

Please check the examination details below before entering your candidate information

Candidate surname

Other names

Pearson BTEC Level 3  
Extended Certificate,  
Foundation Diploma,  
Diploma, Extended  
Diploma

Centre Number

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Learner Registration Number

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**Wednesday 8 January 2020**

Afternoon (Time: 1 hour 30 minutes)

Paper Reference **20108K**

**Equine Management**

**Unit 1: Equine Structure, Form and Function**

**You do not need any other materials.**

Total Marks

### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and learner registration number.
- Answer **all** questions.
- Answer the questions in the spaces provided  
– *there may be more space than you need.*

### Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets  
– *use this as a guide as to how much time to spend on each question.*

### Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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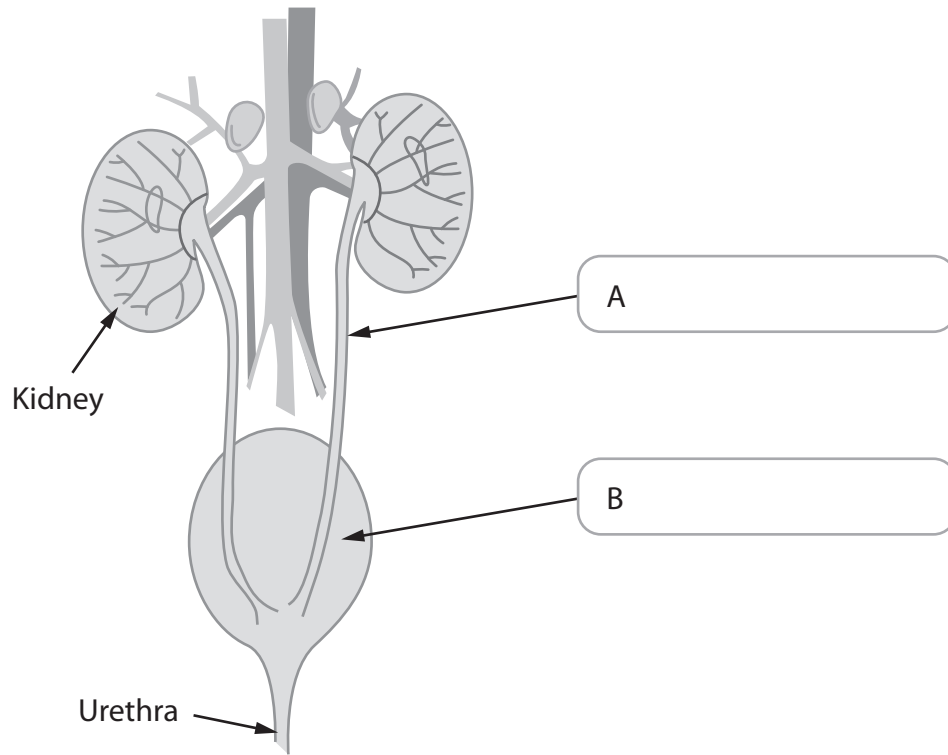
Answer ALL questions. Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1 **Figure 1** shows the anatomy of the equine urinary system.

(a) Label parts A and B in **Figure 1** using the boxes provided.

(2)



