



Victorian Certificate of Education 2012

SUPERVISOR TO ATTACH PROCESSING LABEL HERE

STUDENT NUMBER

Letter

Figures

Words

VCE VET EQUINE INDUSTRY

Written examination

Thursday 8 November 2012

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	24	24	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 white out liquid/tape.
- No calculator is allowed in this examination.

Materials supplied

- Question and answer book of 17 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 particular equine condition involves a swelling of the hard palate in the mouth, just behind the superior incisor arcade. The swelling may become level with the teeth and even beyond. The swelling may be reddened and tender, and may cause feeding problems.

The condition is called

- A. colic.
- B. lampas.
- C. founder.
- D. diarrhoea.

Question 2

Normal granulation during a wound-healing process refers to

- A. proud flesh.
- B. a scab becoming excessively thick.
- C. cells covering the wound to form a scab.
- D. treating the wound with a powder medication.

Question 3

Source: <https://share.ehs.uen.org/sites/default/files/images/Fessel.jpg>

The picture above shows a horse with

- A. a stocking.
- B. ermine marks.
- C. bend-or spots.
- D. a partial pastern.

Question 4

Consider the following information about an equine disease.

- There can be a range of symptoms in horses. Usually there is a sudden fever and either respiratory or neurological illness and rapid death. In some cases the onset of illness is gradual.
- There is no immunisation.
- If humans become infected there is a high death rate.
- Risks can be minimised by feeding and watering horses away from possible flying fox feeding or roosting areas.

The equine disease is most likely to be

- A. hendra.
- B. tetanus.
- C. strangles.
- D. equine influenza.

Question 5

On a hot afternoon a horse is led in from a paddock and is described as ‘tucked-up’.

This means it is standing with

- A. a hollow back.
- B. hollow flanks.
- C. its head down.
- D. all four feet well under its body, with forefeet and hind feet closer than normal.

Question 6

A disease of the male equine reproductive system is

- A. colitis – inflammation of the colon.
- B. arthritis – inflammation of the joints.
- C. urethritis – inflammation of the urethra.
- D. endometritis – inflammation of the uterus.

Question 7

When discussing a horse wound over the telephone with a veterinarian, you are asked if the wound is closed.

Closed wounds include

- A. abrasions.
- B. contusions.
- C. perforations.
- D. penetrations.

Question 8

On Australian horseracing and Equine Australia horse identification charts, any patch of hair growing in the opposite direction to the rest of the hair is noted. It can be either clockwise or anticlockwise in the direction of growth, and is sometimes called a crown, swirl, trichoglyph or cowlick.

A common name for this feature is

- A. scar.
- B. blaze.
- C. whorl.
- D. prophet’s thumb.

Question 9

'Tracking up' is defined as

- A. a horse's hind legs reaching well under the body.
- B. a horse travelling in a straight line across an arena.
- C. a horse's hind feet travelling in a straight line with the forefeet.
- D. a horse's hind feet stepping into or beyond the prints of the forefeet.

Question 10

Bacterial infections can often be treated with antibiotics.

Three equine health conditions caused by bacteria are

- A. botulism, tetanus, strangles.
- B. anhydrosis, thrush, rain scald.
- C. stringhalt, sarcoids, ringworm.
- D. tetanus, equine influenza, pneumonia.

Question 11

A young horse has a dietary deficiency. This may lead to the development of bone being adversely affected, with lameness, stiffness and, in extreme cases, misshaped bones being seen. Some of the grasses that the horse feeds on contain high levels of oxalates, which bind the deficient item and make it unavailable for use by the horse.

Which of the following supplements or additives is most likely to be beneficial?

- A. Ironvita – containing copper, iron, cobalt and folic acid
- B. Cal-Plus – containing calcium, phosphorous and magnesium
- C. Preserve – containing magnesium, selenium and vitamins C and D
- D. Cell-Vital – containing zinc, iron, manganese, selenium, chromium, vitamin A, vitamin B and optimum levels of other essential vitamins

Question 12

A horse basically 'walks in place', swaying its front end and neck/head from side to side repetitively. This usually happens by the stable door. Most of the time this is caused by isolation or a lack of companionship for a horse.

