

Multiple Choice Answers

Q36: B

Multiple Choice Answers

Q32: A

Multiple Choice Answers

Q17: B

Q36: D

Multiple Choice Answers

Q33: C

6(a)	homologous series
6(b)	14
6(c)	$\text{C}_2\text{H}_4 + 3\text{O}_2 \rightarrow 2\text{CO}_2 + 2\text{H}_2\text{O}$ M1 $\text{CO}_2 + \text{H}_2\text{O}$ M2 correct equation
6(d)(i)	M1 decreases M2 decreases M3 decreases M4 no change
6(d)(ii)	M1 kinetic energy of particles increases M2 frequency of collisions between particles increases M3 higher percentage / proportion / fraction of collisions / particles have energy greater than / equal to activation energy
6(e)(i)	$\text{C}_5\text{H}_8\text{O}_4$
6(e)(ii)	it has a carbon-carbon bond which is not a single bond
6(e)(iii)	M1 one C – C single bond with continuation bonds M2 correct structure
6(e)(iv)	compound B has two carboxylic acid groups
6(e)(v)	M1 (mol of NaOH reacting) = 0.2(00) M2 volume = $1000 \times 0.2(00) / 0.250 = 800 \text{ cm}^3$

6(a)	M1 (have a) general formula of C_nH_{2n} M2 (have a) C=C functional group
6(b)	compounds made of C and H only
6(c)	$2\text{C}_3\text{H}_6 + 9\text{O}_2 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O}$ M1 $\text{CO}_2 + \text{H}_2\text{O}$ as only products M2 correct equation
6(d)	CH_2
6(e)	but-2-ene
6(f)	displayed formula of but-1-ene
6(g)(i)	only one product is formed
6(g)(ii)	orange to colourless
6(g)(iii)	2,3-dibromobutane
6(h)(i)	displayed formula of ethanoic acid
6(h)(ii)	ethanoic acid
6(h)(iii)	$\text{CH}_3\text{CH}=\text{CHCH}_3 + 2\text{O}_2 \rightarrow 2\text{CH}_3\text{COOH}$