# Study & Master

**Support Pack | Grade 12** 



# Module 4 Units 1 – 2 Agricultural Sciences

**Animal shelters and management** 

This support pack for the Animal shelters and management module in the Agricultural Sciences Grade 12 CAPS curriculum provides valuable revision activities. All activities have the answers provided. Learners can work through these individually at home or these could form the basis of a catch-up class or online lesson. You have permission to print or photocopy this document or distribute it electronically via email or WhatsApp.

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# Module 4 - Animal shelters and management

# Unit 1 Animal shelter

#### **Short questions**

- 1. Various possible answers are provided for the following questions. Write only the correct letter (A–D) next to the question number.
  - 1.1 Which of the following are examples of housing for pigs? Choose the correct combination.
    - i) backyard system
    - ii) free range system
    - iii) house-and-run system
    - iv) deep-litter system
    - A (i), (iii) and (iv)
    - **B** (ii), (iii) and (iv)
    - C (i) and (ii)
    - D (ii) and (iii)
  - 1.2 Which ONE of the following is used to keep a large ox still for individual treatment?
    - A prodder
    - B neck clamp
    - C halter
    - D tags
  - **1.3** Which of the following requirements should be taken into consideration when designing housing for dairy cattle? Choose the correct combination.
    - i) the use of durable materials in the construction of the building
    - ii) the importance of proper ventilation
    - iii) breed of dairy cattle
    - iv) money available
    - **A** (i), (ii) and (iv)
    - B (ii), (iii) and (iv)
    - C (i) and (iv)
    - D (ii) and (iv)
  - **1.4** All farm animals are .........
    - A homeothermic
    - B heterothermic
    - C cold-blooded
    - D exothermic
  - **1.5** The average body temperature of farm animals is .........
    - **A** 37,5 °C
    - **B** 37 °C
    - C 39 °C
    - **D** 38 °C
  - **1.6** The following is an example of a farm animal that has no sweat glands and is sensitive to changes in temperature.
    - A dairy cow
    - B poultry
    - C pig
    - D beef cow

- **1.7** A pigsty is at its coolest when the long axis runs from .........
  - A east to north
  - B south to east
  - C east to west
  - **D** north to south  $7 \times 2 (14)$
- **2.** Supply ONE word/term for each of the following descriptions. Write only the word/term next to the question number.
  - **2.1** Organisms that maintain a constant body temperature
  - 2.2 System of small wire cages where birds are kept to lay their eggs
  - 2.3 The system where farm animals roam outside looking for feed to eat
  - **2.4** The ability of an animal to regulate its body temperature
  - **2.5** The loss of heat when an animal's body is in contact with a colder surface area, for example wet soil or bedding

 $5 \times 2 (10)$ 

### **Longer questions**

3. The following table gives data on temperature indicators and heat production for three different farm animals.

Farm animal	Lower critical temperature (°C)	Optimal temperature range (°C)	Heat production (kJ/h)
Dairy cow	5	20–25	3 200
Pig sow	12	15–18	800
Chickens 2 weeks	20	27–31	5

- **3.1** Identify the animals with the highest heat production. Give a possible reason for the heat production. (2)
- **3.2** Name TWO reasons why the critical temperature of chickens is high.

(1)

(2)

- **3.3** Give a reason why pigs are sensitive to high environmental temperatures. Answer the following questions about housing for chickens.
- **4.1** The following are points to remember when constructing a chicken house. Each statement contains an error. Rewrite each statement correctly, underlining the correction.
  - **A** The house must be orientated lengthwise in an east–west direction.
  - **B** The long sides must face in an east-west direction.
  - C A flat roof ensures good circulation of air.

(3)

- **4.2** What colour of light stimulates broilers to find food and water?
- **4.3** Name TWO materials that are used for bedding in chicken houses. (2)
- **4.4** Which bedding material is not suitable for poultry? Provide a reason for your answer.

