

## Knowledge Assessment

<b>Qualification</b>	National Vocational Certificate level 2 to 5, in Agriculture Sector (Soil, water and fertilizer testing lab technician)
<b>Competency Standard(s)</b>	<b>Prepare of Solutions</b>
<b>Candidate Details</b>	Name: _____  Registration/Roll Number: _____ Candidate Signature: _____ _____
<b>Assessment Outcome</b>	<div style="display: flex; justify-content: space-around; align-items: center;"> <span>COMPETENT <input type="checkbox"/></span> <span>NOT YET COMPETENT <input type="checkbox"/></span> </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 molar solution?		
2.	What is normal solution?		
3.	What is standard solution?		
4.	What is stock solution?		

5.	What is ppm solution?		
6.	Which type of water is used for preparation?		
7.	At what place solution should be stored?		
8.	In which flask standard solution is made?		
	a) Volumetric flask b) Titration flask c) Iodine flask d) Beaker		

## Key

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

### Prepare of Solutions

<b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		<b>Satisfactory</b>	<b>Not Satisfactory</b>
<b>1.</b>	What is molar solution?		
	Molar solution is a solution in which 1 mole of a compound is dissolved in a total volume of 1 litre. Gram molecular weight (GMW) expressed in molarity. The molecular weight of sodium chloride (NaCl) is 58.44, so one-gram molecular weight (= 1 mole) is 58.44g.		
<b>2.</b>	What is normal solution?		
	Gram-equivalent weight of a solute in a liter (L) of solution		
<b>3.</b>	What is standard solution?		
	A solution of known strength is call standard solution		
<b>4.</b>	What is stock solution?		
	A stock solution is a concentrated solution that will be diluted to some lower concentration for actual use.		
<b>5.</b>	What is ppm solution?		
	PPM is a term used in chemistry to denote a very, very low concentration of a solution. One gram in 1000 ml is 1000 ppm and one thousandth of a gram (0.001g) in 1000 ml is one ppm.		
<b>6.</b>	Which type of water is used for preparation?		
	Distilled water/deionized water		

7.	At what place solution should be stored?		
	It should be stored in refrigerator		
8.	In which flask standard solution is made?		
	Volumetric flask		