The passage above could describe

- A. cribbing.
- B. weaving.
- C. wind sucking.
- D. head bobbing.

Question 13

A horse's integumentary system consists of

- A. skin, teeth and hair.
- B. skin, hair and hooves.
- C. skin and blood vessels.
- D. skin and nervous system.

Question 14

A mature horse weighing 500 kg needs approximately 70 megajoules (MJ) of energy per day just for maintenance.

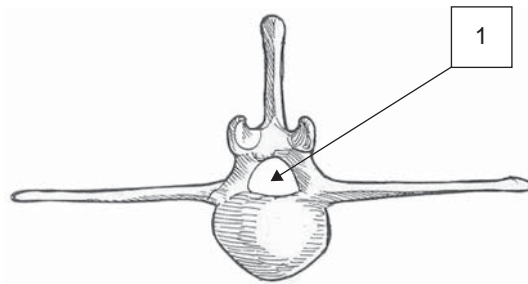
How much additional energy per hour is used if the horse is working at a fast trot, cantering and jumping?

- A. 5 MJ
- B. 10 MJ
- C. 15 MJ
- D. 25 MJ

Question 15

When carrying out routine skin-washing procedures on a horse to prevent or control external parasites, the person applying the product must be aware that the product is a

- A. defoliant.
- B. pesticide.
- C. herbicide.
- D. weedicide.

Question 16

The diagram above shows a cross-section of vertebra.

The area labelled 1 is the

- A. meninges.
- B. spinal canal.
- C. epidural space.
- D. thoracic spinal nerve.

Question 17

A 'walk' has

- A. 0 moments of suspension.
- B. 1 moment of suspension.
- C. 2 moments of suspension.
- D. 3 moments of suspension.

Question 18

As a Certificate II graduate, which of these actions could you be expected to perform without being instructed to do so by your supervisor?

- A. applying hoof oil to a hoof
- B. adding biotin to a horse's next feed
- C. replacing a nail in order to secure a loose shoe
- D. treating a softened hoof with a solution of formaldehyde

Question 19

Which of the following substances is a prohibited medication on a race day or on a day of FEI international competition, regardless of its concentration?

- A. arsenic
- B. glucosamine
- C. hydrocortisone
- D. procaine penicillin

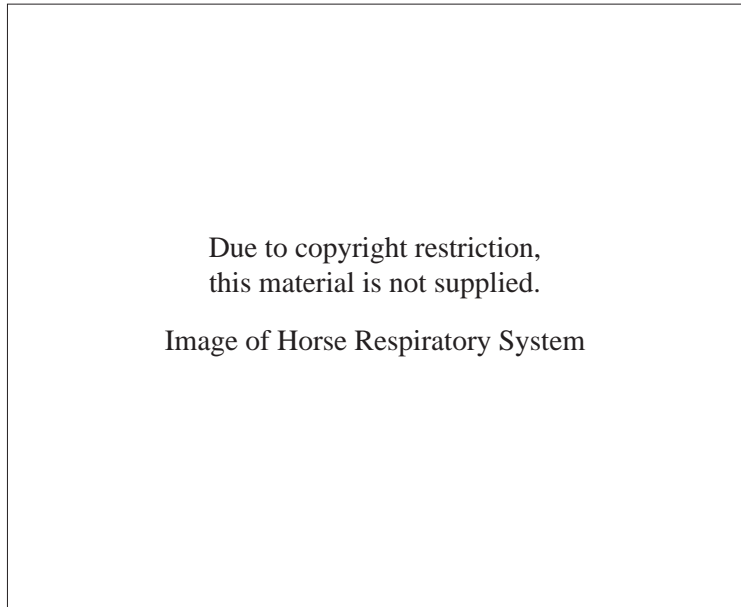
Question 20

The tetanus and strangles vaccine is administered

- A. orally.
- B. intravenously.
- C. intramuscularly.
- D. subcutaneously.