(2)

(1)

# Unit 2 Animal behaviour and handling

#### **Short questions**

- 1. Various possible answers are provided for the following questions. Write only the correct letter (A–D) next to the question number.
  - **1.1** The following is a sign that cattle are not in distress:
    - A pawing
    - **B** snorting
    - C rapid tail movements
    - **D** grazing with other cattle
  - **1.2** A common behaviour of cattle is that they ..........
    - A react best when kept together
    - **B** have very good depth perception
    - C can see objects on the ground without lowering their heads
    - D walk immediately into deep earth dams to drink water

- **1.3** The flight zone of a cow is the space ..........
  - A around it
  - **B** in front of its head
  - C close to its tail
  - **D** between the horns
- 1.4 The following type of farm animal has a circle of vision that extends almost 310°:
  - A horse
  - B pig
  - C cow
  - **D** sheep
- **1.5** A behaviour characteristic of poultry is that .........
  - A they are very territorial
  - **B** they are not territorial
  - C they do not fight
  - D both B and C

 $5 \times 2 (10)$ 

- 2. Supply ONE word/term for each of the following descriptions. Write only the word/term next to the question number.
  - **2.1** Animals that react best when kept together
  - **2.2** When animals in a group follow a leader
  - 2.3 The outer circle around a cow that is the space that it feels safe in
  - 2.4 When male animals mark the area to protect their offspring
  - **2.5** The area behind the cow where she cannot see

 $5 \times 2 (10)$ 

(3)

#### Longer questions

Study the picture below and list THREE signs that show that this bull is in distress.



To which animal listed in the word box do each of the following descriptions or handling precautions apply?

cattle sheep pigs poultry

- **4.1** It is best to catch them in blue or white light.
- **4.2** Carry them by both legs.
- **4.3** Keep the surface of the floor consistent when you move them.
- **4.4** They are sensitive to abrupt changes in light levels.
- **4.5** They need to be handled gently but with confidence.
- **4.6** They kick backwards.
- **4.7** A frightened animal will trample right over a human.

 $7 \times 2 (14)$ 

- 5. There are a number of guidelines and requirements for transporting farm animals. Answer the following questions:
  - **5.1** What do we call the form that must be completed before transporting animals? (1)
  - **5.2** Name three facts about the animals that must be completed on this form. (3)
  - **5.3** When is the best time to transport animals? (1)
  - **5.4** Why is it necessary to group animals before transport? (1)
  - **5.5** Name two skills of good drivers when transporting animals. (2)

3

# Memorandum

# Unit 1

	ort questions							
1.1		<b>2</b> B	<b>1.3</b> A	<b>1.4</b> A	1			
		6 C	<b>1.7</b> C				(14)	
	homeothermic	2.2	battery cage system	2.3	free range	e system		
2.4	thermoregulation	2.5	conduction				(10)	
Lo	nger question	S						
3.1	Dairy cow. For a	dairy co	w to produce milk, it n	needs lots of	energy, wh	ich causes a high heat production.	(2)	
	.2 Reasons for high critical temperature of chickens:							
	•		chickens is small, there		e energy e	asily.		
The down that covers the body at two weeks of age is not good insulation material.							(2)	
3.3	<b>3.3</b> Pigs do not have sweat glands.							
	<b>1.1</b> A The house must be orientated in a south–north direction.							
	<b>B</b> The short side	es must f	ace in an east-west dir	rection.				
	C An <u>A-frame</u> r	oof ensu	res good circulation of	f air.			(3)	
4.2	Green or blue		C				(1)	
4.3	.3 Any two: wood shavings, straw, hay, chopped cardboard, shredded paper						(2)	
	•	_	lusty, because it causes				(2)	
	O		7-	1 /	1		( )	
Un	it 2							
Sh	ort questions							
1.1	D <b>1.2</b> A	1.3	A <b>1.4</b> B	1.5 A			(10)	
	Herd animals		Hierarchy	<b>2.3</b> Flight	zone	<b>2.4</b> Territoriality	()	
	Blind spot		7	8		, , , , , , , , , , , , , , , , , , , ,	(10)	
T.o	nger question	<b>S</b>						
	_							
3.	Any three:	. 1						
	• pinned or rai							
	• rapid tail mo							
	<ul> <li>hair raised or</li> </ul>	n the bac	CK					
	<ul> <li>pawing</li> </ul>							
	• snorting						(2)	
	• feigned charg			4.4 •	4.5	1	(3)	
		.2 poult		<b>4.4</b> pigs	4.5	sheep	(1.4)	
		.7 cattle					(14) (1)	
	<ul><li>.1 Transport permit</li><li>.2 Information to include on transport permit:</li></ul>							
5.2			transport permit:					
	• number of ar							
	• type of anim						(=)	
	• description of						(3) (1)	
	5.3 When the roads are not busy.							
<ul><li>5.4 To allow social groups to become established.</li><li>5.5 Driver skills for transporting animals:</li></ul>							(1)	
	<ul> <li>handle truck</li> </ul>	•						
	• be familiar w	ith the r	oute				(2)	