



FIJI NATIONAL UNIVERSITY
COLLEGE OF AGRICULTURE, FISHERIES AND FORESTRY

Bachelor of Science in Forestry Second Year Second Trimester Final Examination- 2019

ENT 702: Biosecurity and Quarantine

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

Total Marks: 100

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 (30 Marks)

To be answered only on the Answer Sheet.

Section A: Fill in the blanks. (10 Marks)

Section B: True or False Questions. (10 Marks)

Section C: Multiple choice Questions. (10 Marks)

II. DESCRIPTIVE TYPE QUESTIONS (70 marks)

There is one part in descriptive type questions. It is compulsory to attempt ALL SEVEN (7) questions. You are to relate all your answers to insect pests. Write your answer on the Answer Booklet. Answer every question from a new page to facilitate evaluation.

I. OBJECTIVE TYPE QUESTIONS**Total Marks: 30****A. Fill in the blanks.****(10 x 1= 10 Marks)**

1. In, a major development took place when the International Plant Protection Convention was signed.
2. A convention was formed under the of the United Nations (UN), to specifically look into the international protection of all plants from exotic pests and diseases.
3. The concept of International Plant Protection was enforced in
4. Today there are 182 member countries of the around the world.
5. Fiji only became a member of the in 2006.
6. The Is the National Plant Protection office in Fiji.
7. In total there are nine around the world.
8. The was founded by FAO in 1961
9. The OIE, and CODEX are known as the three sisters under the FAO.
10. In total there are 34

B. True or False questions: Select the correct answer.**(10 x 1= 10 Marks)**

1. This convention that was formed in 1952 is known as the International Plant Protection Convention (IPPC).....
2. Fiji is a member of the PPPO.....
3. The Asia and Pacific Plant Protection Commission (APPPC) is one of the eight RPPOs.
4. The pacific region is administered by the PPPO.....
5. The IPPC is guided by rules and regulations known as the Standards of International Phytosanitary Measures (ISPMs).....
6. The OIE is known as International Office of Epizootics (OIE) for animal health and zoonosis.
7. The OIE was founded in 1920.....
8. In total there are nine ISPMs.....
9. The Biosecurity Authority of Fiji issues phytosanitary certificate to anyone who wishes to export potatoes to New Zealand.
10. The import permit is usually issued by the importing National Plant Protection Organization (e.g. BAF) to anyone who wishes to export a commodity abroad.

C. Multiple choice questions: Select the correct answer. (10x1=10 Marks)

11. The Phytosanitary principles for the protection of plants and the application of Phytosanitary measures in international trade is best presented by

A.	ISPM No. 17 (2002)	B.	ISPM No. 06 (1997)
C.	ISPM No. 23 (2005)	D.	ISPM No. 08 (1998)
E.	ISPM No. 01 (2006)	F.	ISPM No. 09 (1998)
G.	ISPM No. 04 (1995)	H.	ISPM No. 12 (2001)

12. The Framework for pest risk analysis is best presented by

A.	ISPM No. 17 (2002)	B.	ISPM No. 06 (1997)
C.	ISPM No. 23 (2005)	D.	ISPM No. 08 (1998)
E.	ISPM No. 02 (2007)	F.	ISPM No. 09 (1998)
G.	ISPM No. 04 (1995)	H.	ISPM No. 12 (2001)

13. The Guidelines for pest eradication programmes is best presented by

A.	ISPM No. 17 (2002)	B.	ISPM No. 06 (1997)
C.	ISPM No. 23 (2005)	D.	ISPM No. 08 (1998)
E.	ISPM No. 01 (2006)	F.	ISPM No. 09 (1998)
G.	ISPM No. 04 (1995)	H.	ISPM No. 12 (2001)

14. Requirements for the establishment of Pest Free Areas is best presented by

A.	ISPM No. 17 (2002)	B.	ISPM No. 06 (1997)
C.	ISPM No. 23 (2005)	D.	ISPM No. 08 (1998)
E.	ISPM No. 01 (2006)	F.	ISPM No. 09 (1998)
G.	ISPM No. 04 (1995)	H.	ISPM No. 12 (2001)

15. Guidelines for surveillance is best presented by

A.	ISPM No. 17 (2002)	B.	ISPM No. 06 (1997)
C.	ISPM No. 23 (2005)	D.	ISPM No. 08 (1998)
E.	ISPM No. 01 (2006)	F.	ISPM No. 09 (1998)
G.	ISPM No. 04 (1995)	H.	ISPM No. 12 (2001)

16. The Export certification system is best presented by

A.	ISPM No. 17 (2002)	B.	ISPM No. 07 (1997)
C.	ISPM No. 23 (2005)	D.	ISPM No. 08 (1998)
E.	ISPM No. 01 (2006)	F.	ISPM No. 09 (1998)
G.	ISPM No. 04 (1995)	H.	ISPM No. 12 (2001)

