Crop Production

School of Agricultural Sciences

Bachelor of Science in Agriculture – Year I

Trimester II Final Examination - 2017

HOR : 502 – Production Technology of Fruit Crops

Total Marks: 100

Time Allowed: Three Hours

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

INSTRUCTIONS

1. This paper consists of 6 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**.
6. **There are Six question pages in this paper.**

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	
		40 Marks	
B	Short answers Answer all the questions. Each question is worth 5 marks.	30 Marks	50 minutes
C	Long answers Answer only three (3) questions from the following. Answer each question in 300 words. Each question carries 10 marks.	30 Marks	90 minutes

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. Banana belongs to family
 - a. Musaceae.
 - b. Rosaceae.
 - c. Anacardiaceae.
 - d. None of the above.
2. Which of the following is ripening hormone?
 - a. GA3.
 - b. Cytokinin.
 - c. Ethylene.
 - d. Abscisic acid.
3. Which of the following plant bio-regulators increases root formation in cuttings
 - a. Ethylene.
 - b. IBA.
 - c. Abscisic acid.
 - d. GA3.
4. Fruit of mango is called
 - a. Drupe.
 - b. Berry.
 - c. Hesperidium.
 - d. None of above.
5. Which is the biggest cultivated fruit in world
 - a. Jack fruit.
 - b. Coconut.
 - c. Breadfruit.
 - d. Lemon.

6. Papaya is commercially propagated by
 - a. Budding.
 - b. Layering.
 - c. Cutting.
 - d. Seed.

7. Based on the climatic requirement papaya is classified as a
 - a. Temperate fruit.
 - b. Tropical fruit.
 - c. Sub- tropical fruit.
 - d. Sub- temperate fruit.

8. Botanically banana fruit is a
 - a. Drupe.
 - b. Berry.
 - c. Pome.
 - d. Nut.

9. The inflorescence of banana is a
 - a. Catkin.
 - b. Spadix.
 - c. Raceme.
 - d. Umbel.

10. The study of fruits is known as
 - a. Pomology.
 - b. Olericulture.
 - c. Physiology.
 - d. Agronomy.

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

- _____ 1. Mango belongs to family
- _____ 2. Scientific name of Banana is
- _____ 3. Multiplication of plants by seed is known as
- _____ 4. Polyembryony is found in
- _____ 5. Most suitable fruit for jelly preparation is
- _____ 6. Chromosome number of citrus species is
- _____ 7. Guava belongs to family
- _____ 8. Jack fruit belongs to family
- _____ 9. Fruit of mango is known as
- _____ 10. Optimum temperature for growth of mango is

List B

- a. *Musa paradisiaca*
- b. sexual propagation
- c. 30-32°C
- d. Mango, Citrus
- e. Anacardiaceae
- f. Guava
- g. 18
- h. 20
- i. Myrtaceae
- j. Moraceae
- k. Drupe
- l. 24-27°C

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. Horticulture literally means garden culture or culture of garden crop.
- _____ 2. Fruit is a developed seed with or without accessory parts.
- _____ 3. Tea is an example of plantation crops.
- _____ 4. Lemon grass is an aromatic plant.
- _____ 5. Vitamin B2 is also known as Thiamine.
- _____ 6. Climatically papaya is a temperate fruit.
- _____ 7. Major diseases of mango are powdery mildew and anthracnose.
- _____ 8. Plants producing seedless fruit can only be propagated vegetatively.
- _____ 9. Citrus species belongs to family.
- _____ 10. The origin of Jack fruit is Australia.

Part.4**Fill in the blanks****[10 marks]**

- Fill in the blanks with the appropriate word from the list given below to complete the following statements.
- Do NOT use a word more than once.
- Write your answers in the space provided in the Answer Booklet.

6-8 years	Late	JBA	<i>Carica papaya</i>
Harmao	Pectin	Ascorbic acid	<i>Abelmoschus papaya</i>
Pruning	Ethylene	Blood	25
Early	IBA	Water	56

- 1 Jack fruit plant usually start bearing fruit _____ after planting.
2. Chromosome number of Jack fruit is _____.
3. The term hormone is derived from a Greek word _____.
4. In _____ we start at the top of the tree and work downward.
5. Training helps in promoting _____ production.
6. Scientific name of papaya is _____.
7. Guava is the best suited for jelly formation because, it is rich in _____.
8. Vitamin C is also known as _____.
9. Vitamin K helps in clotting of _____.
10. Rooting hormone is _____.

SECTION. B**[Compulsory]****(30 Marks)****SHORT ANSWERS**

- **Answer the following questions.**
- **Each question is worth 5 marks.**
- **There are 6 questions only.**
- **Discussing a point is very important to gain full marks.**

1. Discuss why horticultural crops are known as protective fruits?
2. Discuss the climatic requirement of citrus cultivation?
3. Discuss the training and pruning of guava?
4. Discuss the soil and climatic requirement of Jack fruit?
5. Convey the advantages of high density planting?
6. Analyze two major disease of Mango and briefly discuss?

Section C

Long Answers

[30 marks]

- Answer any three (3) questions only.
- Each question is worth 10 marks.
- There are 4 questions given.
- Answer each question in approximately 250-300 words in the Answer Booklet provided.

1. Discuss in detail the role of vitamins in our daily diet and their sources?

2. What is layering? Analyze different methods of layering?

3. Enlist various types of plant growth regulators. Discuss some of the important application of growth regulator in horticulture.

4. Discuss the cultivation of Papaya in reference to:
 - a) Soil
 - b) Climate

THE END