

STUDENT NUMBER           Letter

# VCE VET EQUINE STUDIES

## Written examination

Tuesday 31 October 2023

Reading time: 9.00 am to 9.15 am (15 minutes)

Writing time: 9.15 am to 10.45 am (1 hour 30 minutes)

### QUESTION AND ANSWER BOOK

#### Structure of book

<i>Section</i>	<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
A	20	20	20
B	17	17	80
			Total 100

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners, rulers and one scientific calculator.
- Students are NOT permitted to bring into the examination room: blank sheets of paper and/or correction fluid/tape.

#### Materials supplied

- Question and answer book of 15 pages
- Answer sheet for multiple-choice questions

#### Instructions

- Write your **student number** in the space provided above on this page.
- Check that your **name** and **student number** as printed on your answer sheet for multiple-choice questions are correct, **and** sign your name in the space provided to verify this.
- All written responses must be in English.

#### At the end of the examination

- Place the answer sheet for multiple-choice questions inside the front cover of this book.

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

**SECTION A – Multiple-choice questions****Instructions for Section A**

Answer **all** questions in pencil on the answer sheet provided for multiple-choice questions.

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**

What is the main function of a horse's skin?

- A. digestion
- B. movement
- C. protective covering
- D. transportation of waste

**Question 2**

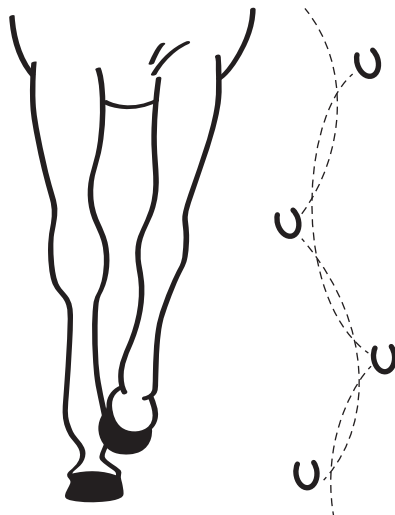
A horse has a resting heart rate of 56 bpm.

This heart rate is

- A. low.
- B. normal.
- C. high.
- D. dangerously high.

**Question 3**

The movement fault in the image below is known as



Source: adapted from PJ Huntington, *Horse Sense: The Guide to Horse Care in Australia and New Zealand*, 2nd edition, J Myers and E Owen (contributors), CSIRO Publishing, Melbourne, 2004, p. 83

- A. forging.
- B. plaiting.
- C. winging.
- D. stargazing.

SECTION A – continued

**Question 4**

The most suitable feed to help manage a horse with recurrent exertional rhabdomyolysis (RER) is

- A. oats.
- B. sweet feed.
- C. lucerne hay.
- D. pasture hay.

**Question 5**

Wobbler syndrome is most commonly detected in

- A. newborn foals.
- B. young growing horses.
- C. mature horses in full work.
- D. older pony breeds.

**Question 6**

The slope of the croup varies between breeds.

Flatter croups can be seen in which breed?

- A. Arabians
- B. Clydesdales
- C. warmbloods
- D. riding ponies

**Question 7**

A racing stable uses 7 tonnes of oats from the silo every 4 weeks.

A silo holding 28 tonnes of oats will need refilling every

- A. 4 weeks.
- B. 8 weeks.
- C. 16 weeks.
- D. 28 weeks.

**Question 8**

Why is it important to organise regular dental checks for horses?

- A. Horses often have cavities.
- B. Horses have continuously growing teeth that require rasping.
- C. The action of chewing produces flat surfaces that require rasping.
- D. Horses do not have deciduous teeth, so you need to manage their permanent teeth.

**Question 9**

What could lead to poor fertility in a mare?

- A. sarcoids
- B. urticaria
- C. cryptorchidism
- D. ovarian haematoma

**Question 10**

According to best practice, how often should a farrier provide hoof care to a ridden horse with shoes?

- A. every 2–3 weeks
- B. every 4–6 weeks
- C. every 8–10 weeks
- D. every 6 months

**Question 11**

Microbial digestion in horses takes place in the

- A. pancreas.
- B. stomach.
- C. caecum.
- D. colon.

**Question 12**

What are two routine vaccinations for horses?

- A. strangles and tetanus
- B. tetanus and laminitis
- C. strangles and laminitis
- D. ricketts and pneumonia

**Question 13**

Digestibility of energy sources is important when devising an optimal feeding plan.

A low digestibility feed ration would be more appropriate for

- A. a lactating mare.
- B. a breeding stallion.
- C. a competition horse.
- D. an insulin-resistant horse.

**Question 14**

Which one of these diseases is zoonotic?

- A. Hendra virus disease
- B. Cushing's disease
- C. laminitis
- D. colic

**Question 15**

Which of the following horse breeds is associated with short, strong cannon bones, feathering, and a relatively short back?

