

NOCTI

State Customized
Credential Blueprint



Small Animal Science (NY)

Code: 7413 / Version: 01

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General Assessment Information

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Test Type: The Small Animal Science assessment was developed based on standards used in the state of New York and contains a multiple-choice and performance component. This assessment is meant to measure technical skills at the occupational level and includes items which gauge factual and theoretical knowledge.

Revision Team: The assessment content is based on input from New York educators who teach in career and technical education programs.



51.0808- Veterinary/Animal Health
Technology/Technician and
Veterinary Assistant



Career Cluster 1-Agriculture, Food,
and Natural Resources



29-2056.00- Veterinary Technologists
and Technicians

Written Assessment

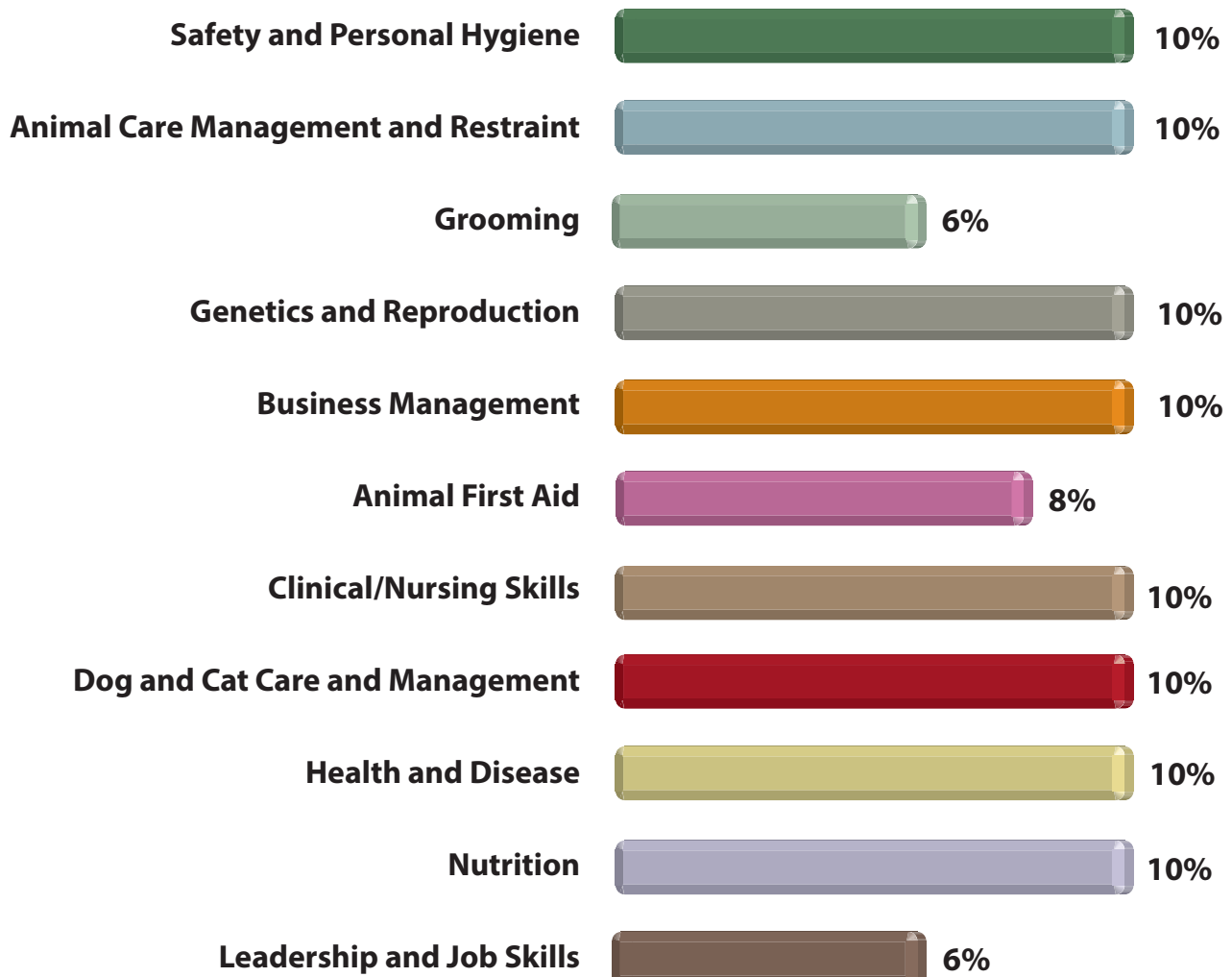
This written assessment consists of questions to measure an individual's factual theoretical knowledge.

