



- 4 An X-ray spectrum is shown in Fig. 4.1.

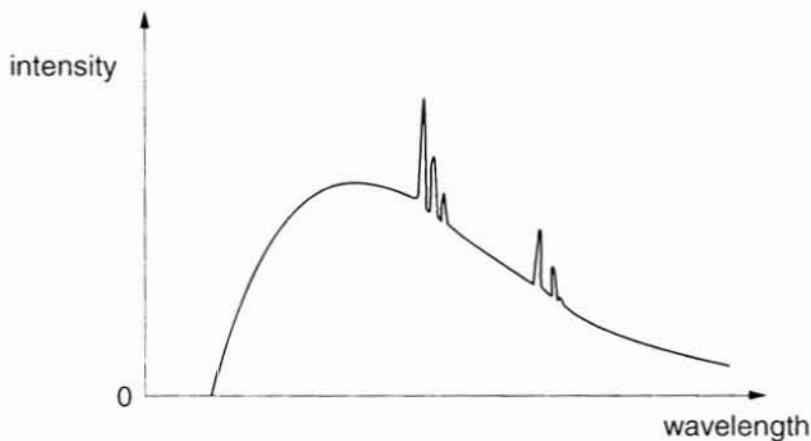


Fig. 4.1

- (a) Explain why there is a minimum wavelength for the emitted X-rays.

.....

 [3]

- (b) A characteristic X-ray wavelength using a copper target is $1.54 \times 10^{-10}\text{ m}$. Calculate the energy change giving rise to this wavelength.

energy = J [2]