

Knowledge Assessment

Qualification	National Vocational Certificate level 2 to 5, in Agriculture Sector (Soil, water and fertilizer testing lab technician)
Competency Standard(s)	Perform Potassium (k) test by Flame-Photometric Method
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: _____

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	What is Flame Photometer?		
2.	What is principal Flame Photometry?		

3.	Which element is determined by flame photometer?		
	a) Cesium b) Boron c) Carbon d) Potassium		
4.	Which type of gases/fuels used in flame photometer?		
	a) air, hydrogen or nitrous oxide b) air, oxygen or sulphur oxide c) air, oxygen or nitrous oxide d) sui gas		
5.	What are the components of flame photometer?		
6.	What is the atomic number of potassium?		
	a) 10 b) 22 c) 11 d) 19		
7.	What is the atomic weight of potassium?		
	a) 22 b) 39 c) 32 d) 23		
8.	What are the application of Flame Photometry ?		

Key

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

Perform Potassium (k) test by Flame-Photometric Method

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	What is Flame Photometer?		
	An instrument used in inorganic chemical analysis to determine the concentration of certain metal ions among them sodium, potassium, calcium and lithium.		
2.	What is principal Flame Photometry?		
	Flame Photometry is based on measurement of intensity of the light emitted when a metal is introduced into flame.		
3.	Which element is determined by flame photometer?		
	Sodium		
4.	Which type of gases/fuels used in flame photometer?		
	air, oxygen or nitrous oxide		
5.	What are the components of flame photometer?		
	<ul style="list-style-type: none"> a. Flame. b. Nebulizer. c. Mixing Chamber. d. Colour Filters. e. Photo Detector. 		

6.	What is the atomic number of potassium?		
	19		
7.	What is the atomic weight of potassium?		
	39		
8.	What are the application of Flame Photometry?		
	Determining the concentration of sodium and potassium ions in infusion solutions, such as NaCl solution, Ringer solution or others. Product control and indirect quality testing of various substances over sodium, potassium or lithium. Concentration determination in pharmaceutical reagents.		

Candidate's Signature_____

Assessor's Signature_____

Date: _____