

INDIAN SCHOOL MUSCAT

FIRST PERIODIC TEST	CLASS: XI
CHEMISTRY	
MARKING SCHEME	

Q.NO	VALUE POINTS	MARK
	Set A	
1	D	1
2	D	1
3	B	1
4	B	1
5	C	1
6	1.204×10^{24} atoms	1
7	0,1525	1
8	2 moles	1
9	Law of Multiple Proportions – Correct statement	1
10	42.8%	1
11	Correct equation - $\frac{1}{2}$ Moles of calcium = 0.5 mol - $\frac{1}{2}$ Volume of HCl = 2500 mL - $\frac{1}{2}$ Volume of hydrogen gas at STP = 11.2 L - $\frac{1}{2}$	2
12	Number of moles of carbon and hydrogen 7.81 and 6.25 - $\frac{1}{2}$ Mole ratio of carbon and hydrogen 1.25 and 1 - $\frac{1}{2}$ EF - C_5H_4	2
13	Molarity definition - 1 Formula and substitution - $\frac{1}{2}$ Molarity = 18.4 M - 1 Unit - $\frac{1}{2}$	3
14	Ppm definition - 1 Moles of calcium chloride = 0.02 mol - $\frac{1}{2}$ Moles of silver nitrate = 0.015 mol - $\frac{1}{2}$ Limiting reactant = silver nitrate - $\frac{1}{2}$ Moles of AgCl = 0.015 mol - $\frac{1}{2}$	3

	Set B	
1	A	1
2	A	1
3	D	1
4	C	1
5	B	1
6	13.88 m	1
7	1.99×10^{-26} Kg	1
8	1.806×10^{24} atoms	1
9	Avogadro's law – Correct statement	1
10	30.4%	1
11	Number of moles of carbon, hydrogen and oxygen 4.816, 3.6 and 2.41 – $\frac{1}{2}$ Mole ratio 2, 1.5 and 1 – $\frac{1}{2}$ EF – $\text{C}_4\text{H}_3\text{O}_2$	
12	Correct equation – $\frac{1}{2}$ Moles of magnesium = 2 mol – $\frac{1}{2}$ Volume of HCl = 8000 mL – $\frac{1}{2}$ Volume of hydrogen gas at STP = 44.8 L – $\frac{1}{2}$	2
13	Molality definition - 1 Formula and substitution – $\frac{1}{2}$ Molality = 6.8 m - 1 Unit – $\frac{1}{2}$	3
14	EF definition - 1 Moles of Na_2SO_4 = 0.08 mol – $\frac{1}{2}$ Moles of silver nitrate = 0.12 mol – $\frac{1}{2}$ Limiting reactant = silver nitrate – $\frac{1}{2}$ Moles of Ag_2SO_4 = 0.06 mol – $\frac{1}{2}$	3

	Set C	
1	A	1
2	D	1
3	D	1
4	D	1
5	C	1
6	6.022×10^{23} atoms	1
7	0,1525	1
8	5.31×10^{-26} Kg	1
9	Gay-Lussac's law – Correct statement	1
10	88.88%	1
11	Number of moles of carbon, hydrogen and oxygen 2.88, 3.8 and 3.85- $\frac{1}{2}$ Mole ratio 1, 1.33 and 1.33 - $\frac{1}{2}$ EF - $\text{C}_3\text{H}_4\text{O}_4$	2
12	Correct equation - $\frac{1}{2}$ Moles of sodium = 0.2 mol - $\frac{1}{2}$ Volume of sulphuric acid = 250 mL - $\frac{1}{2}$ Volume of hydrogen gas at STP = 2.24 L - $\frac{1}{2}$	2
13	Limiting reactant - 1 Moles of barium chloride = 0.04 mol - $\frac{1}{2}$ Moles of silver nitrate = 0.03 mol - $\frac{1}{2}$ Limiting reactant = silver nitrate - $\frac{1}{2}$ Moles of AgCl = 0.03 mol - $\frac{1}{2}$	3
14	Mole fraction definition - 1 Formula and substitution - $\frac{1}{2}$ Molality = 0.005 m - 1 Unit - $\frac{1}{2}$	3