

THE MOLE

MARK SCHEME

Q1.

MASS IN GRAMS	NO. OF MOLES
12g of Mg	0.5
2g of H ₂	2
51g of NH ₃	3
0.25g of C ₆ H ₁₂ O ₆	0.0014
25g of H ₂ O	1.39
134.6 moles of Li ₂ O?	4.5
24.0 grams of FeF ₃	.213
458 grams of Na ₂ SO ₄	3.22
122 grams of NO ₂	2.6
237 grams of CCl ₄	1.53

(10 marks)

Q2.

MOLES	MASS IN GRAMS
1 mole of carbon	<i>12</i>
0.5 moles of HCl	<i>18.25</i>
0.2 moles of CO ₂	<i>8.8</i>
3.7 moles of Na ₂ O	<i>230</i>
4.8 moles of NaOH	<i>192</i>
0.5 moles of CaCl ₂	<i>55.5</i>
1.7 moles of H ₂ O	<i>30.6</i>
2 moles of Br ₂	<i>160</i>
3.8 moles of C ₆ H ₁₂ O ₆	<i>684</i>
5.3 moles of H ₃ PO ₄	<i>520</i>

(10 marks)