Administration Time: 3 hours

Number of Questions: 152

Number of Sessions: This assessment may be administered in one, two, or three sessions.

Areas Covered



Specific Standards and Competencies Included in this Assessment

Safety and Personal Hygiene

- Demonstrate use of fire extinguisher
- Follow safety procedures in classroom and laboratory
- Maintain a safe and sanitary environment
- Identify modes of transmission/prevention of zoonotic disease
- Properly handle chemicals
- Identify and dispose of contaminated and hazardous material properly
- Follow electrical safety rules

Animal Care Management and Restraint

- Restrain animals
- Identify sex of animals
- Trim nails and/or teeth on animals
- Water and properly feed all animals daily
- Maintain records on animals
- Breed and raise young to weaning age

Grooming

- Identify grooming equipment
- Identify selected shampoos
- Mix flea rinse
- Apply muzzle to dog
- Properly use grooming noose

Genetics and Reproduction

- Explain the different stages of mitosis
- Explain the different stages of meiosis
- Define specific genetic terminology
- Use the punnett square to solve problems

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Specific Standards and Competencies (continued)

Genetics and Reproduction (continued)

- Identify sex-linked, incompletely sex linked, holandric, sex-limited, and sex-influenced traits
- Read and evaluate a pedigree
- Identify and explain functions of reproductive organs
- Define gestation
- Explain the role of hormones in the reproductive/estrus cycle
- List the four phases of the estrous cycle
- List different types of estrous cycles in domesticated animals
- Explain the alternative methods of insemination
- List signs of estrus
- List signs of parturition

Business Management

- Prepare sales receipt
- Properly answer phone/record information
- Properly keep appointment book
- Record/file client info on client index cards
- Maintain shop inventory
- Maintain financial records
- Demonstrate sales mathematics

Animal First Aid

- Identify 15 items to keep in a first aid box
- Explain difference between arterial and venous bleeding
- List four pressure points
- Apply pressure bandage to an animal
- List four symptoms of shock and treatment to be given
- Show by example how to approach an injured dog
- List six categories of physical assessment from most to least serious
- Perform CPR on dummy dog
- Define the ABC's
- Define specific first aid terminology
- Given case studies, describe possible first aid treatment

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Specific Standards and Competencies (continued)

Clinical/Nursing Skills

- Operate monocular microscope
- Wrap surgical pack
- Operate scale and weigh animal properly
- Perform TPR on animal
- Identify injection sites and types of injections
- Identify selected surgical instruments
- Identify different size needles and syringes
- Properly administer oral medications
- List methods in which anesthesia is administered
- Mathematically calculate dosage rates

Dog and Cat Care and Management

- Understand the body language of the dog and cat
- Identify external anatomy
- Identify dog breed recognized by the American Kennel Club
- Describe process and justification of neutering
- Define specific dog/cat terminology
- Identify and demonstrate use of training equipment
- List the possible vaccinations available for dog/cat
- Identify ten long haired and ten shorthaired breeds of cats

Health and Disease

- Perform fecal floatation
- Perform fecal smear
- Identify roundworm, hookworm, tapeworm, whipworm & heartworm from prepared slides
- Explain the differences between infectious and non-infectious diseases

Specific Standards and Competencies (continued)

