



MEMORANDUM

EXTERNAL INTEGRATED SUMMATIVE ASSESSMENT

OCCUPATIONAL CERTIFICATE: LIVESTOCK FARMER (LIVESTOCK FARM SUPERVISOR)

NQF Level: 3 | Credits: 112 | SAQA ID: 99253 | Curriculum Code: 612101001

Developed by: Agri SETA

EXEMPLAR PREPARATORY QUESTION PAPER — MARKING MEMORANDUM

(KNOWLEDGE AND PRACTICAL APPLICATION)

Marks: 100 | Time: 2 hours

Instructions to Markers

- Award marks strictly according to the mark allocation next to each question.
 - Award 1 mark for each correct point unless otherwise indicated in the memo.
 - Accept any other relevant and correct answer not listed, provided it addresses the question.
 - Where a candidate provides more points than required, mark only the number of points asked for.
 - Use your professional judgement for practical application answers that are correctly reasoned but differently worded.
 - Award part marks where a candidate's response is partially correct.
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QUESTION 1: LIVESTOCK HEALTH CARE [40]

1.1 Multiple-choice questions (5 x 1 = 5)

Answers

- 1.1.1 B
- 1.1.2 C
- 1.1.3 C
- 1.1.4 B
- 1.1.5 B

Award 1 mark for each correct letter.

1.2 Scenario A

Karoo Wool Farm

Karoo Wool Farm keeps 340 Merino sheep in the Eastern Cape. 25 sheep are lame with foul-smelling, separating hooves; drop in appetite and wool quality; kept on waterlogged pasture; no hoof trimming/foot bath in six months; new sheep introduced without quarantine.

1.2.1 Identify FOUR symptoms and explain what EACH indicates about the health status of the flock. (4 x 1 = 4)

Answers

- Lameness / holding a foot off the ground — indicates pain or foot injury/infection
- Foul-smelling, separating horn — indicates footrot infection
- Drop in appetite — indicates pain, stress or systemic illness
- Decline in wool quality — indicates chronic stress or poor nutritional status

Award 1 mark per correct symptom with a correct explanation.

1.2.2 Discuss FOUR factors that could have contributed to the health problem. (4 x 1 = 4)

Answers

- Waterlogged pasture from the leaking irrigation line — favours footrot bacteria
- No hoof trimming or footbath treatment for over six months
- New sheep introduced without a quarantine period — risk of introducing disease
- Overcrowding/poor pasture and flock management

Award 1 mark per correct, relevant factor.

1.2.3 Describe SIX livestock health care procedures to implement immediately. (6 x 1 = 6)

Answers

- Isolate all lame/affected sheep from the healthy flock
- Trim overgrown or infected hooves
- Apply footbath treatment (e.g., zinc sulphate or formalin solution)
- Administer appropriate antibiotic treatment where indicated
- Move the flock to dry, well-drained pasture
- Record and monitor each animal's response to treatment

Award 1 mark per correct procedure; accept any six relevant actions.

1.2.4 Recommend SEVEN biosecurity measures to prevent further health problems. (7 x 1 = 7)

Answers

- Quarantine newly purchased sheep before introducing them to the flock
- Implement a routine hoof trimming and footbath programme
- Repair the leaking irrigation line and improve pasture drainage
- Disinfect handling equipment and footbaths between uses
- Restrict movement of visitors, vehicles and equipment onto the farm
- Separate and treat chronically infected animals
- Maintain accurate health and treatment records

Award 1 mark per correct measure.

SUBTOTAL SCENARIO A: [26]

1.3 Scenario B

Vaalplaas Mixed Livestock Unit (Practical Application)

Cattle bloated and reluctant to eat; sheep with wool loss, open wounds and maggots; goats with swollen, watery, cloudy eyes. Fly control not applied; cattle moved onto lush clover pasture without gradual introduction.

1.3.1 Which conditions are most likely affecting the livestock? (3)

Answers

- A — Cattle: Bloat; Sheep: Flystrike; Goats: Pink eye (infectious keratoconjunctivitis)

Award 3 marks for the fully correct option; no part-marks.

