

Răspuns

A – NaOH	2 p
B – HCl	1 p
C – MnO ₂ , NaCl	2 p + 2 p
D – Na ₂ CO ₃ ·10H ₂ O	5 p
E – amidon	1 p
1 – Al(NO ₃) ₃	2 p
2 – H ₂ O ₂	2 p
3 – AgNO ₃	2 p
4 – NaHCO ₃	2 p
5 – Na ₂ S, KOH	2 p + 2 p

1+4: $Al^{3+} + 3HCO_3^- = Al(OH)_3 \downarrow + 3CO_2 \uparrow$	0,5p
1+5: $Al^{3+} + 3OH^- = Al(OH)_3 \downarrow$ $Al(OH)_3 + 3OH^- = [Al(OH)_6]^{3-}$	0,25p + 0,5p
1+A: $Al^{3+} + 3OH^- = Al(OH)_3 \downarrow$ $Al(OH)_3 + 3OH^- = [Al(OH)_6]^{3-}$	
1+D: $2Al^{3+} + 3CO_3^{2-} + 3H_2O = 2Al(OH)_3 \downarrow + 3CO_2 \uparrow$	0,5p
2+C: $2H_2O_2 \xrightarrow{MnO_2} 2H_2O + O_2$	0,5p
3+4: $2Ag^+ + HCO_3^- = Ag_2CO_3 \downarrow + H^+$	0,5p
3+5: $2Ag^+ + S^{2-} = Ag_2S \downarrow$	0,25p
3+A: $2Ag^+ + 2OH^- = Ag_2O \downarrow + H_2O$	0,5p
3+B: $Ag^+ + Cl^- = AgCl \downarrow$	0,25p
3+C: $Ag^+ + Cl^- = AgCl \downarrow$	
3+D: $2Ag^+ + CO_3^{2-} = Ag_2CO_3 \downarrow$	0,25p
4+B: $HCO_3^- + H^+ = CO_2 \uparrow + H_2O$	0,25p
5+B: $OH^- + H^+ = H_2O$ $S^{2-} + 2H^+ = H_2S \uparrow$	0,25p + 0,25p
A+B: $OH^- + H^+ = H_2O$	
B+D: $CO_3^{2-} + 2H^+ = CO_2 \uparrow + H_2O$	0,25p