**Figure 1**

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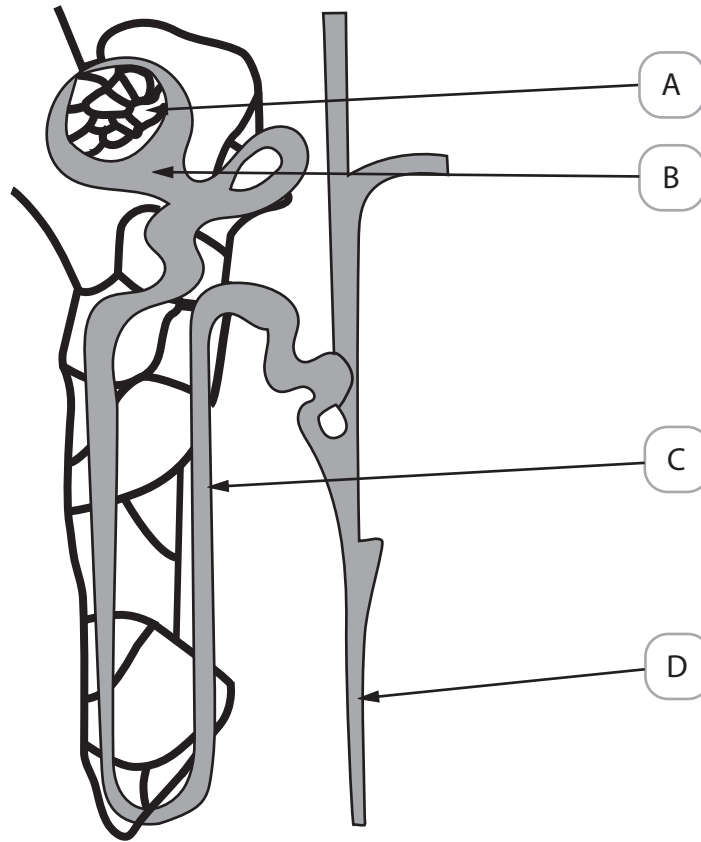
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**Figure 2** shows the internal structure of a nephron.

Four structures have been labelled A, B, C and D.



**Figure 2**

(b) Identify the glomerulus.

(1)

- A
- B
- C
- D



(c) Explain **two** roles of sweat.

(4)

1

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2

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(d) Explain **one** role of antidiuretic hormone (ADH).

(2)

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**(Total for Question 1 = 9 marks)**

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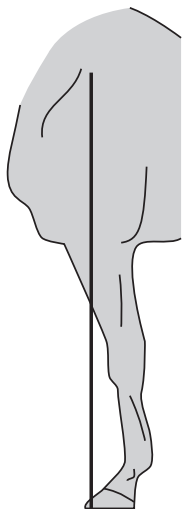
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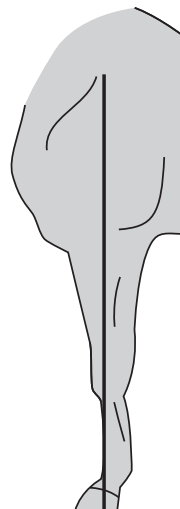
2 **Figures 3 and 4** show foreleg conformation faults.

(a) Identify the named conformation fault in **Figures 3 and 4** by labelling the boxes provided.

(2)



**Figure 3**



**Figure 4**

(b) Describe **two** types of joint found in the equine leg.

(4)

1 .....

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2 .....

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P 6 4 1 2 9 A 0 5 1 6

(c) Describe how weight bearing changes between trot and canter.

(4)

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(Total for Question 2 = 10 marks)

3 (a) Explain **one** role of the Purkinje fibres.

(2)

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(b) Describe the structure of the equine heart.

(4)

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4 (a) Explain the role of simple epithelial cells.

(2)

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(b) Explain **two** roles of tendons.

(4)

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2 .....

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(c) Describe the structure of striated muscle.

(4)

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(Total for Question 4 = 10 marks)

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5 Discuss the structure and function of the equine lymphatic system.

(8)

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**(Total for Question 5 = 8 marks)**



6 (a) State the location of the thyroid gland in an equine.

(1)

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(b) Explain the actions of **two** hormones released by the thyroid gland.

(4)

1 .....

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2 .....

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(c) Describe the hormonal control of ovulation in equines.

(4)

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(d) Explain **two** actions of insulin.

(4)

1

2

(Total for Question 6 = 13 marks)

7 (a) State the name of **two** divisions of the vertebral column.

(2)

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2

(b) Describe the bones in the equine lower front leg, from the knee to the hoof.

(4)

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(c) Describe the structure of osteons.

(4)

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**(Total for Question 7 = 10 marks)**

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8 Discuss how hoof structure affects equine stability.

(8)

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**(Total for Question 8 = 8 marks)**

**TOTAL FOR PAPER = 80 MARKS**



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