



## 7457-402 DECEMBER 2020

### Level 3 Diploma in Small Animal Veterinary Nursing

### Level 3 Anatomy and Physiology Knowledge Test – Paper 3

If provided, stick your candidate barcode label here.

Wednesday 16 December 2020  
09:30 – 11:30

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 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 physiological terms.

a) Hyperthermia. (1 mark)

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b) Chondritis. (1 mark)

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c) Dysphagia. (1 mark)

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2 Name **one** site for venepuncture **and** state where it is anatomically positioned in a dog. (2 marks)

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3 a) Name the synovial joint between the femur and tibia. (1 mark)

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b) Classify the joint type by range of movement. (1 mark)

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c) State **one** type of movement made by this joint. (1 mark)

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4 a) List the **four** active phases of mitotic cell division. (4 marks)

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b) Name **one** example of a tissue type that is replaced by mitotic cell division. (1 mark)

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c) State the cell organelle in which this division occurs. (1 mark)

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5 a) Define the term electrolyte. (1 mark)

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b) Name **one** electrolyte that can be found in Extracellular Fluid (ECF). (1 mark)

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6 a) Name the tactile hairs commonly known as whiskers in dogs and cats. (1 mark)

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b) State the function of these hairs. (1 mark)

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7 a) Define the term sesamoid. (1 mark)

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b) State the function of sesamoid bones. (1 mark)

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c) Name **one** example of a sesamoid bone **and** state where it is in the body. (2 marks)

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8 a) State the scientific term for the sensation of taste. (1 mark)

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b) Name the **three** cranial nerves involved with the sense of taste **and** the area of the tongue they innervate. (6 marks)

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9 a) Name the hormone that regulates red blood cell production. (1 mark)

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b) Name the organ of production for this hormone. (1 mark)

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c) Explain the negative feedback loop in relation to this hormone. (4 marks)

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10 a) Name the structure that initiates the heart to contract. (1 mark)

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b) State where this structure can be located. (1 mark)

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c) Define the term myogenic in relation to this structure. (1 mark)

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11 Define the following terminology associated with respiration.  
a) Residual volume. (1 mark)

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b) Functional residual volume. (1 mark)

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12 a) Name the structure in the kidney that antidiuretic hormone acts upon. (1 mark)

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b) Briefly describe the effect of the hormone on the structure. (1 mark)

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13 a) Name **one** accessory gland to the genital tract of a male cat. (1 mark)

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b) Give **one** function of the seminal fluid produced in the gland. (1 mark)

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14 a) Name the paired olfactory organ in snakes. (1 mark)

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b) State the location of this organ. (1 mark)

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c) State **two** functions of this sense. (2 marks)

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