MARKER CODE		Student Personal Identification Number

South Pacific Form Seven Certificate

AGRICULTURE

2021

QUESTION and ANSWER BOOKLET

Time allowed: Three hours

(An extra 10 minutes is allowed for reading this paper.)

INSTRUCTIONS

Write your **Student Personal Identification Number (SPIN)** in the space provided on the top right-hand corner of this page.

Answer **ALL QUESTIONS**. Write your answers in the spaces provided in this booklet.

If you need more space for answers, ask the Supervisor for extra paper. Write your SPIN on all extra sheets used and clearly number the questions. Attach the extra sheets to the appropriate places in this booklet.

Major Learning Outcomes (Achievement Standards)	Skill Level & Number of Questions				Weight/ Time
	Level 1 *Uni-structural*	Level 2 *Multi-structural*	Level 3 *Relational*	Level 4 *Extended Abstract*	
Strand 1: Primary Production Examine local and export primary production and analyse the influence of market controls.	5	2	2	0	15% 39 min
Strand 2: Sustainable Primary Production Analyse primary production practices that ensure sustainable primary production.	6	3	2	1	22% 57 min
Strand 3: Production Management Demonstrate understanding of production management of a locally produced animal primary product and a locally produced plant primary product.	4	4	3	3	33% 85 min
TOTAL	**15**	**9**	**7**	**4**	**70% 180 min**

Questions in this examination require you to refer to primary products from your own country.

Check that this booklet contains pages 2–19 in the correct order and that none of these pages are blank.

HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

STRAND 1: PRIMARY PRODUCTION

Assessor's use only

1.1	A proper marketing technique allows the flow of products from the supplier to the consumer. State the importance of providing the appropriate transport method in the delivery of primary goods and services. _____ _____ _____	**Unistructural** 1 ☐ 0 ☐ NR ☐
1.2	**Circle the letter that represents the <u>best</u> answer.** Which of the following factors do farmers need to consider in securing market opportunities for their primary products? A. climate B. state of technology C. type of consumers D. income of the consumers	**Unistructural** 1 ☐ 0 ☐ NR ☐
1.3a	International marketing involves the selling and buying of goods and services between countries. Define **bilateral trade agreement**. _____ _____ _____	**Unistructural** 1 ☐ 0 ☐ NR ☐
1.3b	**Select <u>one primary product</u> (either plant or animal) that is locally produced in your country to answer question 1.3b**. Primary product: _____ Name of your country: _____ Specific market: _____ International trade strengthens relationships between importing and exporting countries. Describe how a bilateral trade agreement has an impact on the import and export of your selected primary product. _____ _____ _____ _____	**Multistructural** 2 ☐ 1 ☐ 0 ☐ NR ☐

Assessor's use only

1.4	State **one** reason for export controls on local products. _____ _____ _____	**Unistructural** 1 0 NR
1.5	To be competitive in the world of business, farmers need to produce products that are of high quality. Explain how competition from imports influences primary production. _____	**Relational** 3 2 1 0 NR

Assessor's use only

1.6	Pests and diseases affect the storage of agricultural products and reduce their shelf-life which has an impact on the selling and buying of agricultural products. Define the term **product storage life**. _____ _____ _____	**Unistructural** 1 0 NR
1.7	Import and export controls and biosecurity or quarantine regulations are part of the government's policy on international marketing. Describe how these national regulations and controls affect local primary production. _____ _____ _____ _____ _____	**Multistructural** 2 1 0 NR
1.8	During the production period, primary products change due to certain factors that affect production and the supply to the market. The market price is also affected due to less supply. Explain, with examples, **one** factor that causes primary products to change during the year in your community. _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	**Relational** 3 2 1 0 NR

STRAND 2: SUSTAINABLE PRIMARY PRODUCTION

Assessor's use only

2.1	Globally, climate change is the key issue that affects long term primary production. State **one** impact of climate change on agricultural production. _____ _____ _____	**Unistructural** 1 0 NR
2.2	**Circle the letter that represents the <u>best</u> answer.** The application of fertilisers in the soil at a particular spot is called _____. A. placement B. broadcasting C. top dressing D. side dressing	**Unistructural** 1 0 NR
2.3	Various soil conservation practices and techniques have been developed to prevent and control soil erosion on sloping land. Identify **one** soil conservation practice farmers could use to maintain sustainable primary production on their farms. _____ _____	**Unistructural** 1 0 NR
2.4a	Genetic selection is a crucial step for animal breeders. Define the term **genetic selection**. _____ _____ _____ _____	**Unistructural** 1 0 NR

Assessor's use only

2.4b

The goal of dairy farmers is to increase milk production to satisfy the market demand of consumers.

Describe the importance of genetic selection in ensuring the improvement of milk production in the long term.

Multistructural	
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Use the information below to answer questions 2.5a and 2.5b.

The diagram below illustrates certified seeds.

Source: *https://pacificfarmers.com/e-bulletins-june-2014/*

2.5a

State the importance of using certified seeds in primary production.

Unistructural	
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Assessor's use only

2.5b	Explain how using certified seeds can ensure that farmers get high quantity of good quality production in the long term on the farm.	

Relational	
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2.6a	Integrated Pest Management is a sustainable agricultural practice used in primary production**.** Define the term **Integrated Pest Management**.	

