Edexcel AS Chemistry Exam practice answers

3: Redox

1 (a) Disproportionation happens when an element in a single species; (✓) is simultaneously oxidised and reduced (✓)

(b) A (✓)

(c) C (✓)

(d) One chlorine species (Cl−) has been oxidised and one (ClO−) reduced; (✓) so a single species is not simultaneously oxidised and reduced, it is not disproportionation (✓)

2 (a) (i) H2O2(aq) + 2H+(aq) + 2e− → 2H2O

species (✓) balance (✓)

(ii) S(s) + 2H+(aq) + 2e− → H2S(aq)

species(✓) balance (✓)

(b) H2O2(aq) + H2S(aq) → 2H2O(l) + S(s)

species(✓) balance (✓)

(c) 2HBr + H2SO4 → Br2 + 2H2O + SO2

species(✓) balance (✓)

(d) B (✓)