

STUDENT NUMBER           Letter

# VCE VET EQUINE STUDIES

## Written examination

Thursday 9 November 2017

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	22	22	80
			Total 100

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners and rulers.
- Students are NOT permitted to bring into the examination room: blank sheets of paper and/or correction fluid/tape.
- No calculator is allowed in this examination.

#### 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**

A standardbred, a quarter horse and a thoroughbred are all examples of which type of horse?

- A. warm blood
- B. light horse
- C. draft
- D. pony

**Question 2**

Tumours formed from the cells that produce pigment in the skin are called

- A. cysts.
- B. warts.
- C. sarcoids.
- D. melanomas.

**Question 3**

A horse has a body condition score of 3.

This horse is

- A. obese.
- B. overweight.
- C. underweight.
- D. in ideal condition.

**Question 4**

Strangles is a disease that affects which physiological system?

- A. circulatory
- B. respiratory
- C. endocrine
- D. nervous

**Question 5**

What is the normal temperature range for a healthy adult horse?

- A. 32–35 °C
- B. 35–36 °C
- C. 37–38 °C
- D. 37–40 °C

**Question 6**

The hindgut consists of the

- A. colon and caecum.
- B. caecum and rectum.
- C. colon and small intestine.
- D. small intestine and caecum.

**Question 7**

A condition known as bighead is commonly caused by a deficiency of calcium.

Which one of the following feeds would put a horse most at risk of developing bighead?

- A. grass hay
- B. oaten hay
- C. tropical pasture
- D. native dry pasture

**Question 8**

What is the common name given to large strongyles?

- A. threadworms
- B. bloodworms
- C. tapeworms
- D. pinworms

**Question 9**

When a horse is moving, concussion in the hind limb is mostly absorbed by the

- A. hock.
- B. stifle.
- C. femur.
- D. fetlock.

**Question 10**

Homeostasis and regulation of blood pressure and volume are functions of the

- A. digestive and cardiovascular systems.
- B. digestive and endocrine systems.
- C. digestive and lymphatic systems.
- D. digestive and urinary systems.

**Question 11**

Supplementary feeding refers to

- A. providing vitamins and minerals in a ration.
- B. providing any feed in addition to pasture.
- C. adding extra concentrates to a ration.
- D. adding extra protein to a ration.

**Question 12**

The maximum length of a horse's stride is determined by the

- A. angle of the pastern.
- B. length of the cannon.
- C. angle of the shoulder.
- D. length of the forearm.

**Question 13**

Hunter's bump is a painful condition that affects a horse's

- A. fetlock.
- B. pelvis.
- C. knee.
- D. hock.

**Question 14**

Ringworm is a contagious skin condition caused by a

- A. worm.
- B. virus.
- C. fungus.
- D. parasite.

**Question 15**

In which part of the equine digestive system are starch molecules in grains digested?

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

**Question 16**

Inflammation of the plantar tarsal ligament is commonly referred to as a

- A. thoroughpin.
- B. spavin.
- C. splint.
- D. curb.

**Question 17**

An overly long, sloping front pastern can predispose a horse to excessive

- A. strain on the suspensory ligament.
- B. concussion in the fetlock joint.
- C. strain on the extensor tendon.
- D. concussion in the knee joint.

**Question 18**

Where is a subcutaneous injection administered?

- A. into the bloodstream
- B. into the muscle
- C. under the skin
- D. into a joint

**Question 19**

Soybean meal is very high in

- A. crude protein.
- B. phosphorus.
- C. crude fibre.
- D. calcium.

**Question 20**

Inflammation of the skin caused by an allergic reaction or by a fungal or bacterial infection is the main symptom of

- A. galls.
- B. fibroma.
- C. dermatitis.
- D. folliculitis.

**SECTION B****Instructions for Section B**

Answer **all** questions in the spaces provided.

**Question 1** (1 mark)

What is the main sign of Australian stringhalt?

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**Question 2** (1 mark)

Hydration status is an important indicator of horse health.

What does the test for hydration status involve?

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**Question 3** (1 mark)

Describe the footfalls of the pacing gait.

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**Question 4** (3 marks)

Any injury that a horse sustains may be accompanied by inflammation.

a. Give two indications that inflammation may be present.

