



2024-2025

Technical Skills Assessment

Plant and Soil

Results by Standard

Legend (%)		
0-50%	51-75%	76-100%

Assessment: Plant and Soil	% Correct	% Correct	% Correct	% Correct 24-
Number tested: 14	21-22	22-23	23-24	25
CONTENT STANDARD 1.0: PLANT ANATOMY AND IDENTIFICATION	56.67%	60.42%	62.04%	68.45%
Performance Standard 1.1: PLANT ANATOMY	53.33%	62.04%	63.58%	59.52%
1.1.1 Identify and describe the primary parts of a plant and their function.	53.33%	62.04%	63.58%	59.52%
Performance Standard 1.2: PLANT IDENTIFICATION	60.00%	58.80%	60.49%	77.38%
1.2.2 Differentiate between plant parts and modifications (roots, stems, leaves, flowers, fruits, seeds).	50.00%	62.50%	51.85%	76.79%
1.2.3 Determine plant identification by using a key.	80.00%	51.39%	77.78%	78.57%
CONTENT STANDARD 2.0: PLANT PROCESSES AND GROWTH AND DEVELOPMENT	54.78%	68.72%	64.25%	73.29%
Performance Standard 2.1: BASIC PLANT PROCESSES	62.50%	73.26%	64.81%	77.68%
2.1.1 Explain the process and purpose of photosynthesis, respiration, transpiration and	66.67%	69.44%	65.43%	73.81%
2.1.2 List factors that affect the rate of photosynthesis, respiration, transpiration and	80.00%	81.94%	74.07%	92.86%
2.1.3 Distinguish between the characteristics of photosynthesis and respiration.	46.67%	71.30%	58.02%	71.43%
Performance Standard 2.2: PLANT GROWTH AND DEVELOPMENT	47.69%	64.53%	60.40%	68.68%
2.2.1 List the stages of plant growth and development including germination, vegetative growth and reproductive growth.	33.33%	64.81%	70.37%	78.57%
2.2.2 List conditions affecting the vegetative growth of plants.	48.00%	62.78%	59.26%	72.86%
2.2.3 Demonstrate asexual and sexual reproduction in plants.	56.00%	66.11%	55.56%	58.57%
Performance Standard 2.3: PLANT BREEDING	70.00%	77.78%	87.04%	85.71%
2.3.1 List methods and strategies of pollination.	70.00%	77.78%	87.04%	85.71%
CONTENT STANDARD 3.0: SOIL AND WATER	66.96%	73.43%	67.47%	69.25%
Performance Standard 3.1: ELEMENTARY STUDY OF SOILS	66.25%	72.92%	69.91%	69.20%
3.1.1 Discuss the function of soil as it relates to plant growth, development, and maintenance.	65.00%	74.31%	75.00%	67.86%
3.1.2 Determine soil texture.	50.00%	75.00%	59.26%	60.71%
3.1.3 Identify five kinds of soil structure.	90.00%	72.22%	81.48%	78.57%
3.1.4 Determine how acidity and alkalinity effect the soil and methods of correcting pH	65.00%	77.78%	64.81%	73.21%

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3.1.5 Compare and contrast biotic and abiotic components of soil.	60.00%	59.72%	57.41%	57.14%
3.1.6 Identify soil conservation strategies.	70.00%	72.22%	81.48%	75.00%
Performance Standard 3.2: SOIL MOISTURE MANAGEMENT	68.57%	74.60%	61.90%	69.39%
3.2.1 Identify reasons for irrigation including water holding capacity and soil moisture.	66.67%	74.07%	69.14%	71.43%
3.2.2 Recognize tillage practices associated with different soil structures and their	60.00%	76.39%	44.44%	57.14%
3.2.3 Recognize water sources, delivery systems.	80.00%	73.61%	68.52%	78.57%
CONTENT STANDARD 4.0: PLANT NUTRITION	44.21%	52.05%	51.66%	62.41%
Performance Standard 4.1: IDENTIFY SOURCES AND ROLES OF PLANT NUTRIENTS	37.78%	53.09%	52.67%	65.08%
4.1.1. Identify the functions of N-P-K-S.	6.67%	37.96%	37.04%	61.90%
4.1.2. Identify the primary sources or forms of N-P-K-S available to plants.	40.00%	61.11%	66.67%	69.05%
4.1.3. Differentiate the roles of macro and micro nutrients.	66.67%	60.19%	54.32%	64.29%
Performance Standard 4.2: RECOGNIZE PLANT NUTRIENT DEFICIENCIES	53.33%	64.81%	69.14%	71.43%
4.2.1. Explain the common causes of nutrient deficiencies in plants.	40.00%	66.67%	77.78%	71.43%
4.2.2. Analyze and identify common nutrient deficiencies related to the macronutrients required by plants.	60.00%	63.89%	64.81%	71.43%
Performance Standard 4.3: ANALYSIS OF SOIL AND PLANT NUTRIENTS	48.57%	45.24%	42.86%	55.10%
4.3.2 Interpret soil analysis.	46.67%	47.22%	48.15%	59.52%
4.3.3 Calculate fertilizer application and cost.	50.00%	43.75%	38.89%	51.79%
CONTENT STANDARD 5.0: INTEGRATED PEST MANAGEMENT	64.00%	70.56%	70.37%	75.00%
Performance Standard 5.1: RECOGNIZE CONCEPTS AND PRINCIPALS OF AN INTEGRATED PEST MANAGEMENT PLAN	33.33%	67.59%	72.84%	64.29%
5.1.1 Recognize elements of the disease triangle.	33.33%	67.59%	72.84%	64.29%
Performance Standard 5.2: PEST IDENTIFICATION	77.14%	71.83%	69.31%	79.59%
5.2.2 Recognize common Idaho weeds, insects, diseases.	75.00%	70.14%	62.96%	78.57%
5.2.3 Recognize common Idaho crops.	80.00%	74.07%	77.78%	80.95%
CONTENT STANDARD 6.0: CAREERS AND TECHNOLOGY	55.00%	56.94%	56.48%	66.07%
Performance Standard 6.1: INTRODUCTION TO TECHNOLOGY	60.00%	69.44%	74.07%	71.43%
6.1.1 Discuss the improvements made through genetic engineering.	60.00%	69.44%	74.07%	71.43%
Performance Standard 6.4: SUPERVISED AGRICULTURAL EXPERIENCE	53.33%	52.78%	50.62%	64.29%
6.4.1 Accurately maintain SAE record books.	53.33%	52.78%	50.62%	64.29%
CONTENT STANDARD 7.0: SAFETY	55.56%	68.21%	67.49%	72.22%
Performance Standard 7.1: GENERAL SAFETY	55.56%	68.21%	67.49%	72.22%
7.1.1 Identify and properly use personal protection equipment.	60.00%	84.26%	83.95%	92.86%

Assessment: Plant and Soil Number tested: 14	% Correct 21-22	% Correct 22-23	% Correct 23-24	% Correct 24- 25
7.1.2 Read, understand and follow label directions and SDS (safety data sheet).	53.33%	60.19%	59.26%	61.90%