



Established 1901

Northeast
Equipment
Dealers
Association

Committed to Building The Best Business
Environment for Northeast Equipment Dealers

Agriculture Equipment Technician Apprenticeship Level 1

General Assessment Information

Blueprint Contents

General Assessment Information
Written Assessment Information

Specific Competencies Covered in the Test
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Test Type: The apprenticeship level assessments are based on industry standards determined by Equipment Dealerships in the Northeast. Participants can earn certification and a digital badge.



01.0201 Agriculture
Mechanization, General



Career Cluster 1-Agriculture, Food, and
Natural Resources



49-3041.00 Farm Equipment
Mechanics and Service Technicians

Written Assessment

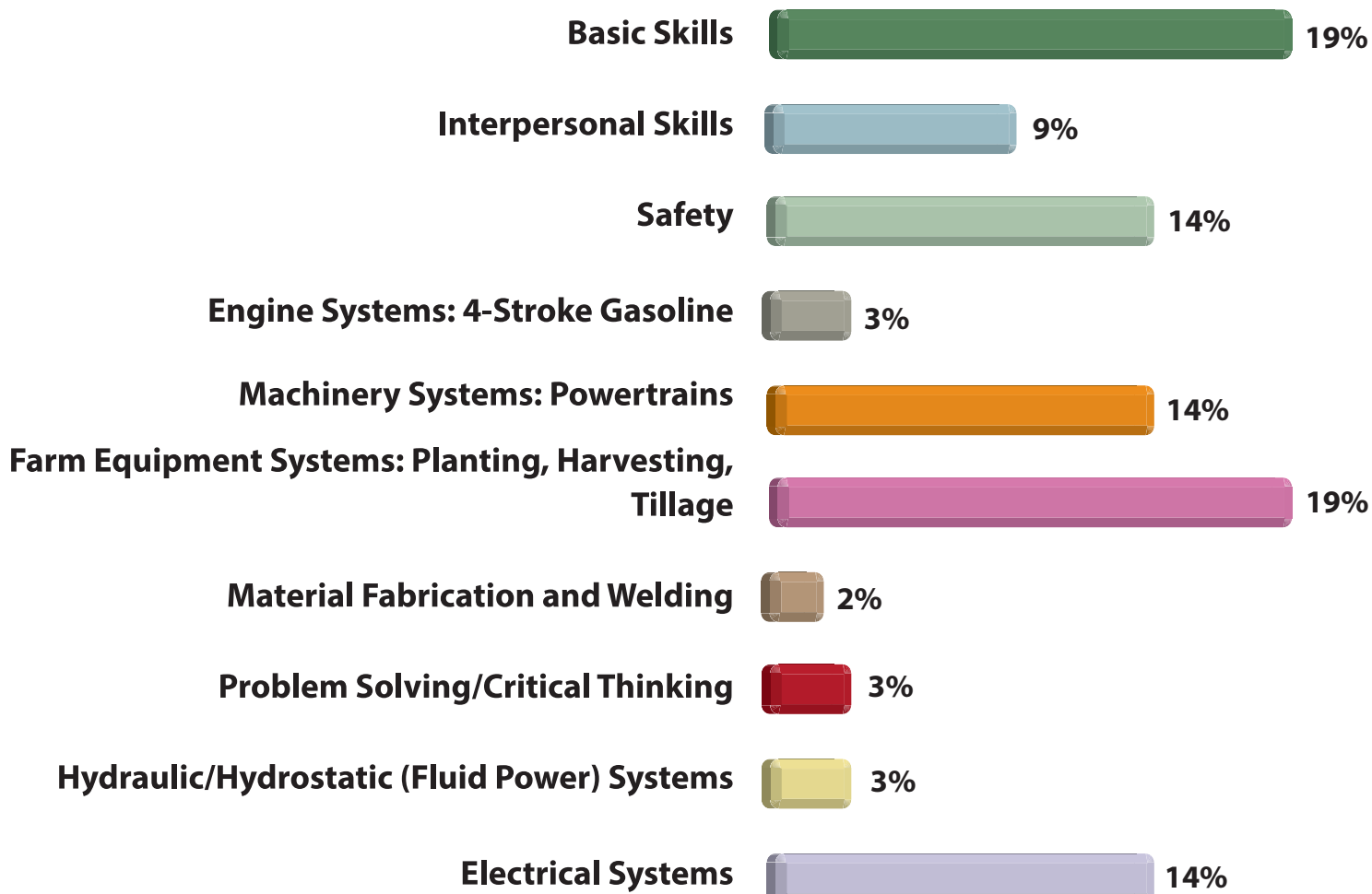
This written assessment consists of questions to measure an individual's factual theoretical knowledge.

Administration Time: 2 hours

Number of Questions: 58

Number of Sessions: This assessment may be administered in one session.

Areas Covered



Specific Competencies and Skills Tested in this Assessment

Basic Skills

- Demonstrate understanding of basic math
- Demonstrate effective use of computers and software to access or retrieve data
- Demonstrate proper selection and use of basic tools
- Demonstrate proper writing and reading skills for the workplace
- Communicate clearly, honestly, and appropriately with coworkers, management, and customers

Interpersonal Skills

- Demonstrate proper work dress and grooming
- Demonstrate active listening skills and clarification of communication
- Demonstrate respect for customers and coworkers
- Demonstrate organizational skills and effective time management
- Practice good housekeeping procedures



(Continued on the following page)

Specific Competencies and Skills (continued)

Safety

- Use the proper personal protective equipment (PPE) required for the various tasks
- Identify safety signs, safety data sheets, and icons in the agriculture industry
- Define safety procedures that promote avoidance of shop hazards and accidents
- Define "Lockout/Tagout"
- Identify the safety requirements before operating machines and equipment

Engine Systems: 4-Stroke Gasoline

- Locate the name plate and engine information

Machinery Systems: Powertrains

- Research and institute procedures for required periodic services
- Describe the physical and mechanical principles of mechanical, hydraulic, pneumatic, and electrical power transfer
- Properly identify different parts (bearings and hardware)



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Specific Competencies and Skills (continued)

Farm Equipment Systems: Planting, Harvesting, Tillage

- Identify and describe agricultural equipment and operations
- Review operating and service manuals, schedules, and conduct procedures as needed
- Perform safety inspection on equipment before operation
- Properly lubricate machinery, equipment, and parts

Material Fabrication and Welding

- Demonstrate welding jobsite safety procedures

Problem Solving/Critical Thinking

- Determine and evaluate the problem

Hydraulic/Hydrostatic (Fluid Power) Systems

- Explain the theory and principles of hydraulic systems

Electrical Systems

- Identify a simple electrical circuit and its components (battery, fuse, switch, light, and ground)
- Describe the differences between alternating (AC) and direct current (DC)
- Use a digital multimeter to determine voltage and current



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Sample Questions

Use of a brass hammer can prevent

- A. oxidation
- B. sparks
- C. fluxation
- D. rust

The major goal of good housekeeping around the work area is to

- A. enhance appearance
- B. halt the spread of disease
- C. prevent accidents
- D. attract new business

Loose clothing is a hazard in the shop because it could

- A. cause an excessive amount of heat
- B. catch on rotating machinery
- C. not look neat
- D. slow the mechanic's movements

A combine is used to

- A. harvest
- B. plant
- C. till
- D. bale

A restricted air filter will cause

- A. a decrease in fuel consumption
- B. white exhaust smoke
- C. a loss of power
- D. cooler exhaust temperatures