

Knowledge Assessment

Qualification	National Vocational Certificate level 2 to 5, in Agriculture Sector (Soil, Water and Fertilizer Testing Lab Technician)
Competency Standard(s)	
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.	Describe Titrimetric analysis?		
2.	Describe the Role of Boron In Plants?		

3.	Enlist Phosphorus containing fertilizers?		
4.	Name the apparatus used to detect Sodium?		
5.	Describe method for the determination of total hardness of water?		
6.	Which indicator is used for carbonate determination by titrimetric method?		
7.	Which indicator is used for bicarbonate determination by titrimetric method?		
	Eriochrome black T Methyl orange Potassium chromate Murexide		

Key

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Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Describe Titrimetric analysis?		
	Titrimetric analysis is a method of analysis in which a solution of the substance being determined is treated with a solution of a suitable reagent of exactly known concentration. The reagent is added to the substance until the amount added is equivalent to the amount of substance to be determined.		
2.	Describe the Role of Boron In Plants?		
	Boron plays a key role in a diverse range of plant functions including cell wall formation and stability, maintenance of structural and functional integrity of biological membranes, movement of sugar or energy into growing parts of plants, and pollination and seed set.		
3.	Enlist Phosphorus containing fertilizers?		
	DAP, NPK, SSP, NP,TSP, MAP		
4.	Name the apparatus used to detect Sodium?		
	Flame Photometer		
5.	Describe method for the determination of total hardness of water?		
	To the sample solution, add ammonia buffer and indicator in conical flask. Then titrate with Standard EDTA solution. The end point will determine by color change.		
6.	Which indicator is used for carbonate determination by titrimetric method?		
	Phenolphthalein indictor		
7.	Which indicator is used for bicarbonate determination by		

	titrimetric method?		
	Eriochrome black T Methyl orange Potassium chromate Murexide		