- A. Lipizzaner
- B. Shetland
- C. stock horse
- D. Standardbred

**Question 16**

On average, how many kilograms of concentrate feed per day are required by a 500 kg stabled horse in heavy work with no access to pasture?

- A. 1 kg to 2 kg
- B. 3 kg to 4 kg
- C. 5 kg to 10 kg
- D. 11 kg to 15 kg

**Question 17**

What equine system does anaemia affect?

- A. cardiovascular
- B. reproductive
- C. respiratory
- D. skin

**Question 18**

A horse with gotch eye has eyes that are

- A. small.
- B. large.
- C. cloudy.
- D. uneven.

**Question 19**

Which of the following parts of a horse's body are most important for hormone production?

- A. thyroid and lungs
- B. epidermis and spleen
- C. caecum and appendix
- D. pituitary and pancreas

**Question 20**

The horse's ability to work in degrees of self-carriage and collection is known as

- A. engagement.
- B. suspension.
- C. elevation.
- D. swing.

**SECTION B**

**Instructions for Section B**  
Answer **all** questions in the spaces provided.

**Question 1** (3 marks)

List **three** functions of the respiratory system.

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**Question 2** (2 marks)

Describe the difference between pacing and trotting in a horse’s movement.

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**Question 3** (6 marks)

**a.** Identify **three** signs that indicate a horse is dehydrated. 3 marks

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**b.** Explain how hydration can be managed when a horse travels long distances. 3 marks

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**Question 4 (5 marks)**

An aged gelding is kept in a muddy paddock during wintertime and fed 2 kg of pasture hay and 1 kg of whole oats once per day. This horse has a body condition score of 2.

A horse's estimated weight can be calculated from the girth and length, using the formula below:

$$\text{weight (kg)} = \text{girth}^2 \text{ (cm)} \times \text{length (cm)} \div 12\,000$$

- a. What would be the weight of the horse in kilograms if the length of the horse was 190 cm and the girth was 165 cm? 1 mark

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- b. Outline appropriate changes to the current feeding plan, without changing the paddock, that would aid the horse in gaining weight. 4 marks

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**Question 5 (2 marks)**

Identify **two** reasons why 'narrow chested' is considered a conformation fault in ridden horses.

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**Question 6** (9 marks)

**a.** What does choke refer to in a horse? 2 marks

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**b.** List **three** causes of choke. 3 marks

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**c.** Outline **two** key signs of choke. 2 marks

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**d.** How can choke be prevented? 2 marks

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**Question 7** (2 marks)

Using your knowledge of equine movement, explain why the leading leg in the gallop is more prone to injury.

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**Question 8** (7 marks)

A horse housed in a paddock with other horses on a large agistment property has been diagnosed with strangles by a veterinarian.

- a. Explain how this horse and all the other horses on the property should be managed. 5 marks

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- b. Identify actions that minimise the risk of strangles occurring on the property. 2 marks

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**Question 9** (2 marks)

Melanomas are abnormalities affecting the horse's skin. One type is often seen under the tails of grey horses.

List **two** typical appearance attributes of this type of melanoma.

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**Question 10** (3 marks)

- a. Define gamete production. 1 mark

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- b. Identify **two** places in horses' bodies where gamete production occurs. 2 marks

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**Question 11** (3 marks)

A hunter's bump is a conformation fault in horses.

- a. Describe the visible signs of a hunter's bump. 1 mark

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- b. Explain the internal changes in a horse's body that cause a hunter's bump. 2 marks

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**Question 12** (2 marks)

List **one** advantage and **one** disadvantage of feeding at the same time every day.

Advantage	Disadvantage
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**Question 13** (10 marks)

Horses can develop laminitis due to a number of reasons, including obesity or non-weight-bearing lameness.

- a. What are **three** initial signs displayed by a horse with laminitis? 3 marks

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- b. Explain what happens structurally when a horse develops laminitis. 4 marks

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- c. A pony on good pasture has developed mild laminitis due to becoming obese.

Describe **three** management strategies to prevent the pony's condition from progressing further.

3 marks

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**Question 14** (9 marks)

A horse has a cleaned wound on the lower leg that requires bandaging.

- a. Identify **three** safe work practices, other than wearing PPE, that should be implemented when applying the bandage. 3 marks

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- b. Following the practices identified in **part a.**, describe the steps required to correctly apply a bandage to the horse’s leg. 6 marks

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**Question 15** (4 marks)

Micronised and extruded horse feeds have advantages over feeding with whole grains.

Describe micronised and extruded horse feeds, and their advantages over whole grains.

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**Question 16** (3 marks)

Describe sidebone and **two** conformation attributes that may lead to a horse developing sidebone.

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**Question 17 (8 marks)**

Compare the two horses pictured below.

Discuss their suitability for elite level eventing, based on the following attributes:

- conformation related to soundness for eventing
- conformation influencing movement for this purpose
- ability to perform at this level based on conformation features
- overall balance.

**Horse 1**



Source: Olga\_i/Shutterstock.com

**Horse 2**



Source: Eric Isselee/Shutterstock.com