17. The Guidelines for Phytosanitary certificates is best presented by

A.	ISPM No. 17 (2002)	B.	ISPM No. 06 (1997)
C.	ISPM No. 23 (2005)	D.	ISPM No. 08 (1998)
E.	ISPM No. 01 (2006)	F.	ISPM No. 09 (1998)
G.	ISPM No. 04 (1995)	H.	ISPM No. 12 (2001)

18. The Pest reporting is best presented by

A.	ISPM No. 17 (2002)	B.	ISPM No. 06 (1997)
C.	ISPM No. 23 (2005)	D.	ISPM No. 08 (1998)
E.	ISPM No. 01 (2006)	F.	ISPM No. 09 (1998)
G.	ISPM No. 04 (1995)	H.	ISPM No. 12 (2001)

19. The Guidelines for inspection is best presented by

A.	ISPM No. 15 (2009)	B.	ISPM No. 06 (1997)
C.	ISPM No. 09 (1998)	D.	ISPM No. 08 (1998)
E.	ISPM No. 23 (2005)	F.	ISPM No. 09 (1998)
G.	ISPM No. 04 (1995)	H.	ISPM No. 12 (2001)

20. The Diagnostic protocols for regulated pests is best presented by

A.	ISPM No. 15 (2009)	B.	ISPM No. 06 (1997)
C.	ISPM No. 09 (1998)	D.	ISPM No. 08 (1998)
E.	ISPM No. 27 (2006)	F.	ISPM No. 09 (1998)
G.	ISPM No. 04 (1995)	H.	ISPM No. 12 (2001)

II. Descriptive type Questions**(70 Marks)****Note: Attempt ALL SEVEN Questions. All carries ten (10) marks each.**

- 1) You work for an organisation that looks after the plant health and was invited to provide a speech on plant pests and diseases to a group of environmentalists. You are to choose one of the ISPMs different from the ones you choose in question 2 and 3 and answer the following:
 - (i) Name an ISPM together with the year in which the ISPM was developed.
(2 marks)
 - (ii) Discuss what the ISPM you chose talks about (4 marks)
 - (iii) Discuss its importance to plant health in terms of plant diseases (4 marks)

- 2) You were selected to represent your country to a global conference to present on the importance of safeguarding our unique biodiversity from pests and diseases. The aim of your presentation was to create awareness on Biosecurity Authority of Fiji works in protecting our flora and fauna from pests and diseases. You are to choose one of the ISPMs different from the ones you choose in question 1 and 3 and answer the following:
 - (i) Name an ISPM together with the year in which the ISPM was developed. (2 marks)
 - (ii) Discuss what the chosen ISPM talks about (4 marks)
 - (iii) Discuss its importance to plant health in terms of plant diseases (4 marks)

- 3) During your industrial attachment, a group of university students visited your facilities. Your director instructed you to present on the importance of pests and diseases. You are to choose one of the ISPMs different from the ones you choose in question 1 and 2 and answer the following:
 - (i) Name an ISPM together with the year in which the ISPM was developed. (2 marks)
 - (ii) Discuss what the chosen ISPM talks about (4 marks)
 - (iii) Discuss its importance to plant health in terms of plant diseases (4 marks)

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- 4) Currently Fiji is importing apples from New Zealand. You worked for Biosecurity and heads your inspection team in detecting plant pathogens. Discuss the following:
- (i) Name a direct detection method that you may recommend as a plant pathologist. (2 marks)
 - (ii) Discuss how the direct detection methods works? (4 marks)
 - (iii) Discuss the advantages of the direct detection method? (2 marks)
 - (iv) Discuss the disadvantages of the direct detection method? (4 marks)
- 5) Currently Fiji is importing potatoes also from New Zealand. You worked for Biosecurity and heads your inspection team in detecting plant pathogens. Discuss the following:
- (v) Name an indirect detection method that you may recommend as a plant pathologist. (2 marks)
 - (vi) Discuss how the indirect detection methods works? (4 marks)
 - (vii) Discuss the advantages of the indirect detection method? (2 marks)
 - (viii) Discuss the disadvantages of the indirect detection method? (4 marks)
- 6) You are a lecturer for Biosecurity at a prominent university in Fiji. In your first lesson you are to deliver a topic on the history and development of quarantine. In detail, discuss the history and development of quarantine? (10 marks)
- 7) Discuss about the three pest risk categories and all the actions taken during their interceptions? (10 marks)

Marks obtained:

Bachelor of Science in Agriculture Third Year Second Trimester Final Examination- 2019**ENT 702: Biosecurity and Quarantine****Objective Type Questions - Answer Sheet****Time: 0.30 hrs.****Total Marks: 30**

A.	1.	
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