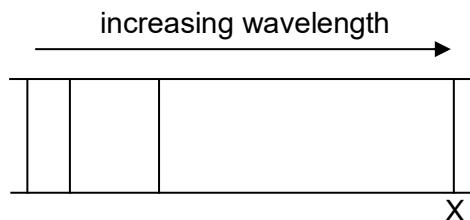
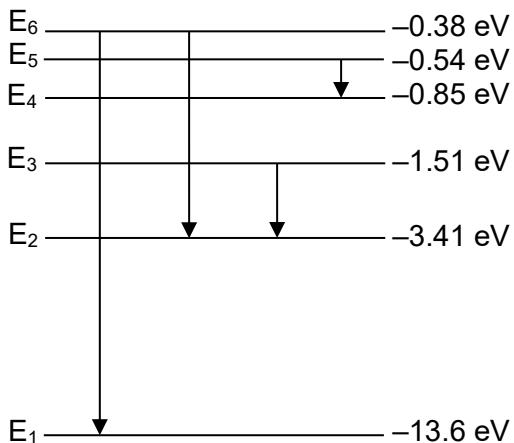


- 30** The line emission spectrum of a hydrogen discharge tube when viewed through a diffraction grating consists of coloured lines on a dark background. One of the coloured lines is marked X, as shown.

The wavelength scale is linear and increases to the right.



The diagram below represents some of the electron energy levels in a hydrogen atom.



Which transition best corresponds to the emission of line X?

- A** E_6 to E_1 **B** E_6 to E_2 **C** E_3 to E_2 **D** E_5 to E_4

End of Paper