•	Ionising radiation is defined as radiation that has energy greater than 1.93×10^{-18} J per photon. Using this criterion, determine whether UV light of $\nu = 1.00 \times 10^{16}$ Hz would be ionising.	Marks 2
•	The atoms in both iodine and diamond are joined by covalent bonds. However, iodine is a soft, low-melting point solid while diamond is very hard and has an extremely high melting point. Account for these differences in properties.	2