



FINAL EXTERNAL INTEGRATED SUMMATIVE ASSESSMENT
OCCUPATIONAL CERTIFICATE: ORCHARD AND VINEYARD FOREMAN
EXEMPLAR

PAPER 2 OF 2 · Instrument code: OVF-EISA-V1-P2

SAQA ID: 110667

CREDITS: 147

Date: Exemplar – published sample

Marks: 40

Time: 2 hours when administered

Duration: 2 hours

Instructions

This paper consists of 12 pages including the cover page.

This is Paper 2 of the EISA for this qualification. Paper 1 counts 60 marks (3 hours) and Paper 2 counts 40 marks (2 hours); the two papers are written on different days and together total 100 marks.

All questions are compulsory. The pass mark is 50%, and an overall mark of 65% across both papers is required to be found competent.

This paper: Question 1.1 (20 Marks) · Question 2.1 (20 Marks)

- Answer every question in the spaces provided in this question paper.
- This is a closed book assessment.
- Read the instructions for each question before answering, and use the mark allocation to guide the length of your answer.
- Candidates are not allowed any form of assistance and must adhere to the invigilator's instructions at all times.
- Any attempt at cheating will lead to disqualification. No cell phones are allowed.

Candidate details

First name:	
Surname:	
ID number:	

SCENARIO 2

Read the following case study carefully. Extrapolating from the case study answer the questions below:

Scenario: Integrated Management of Citrus (oranges and lemons), table grapes, mangoes, and berries (strawberries and blueberries).

Location: Limpopo Province, South Africa

Climate: Green Harvest Farms is situated in a semi-arid region characterized by a Mediterranean climate. The area experiences distinct wet and dry seasons, which significantly influence fruit production:

Temperature: Average temperatures range from 20°C to 35°C (68°F to 95°F) from spring to summer, providing warm conditions favourable for fruit development. Winters are cooler, with average temperatures dropping to 5°C to 15°C (41°F to 59°F), allowing for necessary chilling hours for certain crops.

Rainfall: The region receives annual rainfall ranging from 500 mm to 700 mm (approximately 20 to 28 inches), primarily between November and March. This rainy season coincides with the growing cycle of most fruit crops, aiding in development and yield.

Humidity: Humidity levels can be relatively low, particularly during the dry season, necessitating efficient irrigation practices to maintain soil moisture and support fruit growth – especially critical for moisture-sensitive crops like berries.

Sunlight: The region boasts high levels of sunlight, averaging 8 to 10 hours per day during the growing season, essential for photosynthesis and fruit ripening.

Soil: Well-draining, sandy loam soils which support healthy root systems.

You are the manager on a farm close to Letsitele in the Limpopo Province. The farm is suitable to grow a variety of fruits such as Citrus (oranges and lemons), table grapes, mangoes, and berries (strawberries and blueberries). When answering the questions below consider the type of fruit that you are most knowledgeable about.

QUESTION 1.1 (20 POINTS 60 MINUTES)

Organise, allocate and monitor availability and productive use of resources in an orchard or vineyard.

QUESTION 1.1.1 (7 POINTS 21 MINUTES)

Human Resources

1.1.1. Which of the following statements best explains why skilled, experienced workers are important for managing an orchard successfully? Choose one and briefly explain why.

a) Skilled workers cost more to hire.

b) Skilled workers miss work less often.

c) Skilled workers help increase productivity, improve quality, and use resources efficiently.

d) Skilled workers need less supervision.

Agricultural Inputs:

1.1.1.2 What is the main reason for regularly testing soil nutrients in an orchard? Choose one and briefly explain your answer.

a) To follow government rules.

b) To forecast the weather.

c) To make sure the soil stays wet.

d) To find out what type and amount of fertilizer to use for better plant growth and yield.

Machinery and Equipment:

1.1.1.3 Why is it important to regularly maintain harvesting equipment in fruit production? Choose one and briefly explain your answer.

a) Regular maintenance helps avoid delays and losses by reducing the chances of equipment breaking down during harvest.

b) Regular maintenance improves the appearance of the equipment.

c) Regular maintenance is required by law.

d) Regular maintenance is only needed for costly equipment.

