



**FIJI NATIONAL UNIVERSITY**  
**COLLEGE OF AGRICULTURE, FISHERIES AND FORESTRY**

**Trade Diploma in Agriculture First Year First Trimester Final Examination- 2017**

**ENT 402: Agricultural biology**

**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 paper 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 ..... is the second level of classification of which one is known as Arthropoda.
2. The ..... is a classic example of arthropod that has established itself as an invasive species in Fiji.
3. One of the exotic invasive species that Fiji is on the lookout for is .....

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

4. The economic threshold to an entomologist is a point at which "control" should be implemented to avoid reaching economic injury level .....
5. The economic injury level to an entomologist is a point at which "control" should be implemented to avoid reaching economic threshold.....

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

6. .... is a set of preventive measures designed to reduce the risk of spread or transmission of infectious diseases, quarantined pests, invasive alien species and living modified organisms from infested areas to non-infested areas.

A.	Biosecurity	B.	Legislation
C.	Quarantine	D.	Biosecurity Promulgation 2008

7. .... is the sum of all the organisms in a given area as well as the abiotic factors with which they interact

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

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

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



9. .... is the variety of species in an ecosystem.

A.	Biodiversity Diversity	B.	Genetic Diversity
C.	Ecosystem Diversity	D.	Species Diversity

10. .... is a relatively small area with an exceptional concentration of endemic species and a large number of endangered or threatened species

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

## 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) Sericulture

- i) A Yr 13 student asks you about systematic classification of silkworm. List the systematic classification of silkworm to genus level (2.5 marks)
- ii) You are to explain to a group of farmers about the lifecycle of silkworm. Draw and label the life cycle of silkworm that you would present to these farmers. (2.5 marks)
- iii) The same farmers ask you about how silkworm produces silk. Discuss the production of silk by silkworm in detail. (5 marks)

### 2) Invasive Species

- i) List five established invasive species in Fiji. (2.5. marks)
- ii) List five invasive species that Fiji is on the lookout for. (2.5 marks)
- iii) You were asked by Mr. Jone, a taro farmer about the importance of invasive species to agricultural growers. Discuss why invasive species is a threat to Agriculture. (5 marks)



**3) Apiculture**

- i) You were approached by Mrs. Prasad, a beekeeper from the Sigatoka valley to tell her more about beekeeping equipments. You started discussing with her about the beehive boxes. Draw and label the different parts of a beehive box. (5 marks)
- ii) Mr. David, a beekeeper from Tailevu asks you about beekeeping pests. Discuss two beekeeping pests and how it affects beekeeping. (5 marks)

**4) Definition of pest, pest organisms, causes of pest outbreaks**

- i) You wanted to highlight the importance of pests and pests outbreak to eggplant farmers in the Sigatoka Valley. List five causes of pest outbreak and how these causes will incur pest outbreaks. (10 marks)

**5) Societal and Environmental Limitations**

- i) You visited a community hall in one of the villages in Naitasiri to empower the youths about agricultural production. In your speech you wanted to address societal limitations to agriculture. Discuss five societal limitations that you will cover with the youths and how these limitations impacts agricultural production.  
(5 marks)
- ii) You were approached by some Yr 12 students to explain about some environmental limitations to agricultural production. List and discuss five environmental limitations to agriculture and how these limitations impact agricultural productions.  
(5 marks)





Student I D No.....

Date: .....

Student I D No.....

Date: .....

Marks obtained: .....

**Trade Diploma in Agriculture First Year First Trimester Final Examination- 2017**

**ENT 402: Agricultural Biology**

**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