Unistructural	
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Assessor's use only

2.6b	Pests and diseases can be controlled in various ways. Describe **one** benefit of Integrated Pest Management in maintaining sustainable primary production on a farm. _____ _____ _____ _____ _____ _____	**Multistructural** 2 ☐ 1 ☐ 0 ☐ NR ☐
2.7	The photograph below shows a seed gene bank. A seed gene bank is one way of conserving genetic resources. *Source: https://www.dealspwn.com / image.jpeg.* Describe how genetic resources are conserved for sustainable primary production. _____ _____ _____ _____ _____ _____	**Multistructural** 2 ☐ 1 ☐ 0 ☐ NR ☐

Assessor's use only

2.8 Select **one** crop (vegetable, fruit or root crop) or **one** animal produced in your country. Name an invasive species either pest, disease or weed that affects your selected crop or animal.

Name of plant/animal: _____

Country: _____

Invasive species: _____

Explain how the named invasive species has affected the crop/animal of commercial farmers in your country. Use examples to support your answer.

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Relational	
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Assessor's use only

2.9 The Ministry of Agriculture often encourages farmers to practise organic husbandry practices.

Discuss **one** factor that influences the application of organic husbandry practices and recommend ways to maximise the benefits for the production of a local commodity.

Extended Abstract	
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STRAND 3: PRODUCTION MANAGEMENT

Assessor's use only

3.1 The picture below shows a management practice carried out on a livestock farm.

Source: www.nationalfair.com

The management practice carried out in the above picture is _____.

A. castration

B. iron injection

C. identification

D. artificial insemination

Unistructural	
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3.2 Select **one** Agricultural Enterprise (Plant or Animal) that you have studied to answer question 3.2.

Agricultural Enterprise: _____

Specific Market: _____

Site selection is important before an agricultural enterprise is chosen by a farmer.

State **one** factor to be considered in the selection of a suitable site for the selected agricultural enterprise.

_____

_____

_____

Unistructural	
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Assessor's use only

3.3	A market is a place where a seller and a buyer meet for the exchange of goods and services. List **two** steps in the schedule of operations for the successful marketing of agricultural products. _____ _____ _____ _____ _____	**Multistructural** 2 ☐ 1 ☐ 0 ☐ NR ☐
3.4	Farmers need input to produce output. Without the factors of primary production, there will be no output or product produced. Identify **one** factor of production that is a challenge to farmers. _____ _____ _____	**Unistructural** 1 ☐ 0 ☐ NR ☐
	Select **one** management practice in the schedule of operations for growing vegetables from the box below to answer question 3.5. Nutrient management Pest and disease control Weed control **Management Practice:** _____	
3.5	Describe the selected management practice as a step in the schedule of operations for growing vegetables. _____ _____ _____ _____ _____	**Multistructural** 2 ☐ 1 ☐ 0 ☐ NR ☐

Assessor's use only

<table>
<tr><td>3.6</td><td>Maintaining the quality and quantity of primary products during post-harvest processes is crucial.

Describe how proper handling of perishable primary products is done during the post-harvest process.

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_____</td><td><table><tr><th colspan="2">Multistructural</th></tr><tr><td>2</td><td></td></tr><tr><td>1</td><td></td></tr><tr><td>0</td><td></td></tr><tr><td>NR</td><td></td></tr></table></td></tr>
<tr><td>3.7a</td><td>Proper soil preparation is crucial in the early establishment of plants.

Describe the importance of soil preparation during this stage.

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Assessor's use only

3.7b

A young farmer has just bought a quarter of an acre of sloppy land with clay loam soil and has decided to practise mixed farming even though he does not know anything about soil and crops.

He has requested your assistance and advice.

Analyse the young farmer's land and advise him on land preparation techniques and the conditions that are necessary for plant growth. Make recommendations on the choice of crops to plant and farming practises to adopt or use.

Extended Abstract	
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Assessor's use only

3.8	Select **one** locally produced crop that you have studied to answer question 3.8. **Root Crop/Vegetable:** _____ Identify the type of planting material needed to plant your selected crop. _____ _____ _____ _____	**Unistructural** 1 ☐ 0 ☐ NR ☐
3. 9	Pests and diseases can cause costly and irreparable harm to livestock and crops. Explain the importance of pest management in the schedule of operations. _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	**Relational** 3 ☐ 2 ☐ 1 ☐ 0 ☐ NR ☐

Assessor's use only

Select **one** locally produced **plant or animal** and its specific market that you have studied to answer question 3.10.

Plant/Animal: _____

Specific market: _____

3.10 Planning is important in any type of business. Therefore, effectively following the schedule of operations on a farm is crucial for its success.

Explain the significance of having a schedule of operations for your selected plant or animal.

Relational	
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Assessor's use only

3.11 For plants to grow to their full potential, the soil must provide a satisfactory environment for plant growth. Understanding soil properties is, therefore, essential for management practices such as the addition of either **organic matter** or **inorganic fertilisers**.

From the two management practices highlighted above, explain which management practice would be more effective in the production of plants. Use examples to support your answer.

Relational	
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Assessor's use only

Select a crop or livestock to answer question 3.12.

Crop/Livestock: _____

3.12 A commercial farmer has been producing crops/livestock and is interested in exporting. The farmer lacks knowledge of marketing logistics and seeks your assistance in selling the product.

Assess the farmer's situation and recommend, with justiifcation, the optimal conditions for the marketing of the selected crops/livestock product that is required as a step in the schedule of operations.

Extended Abstract	
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Assessor's use only

3.13	The goal of a commercial farmer is to minimise production cost and maximise profit. This will only be achieved if proper planning is done. Analyse how profitability in a commercial livestock farm in your community is influenced by various steps in the schedule of operations and suggest optimal conditions for profitability. Use examples to support your answer.	

Extended Abstract	
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THE END