



**Qualification title: Level 3 Technical (Certificate (360)/Diploma (540)/Extended Diploma (720/1080))**

**Test title: 0172-531/031 Level 3 Animal Management – Theory Exam**

**Version: April 2017**

**Exam date: 26/04/17**

**Exam start time: 13:30**

**Exam finish time: 15:00**

**Base mark: 60**

Question 1

State what the initials CRT stand for and describe the procedure for assessing it.

**Indicative content:**

Capillary refill time – lift the lip, press the gum with the finger, remove the finger and count how many seconds it takes for the colour to return to normal. Normal CRT is 1-2 seconds.

**Total marks: 2 marks**

Question 2

Define the term notifiable disease. (1 mark)

Name one notifiable disease in animals and two signs/symptoms.(2 marks)

**Indicative content:**

A notifiable disease must legally be reported (to DEFRA/local authority).

(One mark for the name of the disease and one mark for two signs/symptoms)

Rabies – aggressive behaviour, excessive salivation, neurological dysfunction.

Foot and Mouth – blisters on the tongue and hoof, raised temperature

Avian Flu

Swine Flu

Bovine Spongiform Encephalopathy (BSE)

Tuberculosis

Newcastle Disease

Equine Infectious Anaemia

Bluetongue

Any other appropriate diseases.

**Total marks: 3 marks**

Question 3

Explain the procedure to follow if it is suspected that an animal in the UK has a zoonotic disease.

**Indicative content:**

Notify the supervisor/manager, put in place biosecurity and ensure high levels of hygiene and signage are implemented, isolation of animals and the housing complex, disinfect vehicles and accommodation, stop all animal movement, restrict access and update risk assessments, seek medical advice if suspected transfer to humans, use of separate PPE and/or equipment, appropriate disposal of bedding and contaminated materials.

Any other suitable response.

**Total marks: 4 marks**

Question 4

4a) Name three different routes of medicine administration and discuss the procedure required for each. (3 marks)

4b) Discuss the use of the following items commonly found in a first aid kit  
sterile dressing materials  
rectal thermometer  
cotton wool  
poultice  
gloves. (5 marks)

**Indicative content:**

Topical, enteral, parenteral, also accept oral – directly into the mouth by the use of tablets, syringe, in food, intramuscular – injecting medicine directly into the muscle, intravenous – straight into the blood stream via a major vein or through a drip, enema via the rectum, nasal, subcutaneous, tubing or any other suitable answer

1 mark each

Used to cover open wounds or sores, as a pressure pad to stem blood flow, to prevent infection, to keep wound clean and free from pathogens,

Method of taking animal temperatures, diagnostic tool (i.e. prediction of parturition in the bitch, influenza), monitoring animal health status

Not to be applied directly on an open wound, can be used for padding and cleaning, cleaning thermometer, applying topical treatment to unbroken skin

Can be hot or cold, used for drawing out infection, reducing swelling, several types available (i.e. kaolin clay poultice, bread poultice, bran poultice, animalintex)

Protective layer to avoid cross contamination and protection from disease, medicines, infection and pathogenic organisms.

**Total marks: 8 marks**

Question 5

Describe one function of each of the following nutrients.

Carbohydrates

Protein

Water.

**Indicative content:**

Major source of energy/major source of fibre/improves bowel movement.

Growth and repair/source of essential amino acids.

Hydration/aids digestion/transportation of nutrients.

Any other suitable response.

**Total marks: 3 marks**

Question 6

Define the term digestible energy (DE).

**Indicative content:**

The proportion of energy that the animal is able to absorb from the food (the term absorption must be used)

**Total marks: 1 mark**

Question 7

Discuss how nutrients are digested in the hind gut of the rabbit.

**Indicative content:**

Any four from the following Fermentation, broken down by bacteria, production of VFA, slow releasing form of energy, definition or description of coprophagy and its impact on nutrient utilization (e.g. microbial protein).

Any other suitable response.

**Total marks: 4 marks**

Question 8

Compare the diet of a juvenile and adult dog.

**Indicative content:**

Higher energy levels for juveniles, higher protein levels for growth and repair, work and activity levels, condition and health, could be more liquids taken in by younger animals.

Any other suitable response.

**Total marks: 3 marks**

Question 9

Evaluate three factors that should be considered in the feeding plan for a rodent.

**Indicative content:**

Three from the following  
provision of fresh water and method of delivery,  
quantities and type (fresh/dry) given,  
supplements (special dietary requirements),  
frequencies and timings,  
enrichment,  
life stage and condition.

Any other suitable response

**Total marks: 3 marks**

Question 10

Describe three natural behaviours of any member of the feline family during hunting activities.

