

- 5 (a) State one property of electromagnetic waves that is **not** common to other transverse waves.

..... [1]

- (b) The seven regions of the electromagnetic spectrum are represented by blocks labelled A to G in Fig. 5.1.

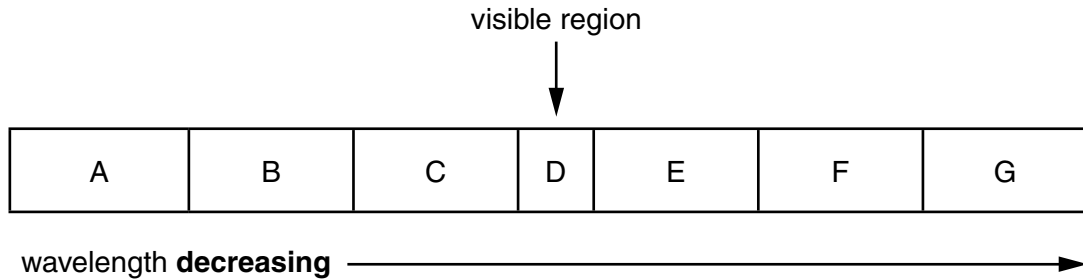


Fig. 5.1

A typical wavelength for the visible region D is 500 nm.

- (i) Name the principal radiations and give a typical wavelength for each of the regions B, E and F.

B: name: wavelength: m

E: name: wavelength: m

F: name: wavelength: m

[3]

- (ii) Calculate the frequency corresponding to a wavelength of 500 nm.

frequency = Hz [2]

- (c) All the waves in the spectrum shown in Fig. 5.1 can be polarised. Explain the meaning of the term *polarised*.

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..... [2]