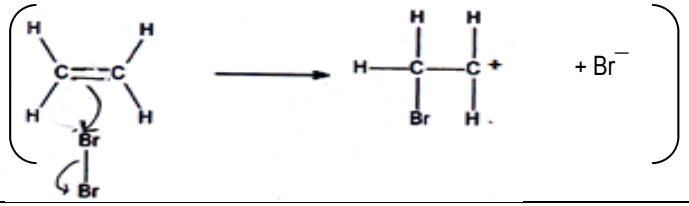
Question Number	Answer	Mark
2(a)	**D** (*Z*-2-bromo-1-chloroprop-1-ene)	(1)

Question Number	Answer	Mark
2(b)(i)	**A** (electrophilic addition)	(1)

Question Number	Answer	Mark
2(b)(ii)	**C** 	(1)

Question Number	Acceptable Answers	Additional Guidance	Mark
2(c)(i)	• (yield) decreases / lower yield	Allow less ethanol is produced Ignore equilibrium shifts to the left but do not allow equilibrium shifts to the right Ignore any reference to Le Chatelier's principle Do not allow high temperature favours the exothermic direction	(1)

Question Number	Acceptable Answers	Additional Guidance	Mark
2(c)(ii)	• (yield) decreases / lower yield	Allow less ethanol is produced Ignore equilibrium shifts to the left but do not allow equilibrium shifts to the right Ignore any reference to Le Chatelier's principle Ignore fewer collisions	**(1)**

Question Number	Answer	Mark
2(c)(iii)	**D** $\left(\frac{[C_2H_5OH(g)]}{[C_2H_4(g)][H_2O(g)]}\right)$	**(1)**

(Total for Question 2 = 6 marks)