

Knowledge Assessment

Qualification	National Vocational Certificate level 2 to 5, in Agriculture Sector (Soil, Water and Fertilizer Testing Lab Technician)
Competency Standard(s)	Perform Soil Boron Test
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____ _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Which method applied for determination of boron in soil?		
2.	Which buffer is used for determination of boron in soil?		

3.	Which indicator is used <i>for determination of boron in soil?</i>		
4.	What factors affect the <i>determination of boron in soil?</i>		
5.	In which solvent reagent is prepared?		
	6. Propanol		
	7. Water		
	8. Dilute acid		
	9. Acetone		
10.	Name the instrument used in <i>determination of boron in soil?</i>		
	1. pH meter		
	2. flame photometer		
	3. Atomic absorption spectrophotometer		
	4. Spectrophotometer		
5.	What is the wavelength for <i>determination of boron in soil?</i>		
	1. 440 nm		
	2. 443 nm		
	3. 420 nm		
	4. 520 nm		
5.			

Key

National Vocational Certificate level 2 to 5, in **Agriculture Sector (Soil, Water and Fertilizer Testing Lab Technician)**

Perform Soil Boron Test

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Which method applied for determination of boron in soil?		
	Hot water soluble-azomethine-H test.		
2.	Which buffer is used for determination of boron in soil?		
	Ammonium acetate-acetic acid buffer		
3.	Which indicator is used for determination of boron in soil?		
	Azomethine-H		
4.	What factors affect the determination of boron in soil?		
	Copper, iron and aluminum interfere and must be removed by chelation with EDTA. Organic matter, coloring or suspended materials Borosilicate glassware		
5.	In which solvent reagent is prepared?		
	Water		
6.	Name the instrument used in determination of boron in soil?		
	spectrophotometer		
7.	What is the wavelength for determination of boron in soil?		
	420 nm		
8.			