

Please check the examination details below before entering your candidate information

Candidate surname

Other names

Centre Number

Learner Registration Number

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

Time 1 hour 30 minutes

Paper reference

31645H

Animal Management
UNIT 2: Animal Biology

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.

1 Animals are classified into groups to identify them.

(a) Complete the table with the **two** missing groups.

(2)

Kingdom
Order
Family
Genus
Species

Animals are made up of cells, tissues and organs.

(b) State the name of **one** chamber found in the heart.

(1)

(c) Complete the table to show the names and functions of tissue types.

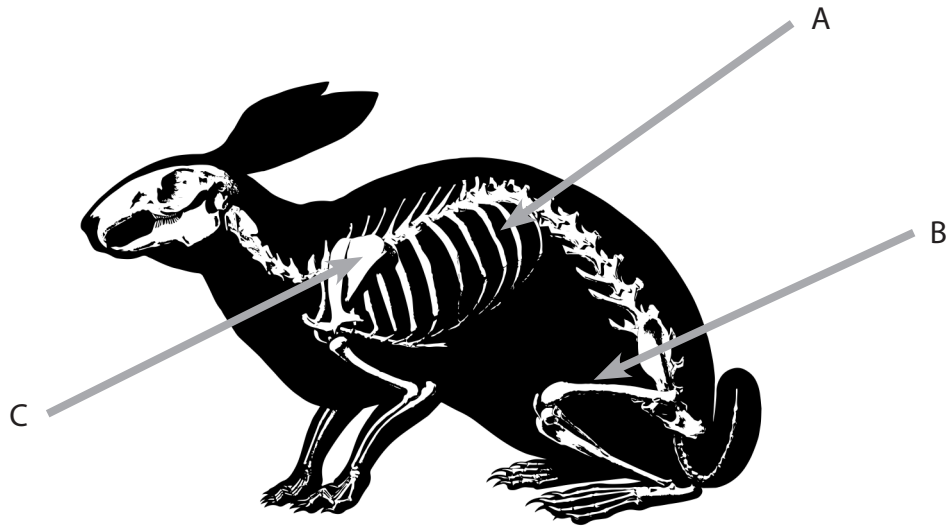
(4)

Name of tissue type	Function
Epithelial	
Connective	
	Conducts impulses
	Allows movement

(Total for Question 1 = 7 marks)



2 The diagram shows the skeleton of a rabbit.



(Source: © Cee_Aye/Shutterstock)

(a) Give the name of the bones labelled A, B and C.

(3)

A

B

C

(b) Describe a ligament.

(2)

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(c) Give **two** functions of the epidermis.

(2)

1

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2

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(d) Explain the function of types of feather:

(4)

Down

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Filoplume

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(Total for Question 2 = 11 marks)

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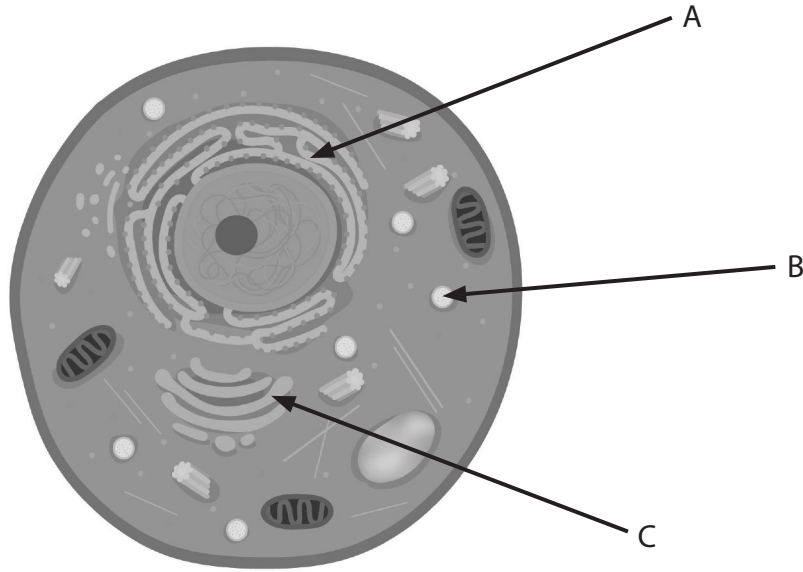
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P 6 7 7 1 5 R A 0 5 1 6

3 The diagram shows an animal cell.



(Source: © Pearson Asset Library)

(a) State the name of the organelles labelled A, B and C in the diagram.

(3)

A

B

C

(b) Describe the fluid mosaic model of the plasma membrane.

(4)

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(c) Describe **one** difference between a eukaryotic and prokaryotic cell.

(2)

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(d) Describe simple diffusion.

(3)

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(Total for Question 3 = 12 marks)

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4 All animals have various processes that control and maintain their internal environment.

(a) State the name of the process that narrows blood vessels.

(1)

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(c) Give the name of the nervous system that prepares the body for 'fight or flight'.

(1)

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(d) Explain the role of brown adipose tissue.

(2)

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(e) Explain terms:

(4)

Endothermic

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Ectothermic

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(Total for Question 4 = 12 marks)

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5 Reproduction is important for the survival of all living things.

(a) State the length of the gestation period of a rabbit.

(1)

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(b) Explain the role of **two** hormones released by the ovaries.

(4)

1

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2

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(c) Describe the placenta.

(2)

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(d) Discuss the sliding filament theory of muscle contraction.

(8)

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(e) State the name of **four** parts of the female reproductive system in birds.

(4)

- 1
- 2
- 3
- 4

(Total for Question 5 = 19 marks)

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6 Excretion allows waste products to be removed from the body.

(a) Explain **two** differences between the excretory systems of birds and mammals.

(4)

1

2

(b) Give **one** symptom of nephritis.

(1)

(c) Explain **two** functions of the kidneys.

(4)

1

2

(d) State the name of **two** parts of a nephron.

(2)

1

2

(Total for Question 6 = 11 marks)



It is important for a constant osmotic pressure to be maintained in an animal's body.

7 Discuss the process of osmoregulation.

(8)

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(Total for Question 7 = 8 marks)

TOTAL FOR PAPER = 80 MARKS



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