AQA AS/A-level Year 1 Chemistry exam practice answers

**10 Alkanes**

**1 (a) (i)** Saturated — containing carbon–carbon single bonds only [1]; hydrocarbon — a compound containing hydrogen and carbon only [1]

 **(ii)** C*n*H2*n*+2 [1]

 **(b) (i)** C5H12 + 8O2 → 5CO2 + 6H2O [1]

 **(ii)** Carbon dioxide and water vapour are ‘greenhouse gases’ [1]

 **(c)**  Carbon/soot [1]

 **(d) (i)** C13H28 → C3H6 + C10H22 [1]

 **(ii)** Poly(propene) or any other sensible suggestion involving a reaction of propene [1]

 **(iii)** Energy is required to break the strong covalent bonds [1]

**2** D [1]