

Print exam correction: Section A,
Question 1, 'gallet' changed to 'gullet'

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Write your **student number** in the boxes above.

Letter

VET Equine Studies

Question and Answer Book

VCE Examination – Friday 8 November 2024

- Reading time is **15 minutes**: 9.00 am to 9.15 am
- Writing time is **1 hour 30 minutes**: 9.15 am to 10.45 am

Approved materials

- One scientific calculator

Materials supplied

- Question and Answer Book of 24 pages
- Multiple-Choice Answer Sheet

Instructions

- Follow the instructions on your Multiple-Choice Answer Sheet.
- At the end of the examination, place your Multiple-Choice Answer Sheet inside the front cover of this book.

Students are **not** permitted to bring mobile phones and/or any unauthorised electronic devices into the examination room.

Contents	pages
Section A (20 questions, 20 marks) _____	2–6
Section B (19 questions, 80 marks) _____	7–21

Section A – Multiple-choice questions

Instructions

- Answer **all** questions in pencil on your Multiple-Choice Answer Sheet.
 - Choose the response that is **correct** or that **best answers** the question.
 - A correct answer scores 1; an incorrect answer scores 0.
 - Marks will **not** be deducted for incorrect answers.
 - No marks will be given if more than one answer is completed for any question.
-

Question 1

A horse with a conformation feature of open gullet is found around

- A. hindlegs.
- B. forelegs.
- C. nose.
- D. neck.

Question 2

What is a high calcium feed for horses?

- A. Lucerne chaff
- B. oaten chaff
- C. sunflower oil
- D. bran

Question 3

It is important to follow the correct vaccination schedules of horses. Initial doses are administered in specific timeframes for the horse to build immunity.

A vaccination that requires two initial doses four to six weeks apart is necessary for which disease?

- A. tetanus
- B. strangles
- C. influenza
- D. equine herpes virus

Question 4

In which part of the body does the secretion of pepsin to aide digestion of protein occur?

- A. caecum
- B. rectum
- C. stomach
- D. small intestine

Question 5

Faecal egg count testing is a parasite control method for horses.

However, it will only detect certain worms, including

- A. bot flies.
- B. pinworms.
- C. strongyles.
- D. tapeworms.

Question 6

Which one of the following factors is most crucial in determining the digestibility of horse feed?

- A. colour
- B. texture
- C. moisture content
- D. nutrient composition

Question 7

A hoof condition where the axis is 60 degrees or more, either inherited or due to nutritional deficiency, is known as a

- A. contracted heel.
- B. bull-nosed foot.
- C. club foot.
- D. flat foot.

Question 8

In a horse's body, curb is an enlargement of the

- A. back of the hock.
- B. front of the knee.
- C. back of the fetlock.
- D. side of the pastern.

Question 9

Fat is broken down and absorbed by a horse's

- A. liver.
- B. small intestine.
- C. caecum.
- D. colon.

Question 10

Being big in the haunches and heavily muscled are characteristics that are associated with which horse breed?

- A. Arabian
- B. Friesian
- C. stock horse
- D. Clydesdale

Question 11

In horse movement, 'collection' refers to the horse's ability to

- A. raise its back and transfer weight onto its hindquarters.
- B. place more weight onto its forelegs.
- C. stretch its neck out in front.
- D. maintain a steady pace.

Question 12

A horse with a bowed tendon in its foreleg will appear to have

- A. a lump on the knee.
- B. a raised bump on the fetlock.
- C. a soft swelling on the pastern.
- D. a swelling at the back of the cannon.

Question 13

Vitamins are essential for horse health.

Biotin is an important vitamin that is often fed as a supplement because it supports

- A. hoof wall structure.
- B. muscle growth.
- C. teeth density.
- D. bone growth.

Question 14

If a horse receives a wound to its forelimb that requires sutures, what is the maximum timeframe to apply sutures for successful healing?

- A. 4–6 hours
- B. 8–10 hours
- C. 12–14 hours
- D. 16–18 hours

Question 15

The body process that maintains the internal environment while adjusting to the constantly changing external environment is known as

- A. metabolism.
- B. homeostasis.
- C. fermentation.
- D. rhabdomyolysis.

Question 16

The process of bone development in horses is known as ossification.

This process requires sufficient amounts of calcium and phosphorus in conjunction with which vitamin?

