Question Number	Answer	Additional guidance	Mark
7(a)(i)	The correct answer is C two *A is incorrect because lignin gives waterproofing properties and can form spiral shapes* *B is incorrect because lignin gives waterproofing properties and can form spiral shapes* *D is incorrect because lignin does not add strength to the cell membranes*		**(1)**

Question Number	Answer	Additional guidance	Mark
7(a)(ii)	Similarity (1) • both contain {cellulose / pits / dead cells / secondary walls} • both {are hollow / do not contain cytoplasm} Difference (1) • sclerenchyma contain end walls whereas xylem do not	Ignore cell walls unqualified Ignore no nucleus Accept sclerenchyma are {pointed/closed} at each end whereas xylem are {not / open at each end} Accept xylem contain tracheids whereas sclerenchyma do not	**(2)**

Question Number	Answer	Additional guidance	Mark
7(b)	An explanation that makes reference to the following: • hemp is renewable / more can be grown / will not run out (1) • available to future generations (1)		**(2)**

Question Number	Answer	Additional guidance	Mark
7(c)(i)	• calculation of mean yearly increase (1) • calculation of total volume in 2020 (1) • correct answer for total volume in 2020 with units (1)	Example of calculation $(84,600,000,000 - 17,000,000,000) \div 11 = 6145454545.45$ $(6145454545.45 \times 20) = 1229090909 + 17,000,000,000 = 1.39 \times 10^{11} / 1.4 \times 10^{11} / 139909 \times 10^6$ $= 1.39 \times 10^{11} \, dm^3 / 1.4 \times 10^{11} \, dm^3 / 139909 \times 10^6 \, dm^3$ Correct answer with no working gains full marks	**(3)**