

Assignment for SSC Examinees 2022

Subject: Chemistry

Subject Code: 176

Level: HSC

1st Paper

Assessment Criterion / Rubric

Assignment Number	Assignment	Learning Outcomes	Guidelines (cues/steps or stages)	Assessment Criterion / Rubric					Com's
		Students will be able to:		Indicators	Rating Scale				Score
					4	3	2	1	
03	Chapter 2 Qualitative Chemistry	Determining the application of ionic product and solubility product of a solution	A. explain the affect of different factors on solubility; B. derive solubility product equation for various less soluble salts; C. calculate the solubility product of a saturated solution of A ₂ B salt in water at 25°C temperature in which the concentration of B ²⁻ ion is 6.4x 10 ⁻⁵ M. D. 2mL 0.25 M NH ₄ OH solution is added in 10mL 0.30M AB ₃ solution. If the solubility product of A(OH) ₃ at 25°C is 3.98x10 ⁻³⁸ then justify the probability of getting precipitation in the solution.	A. Explanation of solubility, nature of solution, effect of pressure and effect of temperature B. Derivation of solubility product equation of AB, AB ₂ , A ₂ B, AB ₃ types of salt C. Reaction, concentration of A ⁺ ion, writing the equation for solubility product, calculation D. Reaction, concentration of A ³⁺ , concentration of OH ⁻ , ionic product of A(OH) ₃ along with comments	Explained 5 of them	Explained 4 of them	Explained 3 of them	Explained 2 of them	
					Could derive 4 equations	Could derive 3 equations	Could derive 2 equations	Could derive 1 equation	
					Properly calculated following all steps	Partially calculated following all steps	Could do partial calculation	Mentioned the reaction.	
					Properly calculated following all steps and added comments.	Partially calculated following all steps.	Could do partial calculation.	Mentioned the reaction.	
								Total	
									Total marks for this assignment: 16 NB: Proper: 80-100%, Mostly correct: 70-79%, Partially correct: 50-69%

Marks Obtained	Comments
14-16	Excellent
11-13	Very good
8-10	Good
7 or below	Needs Improvement