- A. vitamin B
- B. vitamin C
- C. vitamin D
- D. vitamin K

Question 17

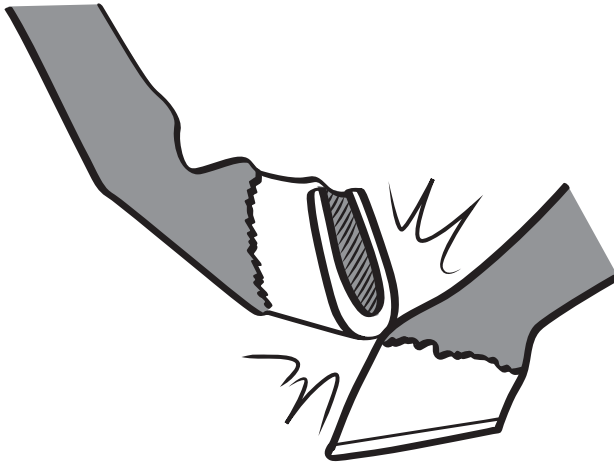
A horse in poor health is brought to an equestrian stable. The horse has matted scabs over its back and rump.

This is a form of dermatophilosis known as

- A. rain scald.
- B. mud fever.
- C. urticaria.
- D. warts.

Question 18

The picture below shows the toe of the forefoot hitting the coronet of the hind foot on the same side.



This interference can occur during a trot and a gallop and is known as

- A. forging.
- B. scalping.
- C. over-reaching.
- D. speedy cutting.

Question 19

When a horse is constantly rubbing its tail, this is an indicator for which one of the following parasites?

- A. pinworms
- B. tapeworms
- C. large strongyles
- D. large roundworms

Question 20

The failure of one or both testes to descend into the normal adult position in the scrotum is known as

- A. prolapse.
- B. urticaria.
- C. uterine cysts.
- D. cryptorchidism.

Section B

Instructions

- Answer **all** questions in the spaces provided.
 - Write your responses in English.
-

Question 1 (1 mark)

What is a physical characteristic of a horse as a 'roarer'?

Question 2 (3 marks)

Identify three factors which will impact on the healthy weight of a horse.

Factor 1 _____

Factor 2 _____

Factor 3 _____

Question 3 (3 marks)

A horse has a conformation feature described as a 'sway back'.

Describe this conformation feature and explain how this can impact the horse's suitability for riding.

Question 4 (1 mark)

What is the workplace health and safety standard for disposing of a used needle after a horse has been given an injection?

Question 5 (3 marks)

The stable manager has spotted a horse with Australian stringhalt.

Complete the table below.

State the body system that Australian stringhalt affects.	
State one symptom of Australian stringhalt.	
Identify one action that minimises the risk of Australian stringhalt.	

Question 6 (6 marks)

Ringworm is a relatively mild zoonosis disease.

- a. Outline a treatment plan for a horse with ringworm to avoid spreading the infection to other horses in the stable.

4 marks

- b. Identify **two** safe work practices a stablehand could implement to prevent contracting ringworm.

2 marks

Do not write in this area.

Question 7 (4 marks)

Bone spavin is one of the most common causes of hind leg lameness.

Complete the table below.

What are two symptoms of bone spavin?	1.
	2.
What is a conformation feature that increases the likelihood of bone spavin?	
What is a movement or competitive activity that would increase the likelihood of bone spavin occurring?	

Question 8 (9 marks)

A horse is brought onto a property from another state. The horse is closely monitored for abnormal health signs or any changes, including colic.

- a.** List three behaviours the horse may demonstrate that would indicate colic. 3 marks

Behaviour 1 _____

Behaviour 2 _____

Behaviour 3 _____

- b.** The horse has begun to display signs of colic and the vet has been called.
Outline four actions required to manage the horse until the vet arrives. 4 marks

Action 1 _____

Action 2 _____

Action 3 _____

Action 4 _____

- c.** Identify two possible causes of colic. 2 marks

Cause 1 _____

Cause 2 _____

Question 9 (2 marks)

Describe **two** functions of the equine skeletal system.

Question 10 (5 marks)

Equine wormers are administered according to a horse's body weight.