**Indicative content:**

Most active at dawn and dusk, stalk, pounce, ambushing, chasing and catching, play and kill, often bring their prey back to their home, or core area. Do not accept behaviours not related to hunting e.g. sleeping, grooming.

Any other suitable response.

**Total marks: 3 marks**

Question 11

Discuss how the behaviour of the Syrian hamster is linked to its environment.

**Indicative content:**

One from the following  
territorial and solitary animals (will fight to defend their territory)  
high activity levels,  
will travel long distances to search for food,  
store food in territory and pouches,  
burrow into a tunnel or huddle in small, dark, enclosed spaces.

**Total marks: 1 mark**

Question 12

Outline two atypical behaviours of zoo animals caused by enforced confinement.

**Indicative content:**

1 mark for any two of the following:

Continuous walking back and forth or in a circle, following the same path. Signs of regular pacing include definite paths worn in the ground. Lethargic and/or aggressive behaviour/loss of appetite.

Accept any other atypical behaviour.

Just naming the behaviour is not worthy of a mark.

**Total marks: 2 marks**

Question 13

Define the following terms in the context of the social behaviour of animals giving one example for each.

Hierarchy

Agonistic behaviour

Social bonding affiliative behaviour.

**Indicative content:**

One for the correct definition and one for the appropriate example.

Social control with dominant leaders (e.g. alpha male or female) e.g. in Chimpanzees males remain in their natal communities while females, in general, emigrate at adolescence, linear hierarchy – largest or strongest male, complex hierarchy indicates elaborate organization demonstrating individual standing within the group

Conflict behaviour e.g. caused by competition over females and competing for group dominance

Communication, verbal e.g. calls and screams, body language e.g. facial expressions, body posture, tactile e.g. grooming, harems e.g. selection of mates

Any other suitable response.

**Total marks: 6 marks**

Question 14

Outline the principle of natural selection in animals.

**Indicative content:**

The process in nature by which animals better adapted to their local environment have a better chance of survival and more opportunity to reproduce than those less adapted to their environment. Key terms within answer (survival of the fittest and adaptation)

Any other suitable response.

**Total marks: 1 mark**

Question 15

Give two examples of how animals are perceived in different human cultures or religions.

**Indicative content:**

Any two examples which may include the following:

Animals in the media: film, television, advertising, media portrayal

Animals in sport and leisure, legal rural pursuits, hunting and angling, racing, horse trekking, riding schools and eventing, zoos, aquaria, wildlife parks and circuses

Influence of culture and religion eg cats in Egypt, Christianity (dominion over animals), Judaism (forbidden to hunt animals), Islam (does not accept animal suffering), Hinduism (animals have souls, cows are very sacred and must not be eaten), dogs and other animals as fashion accessories and status symbols.

**Total marks: 2 marks**

Question 16

State and describe two breeding problems in an animal that might have an impact on fertility.

**Indicative content:**

Any two from the following:

Infertility (obesity, anorexia, genetic defects)

Restricted gene pool (fitness traits, inbreeding)

Specific health problems, Female – pseudo – pregnancy, ovarian imbalance, adult acromegaly, ovarian tumours; Male – Balanitis, phimosis, prostate problems, cryptorchid, monorchidism, orchitis

**Total marks: 2 marks**

Question 17

A dog breeder has a healthy medium sized 4 year old pure bred entire dog. They have decided to put him to stud and are now looking for a suitable mate/bitch of the same breed.

Outline the steps that would be required to ensure that the bitch is a suitable mate for the dog, including behavioural traits, and any health and feeding implications. In order to maximise the success of the breeding programme, discuss and justify the reproductive management and welfare of the animal from oestrus and copulation to gestation and parturition.

**Indicative content:**

Behavioural traits, health and feeding implications, the reproductive management and welfare of the animal and links should be made to the following stages from oestrus and copulation to gestation and parturition.

**Banding:**

Band A (1 – 4 marks) – The learner either covered all the indicative knowledge (behavioural traits, health and feeding implications, the reproductive management and welfare of the animal) but with limited coverage or did not cover all of the indicative knowledge or the information was inaccurate. The higher marks are gained by providing basic, mostly accurate information on most of the indicative knowledge.

Band B (5 - 8 marks) – For the lower marks most indicative knowledge was covered accurately and in detail. The higher marks would be gained with a basic justification of the welfare of the animal with reference to the stages of reproduction management, may contain minor inaccuracies.

Band C (9 - 12 marks) – For the lower marks the learner covered all the indicative knowledge accurately and in detail with some justification. For the higher marks the learner gave an accurate and comprehensive justified account of the indicative knowledge, including links made to the following stages from oestrus and copulation to gestation and parturition.

**Total marks: 12 marks**