West Virginia DEPARTMENT OF EDUCATION

Animal Systems (WV)

Code: 8996 / Version: 01

General Assessment Information

Test Type: The Animal Systems assessment was developed based standards used in the State of West Virginia and contains a knowledge-based 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 West Virginia educators who teach in career and technical education programs.

01.0901
Animal Sciences, General

Career Cluster 1 - Agriculture, Food & Natural Resources

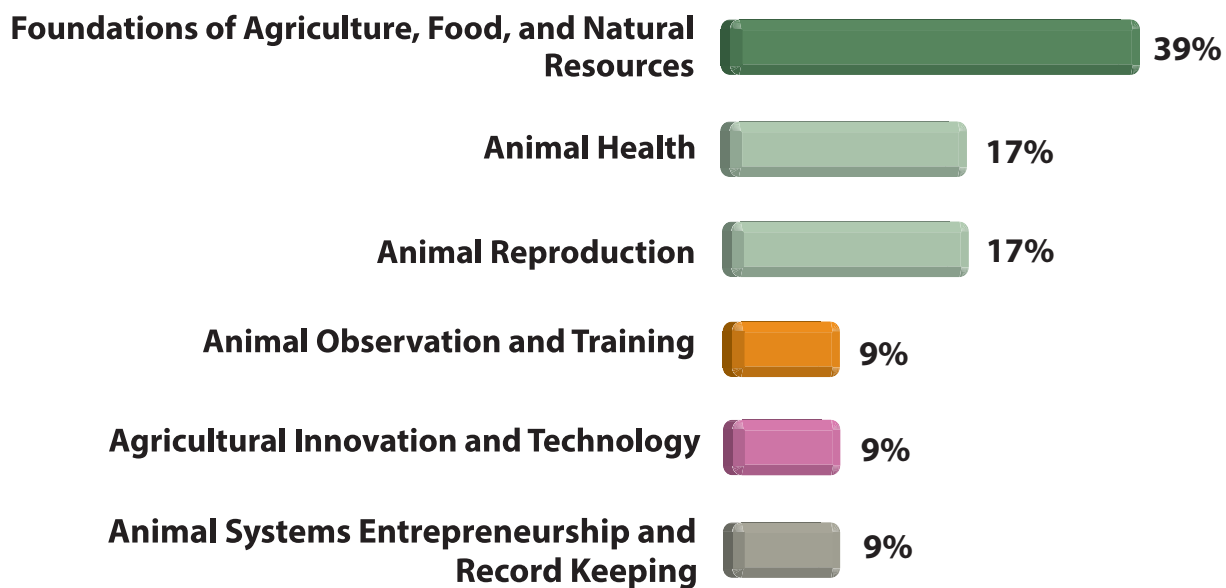45-2093.00 Farmworkers, Farm, Ranch, and Aquacultural Animals

Written Assessment

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

Administration Time: 2 hours
Number of Questions: 102
Number of Sessions: This assessment may be administered in one, two, or three sessions.

Areas Covered

Area	Percentage
Foundations of Agriculture, Food, and Natural Resources	39%
Animal Health	17%
Animal Reproduction	17%
Animal Observation and Training	9%
Agricultural Innovation and Technology	9%
Animal Systems Entrepreneurship and Record Keeping	9%

Specific Standards and Competencies Included in this Assessment

Foundations of Agriculture, Food, and Natural Resources
- Demonstrate understanding of agribusiness (e.g., SAE, expenses)
- Demonstrate understanding of animal systems (e.g., breeds of livestock, anatomy)
- Demonstrate understanding of agriculture innovation and technology
- Demonstrate understanding of food products and processing (e.g., protein sources, food preservation)
- Demonstrate understanding of natural resources (e.g., renewable resources)
- Demonstrate understanding of plant systems (e.g., plant parts, processes, soil)
- Demonstrate understanding of power, structural, and technical systems (e.g., measurement)
- Demonstrate knowledge of leadership development through FFA (e.g., motto, parliamentary procedurofficial dress)

Animal Health
- Identify diseases and injuries and appropriate treatment for domestic farm animals, pets, and nonfarm animals (e.g., bacterial, viral, fungal, or parasitic cause, not specific medications)
- Interpret records on heats, birth intervals, pedigree, and health practices of domestic farm animals, pets, and nonfarm animals (e.g., subcutaneous injection)
- Demonstrate understanding of biosecurity in the animal industry (e.g., quarantine)

Animal Reproduction
- Describe selection methods of domestic farm animals, pets, and nonfarm animals (e.g., birth weight, EPD, genotype vs. phenotype)
- Identify aspects of breeding, including breeding methods, used in domestic farm animals, pets, and nonfarm animals (e.g., artificial insemination)

Animal Observation and Training
- Understand how to observe and train animals for various situations (e.g., showing, training of livestock)
- Describe methods utilized in animal handling and restraint (e.g., farrowing crate, squeeze chute)

Standards and Competencies (continued)

Agricultural Innovation and Technology
- Identify emerging technology in the livestock and companion animal industry (e.g., embryo transfer, RFID)
- Demonstrate understanding of the impact of international agriculture on the U.S. livestock and companion animal industry (e.g., imports, tariffs, supply and demand)
- Recognize career opportunities in technology, innovation, and entrepreneurship in the livestock andcompanion animal industry.

Animal Systems Entrepreneurship and Record Keeping
- Describe value-added agriculture, and define direct marketing (e.g., niche marketing, marketing plan)
- Exhibit understanding of animal welfare and quality assurance
- Demonstrate understanding of financial record keeping (e.g., expenses, assets and liabilities, income)

Sample Questions

Agricultural innovations have allowed farmers to
        A .eliminate the use of chemical fertilizers
        B. increase the use of chemical fertilizers
        C. produce more crops on less land
        D. produce fewer crops on more land

FFA business meetings are run using an established set of rules known as
        A. Business Rules
        B. Meeting Rules
        C. Parliamentary Procedures
        D. Business Procedures

Expected Progeny Difference is a livestock
        A. performance record system for pets
        B. tool used to evaluate semen of offspring
        C. method of embryo transfer for livestock
        D. measurement of potential offspring performance

What are the two factors that determine or influence an animal's disposition?
        A. genetic make-up and environmental situation
        B. environmental situation and nutrition
        C. nutrition and housing
        D. housing and genetic make-up

Which is an example of an animal welfare principle?
        A.providing adequate housing
        B. preventing slaughter
        C. using animals for entertainment
        D. refraining from eating meat