Importance in Production Cycle and Achievement of Targets:

1.1.1.4 How do good resource use practices (like managing workers, materials, machines, and equipment) help meet production goals? Choose the best answer.

a) Good resource use increases costs.

b) Good resource use doesn't greatly affect production goals.

c) Good resource use improves productivity, cuts waste, reduces losses, and helps reach production goals more efficiently.

d) Good resource use means workers need less supervision.

QUESTION 1.1.2 (6 POINTS 18 MINUTES)

Resource Organization:

1.1.2.1 Which option best explains why organizing and allocating resources well is important in orchard management? Choose one and briefly explain your answer.

a) It makes detailed planning less necessary.

b) It makes record-keeping easier.

c) It ensures that the right resources are available at the right time and place, which maximizes efficiency and reduces waste.

d) It decreases the number of workers needed.

Resource Allocation:

1.1.2.2 A farm manager needs to assign workers for harvesting. Which approach is the most effective for using the workforce efficiently? Choose one and briefly explain your answer.

a) Assigning tasks based on how long workers have been there.

b) Assigning tasks randomly.

c) Assigning workers to tasks based on their skills and experience, considering the specific needs of each task.

d) Ignoring what workers prefer and what skills they have.

Monitoring Productive Use:

1.1.2.3 Which of the following is the best way to monitor how well irrigation water is used in a vineyard? Choose one and briefly explain your answer.

a) Using soil moisture sensors and other tools to regularly check soil moisture levels and adjust irrigation as needed.

b) Ignoring water usage and hoping for good results.

c) Relying only on workers' guesses.

d) Waiting until the end of the growing season to look at water usage.

QUESTION 1.1.3 (4 POINTS 12 MINUTES)

Preventative Maintenance:

1.1.3.1 Which of the following BEST describes preventative maintenance for farm machinery? Choose one and briefly explain your answer.

a) Repairing equipment only when it breaks down.

b) Regularly inspecting equipment for wear and tear, conducting routine servicing, and making necessary repairs to prevent major breakdowns and extend equipment life.

c) Replacing equipment every year regardless of condition.

d) Ignoring equipment maintenance until it significantly impacts production.

Safe Equipment Use:

1.1.3.2 Which practice is MOST important for ensuring the safe and correct use of farm machinery? Choose one and briefly explain your choice.

a) Allowing untrained workers to operate machinery without supervision.

b) Ignoring safety regulations and guidelines.

c) Providing adequate training on safe operating procedures, emphasizing the importance of regular safety checks and adhering to safety regulations and guidelines.

d) Using machinery only when it is convenient.

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QUESTION 1.1.4 (3 POINTS 9 MINUTES)

Equipment Storage:

1.1.4.1 Which of the following is the MOST important aspect to consider when storing farm machinery and equipment? Choose the best answer.

- a) Storing equipment wherever there is space available.
- b) Storing equipment outdoors to allow for easy access.
- c) Storing equipment in a dry, clean, and secure location, protecting it from the elements and theft.
- d) Storing equipment close to the field where it will be used.

Equipment Cleaning:

1.1.4.2 Why is regular cleaning and sanitization of harvesting equipment crucial in fruit production? Pick one and briefly explain your choice.

- a) Clean equipment is more aesthetically pleasing.

- b) Regular cleaning is only necessary for high-value crops.

- c) Regular cleaning reduces the amount of fertilizer needed.

- d) Regular cleaning and sanitization help prevent the spread of diseases and pests, maintaining high fruit quality.

SUB-TOTAL: 20

QUESTION 2.1 (20 POINTS 60 MINUTES)

Refer to the scenario given at the start of the paper.

QUESTION 2.1.1 (8 POINTS 24 MINUTES)

Data Collection Methods:

2.1.1.1 Green Harvest Farms needs to collect daily production data for its mango crop. Which method is the best for getting accurate and timely information? Choose one and explain your answer.

a) Trusting workers' guesses at the end of the day.

b) Using a basic paper system to keep track of daily production.

c) Using a digital system that lets workers enter data in real time and check it quickly.

d) Not collecting daily production data for mangoes.

