

Multiple Choice Answers

Q17: B

Multiple Choice Answers

Q16: C

Multiple Choice Answers

Q16: D

Multiple Choice Answers

Q17: A

1(a)	78(%)
1(b)	450
1(c)	3
1(d)	2
1(e)	any value between 25 to 35 inclusive
1(f)	2
1(g)	8
1(h)	7

1(a)	21
1(b)	450
1(c)	2
1(d)	8
1(e)	16
1(f)	6.02×10^{23}

4(a)	no reactants or products can enter or leave
4(b)	enthalpy change (of reaction)
4(c)	(The value of ΔH is) negative
4(d)	+105 (kJ / mol)
4(e)	decreases increases increases no change
4(f)	M1 Bond energy in breaking bonds = $1075 + 240 = (+) 1315$ M2 Bond energy of $\text{COC}l_2 = 1315 - (-105) = 1420$ M3 $\text{C}=\text{O} = 1420 - 2 \times \text{C}-\text{Cl}$ = $1420 - (2 \times 340) = (+) 740$
4(g)	M1 both single bonding dot and cross pairs correct M2 double $\text{C}=\text{O}$ bond dot and cross pairs are correct M3 Complete diagram is correct