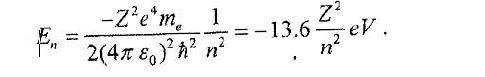
The energy levels for an electron moving about a nucleus of charge +*Ze* are given by



Calculate the first and third ionisation energies of , stating any assumptions you make for the effective Z value in each case.