Data Accuracy:

2.1.1.2 What is the MOST important aspect to consider when gathering production data for table grapes at Green Harvest Farms? Pick one and briefly explain your choice.

a) Collecting data only on sunny days.

b) Ensuring that the data is accurate, complete, and consistent across all harvesting teams, including weight, quality assessment, and any unusual occurrences noted.

c) Collecting data only from experienced workers.

d) Not recording any data that is less than perfect.

Communication Methods:

2.1.1.3 What is the MOST effective method for communicating daily production data to the harvesting teams at Green Harvest Farms? Pick one and briefly explain your choice.

a) Announcing data verbally at the end of each day.

b) Sending an email to the team at the end of the week.

c) Using a combination of daily briefings, visual displays, and simple reports to provide regular and clear updates, ensuring everyone is well-informed.

d) Not communicating daily production data.

Addressing Communication Issues:

2.1.1.4 At Green Harvest Farms, the blueberry harvesting team is struggling to understand the daily production reports. What is the BEST course of action to address this communication challenge? Pick one and briefly explain your choice.

a) Ignore the issue, and hope it resolves itself.

b) Reprimand the team for not understanding the reports.

c) Review the format of the reports with the team, making any necessary adjustments to ensure clarity, using appropriate visual aids if needed, and answer any questions.

d) Send out new reports, hoping for better results.

QUESTION 2.1.2 (8 POINTS 24 MINUTES)

Identifying Deviations:

2.1.2.1 Green Harvest Farms is analysing its citrus production data. Which option shows a significant problem that needs immediate attention? Choose one and explain your answer.

a) A consistent shortfall in fruit size and yield below the established minimum standards, showing there might be a bigger issue.

b) A slight increase in fruit size compared to last year.

c) A small increase in the number of workers needed.

d) A minor change in the daily harvest weight.

Analysing Production Data:

2.1.2.2 To effectively analyse production data at Green Harvest Farms, which tool or technique is MOST helpful for identifying trends and patterns? Pick one and briefly explain your choice.

a) Relying solely on memory and intuition.

b) Using spreadsheets or specialized farm management software to visually represent the data, allowing for easy identification of trends and anomalies.

c) Disregarding any data that seems unusual.

d) Asking workers for their opinion.

Addressing Deviations - Labor:

2.1.2.3 Green Harvest Farms notices a consistent shortfall in its table grape harvest compared to planned targets. After analysing production data, the farm manager discovers that there is a significant labour shortage during peak harvest times. What is the MOST effective solution to this issue? Pick one and briefly explain your choice.

a) Reduce the harvesting targets drastically.

b) Increase worker salaries significantly.

c) Implement a more efficient harvesting schedule, explore the use of technology to improve efficiency and potentially supplement with temporary additional workers.

d) Ignore the issue.

Addressing Deviations - Environmental Factors:

2.1.2.4 Green Harvest Farms observes a significant decrease in blueberry yield compared to the previous year. After reviewing environmental data, the farm manager identifies a prolonged period of unusually low rainfall during the critical growing season. What is the MOST effective way to mitigate the impact of this environmental deviation in future seasons? Pick one and briefly explain your choice.

a) Reduce the number of blueberry plants.

b) Implement improved irrigation practices, including monitoring soil moisture levels and adjusting irrigation frequency as needed.

c) Stop growing blueberries.

d) Ignore the issue.

QUESTION 2.1.3 (4 POINTS 12 MINUTES)

2.1.3.1 A recent pest infestation has significantly reduced the yield of your blueberry crop. You need to inform your supervisor about the situation. Write a concise email to your supervisor explaining:

- The extent of the damage to the blueberry crop.

- The likely cause of the infestation (assuming you know).
- The actions you have already taken to address the problem.
- The actions you propose to take to mitigate further losses.

(Note: Your response should be concise (approximately 100 words) and clearly communicate the essential information.)

SUB-TOTAL: 20