

2 The spectrum of electromagnetic waves is divided into a number of regions such as radio waves, visible light and gamma radiation.

(a) State three distinct features of waves that are common to all regions of the electromagnetic spectrum.

1.

2.

3. [3]

(b) A typical wavelength of visible light is 495 nm. Calculate the number of wavelengths of this light in a wave of length 1.00 m.

number = [2]

(c) State a typical wavelength for

(i) X-rays,

wavelength = m

(ii) infra-red radiation.

wavelength = m
[2]