



FIJI NATIONAL UNIVERSITY
COLLEGE OF AGRICULTURE, FISHERIES AND FORESTRY

Bachelor of Education in Agricultural Science First Year First Trimester Final Examination- 2017

APP 511: Principles of Crop Protection

Time Allowed: 3.00 hours plus (10 minutes reading time)

Total Marks: 50

INSTRUCTIONS:

1. This paper consists of five pages including one Answer Sheet.
2. Please check to see that all your answer script is complete.
3. Answer all the Objective Type Questions on the Answer Sheet and Descriptive Type Question in the Answer Booklet only.
4. The Answer sheet of the Objective Type Questions will be collected 30 Minutes after the start of Examination.
5. No written or printed material and mobile phones are allowed in the examination hall.
6. Marks allocated for each question appears at the side of each question so allocate your time accordingly.
7. This paper has two parts. The first part contains Objective Type Questions which is having Three Sections – A, B and C. The second part contains Descriptive Type Questions.

I. OBJECTIVE TYPE QUESTIONS (10 Marks)

To be answered only on the Answer Sheet.

Section A: Fill in the blanks. (3 Marks)

Section B: True or False Questions. (2 Marks)

Section C: Multiple choice Questions. (5 Marks)

II. DESCRIPTIVE TYPE QUESTIONS (40 marks)

There is one part in descriptive type questions. It is compulsory to attempt four (4) questions. Write your answer on the Answer Booklet. Answer every question from a new page to facilitate evaluation.

I. OBJECTIVE TYPE QUESTIONS

Note: Answer only on the Answer Sheet and return 30 minutes after the start of Examination.

Time: 0.5 hrs.

Total Marks: 10

A. Fill in the blanks.**(3x1=3 Marks)**

1. The hanging is a characteristic which all organisms under the phylum Arthropoda shares in common.
2. The phylum shares a common characteristic, i.e. they all have cylindrical bodies.
3. Physiological stress is a classic example of stress.

B. True or False questions: Select the correct answer.**(2x1=2 Marks)**

4. The embryo of a nematode develops inside the egg to become the first-stage juvenile.
5. There four stages of a parasitic plant nematode are eggs, larvae, pupa and adult.....

C. Multiple choice questions: Select the correct answer.**(5x1=5 Marks)**

6. are the second largest phylum of the animal kingdom, forming a major part of the world fauna.

A.	Mollusca	B.	Insecta
C.	Arthropoda	D.	Nematoda

7. The.....is the only class of molluscs which have successfully invaded land.

A.	Arthropoda	B.	Nematoda
C.	Gastropoda	D.	Insecta

8. is the study of the interactions between organisms and the environment.

A.	Biodiversity Hotspot	B.	Ecosystem
C.	Biodiversity	D.	Ecology

9. The presence of best distinguishes a vertebrate pest from other types of pests.

A.	Hanging appendages	B.	Backbone
C.	Pair of wings	D.	Segmented bodies

10. The..... is a type of pathogen that could be detrimental to crop production.

A.	Arthropoda	B.	Molluscs
C.	Nematoda	D.	Virus

II. Descriptive type Questions

(40 Marks)

Note: Attempt FOUR Questions Only. FOUR questions from this part are compulsory. All carries ten (10) marks each.

1) Arthropods

- i) A Yr 11 student asks you about the systematic classification of an insect. Discuss the systematic classification of an insect. (2.5 marks)
- ii) You are to explain to a group of Yr 12 students about the characteristics of arthropods. Discuss the characteristics of arthropods. (2.5 marks)
- iii) A Yr 13 student asks you about the characteristics of an insect pest. Discuss, draw and label the distinguishing characteristics of an insect. (5 marks)

2) Nematology

- i) Draw and label the structural morphology of a nematode. (3 marks)
- ii) Discuss the two types of plant nematodes and how they affect crop plants. (4 marks)
- iii) Discuss the life cycle of nematodes. (4 marks)

3) Molluscs

- i) Draw and label the structural morphology of a mollusc. (5 marks)
- ii) Discuss four control methods of molluscs. (5 marks)

4) Plant Pathogens

- i) Draw and label the structural morphology of any two plant pathogens. (4 marks)
- ii) Discuss the disease cycle in crops. (6 marks)

5) Abiotic Stresses

- i) Discuss physiological stresses and its impact on crop plants. (3 marks)
- ii) Discuss nutritional stresses and its impact on crop plants. (3 marks)
- iii) Discuss environment and physical disorders and their impact on crop plants.
(4 marks)

Marks obtained:

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I. Objective Type Questions - Answer Sheet

Time: 0.30 hrs.

Total Marks: 10

A.	1.		
	2.		
	3.		
B.	4.		
	5.		
C.	6.		
	7.		
	8.		
	9.		
	10.		

The End

