

Model answer lesson 3 chapter 2

Question	Answer	Question	Answer
1	B	31	D
2	D	32	B
3	B	33	C
4	B	34	D
5	C	35	A
6	A	36	A
7	C	37	D
8	C	38	B
9	A	39	1)D 2) D
10	D	40	C
11	D	41	C
12	C	42	A
13	B	43	A
14	A	44	B
15	A Edit : Most stable iron ion*	45	B
16	C	46	B
17	B	47	B
18	D	48	C
19	B	49	C
20	B	50	B
21	C	51	A
22	B	52	A
23	A	53	A
24	B	54	B
25	C	55	A
26	C	56	C
27	A	57	B
28	B	58	A
29	D	59	C

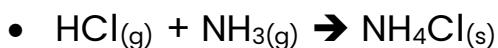
30	B	60	C
----	---	----	---

Essay questions:

61)

Anion :

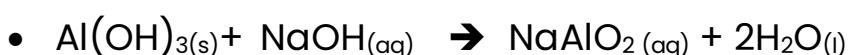
by adding conc. H_2SO_4 , colorless gas evolve which is (HCl) and by approaching glass rod wetted by ammonia , ammonium chloride is formed which is white fumes.



Anion \rightarrow Chloride (Cl^-)

Cation :

By adding sodium hydroxide so white ppt. appears " Al(OH)_3 " and by adding excess of NaOH , it disappear due to formation sodium meta aluminate (NaAlO_2)



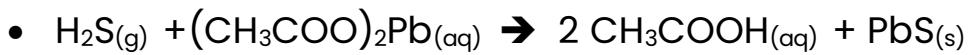
Cation \rightarrow Aluminium (Al^{+3})

So compound A is aluminum chloride (AlCl_3)

62)

Anion :

hydrogen sulphide gas evolve which has **bad smell and Turns paper wet with lead acetate $(CH_3COO)_2Pb$ to black**



Anion \rightarrow Sulphide (S^{2-})

Cation :

When ammonium hydroxide is added to iron(II), white green ppt. is formed $\rightarrow Fe(OH)_{2(s)}$

Cation \rightarrow Iron II (Fe^{+2})

So **compound (B) is ferrous sulphide (FeS)**