7457-407 MARCH 2020
Level 3 Diploma in Equine Veterinary Nursing
Level 3 Anatomy and Physiology Knowledge – Paper 3

Wednesday 4 March 2020
09:30 – 11:30

If provided, stick your candidate barcode label here.

Candidate name (first, last)
First
Last
Candidate enrolment number
Date of birth (DDMMYYYY)
Gender (M/F)
Assessment date (DDMMYYYY)
Centre number
Candidate signature and declaration*

* If additional answer sheets are used, enter the additional number of pages in this box.
* Before taking the examination, all candidates must check that their barcode label is in the appropriate box. Incorrectly placed barcodes may cause delays in the marking process.
* Please ensure that you staple additional answer sheets to the back of this answer booklet, clearly labelling these with your full name, enrolment number, centre number and qualification number in BLOCK CAPITALS.
* All candidates need to use a black/blue pen. Do not use a pencil or gel pen, unless otherwise instructed.
* If provided with source documents, these documents will not be returned to City & Guilds, and will be shredded. Do not write on the source documents.
* I declare that I had no prior knowledge of the questions in this examination and that I will not divulge to any person any information about the questions.

You should have the following for this examination
• a ball-point pen with blue or black ink

General instructions
• Use black or blue ball-point pen.
• The marks for questions are shown in brackets.
• This examination contains 15 questions. Answer all questions.
• Answer the questions in the spaces provided. Answers written in margins or on blank pages will not be marked.
• Cross through any work you do not want to be marked.
1 Define the following directional terms:
   a) Median/mid-sagittal plane. (1 mark)
   b) Sagittal/paramedian plane. (1 mark)
   c) Dorsal plane. (1 mark)
   d) Transverse plane. (1 mark)

2 Give a definition for the following prefixes:
   a) Ante. (1 mark)
   b) Dys. (1 mark)
   c) Hypo. (1 mark)
   d) Neo. (1 mark)
   e) Pseudo. (1 mark)
Define the following terms in relation to joint movement:

a) Flexion. (1 mark)

b) Adduction. (1 mark)

c) Circumduction. (1 mark)

Using the correct terminology, identify three anatomical landmarks found in the hindlimb, including the pelvis. (3 marks)

List two clinically significant arteries that can be used as anatomical landmarks in equids. (2 marks)

Name three body cavities. (3 marks)
7 Explain **two** differences between mitosis and meiosis. (4 marks)

7 Explain the term **osmosis**. (2 marks)

9 Explain the function of the following components of the eye:
   a) Cornea. (1 mark)

9 Explain the function of the following components of the eye:
   b) Nictitating membrane. (1 mark)

9 Explain the function of the following components of the eye:
   c) Corpora nigra. (1 mark)

9 Explain the function of the following components of the eye:
   d) Sclera. (1 mark)
10 State the dental formula for:
   a) An adult horse. 

11 a) Describe the location of the Caecum. 

12 a) State two components that make up the central nervous system. 

b) Explain the function of the central nervous system.
13. Describe the function of the following components of a neuron:
   a) Soma. (1 mark)
   b) Axon. (1 mark)
   c) Dendrites. (1 mark)
   d) Synapses. (1 mark)

14. State the origin and insertion for the Trapezius muscle. (2 marks)
15 Discuss how the structure of the respiratory system aids athleticism in the horse. (12 marks)