

**FIJI NATIONAL UNIVERSITY**  
**College of Agriculture, Fisheries & Forestry**  
**School of Agriculture and Forestry**  
**Department of Crop Science**  
**Bachelor of Science in Agriculture**

**Semester 2 Supplementary Examination Paper – 2020**

**HOR602 Production technology of spices, aromatics and medicinal plants**

**Writing Time: 3 hours**

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

**Total Marks: 100**

**INSTRUCTIONS:**

1. This paper consists of four 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 so allocate your time accordingly.
6. This paper is divided into Three Section

SECTION	PARTICULARS	TOTAL MARKS
A	Part 1: Multiple Choice Part 2: True and False	10 10
B	Short Answers	30
C	Long answers	50
	<b>TOTAL</b>	<b>100</b>

**Section A: There are two parts in this section. All the questions are COMPULSORY****Part 1: Multiple Choices. Select the correct answer. (10marks)****In your answer sheet write the question number followed by the answer.**

1. Soft rot is most destructive disease in \_\_\_\_\_.
  - A. turmeric
  - B. ginger
  - C. cinnamon
  - D. cardamom
  
2. Palmarosa belongs to family \_\_\_\_\_.
  - A. Graminae
  - B. Poaceae
  - C. Leguminoseae
  - D. None of the above.
  
3. The botanical name of betel vine is \_\_\_\_\_.
  - A. *Piper betel*
  - B. *Papaver somniferum*
  - C. *Catharanthus roseus*
  - D. *Ocimum sanctum*
  
4. In coconuts, the leaves born at crown region are called \_\_\_\_\_.
  - A. fronds
  - B. caudex
  - C. tricarpic
  - D. spathe
  
5. \_\_\_\_\_ is the removal of male and female flowers in the early stages of oil palm growth.
  - A. Ablation
  - B. Spadix
  - C. Monoecious
  - D. Pollination
  
6. The main chemical constituent of *Artemisia pallens* is \_\_\_\_\_.
  - A. Davanone
  - B. Diosgenin
  - C. Botogenin
  - D. Kryptogenin
  
7. The economic part of *Dioscorea floribunda* plant is \_\_\_\_\_.
  - A. bulbies
  - B. cloves
  - C. berry
  - D. rhizomes (tuber)

8. Vetiver oil is obtained by steam distillation of vetiver \_\_\_\_\_.
- Leaves
  - Stem
  - Roots
  - Leaves and stem
9. The economic part of *Rauvolfia Serpentine* used is:
- Stem
  - Leaf
  - Roots
  - Bark
10. Aloe Vera belongs to family \_\_\_\_\_.
- Apocynaceae
  - Liliaceae
  - Piperaceae
  - Alliaceae

**Part 2: True or False. Select the correct answer. (10marks).**

**In your answer sheet write the question number followed by the answer.**

- Chirayata is an antipyretic herb.
- Pollination in cardamom is done by insects.
- The best pH range for cultivation of Citronella is 5-7 pH.
- Betel vine is a perennial, dioecious and evergreen climber plant.
- Dioscorea floribunda* is the scientific name of yam.
- Areca nut inflorescence is known as cymose.
- Cardamom is known as "Queen of Spices".
- Botanical family of fenugreek is *Umbelliferae*.
- Cumin is susceptible to fungus diseases.
- Lemongrass is a good source of natural citral that is used in perfumery and favour agent for soft drinks.

**SECTION B: Short Answers (30 marks)**

**Answer all the questions. Each question is worth of 5 marks.**

- Evaluate and discuss the harvesting and post-harvest management of Betel vine.
- Analyse and discuss the importance of herbs and spices.
- Evaluate the sowing method and the time of sowing Davanam.
- Evaluate and discuss the importance of medicinal plants in human health with examples.

Student ID No.....

Date.....

5. Apply your knowledge on pepper cultivation and discuss the methods of propagation.
6. Analyse and discuss the distillation process of Citronella.

**Section C- Long Answers (50marks). All questions are COMPULSORY.**

1. Evaluate and discuss the harvesting and postharvest management of Coriander.
2. Apply your knowledge to discuss important processing techniques carried in cashew nut.
3. Analyse and discuss the oil palm in reference to:
  - i. Irrigation management
  - ii. Fertilizer requirement
  - iii. Basin management.
4. Evaluate your knowledge to describe climate, soil and propagation technique of cardamom.
5. Apply your knowledge to discuss the importance, climatic and soil requirements, and postharvest processing of citronella.

**THE END!!!**