Practice Question Set For GCSE
Subject : Physics
Paper-2 Topic: GCSE Triple Science_Waves (LDQ)

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Name of the Student:_____
Max. Marks : 17 Marks **Time : 17 Minutes**

Mark Schemes

Q1.

(a) pitch

1

loudness

1

(b) (i) as length (of prongs) decreases frequency / pitch increases

accept converse
accept negative correlation
ignore inversely proportional

1

(ii) 8.3 (cm)

accept 8.3 ± 0.1 cm

1

(iii) (8.3 cm is) between 7.8 (cm) and 8.7 (cm)

*ecf from part **(ii)***

1

(so *f* must be) between 384 (Hz) and 480 (Hz)

1

410 (Hz) ≤ *f* ≤ 450 (Hz)

*if only the estimated frequency given, accept for **1** mark an answer within the range*

1

(c) (i) electronic

1

(ii) frequency is (very) high

accept frequency above
*20 000 (Hz) **or** audible range*

1

so tuning fork ***or*** length of prongs would be very small (1.2 mm)

1

(d) 285.7 (Hz)

accept any correct rounding 286, 290, 300
*allow **2** marks for 285*
*allow **2** marks for correct substitution 0.0035 = 1 / f*

*allow **1** mark for T = 0.0035 s*
*allow **1** mark for an answer of 2000*

3

[13]

Q2.

(a) decreases

correct order only

1

increases

1

(b) (i) intensity (of transmitted light) depends on thickness
or
to enable a valid comparison
or
it is a control variable

accept absorption depends on thickness
it would affect the results is insufficient
fair test is insufficient

1

(ii) transmits the least light
or
absorbs the most light

accept very little light is transmitted
*do **not** accept transmits none of the light*
*do **not** accept absorbs all of the light*
any reference to heat negates this mark

1

[4]