

051106T4APB

APPLIED BIOLOGY LEVEL 6

APB/OS/AB/CR/06/6

Carry Out Animal Husbandry

March/April 2026



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION COUNCIL
(TVET CDACC)**

WRITTEN ASSESSMENT

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATE

1. This paper consists of **TWO** sections: **A** and **B**.
2. Answer **ALL** questions in section A and **ANY THREE** (3) questions in section B.
3. Marks for each question are indicated in the brackets.
4. Candidates are provided with a separate answer booklet
5. Do not write on the question paper.

This paper consists of THREE (3) printed pages

Candidate should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing.

SECTION A (40 MARKS)

Answer ALL questions in this section

1. A good laboratory animal floor plays a vital role in maintaining animal welfare. Highlight FOUR characteristics of a good laboratory animal floor. (4 Marks)
2. Improper handling of laboratory animals can lead to serious consequences. Identify FOUR risks associated with poor animal handling. (4 Marks)
3. Isolation of diseased laboratory animals is a critical practice in laboratory animal management. State FOUR importance of isolating diseased laboratory animals. (4 Marks)
4. Proper feed quality directly influences the reliability of experimental results. Highlight FOUR qualities of good laboratory animal feed. (4 Marks)
5. Pelletized feed is prepared by compressing feed ingredients into uniform pellets for laboratory animals. List FOUR advantages of using pelletized feed in laboratory animals. (4 Marks)
6. Controlling laboratory animal populations is essential for maintaining a healthy and well-organized research facility. State FOUR importance of controlling laboratory animal populations. (4 Marks)
7. Recognizing the signs of proper anaesthesia is important to protect animal welfare. Identify FOUR signs that an animal is properly anaesthetized. (4 Marks)
8. Dissecting laboratory animals is a fundamental procedure in biological laboratories. List FOUR reasons for dissecting laboratory animals. (4 Marks)
9. Proper carcass disposal is an essential aspect of laboratory animal management and biosafety. State FOUR importance of proper carcass disposal. (4 Marks)
10. Offences under animal handling regulations are violations of laws and guidelines designed to ensure the proper care and welfare of laboratory animals. Identify FOUR offences under animal handling regulations. (4 Marks)

SECTION B (60 MARKS)

Answer THREE questions in this section

11. a) Carbon dioxide (CO₂) is commonly used to humanely euthanize laboratory animals. Outline SIX steps followed when using carbon dioxide for killing laboratory animals humanely. (12 Marks)
- b) Litter size in laboratory animals varies according to several interrelated factors. Discuss FOUR factors that affect litter size. (8 Marks)
12. a) Disinfecting laboratory animal structures is a critical practice in animal research facilities. Explain FIVE reasons for disinfecting laboratory animal structures. (10 Marks)
- b) Laboratory animals exhibit specific signs that indicate they are ready for breeding. Describe FIVE signs that laboratory animals are ready for breeding. (10 Marks)
13. a) Zoonotic diseases are infections that are naturally transmitted between animals and humans. Explain FIVE measures used in controlling zoonotic diseases. (10 Marks)
- b) Determining the sex of laboratory animals can be challenging due to several factors. Highlight FIVE challenges encountered during the sexing of animals. (10 Marks)
14. a) Protective wear is essential during the disposal of laboratory animal carcasses. Outline FIVE importance of protective wear during laboratory animal carcass disposal. (10 Marks)
- b) Post-dissection procedures are essential steps carried out after the dissection of laboratory animals. Explain FIVE post-dissection procedures. (10 Marks)