2 marks

1. \_\_\_\_\_

2. \_\_\_\_\_

b. What first-aid treatment can be given for inflammation?

1 mark

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**Question 5** (3 marks)

Give three reasons why hay would be considered of poor quality and unsuitable to feed to horses.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

**Question 6** (2 marks)

Explain what a zoonotic disease is and give one example relating to horses in Australia.

Explanation \_\_\_\_\_

\_\_\_\_\_

Example \_\_\_\_\_

**Question 7** (2 marks)

Explain the difference between the gait abnormalities of overreaching and forging.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Question 8** (1 mark)

What is the common name for the condition that may occur in a fit horse in regular, moderate-to-hard work if the grain component of its feed ration is not reduced on a rest day?

\_\_\_\_\_

**Question 9** (4 marks)

It is important that a horse has the correct ratio of calcium (Ca) to phosphorus (P) in its feed ration.

**a.** What is the correct Ca:P ratio for each of the following? 2 marks

• A growing horse \_\_\_\_\_

• A mature horse \_\_\_\_\_

**b.** Name one feedstuff that is high in 2 marks

• calcium

\_\_\_\_\_

• phosphorus.

\_\_\_\_\_

**Question 10** (2 marks)

Explain why the forelegs of a horse are more likely to sustain injury than the hind legs.

\_\_\_\_\_

\_\_\_\_\_

**Question 11** (7 marks)

Retained afterbirth after foaling, an extended non-weight-bearing lameness in one leg and obesity may cause a serious condition in horses.

**a.** What is the correct veterinary term for this condition? 1 mark

\_\_\_\_\_

**b.** Give three possible signs of the condition named in **part a.** 3 marks

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

**c.** If the condition named in **part a.** is left untreated, what would be the physiological consequence? Explain how this consequence occurs. 3 marks

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**Question 12** (4 marks)

Joint injuries are common in horses. Some of these injuries have preventable causes, such as overworking a horse. Other injuries are caused by issues over which trainers have no control.

- a. State two examples of preventable causes of joint injury, other than overworking a horse. 2 marks

1. \_\_\_\_\_

2. \_\_\_\_\_

- b. Suggest two unpreventable causes of joint injury, excluding accidents. 2 marks

1. \_\_\_\_\_

2. \_\_\_\_\_

**Question 13** (2 marks)

Describe the function of the endocrine system and provide an example of an illness or abnormality that affects this system.

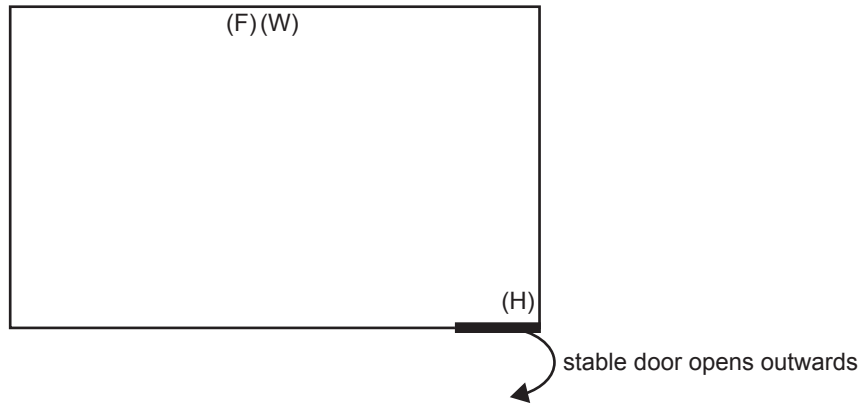
Description \_\_\_\_\_

\_\_\_\_\_

Example \_\_\_\_\_

**Question 14** (7 marks)

Consider the locations of the feed bin (F), water bucket (W) and hay net (H) in the diagram of a stable depicted in Figure 1.

