FACULTY	**HEALTH SCIENCES AND VETERINARY MEDICINE**		
DEPARTMENT	**PRECLINICAL VETERINARY STUDIES**		
SUBJECT	**ANIMAL ETHOLOGY**		
SUBJECT CODE	**V3601EE**		
DATE	**JUNE 2024**		
DURATION	**2 Hours**	**MARKS**	**100**

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This question paper consists of four **(4)** pages including this front page.
Additional materials to be supplied: **NONE**

Instructions
This paper has **ten (10)** questions. You should answer all questions in a separate booklet provided

SECOND OPPORTUNITY EXAMINATION

1a	Illustrate with an aid of a diagram the processes involved of how an animal responds to a stimulus and its experience thereafter.	4
1b	State whether the following animal behaviour statements are true or false. Using only one word, state the correct definition that fits each false statement i Intelligence is the ability to learn and respond and adapt to certain situations from a short term or long-term memory. ii Agonistic behaviour refers to behavioural adaptation where one individual in a group reduces its fitness on behalf of other recipient(s). iii Allelomimetic behaviour is an example of affiliative behaviours where primates tend to groom each other. iv The endogenous rhythm that usually fall periodically short of 24 hours are called circadian.	6
1c	Name and provide an example for each of the three (3) types of **interspecific (interspecies) aggression** in animals. (2 marks each)	6
1d	Formulate the Tinbergen's Question on phylogeny [4 marks] and discuss with an appropriate example [1 mark] how it contributes to the understanding of animal behaviour.	5
2	In the table below, state one word that appropriately fits the corresponding animal behavioural definitions and name one appropriate example of behaviour in animals for each definition	10

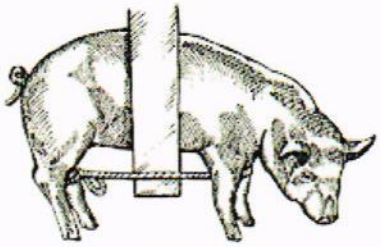
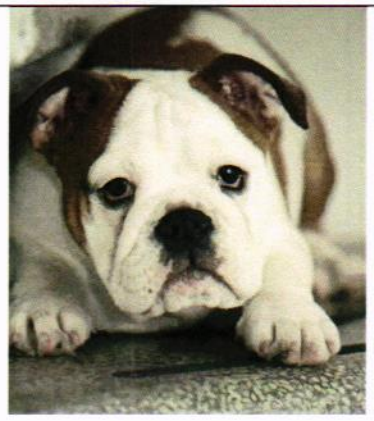
	Behavioural statement	**Definition (one word only) [1 mark each]**	**One appropriate example [1 mark each]**
	i. An animal's non-directional response to a stimulus. The animal does not move toward or away from the stimulus but moves at either a slow or fast rate depending on its "comfort zone''.		
	ii. Normal behaviour or activities directed towards inappropriate substrates		
	iii. The lack of response to a repeated stimulus		
	iv. A period of inactivity by which some animals experience an internal slowdown in their metabolism in the hottest parts of summer.		
	v. Behaviour of animals adapted to characteristics of human		

3a	Animals that cannot adapt to their environment exhibit inappropriate or unusual behaviour. With reference to the above statement and giving appropriate examples, discuss how pigs exhibit these stereotypic behaviours.	6

3b	Nursing of piglets is episodic occurring, of which 20 seconds of milk are released every 40 to 60 minutes. How does the sow communicate with her piglets that it is time to nurse?	2
4a	Licking is part of maternal grooming of the newly born. Suggest reasons for maternal licking of the young born post-partum.	5
4b	Describe the normal hen behaviour after egg hatching?	5
4c	Describe the copulatory behaviour of cats.	5
5	The concept of "The Flight zone" is important for moving livestock. i. Explain the behavioural adaptations of sheep when people enter their flight zone? [2 marks] ii. Explain how this behaviour can be used to assist in moving a large flock of sheep in a kraal [2 marks]	4
6a	Explain how the following methods are used as distraction techniques during the handling and restraining of horses. i. Rocking an ear [2] ii. Skin Roll [2] iii. Caveman Pats [2]	6
6b	Study the horses in the following pictures.   Explain which horse is paying more attention to his rider in these pictures (Left or Right?)?	2
6c	Which natural instinct is limited when the horse is stabled?	1
6d	At what height should the horse be tied up?	1
6e	What do the following behaviours indicate in a horse? i. Ears pinned flat back to their neck [1] ii. Ears moving quickly backwards and forwards, head and neck elevated, and tail held high [1] iii. If the equid has one or two ears slightly back [1]	3
6f	Name two (2) horse breeds that are determined by the colour and not the physical characteristics of the horse.	2

7a	What physical method of restraint would a veterinarian use without assistance in cats?	1
7b	Name two (2) uses of the Elizabethan Collars (or E-collars)	2
7c	Describe the restraining technique you would use for taking blood from the cephalic vein of a dog.	3
8a	Fill in the correct missing definition of animal handling method/restraining equipment/tool with regards to the handling of cattle.	2

i. Gear composed of a noseband and a throatlatch which encircles the head of a large animal such as a horse, allowing a lead to be attached for restraint.	[1]
ii. [1]	Burley casting method

8b	Outline precautions you would take before casting animals.	5
8c	This is a method of restraining pigs.  What do you think is the purpose of this method? [1]. Describe how this method is performed [3]	4
9a	Briefly describe the two (2) best ways you will restrain chicken for blood collection.	2
9b	True or False? A chicken can be safely carried hanging from its feet with its head facing the ground.	1
9c	What possible factors could predispose to feather pecking behaviour in chickens?	3
10	Identify the following breeds of dogs [1 mark each] and mention an important veterinary challenge that faces the breed [1 mark each].	4
	i.  ii. 	
	END	