

Name of the Student: _____

Max. Marks : 17 Marks

Time : 17 Minutes

Mark Schemes

Q1.

(a) compression
this order only 1

rarefaction 1

(b) longitudinal waves transfer energy 1

(c) amplitude 1

(d) 340 (m/s)
allow answers in the range 339 to 340 (m/s) 1

(e) $s = 340 \times 0.20$ 1

$s = 68 \text{ m}$
allow ecf from part (d) 1

(f) the higher the temperature the greater the speed
do not accept the greater the speed the higher the temperature 1

(so) time taken is less 1

[9]

Q2.

(a) energy 1

(b) frequency 1

wavelength 1
either order

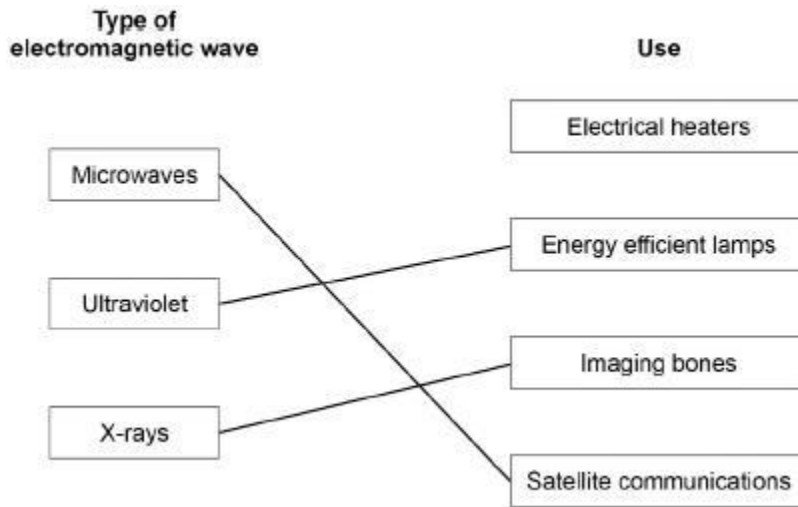
- (c) **A** = visible light
allow visible
allow light

1

B = gamma (rays / waves / radiation)

1

(d)



additional line from a box on the left negates the mark for that box

3

[8]