

WYOMING CUSTOMIZED ASSESSMENT BLUEPRINT

Administered by NOCTI®



Agricultural Mechanics

Test Code: 8708

Version: 01

Preliminary Blueprint - final version is subject to slight changes.

Specific competencies and skills tested in this assessment:

Safety

Understand appropriate use of clothing protection and personal protective equipment (PPE)
Identify safe practices for fire and electrical dangers
Explain how to create a safe work environment

Hand and Power Tools

Recondition and maintain tools
Select appropriate hand and power tools
Use portable and stationary power tools

Compact Engines

Understand combustion processes
Identify components of compact engines
Maintain compact engines

GMAW, SMAW, and Oxyfuel Welding

Perform safety inspections of equipment and accessories
Set up and operate for gas metal arc welding (GMAW) operations on mild steel
Apply oxyfuel welding and cutting processes and techniques
Set up and operate shielded metal arc welding (SMAW) on mild steel
Perform and identify proper joint positions, set-up, and welding rod selection

Metal Fabrication

Identify metals according to type and shape
Interpret and plan projects with a bill of materials
Use basic math and measuring skills

Agricultural Mechanics (continued)

Agricultural Structures

Explain elements of electricity

Understand basic framing

Select, apply, and calculate for concrete application

Employability Skills

Read, comprehend, and interpret technical materials and publications

Produce technical reports and research papers

Produce employment documents (e.g., resumé, cover letter)

Identify careers in the agriculture industry

Agricultural Mechanics (continued)

Written Assessment:

Administration Time: 3 hours

Number of Questions: 132

Areas covered:

17%	Safety
11%	Hand and Power Tools
8%	Compact Engines
26%	GMAW, SMAW, and Oxyfuel Welding
14%	Metal Fabrication
14%	Agricultural Structures
10%	Employability Skills

Sample Questions:

Personal Protective Equipment (PPE) is designed to protect the body from

- A. exhalation
- B. injury
- C. physical barriers
- D. discomfort

Broken or damaged equipment should be

- A. turned in when the job is finished
- B. marked as damaged and put away
- C. reported to a supervisor/instructor
- D. fixed on the spot to avoid interruption of work

A device that supplies fuel in the proper proportion for a combustible mixture is a

- A. fuel pump
- B. combustion chamber
- C. distributor
- D. carburetor

When selecting an OFC tip, the size is based on

- A. material thickness
- B. acetylene working pressure
- C. atmospheric temperature
- D. gas pressure

A unit of measure of electrical pressure is

- A. volt
- B. amp
- C. watt
- D. ohm