SECTION B**Instructions for Section B**

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

Question 1

Source: www.localriding.com/horses-respiratory-system.html

Select the numbers from the diagram above that correspond to the following components of the respiratory system.

trachea

alveolus

nasal cavity

pharynx

4 marks

Question 2

A horse has a loose shoe that needs to be removed.

a. Describe the **two** main steps in removing the shoe.

2 marks

b. Name **three** items of farrier equipment that could be used to remove the shoe.

3 marks

Question 3

Name the following dental faults, using common equine terminology.



1. _____

2. _____

2 marks

Question 4

There are six essential nutrients in food; four are listed below.

Describe a function of each essential nutrient listed.

Nutrient	Function
vitamin or mineral	
water	
protein	

3 marks

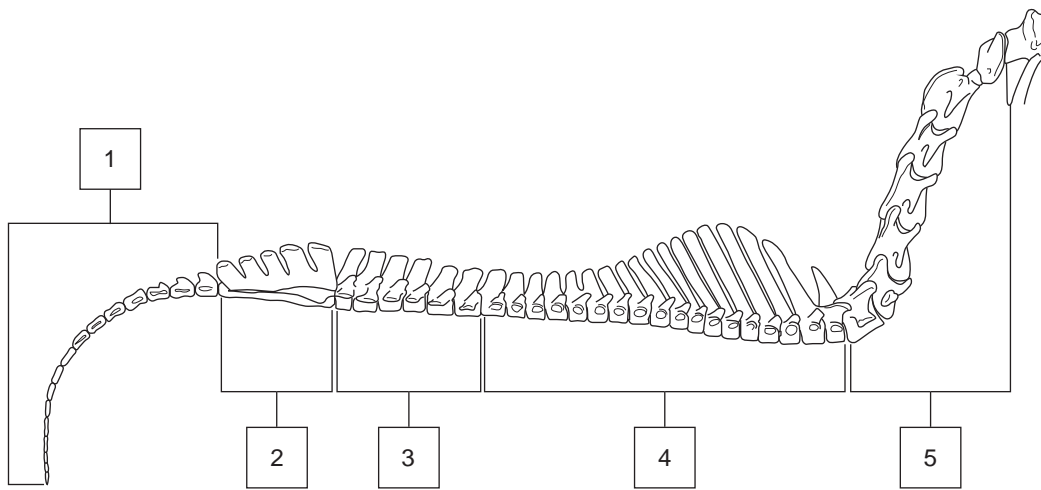
Question 5

Dystocia (difficult foaling, abnormal foal presentation, malpresentation) is relatively common in foaling mares.

Give one example of dystocia and explain how this can be corrected by the veterinarian.

2 marks

Question 6



Using the list below, identify the spinal groups labelled 1–5 in the diagram above.

- | | | |
|-----------|----------|----------|
| atlas | axis | cervical |
| coccygeal | dock | lumbar |
| sacral | thoracic | withers |

1	
2	
3	
4	
5	

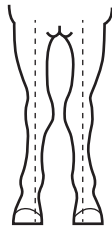
5 marks

Question 7

A horse is kept in a private, treed paddock that does not have any stable or loose box. Yesterday's temperature range was 6–17 °C and there were patches of heavy rain in the afternoon. Today the forecast is for a sunny day with clear skies, no rain and a maximum temperature of 27 °C.

When giving the horse its morning feed, describe **four** additional activities that you would do as a consequence of the changed weather conditions.

4 marks

Question 8Source: www.horseinfo.com

Name the foreleg fault condition shown above.

1 mark

Question 9

A 16.3 HH thoroughbred is nine years old. It is competing in dressage once a week and is trained vigorously for an hour, four times a week. It has a private paddock with moderate grass cover and it weighs 570 kg. A third of its food requirements is provided by grass and hay. In addition it has two buckets of feed each day. The table below provides data on some horse feeds. Refer to the data below when answering all parts of this question.

