



Job Ready Assessment Blueprint

Production Agriculture



Test Code: 2063 / Version: 01

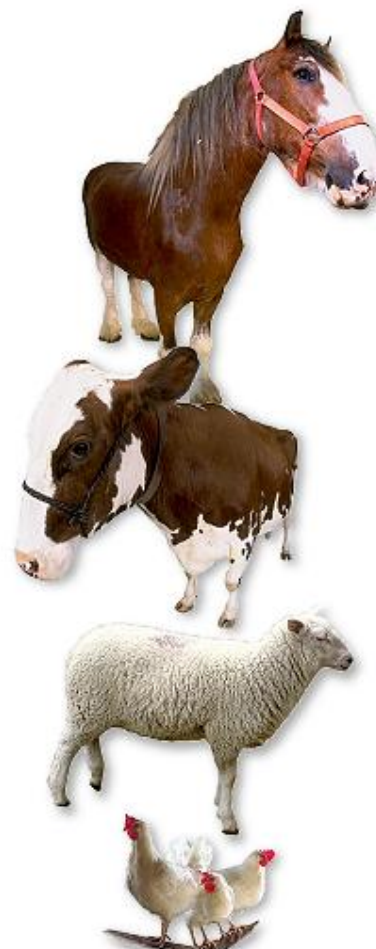
“Measuring What Matters”

Specific Competencies and Skills Tested in this Assessment:

Animal Science

(Emphasizes beef, dairy, sheep, and swine but also includes horses and poultry)

- Identify types and breeds of livestock
- Describe anatomy and physiology of livestock
- Explain grading and judging of livestock
- Maintain animal health and sanitation
- Explain genetics and breeding of livestock
- Describe feeds and feeding of livestock
- Identify and grade wholesale cuts of meat
- Describe handling and shipment of livestock
- Identify markets and distribution



Companion Animals and Aquaculture

- Identify types and breeds of companion animals
- Identify aquaculture systems

Land Use and Stewardship

- Conserve and protect water, land, and soil resources
- Recycle and manage waste products
- Research and develop new energy sources

Plant Science

- Describe plant anatomy and physiology
- Understand taxonomy and identification process of plants
- Explain plant genetics and breeding
- Formulate, mix, and properly handle agricultural chemicals
- Identify plant insects and practice pest control
- Identify and classify plant diseases
- Describe preparation of land for efficient cropping
- Understand the concept of land judging and soil management
- Identify and discuss soil tests and various amendments
- Calculate fertilizer rates and costs
- Determine populations and planting rates
- Discuss harvesting, marketing, and distribution of crops

Specific Competencies and Skills continued:

Agriculture Mechanics

- Explain safe use and maintenance of tools and equipment
- Perform calculations and measurements used in agricultural mechanics
- Describe safe welding techniques
- Explain maintenance of agricultural and livestock containment structures
- Operate, maintain, and repair engines
- Safely operate, maintain, and repair agricultural machinery

Farm Management and Recordkeeping

- Identify sources of credit
- Use appropriate tax management skills
- Describe types of farm businesses and enterprises
- Identify assets, liabilities, and net worth
- Calculate net worth, income and expense, and cash flow statements
- Identify fixed and variable costs
- Compute market values of livestock and costs of ownership
- Interpret and apply analysis of financial tools and recordkeeping systems

Employability

- Describe basic leadership skills
- Demonstrate speaking and communication skills
- Identify sales, marketing, and technology/research skills