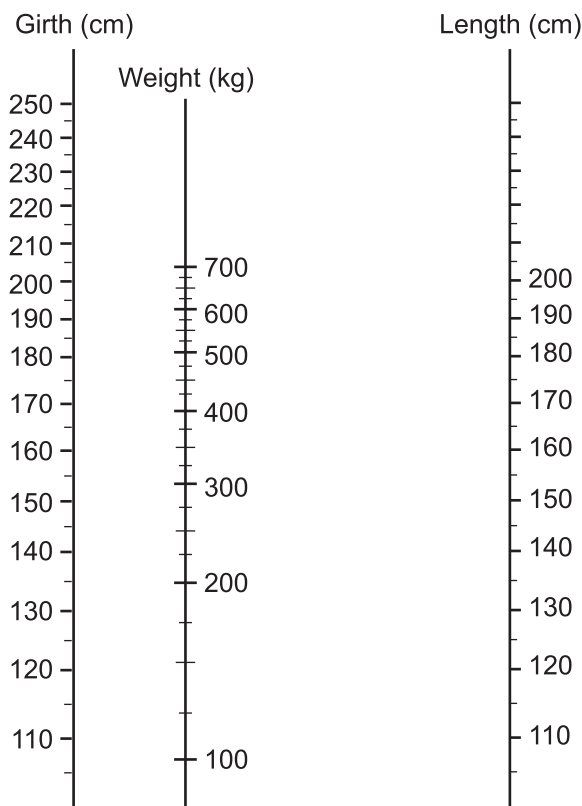
a. Using the nomogram detailed below, calculate the weight (rounding up to the nearest 100 kg) of a horse that measures:

- 190 cm from the point of the shoulder to the point of the buttock
- 180 cm around the girth.

1 mark

Weight (kg) _____

Nomogram for horse weight calculation



Source: <https://agriculture.vic.gov.au>

- b. An equine wormer dosage rate is recommended to be given at 1 mL/50 kg.

In the box below, calculate the dosage required for a horse weighing 550 kg. Include the calculation in your response.

2 marks



- c. Apart from body weight, what are **two** other factors that should be considered when worming a horse?

2 marks

Question 11 (3 marks)

Protein is an essential nutrient for horse health.

a. Identify **one** natural protein source for horses.

1 mark

b. Identify **two** functions of proteins in horses.

2 marks

Question 12 (3 marks)

Equine metabolic syndrome (EMS) is a serious problem affecting both horses and ponies.

a. In the table below, name the equine system affected by this syndrome and state that system's function.

2 marks

System affected	
System function	

b. Horses and ponies with EMS are at risk of developing further complications.

Which illness has a high possibility of developing in an EMS-affected horse?

1 mark

Do not write in this area.

Question 13 (4 marks)

An eventing horse has undertaken high-intensity training. It is a warm day, and the horse has sweated heavily.

- a. What are **two** consequences of excessive sweating for the wellbeing of the horse? 2 marks

- b. Detail **two** preventative measures that could be implemented to avoid the consequences identified in **part a**. 2 marks

Question 14 (8 marks)

A rider is completing the final stretch of a 40 km endurance ride, when they notice that their horse suddenly appears stiff and reluctant to move. The muscles of the hindquarters feel hard, and the horse is sweating profusely.

- a. Identify the horse's health condition. 1 mark

- b. State **two** first aid steps the rider could follow in this scenario. 2 marks

- c. Apart from first aid, explain what treatment the horse will require to aid recovery. 3 marks

- d. Identify **two** possible causes of this condition. 2 marks

Do not write in this area.

Question 15 (5 marks)

If an equestrian establishment experiences an outbreak of strangles, monitoring the vital signs of all the horses on the property is required.

- a. Why is the monitoring of both sick and healthy horses required?

2 marks

- b. In the table below, identify the normal range of the following vital signs for a healthy horse.

3 marks

	Normal range
Temperature (°C)	
Heart rate	
Respiratory rate	

Question 16 (6 marks)

The Friesian pictured below is a baroque-type horse.



Source: Sabine Hagedorn/Shutterstock.com

- a. List three conformation features of the Friesian horse that are typical of the baroque type.

3 marks

Conformation 1 _____

Conformation 2 _____

Conformation 3 _____

- b. Identify an equestrian discipline that this Friesian–baroque type would suit, and justify your response.

3 marks

Discipline _____

Justification _____

Do not write in this area.

Question 17 (4 marks)

The cardiovascular and lymphatic systems play an important role in equine physiology.

- a.** Describe the shared function of the equine cardiovascular and lymphatic systems. 2 marks

- b.** Filled legs are an abnormality of the cardiovascular and lymphatic systems.
Identify **two** other illnesses or abnormalities of these physiological systems. 2 marks

Question 18 (4 marks)