Food	Energy Mj/kg	Protein g/kg	Fibre %	Calcium g/kg	Phosphorous g/kg
lucerne chaff	9	170	27	13	3
oaten chaff	7	85	32	6	4
oats	12	96	10	1	3
soy meal	13.1	445	6.2	3.6	6.3
vegetable oil	38				
molasses	13.4	90	7	10.3	1.4

- a. This horse's feed buckets consist of 2 kg of lucerne chaff, 2 kg of oaten chaff and 1 kg of oats. The horse's owner believes that the weight of the feed is appropriate for the horse.

How could the horse's owner justify the feed combination?

2 marks

- b. The horse's trainer advises that half of the oats be replaced with soy meal.

i. Describe one advantage of replacing oats with soy meal.

ii. Describe a disadvantage of replacing oats with soy meal.

iii. Under what circumstances would replacing oats with soy meal be the better choice?

1 + 1 + 1 = 3 marks

- c. It has been suggested that 250 mL of either vegetable oil or molasses be added to the feed.

Explain why molasses could be considered a better choice.

1 mark

**SECTION B – continued
TURN OVER**

Question 10

Diarrhoea can either be short term or chronic (persistent and severe).

- a. State **two** possible causes of a short-term incident of diarrhoea.

2 marks

- b. State a possible cause of chronic diarrhoea.

1 mark

Question 11

- a. In most cases, ligaments join bone to bone.
Name an exception to this.

1 mark

- b. What is the difference between skeletal (striated) and smooth muscle?

1 mark

Question 12

The horse you have been asked to groom is agitated and you find that there is heat in the off foreleg, down the back of the cannon. You suspect that the horse has a bowed tendon.

- a. What is **your** initial responsibility?

1 mark

- b. If it is a bowed tendon, explain the treatment that the horse should receive.

2 marks

Question 13

- a. Define 'conformation' as it applies to horses.

1 mark

- b. Describe three major conformation differences that you are likely to find in a ridden show horse and a draught horse in relation to the parts of the anatomy listed below.

Anatomy	Ridden show horse	Draught horse
shoulders		
neck		
feet		

3 marks

Question 14

- a. State a problem health condition that can develop from a nutrient deficiency in a horse's diet. State which nutrient is lacking in the diet to cause this.

Problem health condition	Nutrient lacking

2 marks

- b. State a problem health condition that can develop from an excess of a nutrient in a horse's diet. State which nutrient is excessive in the diet to cause this.

Problem health condition	Excess nutrient

2 marks

Question 15

Briefly explain how the position of a horse's head may alter when the horse is lame in a forefoot and is being trotted for inspection.

1 mark

Question 16

- a. What are the major signs of pneumonia in a horse?

2 marks

- b. What physical change takes place in a horse's respiratory system if it has a severe case of pneumonia?

1 mark

Question 17

Manual handling of objects, other than horses, comprises a large part of the day when working in the equine industry.

- a. Give an example of a task that involves the manual handling of objects.

1 mark

- b. What can you do to minimise the risk of injury when carrying or moving equipment that is associated with the task stated in **part a.**?

2 marks

Question 18

Describe the difference between the horse markings known as prophet's thumb and whorl.

2 marks

Question 19

You are leading a horse with a halter and lead rope across a fenced yard, and it suddenly starts to stagger and become uncoordinated. It is unstable on its legs, wobbling and looking as if it might fall.

Outline the steps that you would take to maximise safety, first for yourself and, second, for the horse, in this scenario.

2 marks

Question 20

Circle one of the following terms and describe the effect that it has on a horse.

cryptorchidism

sloping vulva

irregular ovulation

2 marks

Question 21

Taking a horse's vital signs (temperature, pulse and respiration) gives a good indication of the horse's health. List **three** other signs that you could check when assessing the horse's state of health.

