



**FIJI NATIONAL UNIVERSITY**  
**College of Agriculture, Fisheries & Forestry**  
**School of Agriculture and Forestry**  
**Department of Crop Science**  
**Bachelor of Science in Agriculture (Year III)**  
**Final Examination**  
**Trimester II– 2019**

**HOR 602 – Production Technology of Spices, Aromatics and Medicinal  
Plants**

**Total Marks: 100**

**Time Allowed: Three Hours**

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

**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 are allowed in the examination hall.
5. Marks allotted for each section appears at the side of each question so allocate your time accordingly.
6. This paper is divided into three section.

**Section A: Multiple Choice**

**(20 Marks)**

**Section B: Short answers**

**( 30 Marks)**

**Section C: Essay**

**( 50 Marks)**

**SECTION A**

**MULTIPLE CHOICE**

**[20 marks]**

- A. There are twenty 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 crops acts as an astringent?
  - a. Cardamom
  - b. Coriander
  - c. Turmeric
  - d. Cinnamon
  
2. Which of the following are used in arresting the discharge of blood, mucus etc.?
  - a. Basil
  - b. Fennel
  - c. Sandalwood
  - d. Chirayata
  
3. Turmeric can be raised as mixed crop with \_\_\_\_\_.
  - a. Chilli
  - b. Colocasia
  - c. All of the above
  - d. None of the above
  
4. Soft rot is most destructive disease in \_\_\_\_\_.
  - a. Turmeric
  - b. Ginger
  - c. Cinnamon
  - d. Cardamom
  
5. *Cydia hemidoxa* is a serious pest in \_\_\_\_\_.
  - a. Citronella
  - b. Lemongrass
  - c. Black pepper
  - d. None of the above
  
6. Young leaves of which crop are used for garnishing of food?
  - a. Coriander
  - b. Fenugreek
  - c. Cumin
  - d. None of the above

7. The chromosome number of cumin is \_\_\_\_\_.
- 18
  - 14
  - 16
  - 20
8. Palmarosa belongs to family \_\_\_\_\_.
- Gramineae
  - Poaceae
  - Leguminoseae
  - None of the above
9. Vetiver can be propagated by \_\_\_\_\_.
- Tillers
  - Slip
  - Both of the above
  - None of the above
10. Geranium comes to first harvest in \_\_\_\_\_ month.
- 3
  - 4-6
  - 7
  - 9
11. Botanical name of Davanam is \_\_\_\_\_.
- Artemisia pallens*
  - Pelargonium graveolens*
  - Curcuma longa*
  - None of the above
12. Davanam originated in \_\_\_\_\_.
- South Africa
  - Malaysia
  - India
  - Mexico
13. Coconut is a \_\_\_\_\_ crop.
- Self-pollinated
  - Cross pollinated
  - Often cross pollinated
  - None of the above
14. In coconut which of the below given crops can be grown as intercropping?
- Banana
  - Turmeric
  - Sweet potato
  - All of the above

15. Betelvine belongs to family \_\_\_\_\_.
- Zingiberaceae
  - Piperaceae
  - Caesalpinaceae
  - Leguminoseae
16. Cashew nut originated in \_\_\_\_\_.
- South America
  - Mexico
  - China
  - India
17. Feni (liquor) is prepared from \_\_\_\_\_.
- Black pepper
  - Coconut
  - Betelvine
  - Cashew nut
18. The economic part of *Dioscorea floribunda* plant is \_\_\_\_\_.
- Bulbies
  - Cloves
  - Berry
  - Rhizomes (tuber)
19. Rauwolfia belongs to family \_\_\_\_\_.
- Apocynaceae
  - Zingiberaceae
  - Piperaceae
  - None of the above
20. Aloe Vera belongs to family \_\_\_\_\_.
- Apocynaceae
  - Liliaceae
  - Piperaceae
  - Alliaceae

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

- **Answer all the following questions.**
  - **Each question is worth 6 marks.**
  - **There are 5 questions only.**
1. Apply your knowledge to discuss planting and manorial requirement of turmeric.
  2. Judge your knowledge on climate and soil requirement of pepper.
  3. Evaluate your knowledge to discuss the processing process of cardamom in detail.
  4. Judge your knowledge on distillation process of lemongrass.
  5. Discuss the sowing method and the time of sowing of Davanam.

**Section C****Long Answers****[50 marks]**

- **There are 6 questions in this section.**
  - **Answer only Five (5) questions.**
  - **Each question is worth 10 marks.**
  - **Answer each question in approximately 350 words in the Answer Booklet provided.**
1. Evaluate your knowledge on the importance of some herbs with their medicinal values.
  2. Apply your knowledge to discuss the production technology of vetiver in reference to:
    - a. Soil and climate
    - b. Propagation
    - c. Raising of initial nursery
  3. Utilize your knowledge to discuss on the uses and economic importance of coconut.
  4. Evaluate your knowledge on the cultivation practices of oil palm in reference to:
    - a. Irrigation management
    - b. Fertilizer requirement
    - c. Basin management
  5. Apply your knowledge to discuss the cultivation practices of betelvine in reference to:
    - a. Soil preparation
    - b. Soil sterilization
    - c. Planting of betelvine cuttings
    - d. Training and pruning
  6. Evaluate your knowledge to discuss botany and climatic requirement of cashew nut.

**THE END**