



FIJI NATIONAL UNIVERSITY
COLLEGE OF AGRICULTURE, FISHERIES AND FORESTRY

B. Sc. (Ag.) Second Year Third Trimester Final Examination - 2016

ENT 704: Non-Insect Pests and Their Management

Time Allowed: 3.00 hours plus (10 minutes reading time) Total Marks: 50

INSTRUCTIONS:

1. This question paper consists of six pages including two pages of Answer Sheet.
2. Please check to see that all pages of your question 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 **45 Minutes** after the start of examination (Excluding reading time).
5. No written or printed material and mobile phone 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 question paper is divided into Two Parts. First Part contains Objective Type Questions which has four Sections – A, B, C, and D. All questions of this part are compulsory. Second part is Descriptive Type which has eight (8) questions. Attempt only any **five** questions from this part.

I. OBJECTIVE TYPE QUESTIONS (20 Marks)

To be answered only on the Answer Sheet.

- Section A: Fill in the blanks. (5 Marks)
Section B: Multiple choice Questions. (5 Marks)
Section C: Matching type. (5 Marks)
Section D: Write True or False. (5 Marks)

II. DESCRIPTIVE TYPE QUESTIONS (30 marks)

There are **Eight (8)** descriptive type questions provided, please attempt any **Five (5) questions only**. Each question carries equal six (6) marks. Write your answer of this section only on the Answer Booklet.

Answer every question from a new page to facilitate evaluation.

Student I D No. Date:

I. OBJECTIVE TYPE QUESTIONS

Note: Answer only on the Answer Sheet and return 45 minutes after the start of examination.

Time: 45 Minutes

Total Marks: 20

A. Fill in the blanks.

(10x0.5=5 Marks)

01. Rat, mice and gerbil belong to the order
02. Rats are colour
03. Multiple dose chronic rodenticides cause external and internal
04. One Giant African snail can lay eggs in load of
05. The giant African snail belongs to order
06. The egg mass of black slug resembles a
07. The black slug has pair of antennae.
08. The doves and pigeons produce to feed the young ones.
09. Parrots have generallydistribution.
10. The scientific name of redlegged earth mite is.....

B. Multiple choice questions: Select the correct answer. (10x0.5=5 Marks)

11. About species of rodents are reported.

A.	2275	B.	2276
C.	2277	D.	2278

12. According to an estimate rats destroy% of the total worlds cereal production.

A.	15 %	B.	20 %
C.	25 %	D.	30 %

13. The aim of rodent management is to kill% of rat population.

A.	70%	B.	80%
C.	90%	D.	100%

14. In Fiji of giant African snail were collected on one day just 4 years after its introduction.

A.	15 tones	B.	20 tones
C.	25 tones	D.	30 tones

15. The slug is a common predator of egg and adult of giant African snail.

A.	<i>Incillaria</i> sp.	B.	<i>Euglandina rosea</i>
C.	<i>Platydemus manokwari</i>	D.	<i>Geoplana</i> sp.

16. Cher Ami is on display in the

A.	British Museum of London	B.	Smithsonian Institution of USA
C.	National Museum of New Delhi	D.	National Museum of Denmark

17. Mino starlings have reached the

A.	Solomon Islands	B.	Papua New Guinea
C.	Samoa Islands	D.	Cook Islands

18. The incubation period of house sparrow's eggs is about

A.	8 days	B.	10 days
C.	12 days	D.	14 days

19. The body weight of house crow is about

A.	150 g	B.	250 g
C.	350 g	D.	450 g

20. *Anystis wallacei* Otto..... mites can suppress populations of
..... in some pastures.

A.	Blue oat mite	B.	Balaustium mite
C.	Brown wheat mite	D.	Two-spotted mite

C. Match the following:

(10x0.5=5 Marks)

21.	<i>Onychomys leucogaster</i>	A.	Celphos
22.	Hydrocyanic acid	B.	Eosinophilic meningoencephalitis
23.	Phosphine	C.	Passenger pigeon
24.	<i>Geoplana</i> sp.	D.	Histoplasmosis
25.	Roundworm	E.	PHB -14
26.	Dodo	F.	Blackbuck
27.	Starlings	G.	Flatworm
28.	Pearl millet	H.	Spotted deer
29.	<i>Antilope cervicapra</i> (Linnaeus)	I.	Fumigant rodenticide
30.	<i>Axis axis</i> Erxleben	J.	Insects

D. Write 'True' or 'False'.**(10x0.5=5 Marks)**

31.	Lesser bandicoot rat has 12-18 mammae.	
32.	The offspring of rodents open their eyes in 15 weeks.	
33.	Colchicine sterilizes the male rat.	
34.	Giant African snail is hermaphrodite.	
35.	Metaldehyde 50 % pellets give good control of snail and slug.	
36.	The frugivorous pigeon species have brightly coloured plumage. .	
37.	Peace dove is a common Hindu symbol of the Holy Spirit.	
38.	The granivorous species tend to have thick walls in the gizzards.	
39.	House sparrows are monogamous usually for life.	
40.	The effectiveness of the laser bird scarer increases with increasing light levels.	

II. Descriptive type Questions**Total 30 Marks****Note: Attempt Any Five Questions Only. All carries equal Six (6) marks.**

1.	Provide a list of common rat species based on their shelter and habitat. Discuss the damage caused by rodents.	(6)
2.	Analyse the host plants, distribution and management of black slug.	(6)
3.	Analyse the sparrow's food and feeding habits and discuss its relationship with humans.	(6)
4.	Demonstrate the various body parts of crow with the help of a labeled line diagram. Analyze its distribution, habitats, food and feeding habits.	(6)
5.	Analyse various mechanical methods of bird pest management and discuss visual scarers.	(6)
6.	Analyse phytophagous mite species of agricultural importance. Explain distribution, host plants and damage symptoms of red spider mite.	(6)
7.	Analyse the distribution, characters, ecology and behavior and host plants of black buck.	(6)
8.	Analyse the distribution, life cycle and management of fruit bat.	(6)

XXXXXXXXXXXXXXXXXX

Date:

Marks obtained:

Name:

Student I D No.:

B. Sc. (Ag.) Second Year Third Trimester Final Examination - 2016

Course No. & Title: ENT 704: Non Insect Pests & Their Management

I. Objective Type Questions - Answer Sheet

Time: 45 Minutes

Total Marks: 20

A.	1.		
	2.		
	3.		
	4.		
	5.		
	6.		
	7.		
	8.		
	9.		
	10.		
B.	11.		
	12.		
	13.		
	14.		
	15.		
	16.		
	17.		
	18.		
	19.		
	20.		

C.	21.		
	22.		
	23.		
	24.		
	25.		
	26.		
	27.		
	28.		
	29.		
	30.		
D.	31.		
	32.		
	33.		
	34.		
	35.		
	36.		
	37.		
	38.		
	39.		
	40.		

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