VCE VET EQUINE INDUSTRY

Written examination

Monday 12 November 2007

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

<table>
<thead>
<tr>
<th>Section</th>
<th>Number of questions</th>
<th>Number of questions to be answered</th>
<th>Number of marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>B</td>
<td>24</td>
<td>24</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total 108</td>
<td></td>
</tr>
</tbody>
</table>

- 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 14 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.

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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 horse’s circulatory system has which of the following parts?

A. brain, veins, heart  
B. capillaries, arteries, heart  
C. liver, heart, veins  
D. veins, arteries, kidneys

Question 2
Teeth are always emerging from the gum line to be ground down by the opposing tooth. Lack of symmetry can lead to

A. sharp edges that can cut the tongue or cheek.  
B. teeth falling out.  
C. teeth cracking.  
D. flat surfaces that help grind the grain in the feed.

Question 3
The minimum amount of time generally recommended between feeding and exercise is

A. 1 hour.  
B. 2 hours.  
C. 3 hours.  
D. 4 hours.

Question 4
What is the normal heart rate of an adult horse?

A. 6–18 beats per minute  
B. 19–31 beats per minute  
C. 32–44 beats per minute  
D. 45–57 beats per minute

Question 5
A horse’s vital signs give an indication of its state of health. A raised temperature is most likely to be an indication of

A. lack of fitness.  
B. parasite infestation.  
C. infection.  
D. jaundice.
Question 6
Hazards in the workplace should be reported
A. as soon as possible.
B. at the end of the day.
C. at the end of the week.
D. at the monthly workplace meeting.

Question 7
The upper respiratory tract consists of
A. nasal passages, pharynx, soft palate.
B. larynx, trachea, lungs.
C. oesophagus, tongue, hard palate.
D. trachea, bronchi, lungs.

Question 8
When designing a ration for a thoroughbred, the first step is to
A. determine the weight of the horse and the amount of work it is to do.
B. determine the cost and availability of various ingredients.
C. have an in-depth knowledge of common scientific terms of commercial supplements.
D. determine what appeals to the horse.

Question 9
Riding gear that is fitted incorrectly to a horse can damage its
A. lungs.
B. heart.
C. skin.
D. stomach.

Question 10
Compared to older retired geldings, foals require less
A. protein.
B. phosphorus.
C. calcium.
D. iodine.

Question 11
Calcium concentrations are highest in
A. soya bean meal.
B. oats.
C. mixed pasture.
D. whole milk powder.
Question 12
Which part of the gear is most likely to wear out first?
A. buckles
B. straps
C. stitching
D. flat surfaces

Question 13
To dampen down bedding is to
A. remove any damp and soiled bedding.
B. hose out the stable after cleaning thoroughly.
C. settle the dust, once mucking out is complete.
D. dust the stable floor with hydrated lime.

Question 14
A cut on the leg of a horse is most severe if the blood is
A. bright red and spurting.
B. dark red and flowing.
C. dark red and oozing.
D. bright red and oozing.

Question 15
When balancing a feed ration, which of the following ratios is the most important?
A. sulphur to phosphorous
B. energy to protein
C. calcium to phosphorus
D. selenium to calcium

Question 16
The most suitable fence for housing horses is
A. ring lock.
B. five plain wires and two barbed wires.
C. two electric wires.
D. diamond mesh.

Question 17
When grooming a horse ready for work you should
A. take the horse to the tie up stalls.
B. remove the horse from the box and stand the horse in the walkway.
C. have the bridle and anti-rearing bit attached.
D. leave them in the box untethered.
Question 18
How often should horses be checked for injury, illness and lameness?
A. daily
B. weekly
C. fortnightly
D. monthly

Question 19
Some conditions of horses can be life threatening and should be identified and reported immediately.
Which of the following conditions is likely to be the most life threatening?
A. lameness
B. swelling at the point of the elbow
C. colic
D. laminitis

Question 20
Semen is produced in the tubules within the testicles.
Where is the semen then stored?
A. the ureters
B. vas deferens
C. accessory sex glands
D. epididymis
SECTION B – Short answer questions

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

Question 1
Name three contaminants that may arise in a feed room as a result of poor management.

1. 

2. 

3. 

3 marks

Question 2
a. What is a tongue tie?

b. When is a tongue tie used?

1 mark

1 mark

Question 3
Three hazards in the stable block are listed below. Indicate whether they are mechanical, environmental or operator hazards by placing a tick in the appropriate column.

<table>
<thead>
<tr>
<th>Hazard</th>
<th>mechanical</th>
<th>environmental</th>
<th>operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed storage bin left open</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A boiler in the feed room has a frayed cord</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A farm bike being ridden without a helmet</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3 marks
Question 4
You have been asked to select a horse from a group of horses. The horse you must select is a chestnut mare with a star, stripe and snip on her face, a white stocking on her near hind leg and a white pastern on her off foreleg. Draw the markings on the diagram below that correspond with those of the horse you are to select.

![Diagram of horses with markings]

5 marks

Question 5
Explain the role the coronary band has for the health of the hoof wall.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3 marks

Question 6
Describe three main functions of the frog.

1. ____________________________

2. ____________________________

3. ____________________________

3 marks
**Question 7**
Endurance horses must have excellent leg conformation. Describe two examples and explain why each is important in an endurance horse.

