

7(a)	M1: $\text{Q CH}_3\text{CH}_2\text{CH}(\text{CH}_3)\text{CHO}$ M2: $\begin{array}{c} \text{C}_2\text{H}_5 \\ \\ \text{C} \\ / \quad \backslash \\ \text{HOC} \quad \text{H} \\ \quad \backslash \\ \quad \text{CH}_3 \end{array}$ AND $\begin{array}{c} \text{C}_2\text{H}_5 \\ \\ \text{C} \\ / \quad \backslash \\ \text{H} \quad \text{CHO} \\ \quad / \\ \quad \text{H}_3\text{C} \end{array}$
7(b)(i)	T $\text{CH}_3\text{CH}_2\text{CH}_2\text{COCH}_3$ AND V $(\text{CH}_3)_2\text{CHCOCH}_3$
7(b)(ii)	- yellow solid $\text{CH}_3\text{CH}_2\text{CH}_2\text{COOH}$ OR $(\text{CH}_3)_2\text{CHCOOH}$ CHI_3 Any two [1], all three [2]
7(c)(i)	S $(\text{CH}_3)_3\text{CCHO}$
7(c)(ii)	U $\text{CH}_3\text{CH}_2\text{COCH}_2\text{CH}_3$
7(c)(iii)	triplet AND two hydrogen atoms on neighbouring carbon atoms
7(c)(iv)	TMS / tetramethylsilane / $\text{Si}(\text{CH}_3)_4$
7(d)	4 3 5 3 Any two [1], all four [2]