

# Assignment for HSC Examinees, 2022

Subject: Chemistry

Paper 2

Subject Code: 177

Level: HSC

Assignment Number	Assignment	Learning Outcomes	Guidelines (cues/steps or stages)	Assessment Criterion /Rubric					Com'ts
4  Chapter One:  Environmental Chemistry	Properties of acid and base, strength and use	<b>Students will be able to:</b>  -identify the cause of acid rain and explain its remedy;  - explain Arrhenius' theory of acid-base;  -explain the Bronsted-Lowry theory, the identification of conjugate acid-base and establish the relationship between them by the help of equation;  -explain Lewis' theory of acid-base.	<b>The answer will contain the followings:</b>  a. Explanation of acid-base.  b. Comparison of the strength of acid and base.  c. Explanation of conjugate acid-base and its use.  d. Identification of the cause of acid rain and explanation of the its remedy.	<b>Indicator</b>	<b>Rating Scale</b>				<b>Score</b>
					4	3	2	1	
				a. Arrhenius' theory, Bronsted-Lowry theory and Lewis' theory	Perfectly explained the theories	Mostly explained the theories	Partially explained the theories	Mentioned the theories	
				b. Bond length, oxidation number of central atom, electronegativity and dissociation constant	Perfectly explained the factors	Mostly explained the factors	Partially explained the factors	Partially explained one/two of them	
				c. Explanation of conjugate acid-base, role of conjugate acid-base in buffer solution	Perfectly explained conjugate acid-base and its role	Mostly explained conjugate acid-base and its role	Partially explained conjugate acid-base and its role	Explained one of them	
				d. Description of acid rain, its cause, harmful effect and remedy	Perfectly explained acid rain, its cause, harmful effect and remedy	Mostly explained acid rain, its cause, harmful effect and remedy	Partially explained acid rain, its cause, harmful effect and remedy	Described acid rain	
								<b>Total</b>	
<b>Total marks for this assignment: 16</b> <b>NB. Perfect: 80-100%, Mostly Correct: 70-79%, Partially correct: 50—69%</b>									

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