

INDIAN SCHOOL MUSCAT
HALF YEARLY EXAMINATION
SEPTEMBER 2019
CLASS X

SET B

Marking Scheme – SUBJECT[CHEMISTRY][THEORY]

Q.NO.	Answers	Marks (with split up)
1.	PHY- MCQ	
2.	PHY- MCQ	
3.	PHY- MCQ	
4.	PHY- MCQ (BASED ON PRACTICAL)	
5.	a) Hydrogen gas and iron chloride is produced.	1M
6.	b) Metals are malleable and ductile.	1M
7.	b) Acidic oxides.	1M
8.	d) B and D	1M
9.	BIO- MCQ	
10.	BIO- MCQ	
11.	BIO- VSA (BASED ON PRACTICAL)	
12.	BIO- VSA (BASED ON PRACTICAL)	
13.	BIO- VSA	
14.	BIO- ASSERTION/REASONING TYPE	
15.	PHY- VSA (BASED ON PRACTICAL)	
16.	PHY- VSA	
17.	PHY- ASSERTION/REASONING TYPE	
18.	Basic , Carbon dioxide turns milky.	$\frac{1}{2} + \frac{1}{2} = 1M$
19.	Substance oxidized – CO , Substance Reduced - Fe ₂ O ₃	$\frac{1}{2} + \frac{1}{2} = 1M$
20.	Due to evolution of CO ₂ gas.	1M
21.	PHY OR	
22.	PHY	
23.	PHY OR	
24.	Cinnabar, HgS i) $2HgS + 3O_2 \xrightarrow{\text{Heat}} 2HgO + 2SO_2$ ii) $2HgO \xrightarrow{\text{Heat}} 2Hg + O_2$ OR Diagram , Observations and conclusion	$\frac{1}{2} + \frac{1}{2} = 1M$ 1 + 1 = 2M 3 x 1 = 3M
25.	(A) i) Endothermic ii) Exothermic (B) i) $Cu + 2AgNO_3 \rightarrow Cu(NO_3)_2 + 2Ag$ (Displacement Reaction) ii) $3H_2 + N_2 \rightarrow 2NH_3$ (Combination reaction)	$\frac{1}{2} + \frac{1}{2} = 1M$ $\frac{1}{2} \times 4 = 2M$
26.	(A) Alkali, Eg. NaOH or Name (B) Bee sting contains Methanoic acid. Baking Soda being basic in nature, neutralizes acid and gives relief. (C) Strong – H ₂ SO ₄ , HNO ₃ (Any one from each) Weak – CH ₃ COOH , H ₂ CO ₃ OR	$\frac{1}{2} + \frac{1}{2} = 1M$ $\frac{1}{2} + \frac{1}{2} = 1M$ $\frac{1}{2} + \frac{1}{2} = 1M$

	<p>(A) Soil is acidic</p> <p>(B) i) A is $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ or (Hydrated copper sulphate) B is water of crystallization. C is CuSO_4 or Anhydrous copper sulphate D is water ii) Any example of a hydrated salt</p> <p>(C) Plaster of Paris absorbs moisture and changes to gypsum, a hard mass.</p>	<p>$\frac{1}{2}$ M</p> <p>$1/4 \times 4 = 1\text{M}$</p> <p>$\frac{1}{2}$ M</p> <p>1M</p>
27.	BIO OR	
28.	BIO	
29.	BIO	
30.	BIO	
31.	PHY OR	
32.	PHY	
33.	<p>(A) i) By heating alone the metal oxide ii) Electrolytic Reduction/ Electrolysis of its molten ore. iii) By using suitable reducing agents like carbon (coke) or CO or by using highly reactive metals like sodium, aluminium as reducing agents.</p> <p>(B) Formation of Na_2O by transfer of electrons.</p> <p>(C) One difference</p> <p style="text-align: center;">OR</p> <p>(A) Any two differences with chemical equations.</p> <p>(B) Electrolytic Refining. Pure copper is used as cathode. Impure copper is used as anode. Copper sulfate as electrolyte.</p> <p>(C) Correct definition with one example.</p>	<p>$3 \times 1 = 3\text{M}$</p> <p>1M</p> <p>1M</p> <p>$1 + 1 = 2\text{M}$</p> <p>$\frac{1}{2} \times 4 = 2\text{M}$</p> <p>1M</p>
34.	<p>(A) Three balanced chemical equations.</p> <p>(B) Solution A has max. concentration of H^+ ions. A is acidic, while B and C are Basic in nature</p>	<p>$3 \times 1 = 3\text{M}$</p> <p>$\frac{1}{2} \times 4 = 2\text{M}$</p>
35.	BIO OR	
36.	BIO	