3 marks

Question 22

Circle one of the following horses.

show horse

dressage horse

racehorse trotter/pacer

jumping horse

- a. For your selection, indicate **three** important aspects of good conformation.

3 marks

- b. State the impact of each aspect of good conformation identified in **part a.** on the horse's movement.

3 marks

Question 23

A horse is tied up in an indoor stable laneway, 4 m wide. It is being groomed in preparation for a ride. A second rider mounts her horse in the middle of the stable block and rides towards the exit. She needs to ride behind the tied horse.

- a. Identify an Occupational Health and Safety hazard associated with this scenario. Describe the risk associated with this hazard, and assess the likelihood and probable consequence of the risk.

hazard _____

risk _____

likelihood _____

probable consequence _____

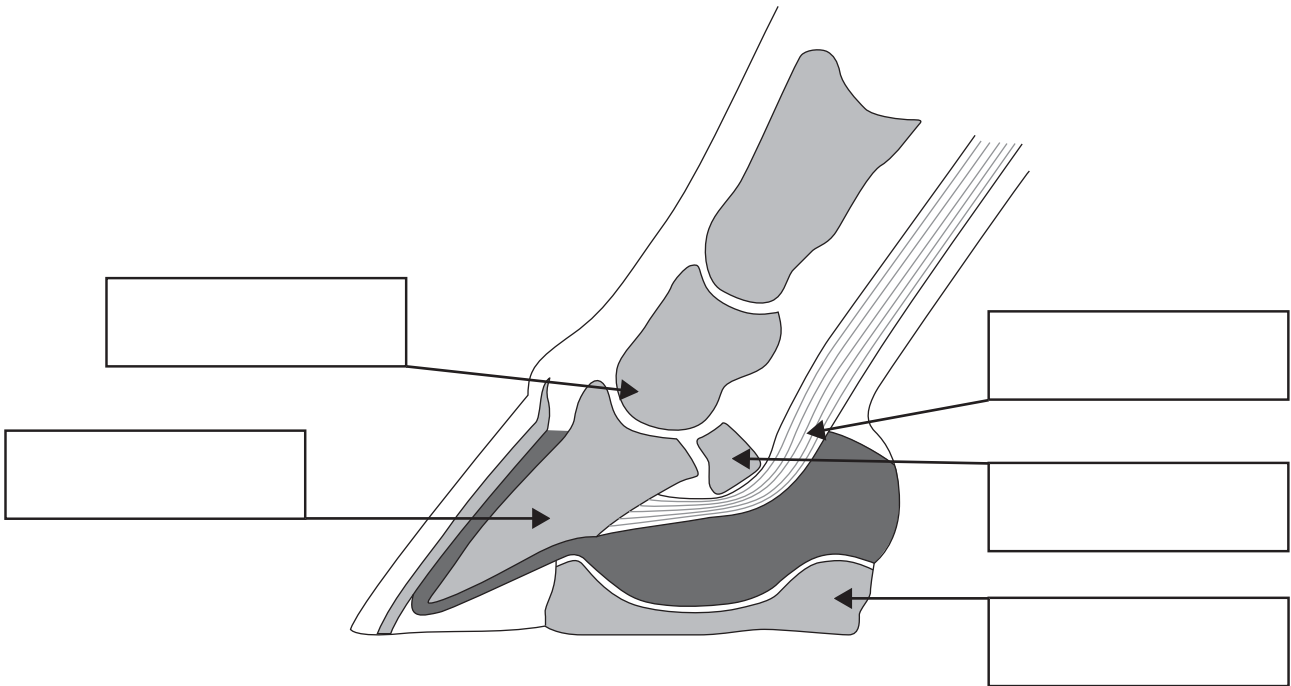
4 marks

- b. What control could be introduced to remove the risk and the severity of the consequence?

1 mark

Question 24

Label the following diagram with the correct names of the lower leg parts.



5 marks