Perform skin scraping

- Identify external parasites
- Explain quarantine and place animal in Quarantine
- Describe the antibody/antigen response
- Describe the process of immunity
- Explain how diseases are transmitted
- Explain how diseases can be prevented
- List characteristics of a healthy animal

Nutrition

- List the six nutrient groups and their function and sources
- Determine type of food to feed animal
- Figure cost of feed (price per pound)
- Explain the difference between a ruminant, non-ruminant, and a bird
- Properly read a feed label
- List diseases associated with nutritional deficiency and/or toxicity

Leadership and Job Skills

- Prepare a resume and portfolio
- Explain and identify common sources for employment
- Write a cover letter, business, and a thank you letter
- Perform a mock interview
- Complete a job application
- Send a fax and email
- Demonstrate proper business etiquette
- Conduct a meeting following Parliamentary Procedure
- Identify four offices and their duties

Sample Questions

Which of the following diseases is associated with an extreme deficiency of calcium?

- A. pellagra
- B. scurvy
- C. rickets
- D. grass tetany

Why do parasite eggs come to the top during a fecal floatation?

- A. They are attracted to light.
- B. They swim to the top.
- C. They are heavier than the solution.
- D. They are lighter than the solution.

When reading a pedigree, the dam is the

- A. father
- B. grandfather
- C. mother
- D. litter mate

Which of the following animals can be properly restrained between the thumb and forefinger?

- A. rat
- B. snake
- C. rabbit
- D. cat

When picking up a heavy dog, you should lift with the muscles of your

- A. legs
- B. arms
- C. back
- D. waist

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Sample Questions

Which of the following pieces of equipment is used to attach the dog to the grooming arm?

- A. leash
- B. collar
- C. grooming noose
- D. snare

Daily sales totals should be done to

- A. do inventory recall
- B. record billing information
- C. maintain proper financial records
- D. identify clients

When applying for a job, it is important to know your

- A. social security number
- B. weight
- C. religion
- D. height

A female dog is called a

- A. boar
- B. queen
- C. bitch
- D. sow

Which of the following needles is the largest?

- A. 30 gauge
- B. 25 gauge
- C. 22 gauge
- D. 18 gauge

Performance Assessment

NOCTI performance assessments allow individuals to demonstrate their acquired skills by completing actual jobs using the tools, materials, machines, and equipment related to the technical area.

Administration Time: 1 hours, 20 minutes

Number of Jobs: 6

Areas Covered:

7% Identify Grooming Equipment

Proper identification/spelling of grooming equipment

43% Restraint and Sex Determination of Small Animals

Pick-up, restrain, and determine the sex of small animals

19% Identify Internal Parasites

Identify parasite and egg on microscopic slides

5% Read Glass Thermometer

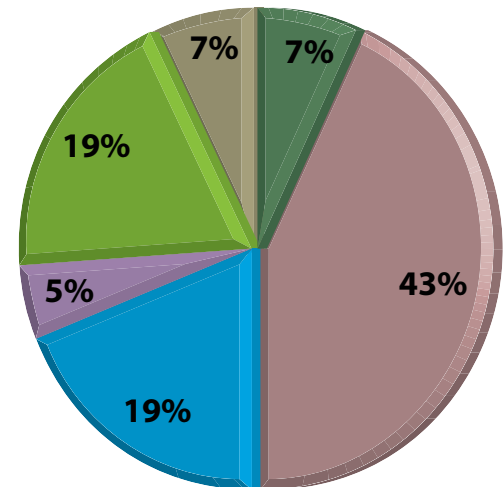
Properly read two separate preset glass thermometers

19% Canine: Safety, Handling, Restraint, and Identification of External Anatomy

Properly lift dog, apply grooming noose and muzzle, clip nail, and identify specified areas of external anatomy of a medium-sized dog

7% Communication Skills

Greet customer and complete a grooming receipt



Sample Job

Identify Grooming Equipment

Estimated Job Time: 15 minutes

Participant Activity: Identify and correctly spell each of ten displayed pieces of grooming equipment.

