

INDIAN SCHOOL MUSCAT

FIRST PRE-BOARD EXAMINATION

February 2021

SET B

CLASS XII

Marking Scheme –CHEMISTRY [THEORY]

Q. N O.	Answers	Marks (with split up)
17	a) Represents atoms /ions in space b) ZnS-small size of cation	2
18	$\Pi = \frac{1 \times 0.0821 \times 310}{185000 \times 0.45} = 3.05 \times 10^{-4}$ atm	1+1
21	manufacture of nitric acid (give equations)	2
22	a)square planar,dsp ² ,diamagnetic OR a) Diamminechloridomethylamineplatinum(II) Chloride . b) $[\text{Co}(\text{NH}_3)_6]\text{Cl}_3$	1+1 1+1
25	a) Stephens reaction b) Cannizaro reaction	1+1
26	$d = \frac{Z \times M}{a^3 \times N_A}$ 106.5 g mol⁻¹ $4r = \sqrt{2}a$ $r = \frac{1.414 \times 407}{4} = 143.87 \text{ pm}$	1 1 1
28	the structure of a) ICl_3 b) XeF_4 c) Perchloric acid	1x3
29	Correct reason $3 \times 1 = 3$	

	OR	
	<p>Cerium - 1</p> <p>Oxidising agent - $\frac{1}{2}$</p> <p>+3 - $\frac{1}{2}$</p> <p>Electronic configuration - $\frac{1}{2}$</p> <p>Magnetic moment = 1.732 BM - $\frac{1}{2}$</p>	
30	<p>a) denaturation of protein</p> <p>b) Hexane</p> <p>c) Saacharic acid is formed</p>	1x3