

051106T4APB

APPLIED BIOLOGY LEVEL 6

APB/OS/AB/CR/12/6

Perform Pharmacological and Toxicological Techniques

July/August 2025



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

PRACTICE ASSESSMENT

Time: 3 HOURS

INSTRUCTIONS TO CANDIDATE:

1. You are required to perform the following tasks
 - i. To administer drugs to a live animal and fill detail in Table 1
 - ii. Observe effects of drugs in the two rabbits within 20 minutes
2. You have been provided with the following resources for the practical tasks:
 - a. Rabbit restrainer
 - b. Rabbits (Mature) in a cage
 - c. Hypodermic needle (23G)
 - d. Hypodermic needle (25G)
 - e. Syringes (1-3 ml/1 inch long)
 - f. Syringes (30ml/ ¾ inches long)
 - g. Methylated spirit or 70% alcohol

- h. Cotton swab
- i. Weighing balance/Spring balance
- j. Drug X
- k. Drug Y
- l. Pair of scissors or scalpel
- m. Gloves
- n. Mask
- o. Writing material (paper)
- p. Stop watch
- q. Laboratory coat
- r. Closed shoes
- s. Pen/pencil and ruler

Additional Instructions for Learners

1. Before starting the observation, clear the designated section of the cage in the designated section the exact substance and the administered amount in each rabbit.
2. Note the precise time of injection.
3. Before the injections, take a few moments to observe the typical behavior of both rabbits to establish a baseline for comparison.
4. Observe both rabbits within each 5-minute interval after injection and record observations in the **Table 1**
5. For each observation category and time interval, record specific details about what you observe in each rabbit. Use descriptive language.
 - i. **Activity Level:** Note frequency of movement (e.g., hops per minute), distance traveled, time spent resting, signs of lethargy.
 - ii. **Posture and Body Language:** Describe their body position (lying, sitting, standing), head position, ear position, and any other relevant postures.
 - iii. **Responsiveness to Stimuli:** Briefly describe the stimulus (e.g., gentle tap on the cage, a quiet clap) and the rabbit's reaction (e.g., no reaction, slight twitch of the ear, full startle).

- iv. **Breathing:** Note the rate (breaths per minute, if possible, count accurately) and the depth of each breath (shallow, deep).
 - v. **Eye Appearance:** Describe pupil size (e.g., small, medium, large) and note if there is any drooping of the upper eyelids.
6. Focus on recording what you see and hear, not your interpretations.
 7. Pay close attention to the differences in observations between the placebo rabbit and the rabbit that received Drug Y.

Fill Table 1

Observation Category	Time (post-injection)	Rabbit 1	Rabbit 2 (Drug Y)	Notes/Specific Observations
Substance Administered	Time of Injection:	Substance: _____ Amount: _____	Substance: _____ Amount: _____	
Activity Level	0-5			
	5-10			
	10-15			
	15-20			
Posture & Body Language	0-5			
	5-10			
	10-15			
	15-20			
Responsiveness to Stimuli (e.g., gentle tap, noise)	0-5			
	5-10			
	10-15			
	15-20			
Breathing	0-5			
	5-10			

	10-15			
	15-20			
Eye Appearance (Pupil Size, Eyelid Drooping)	0-5			
	5-10			
	10-15			
	15-20			
Any Other Notable Observations	0-5			
	5-10			
	10-15			
	15-20			