1. 

2. 

4 marks

**Question 8**
Where on a horse would you find each of the following?

<table>
<thead>
<tr>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hernia</td>
</tr>
<tr>
<td>Splint</td>
</tr>
<tr>
<td>Sore shins</td>
</tr>
<tr>
<td>Bone spavin</td>
</tr>
<tr>
<td>Wind gall</td>
</tr>
<tr>
<td>Bog spavin</td>
</tr>
<tr>
<td>Roaring</td>
</tr>
</tbody>
</table>

7 marks

**Question 9**
As a groom in a busy racing stable, you have been asked to spread lime in the stables. Name three pieces of personal protective safety gear you are required to wear when completing this task.

1. 

2. 

3. 

3 marks
**Question 10**
A new horse has arrived by transport from interstate. After boxing and a health check, you notice the horse has an elevated temperature, nasal discharge and appears lethargic. What action are you required to take?

**Question 11**
Regular rest stops will be needed when transporting a horse by float on an eight-hour journey.

a. What is the maximum time allowed between rest stops?

b. Describe three checks that should be made at these stops.

1. 
2. 
3. 

**Question 12**
Feed products for horses provide nutritional information about the feed stated as either weight per kilogram on a ‘dry matter’ basis or weight per kilogram ‘as fed’.

Explain the difference between a ‘dry matter’ and ‘as fed’ basis for determining a feed ration.
Question 13

Energy requirements for horses at various levels of work

<table>
<thead>
<tr>
<th>Horse’s weight (kg)</th>
<th>400</th>
<th>500</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy (MJ) required for maintenance per day</td>
<td>58</td>
<td>68</td>
<td>79</td>
</tr>
<tr>
<td>Additional energy (MJ) required per hour for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• walking</td>
<td>0.84</td>
<td>1.05</td>
<td>1.26</td>
</tr>
<tr>
<td>• slow trotting and some cantering</td>
<td>8.4</td>
<td>10.5</td>
<td>12.6</td>
</tr>
<tr>
<td>• fast trotting, cantering and some jumping</td>
<td>21.0</td>
<td>26.2</td>
<td>31.4</td>
</tr>
<tr>
<td>• cantering, galloping and jumping</td>
<td>38.5</td>
<td>48.1</td>
<td>57.8</td>
</tr>
<tr>
<td>• strenuous activity (racing at full speed)</td>
<td>65.3</td>
<td>81.6</td>
<td>97.9</td>
</tr>
</tbody>
</table>

Using data from the table show how many megajoules a 500 kilogram horse requires per day if it does 1 hour of slow trotting with some cantering and 2 hours of fast trotting, cantering and some jumping. You are not required to calculate a final answer.

2 marks

Question 14

a. Describe the signs and symptoms associated with a horse with a heavy worm burden.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3 marks

b. Provide the progressing symptoms if this condition is not dealt with.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3 marks
Question 15
a. Give two examples of alkalising agents.
1. _____________________________________________________________

2. _____________________________________________________________ 2 marks
b. Describe the effects of adding alkalising agents to a standardbred’s diet before a race.

______________________________________________________________

______________________________________________________________ 2 marks

Question 16
A horse in your care has suffered a severe external bleed from a wound. The veterinarian has treated the wound. When you check the horse later you suspect the horse is in shock.
a. Name two vital signs/indications to test for shock.
1. _____________________________________________________________

2. _____________________________________________________________ 2 marks
b. Suggest two actions you should undertake with the horse after conclusive testing.
1. _____________________________________________________________

2. _____________________________________________________________ 2 marks

Question 17
Most injuries to a horse occur on the legs. Name two common injuries that occur on the legs.
1. _____________________________________________________________

2. _____________________________________________________________ 2 marks
Question 18
Name, in order, the four joints of the leg found between the coffin joint and the hip joint.

- coffin joint
- ____________________________
- ____________________________
- ____________________________
- ____________________________
- hip joint

4 marks

Question 19
a. Name two types of grass weeds.
   1. ____________________________
   2. ____________________________
   2 marks

b. Explain why they are classed as weeds.
   ____________________________
   ____________________________
   2 marks

Question 20
Identify three typical causes of an increase in the heart rate of a horse.

1. ____________________________
2. ____________________________
3. ____________________________
3 marks

Question 21
Name the three types of muscle in a horse.

1. ____________________________
2. ____________________________
3. ____________________________
3 marks
**Question 22**

When working with stallions and thoroughbreds in general, there are times when an anti-rearing bit should be used and times when it should not be used.

a. Suggest three occasions when an anti-rearing bit **should** be used.

   1. 
   
   2. 
   
   3. 

   3 marks

b. Suggest three occasions when an anti-rearing bit **should not** remain on a horse.

   1. 
   
   2. 
   
   3. 

   3 marks

**Question 23**

In Australia we have a code of practice for the use of animals. Its title is: ‘Australian code of practice for the care and use of animals for scientific purposes 7th edition 2004’.

a. What is a code of practice?

   

   

   2 marks

b. What is the purpose of this code of practice?

   

   1 mark
Question 24
When you are handling a horse for a horse professional, some form of restraint is often used. Recommend the most appropriate restraining method to use when assisting in each of the following situations. Give reasons to support each recommendation.

A horse being pregnancy tested

A horse being attended by a farrier

6 marks