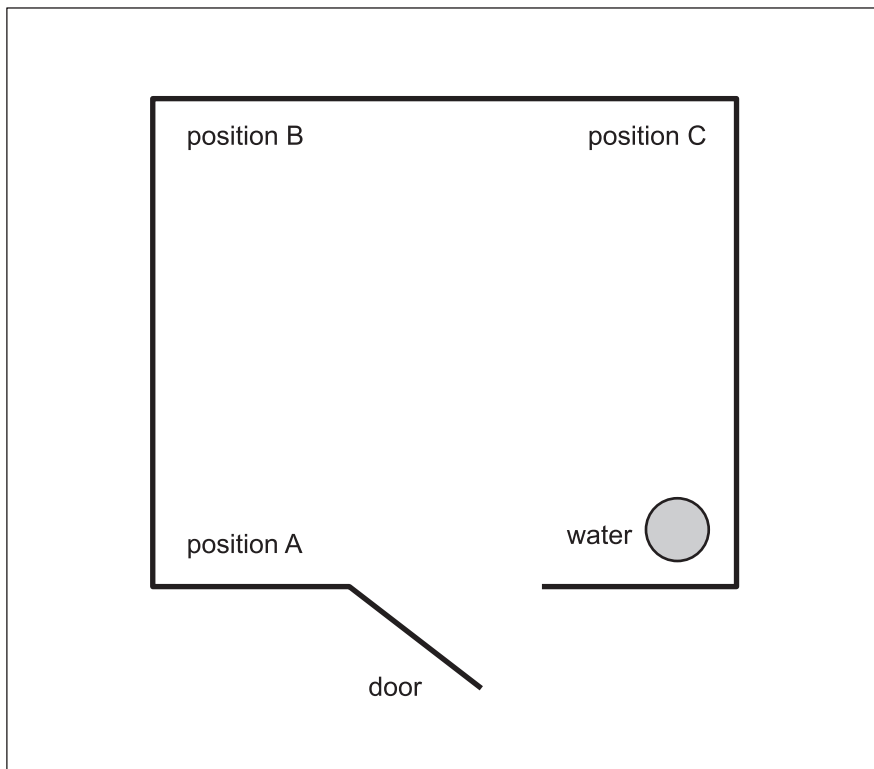
A horse in a performance stable has recovered from impaction colic and is on box rest. The horse is being fed only hay.

a. Why would a horse on box rest be fed only hay?

2 marks

b. Using the diagram of a box rest below, identify which position is the most appropriate to tie a haynet. State a reason for your choice.

2 marks



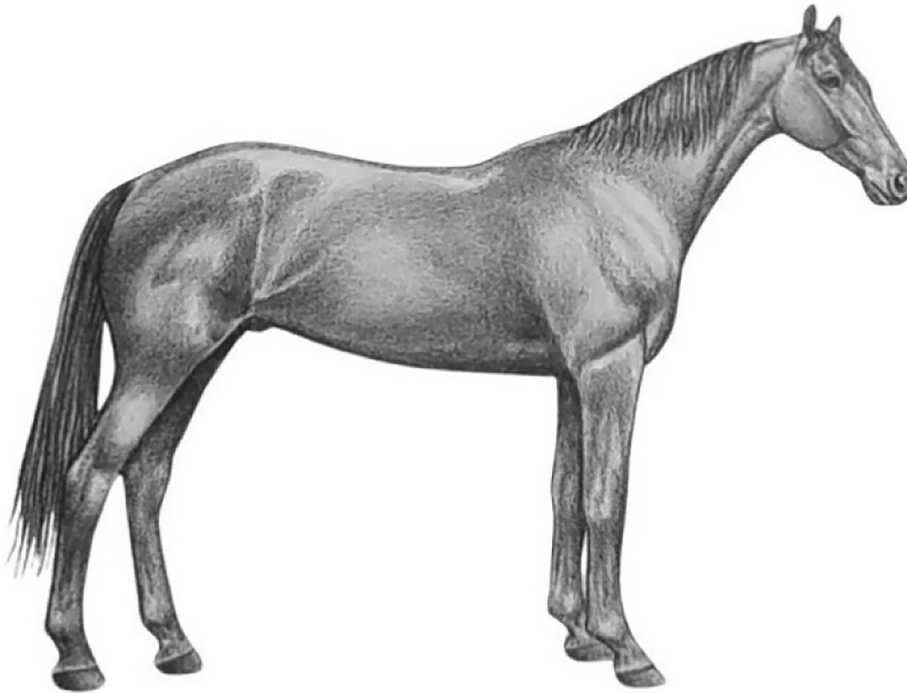
Position _____

Reason _____

Question 19 (6 marks)

The horse pictured below has the following conformation features:

- straight behind
- long back
- short neck
- narrow chest.



Source: HS Thomas, *The Horse Conformation Handbook*, Storey Publishing, 2005, p. 286

Select **two** of the conformation features. For each feature, state why it is undesirable and explain how this impacts the horse's movement during riding.

Conformation	Undesirability	Impacts on movement
1.		
2.		

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