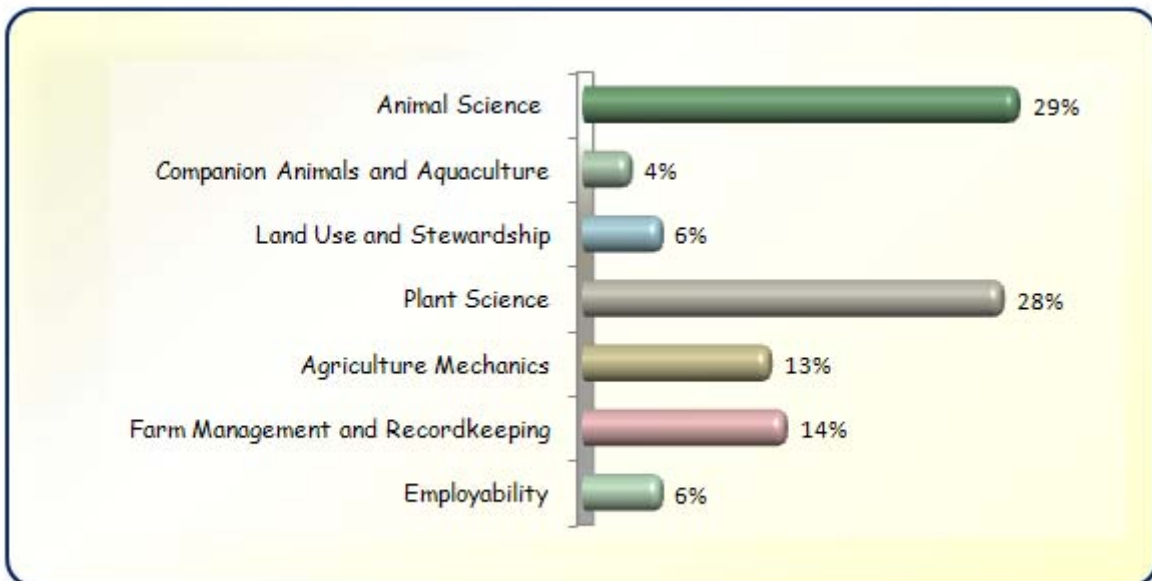


Written Assessment:

Administration Time: 3 hours

Number of Questions: 161

Areas Covered:



Sample Questions:

A breed of polled black cattle is the

- A. Angus
- B. Hereford
- C. Shorthorn
- D. Charolais

The optimum temperature for raising tropical fish in captivity is

- A. 30 degrees Fahrenheit
- B. 50 degrees Fahrenheit
- C. 60 degrees Fahrenheit
- D. 80 degrees Fahrenheit

A plant that completes its natural life cycle in 12 months or less is a/an

- A. perennial
- B. annual
- C. biennial
- D. graft

How much would the chilled carcass of an 850 pound steer weigh if it had a 60 percent cutability (dressing) percentage?

- A. 51 pounds
- B. 410 pounds
- C. 510 pounds
- D. 620 pounds

A leader should exhibit the ability to

- A. encourage impulse spending
- B. develop selfishness
- C. encourage integrity
- D. improve their personal portfolio



Performance Assessment:

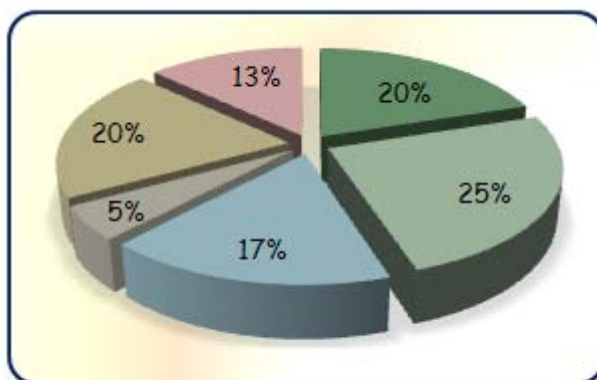
Administration Time: 3 hours and 5 minutes

Number of Jobs: 6

Areas Covered:

20% Vehicle Maintenance

Record vehicle make, model, serial number, recommended oil type and capacity, check oil, determine actual oil level, record fuel gauge reading, tire inflation psi, actual tire inflation, check and record engine coolant level, and timeliness of job.



25% Calculate Net Worth

Identify and list current, intermediate, long term, and total assets, determine absence of intermediate liabilities, identify and list long term liabilities, calculate and list total liabilities, net worth, liabilities and capital, current capital ratio, and timeliness of job.

17% Determine Genotypes and Phenotypes (Punnett Square)

Punnett square completion, number of calves appearing as red and black angus polled and horned, genotypes, and timeliness of job.

5% Crop Leaf Identification

Crop leaf identification and timeliness of job.

20% Administer an Injection

Determine appropriate medication dosage and how much to administer, select appropriate syringe and size of needle, prepare syringe, draw proper dosage, identify and prepare injection site, administer injection intramuscularly, dispose needle and syringe, and timeliness of job.

13% Compute Acreage

Compute and record total acreage, corn, potato, and wheat acreage, and timeliness of job.

Sample Job: Crop Leaf Identification

Maximum Time: 15 minutes

Participant Activity: The participant will identify the leaves of seven different plants (or crops).

