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	Learner Registration Number	
Wednesday 6 Ja	nuary 2021	
Morning (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 \boxtimes . If you change your mind about an answer, put a line through the box \boxtimes and then mark your new answer with a cross \boxtimes .

1 (a) Figure 1 shows the anatomy of the equine heart.

Label parts A and B in Figure 1 using the boxes provided.

(2)

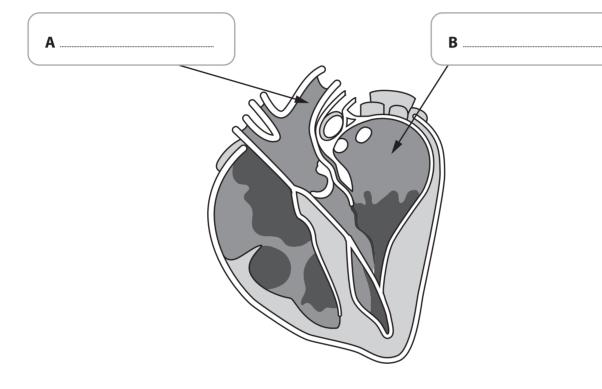


Figure 1

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(b) Figure 2 shows the structure of the equine circulatory system.

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

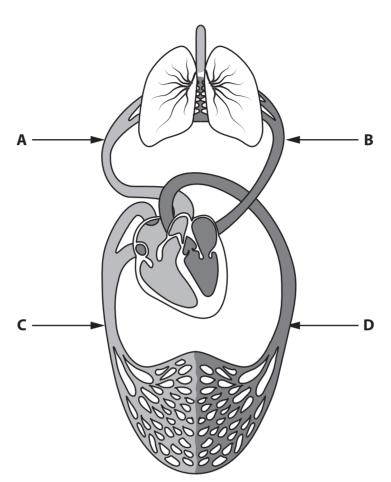


Figure 2

Identify the pulmonary artery.

- \bowtie A
- \boxtimes B
- **⊠** C
- \boxtimes D

(1)

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(c) Describe the process of gas exchange in equines.	(4)
(d) Explain one function of the ribs.	(2)
(Total fo	r Question 1 = 9 marks)

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- **2** Figure 3 shows the anatomy of a mare's reproductive tract.
 - (a) Identify structures A and B in Figure 3 using the boxes provided.

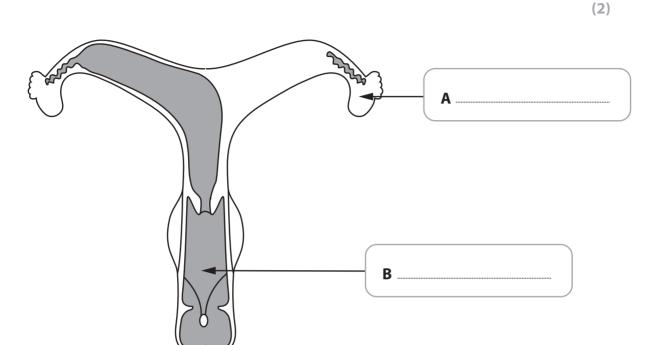


Figure 3

(b) Explain **two** features of a mare's uterus that aid reproduction. (4)

1

2

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(c) Describe how hormones control the development of eggs (ova).	(4)
(Total for Question 2 = 10	marks)

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3	(a)	Describe the location of the pedal (coffin) joint.	(2)
1.		Explain two functions of the frog.	(4)
2 .			
	(c)	Describe the movement provided by a hinge joint.	(2)



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(d) Describe which bones make up the equine upper foreleg.	(4)
(Total	for Question 3 = 12 marks)

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4 (a) Describe the basal surface of a tissue.	(2)
(b) Describe the structure of pseudostratified tissue.	(4)
(c) Describe the features of hyaline cartilage.	(4)
(Total for Question 4 = 1	I 0 marks)
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5 Discuss joint angles in equine anatomy and factors that affect them.	(8)



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(Total for Question 5 = 8 marks)
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6	(a) State the type of cells that transport nerve impulses.	(1)
	(b) Describe the divisions of the equine vertebral column.	(4)
1	(c) Explain two roles of the parasympathetic nervous system.	(4)
1 .	(c) Explain two roles of the parasympathetic nervous system.	
2 .		
2		



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(d) Describe how neurotransmitters work at a synapse.	(4)
(Total for Question 6 = 13 ma	rks)

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7 (a) State two skin appendages to the equine body.	(2)
2	
(b) Explain what the periosteum is in relation to bones.	(2)
(c) Explain what the epiphysis is in relation to bones.	(2)



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(d) Describe the function of bone marrow.	(4)
(Total for Question 7 = 10 ma	rks)

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The appearance and structure of muscle types are different depending on their functions.		
Discuss the three muscle types found in the equine body.	(8)	



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(Total for Question 8 = 8 marks)
(10tal for Question 0 - 0 marks)
TOTAL FOR PAPER = 80 MARKS

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