Edexcel AS Chemistry Exam practice answers

10: Equilibrium

1 (a) (i) The rate of the forward reaction = the rate of the backward reaction; (✓) so there is no change in the concentrations of the reactants and products (✓)

 (ii) B (✓)

 (b) (i) The reaction is exothermic; (✓) so a decrease in temperature will increase the value of *K*c; (✓) and the position will move to the right (✓)

 (ii) The position will move to the right; (✓) because 4 gas moles form 1 gas mole (or fewer gas moles on the right) (✓)

 (c) Pass carbon monoxide over heated nickel; (✓) Increasing the temperature of the gas produced (✓) drives the equilibrium to the left; (✓) producing more pure nickel

2 (a) A (✓)

 (b) (i) ; (✓) units dm1½¦mol−½ (✓) (accept without state symbols)

 (ii) The pressure will be doubled; (✓) so the equilibrium will be driven to the right; (✓) because there are fewer product gas moles (✓)

 (iii) None (✓)