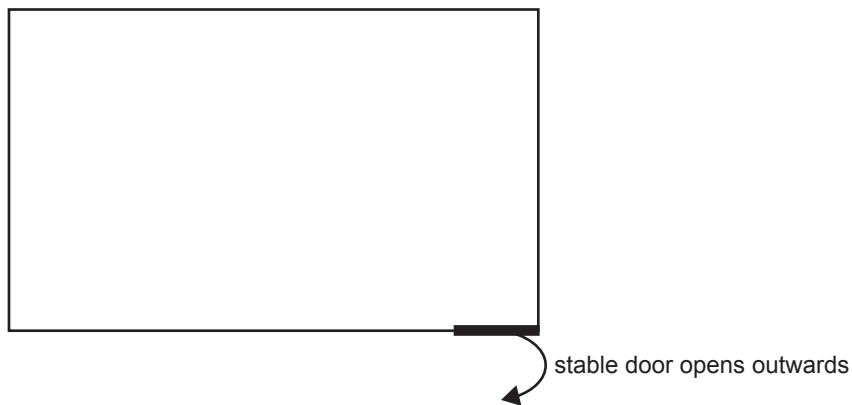


**Figure 1**

a. Identify three potential problems that could arise due to the arrangement depicted in Figure 1. 3 marks

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

b. On the diagram below, mark where the feed bin (F), water bucket (W) and hay net (H) should be located and explain the reasons for marking these locations. 4 marks



- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Question 15** (6 marks)

- a. What are two functions that the male and female equine reproductive systems have in common? 2 marks

1. \_\_\_\_\_ 2. \_\_\_\_\_

- b. Explain each of the following problems that can occur with equine reproductive systems and describe how each affects fertility. 4 marks

- Cryptorchidism

Explanation \_\_\_\_\_

\_\_\_\_\_

Description \_\_\_\_\_

\_\_\_\_\_

- Pooling urine

Explanation \_\_\_\_\_

\_\_\_\_\_

Description \_\_\_\_\_

\_\_\_\_\_

**Question 16** (9 marks)

Different horse breeds are used for different purposes because of their breed characteristics and conformation features.

For each of the following purposes, select an appropriate horse breed and give reasons for your selection, making reference to their breed characteristics and conformation features.

- A horse to pull a wagon at a family holiday camp

Breed \_\_\_\_\_

Reasons \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- A pony club mount for a confident eight-year-old beginner rider

Breed \_\_\_\_\_

Reasons \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- A horse for stock work

Breed \_\_\_\_\_

Reasons \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Question 17** (4 marks)

It is important to monitor the individual eating behaviours of horses.

- a. Describe three examples of eating behaviours that could indicate a potential health problem in a horse. 3 marks

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

- b. For one of the examples described in **part a.**, explain the associated potential health problem. 1 mark

Example \_\_\_\_\_

Health problem \_\_\_\_\_

\_\_\_\_\_

**Question 18** (4 marks)

At the first morning check of horses at a racing stable, a particular horse presents with the following signs:

- loss of appetite (feed left in bin)
- lethargy
- sweating
- nasal discharge
- visibly increased respiratory rate

The horse attended a race meeting the previous day.

Outline four biosecurity measures that should be taken in this situation.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

**Question 19** (4 marks)

Roaring is an equine respiratory disorder.

- a. What is the cause of roaring? 1 mark

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- b. Which specific part of the respiratory system is affected by roaring? 1 mark

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- c. Give two signs that could indicate a horse is a roarer. 2 marks

1. \_\_\_\_\_ 2. \_\_\_\_\_

**Question 20** (3 marks)

Gastric ulcers occur most commonly in performance horses and foals.

- a. What are two signs that a foal may be affected by gastric ulcers? 2 marks

1. \_\_\_\_\_ 2. \_\_\_\_\_

- b. Give **one** reason why a foal might develop gastric ulcers. 1 mark

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**Question 21** (4 marks)

Other than regular worming or drenching of horses, what are two strategies for minimising the worm burden? Explain why each strategy is effective.

Strategy 1 \_\_\_\_\_

Explanation \_\_\_\_\_

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Strategy 2 \_\_\_\_\_

Explanation \_\_\_\_\_

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**Question 22** (6 marks)

Describe each of the following conformation faults and explain how each could have a negative impact on the health or soundness of a horse.

- Parrot mouth

Description \_\_\_\_\_

\_\_\_\_\_

Explanation of negative impact \_\_\_\_\_

\_\_\_\_\_

- Flat feet

Description \_\_\_\_\_

\_\_\_\_\_

Explanation of negative impact \_\_\_\_\_

\_\_\_\_\_

- Calf knees

Description \_\_\_\_\_

\_\_\_\_\_

Explanation of negative impact \_\_\_\_\_

\_\_\_\_\_