1.3.2 Explain how the farm's management practices contributed to the conditions described. (3)

Answers

- Lack of fly control allowed flies to lay eggs in wounds and soiled wool, causing flystrike
- Sudden introduction to lush clover pasture caused excessive gas production, leading to bloat
- Poor biosecurity and hygiene practices allowed conditions to spread across species

Award 1 mark per correct, well-explained link.

1.3.3 Develop a THREE-step treatment plan for the cattle, sheep and goats. (4)

Answers

- Step 1: Isolate all affected animals from the rest of the herd/flock
- Step 2: Administer the correct treatment — anti-bloat drench for cattle, insecticide wound dressing for fly-struck sheep, antibiotic eye ointment for goats with pink eye
- Step 3: Monitor recovery, record treatment given, and follow up according to SOPs

Award up to 4 marks for a logical, correctly sequenced plan that follows farm SOPs.

1.3.4 Which remedies correctly match the conditions identified? (2)

Answers

- B — Bloat: Anti-bloat drench; Flystrike: Insecticide wound dressing; Pink eye: Antibiotic eye ointment

Award 2 marks for the fully correct option; no part-marks.

1.3.5 Outline TWO immediate biosecurity measures to prevent further spread of disease. (2)

Answers

- Isolate all affected animals immediately
- Implement/restore a preventative fly and parasite control programme

Award 1 mark per correct measure.

SUBTOTAL SCENARIO B: [14]

TOTAL QUESTION 1: [40]

QUESTION 2: LIVESTOCK PRODUCTION AND BREEDING [40]

Scenario A — Midlands Dairy Herd

180 Holstein cows; calving interval increased from 12 to 15 months; calf birth weights below target; inconsistent heat detection; incomplete breeding records; camps not rotated for three months; mineral lick stopped; ear-tagging and disbudding delayed.

2.1.1 Explain FOUR routine herding and handling practices that promote animal welfare and safety. (4 x 1 = 4)

Answers

- Handle animals calmly and quietly to reduce stress
- Use correct, well-maintained handling facilities and equipment
- Avoid overcrowding animals in pens or races
- Use appropriate PPE and follow safe work procedures

Award 1 mark per correct practice.

2.1.2 Discuss FOUR breeding practices that can shorten the calving interval and improve productivity. (4 x 1 = 4)

Answers

- Accurate and consistent heat (oestrus) detection
- Maintain complete and up-to-date breeding records
- Timely breeding/AI scheduling based on heat detection
- Provide adequate nutrition to support reproduction

Award 1 mark per correct practice.

2.1.3 Describe FOUR nutrition and feeding practices to improve growth and reproduction. (4 x 1 = 4)

Answers

- Provide balanced, energy-appropriate rations
- Restore mineral lick supplementation, especially during the wet season
- Rotate pasture camps regularly to protect grazing quality
- Ensure a clean, adequate water supply at all times

Award 1 mark per correct practice.

2.1.4 Explain THREE routine production practices related to identification, disbudding or parasite control. (3 x 1 = 3)

Answers

- Ear-tag all calves promptly for permanent identification

- Disbud calves at the correct age, following animal welfare standards
- Implement a regular internal and external parasite control programme

Award 1 mark per correct practice.

2.1.5 Define any FIVE key terms/principles used in livestock production and explain the importance of EACH. (5 x 2 = 10)

Answers

- Calving interval — the time between two successive calving's; a shorter interval improves herd productivity
- Oestrus (heat) detection — identifying when a cow is receptive to breeding; essential for successful conception
- Mineral supplementation — providing essential minerals; supports fertility, growth and general health
- Pasture/camp rotation — moving animals between grazing camps; prevents overgrazing and reduces parasite build-up
- Disbudding — removal of horn buds in young calves; improves animal and handler safety and reduces injury

Award 1 mark for a correct definition and 1 mark for a correct explanation of importance (2 marks per term).

SUBTOTAL SCENARIO A: [25]

Scenario B — Eastern Cape Boer Goat Ranch (Practical Application)

250 Boer goats under extensive browsing; goats stressed during handling; bucks and does run together year-round (year-round kidding); camps not rested per rotation schedule; heavy tick infestation; kids not yet ear-tagged.

2.2.1 Describe TWO safe handling practices that protect animals and workers. (3)

Answers

- Move goats calmly and quietly, avoiding shouting or sudden/fast movements
- Use appropriate handling pens and equipment designed to reduce stress and injury

Award up to 3 marks for two well-described practices.

2.2.2 Explain how introducing a controlled (seasonal) breeding season would improve herd management. (3)

Answers

- Concentrates kidding into a defined period, making labour and care planning easier
- Allows better synchronisation of feeding, health management and marketing of kids
- Reduces stress on does by avoiding continuous breeding pressure

Award 1 mark per correct, well-explained point.

2.2.3 Draft a plan for supplementary feeding and browsing camp rotation. (5)

Answers

- Rest degraded camps to allow bush/vegetation to recover
- Rotate browsing camps according to a planned schedule
- Provide supplementary feed during periods of low browse availability
- Monitor camp condition regularly and adjust the rotation as needed
- Match stocking rate to the carrying capacity of each camp

Award 1 mark per correct, practical point in the plan.

2.2.4 Explain TWO routine practices to control the tick infestation and manage identification. (2)

Answers

- Apply a regular dipping/spraying programme to control ticks
- Ear-tag all kids promptly for permanent identification

Award 1 mark per correct practice.

2.2.5 Briefly explain why accurate record-keeping is essential in livestock production. (2)

Answers

- Enables tracking of health, breeding and production performance over time
- Supports informed management decisions and compliance with farm SOPs

Award 1 mark per correct point.

SUBTOTAL SCENARIO B: [15]

TOTAL QUESTION 2: [40]

QUESTION 3: SUPERVISORY AND TEAM LEADERSHIP [20]

Waterberg Beef Ranch. Worker B left early and missed vaccination; Worker C recorded incomplete weight data; Worker A moved only half the herd; Workers D and E completed their tasks; records not updated correctly; some workers state they did not receive clear instructions.

3.1.1 Develop a work schedule for FOUR daily livestock farming activities for the following day. (4 x 0.5 = 2)

Answers

- Grazing rotation — move remaining herd to Camp 3
- Complete the vaccination programme

- Weighing and accurate record keeping at the weigh crush
- Infrastructure/maintenance checks and calving monitoring

Award 0.5 mark per correct activity (any four relevant activities).

3.1.2 Explain FOUR actions to communicate work instructions and farm notices effectively.

(4 x 0.5 = 2)

Answers

- Conduct a daily toolbox/briefing meeting
- Provide clear written work instructions
- Demonstrate tasks practically where needed
- Confirm each worker's understanding before work begins

Award 0.5 mark per correct action (any four).

3.1.3 Describe FOUR fair disciplinary actions for Worker B's repeated conduct. (4 x 0.5 = 2)

Answers

- Meet with the employee to discuss the issue
- Investigate the circumstances fairly before acting
- Issue a verbal or written warning as appropriate
- Document the disciplinary process and outcomes

Award 0.5 mark per correct action (any four).

3.1.4 Recommend FOUR methods to improve worker performance and productivity. (4 x 0.5 = 2)

Answers

- Provide relevant training
- Set clear, measurable performance targets
- Give regular, constructive feedback
- Recognise and reward good performance

Award 0.5 mark per correct method (any four).

3.1.5 Identify FOUR types of farm records that should be maintained and reported on regularly. (4 x 0.5 = 2)

Answers

- Livestock health records
- Vaccination records
- Breeding records
- Production/weight records

Award 0.5 mark per correct record type (any four).

3.1.6 Draft a simple livestock health record entry for an animal treated this week. (10)

Answers

- Animal identification — e.g., Tag No./ear tag number and breed
- Date of treatment
- Symptoms/condition observed or diagnosed
- Treatment given (medication, dosage, method of administration)
- Name of person who administered the treatment
- Withdrawal period, where applicable
- Follow-up/review date
- Outcome of treatment (recovered, ongoing, referred to vet)

Award up to 10 marks: 1–2 marks per correctly included and appropriately detailed record field, to a maximum of 10.

TOTAL QUESTION 3: [20]

GRAND TOTAL: 100