Practice Question Set For GCSE
Subject : Physics
Paper-2 Topic: Waves (Low Demand Questions)

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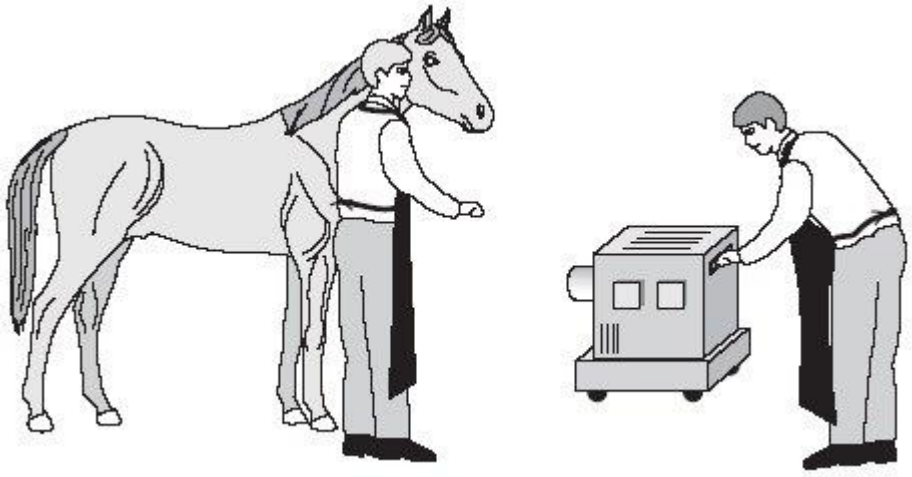
Name of the Student:_____
Max. Marks : 19 Marks **Time : 19 Minutes**

Q1.

The picture shows a horse being prepared for an X-ray.



The person who will take the X-ray and the person holding the horse are wearing special aprons. These aprons have a lead lining.

Explain why the lead lining is important.

To gain full marks in this question you should write your ideas in good English.
Put them into a sensible order and use the correct scientific words.

_____

_____

_____

_____

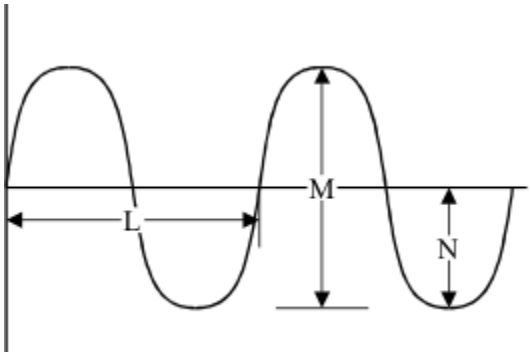
_____

_____

(Total 3 marks)

Q2.

(a) The diagram shows a wave pattern.



Which letter, **L**, **M** or **N** shows:

(i) the wavelength? _____

(ii) the amplitude? _____

(2)

(b) Describe how you could show that visible light travels in straight lines. You may wish to draw a diagram to help explain your answer.

_____

_____

_____

_____

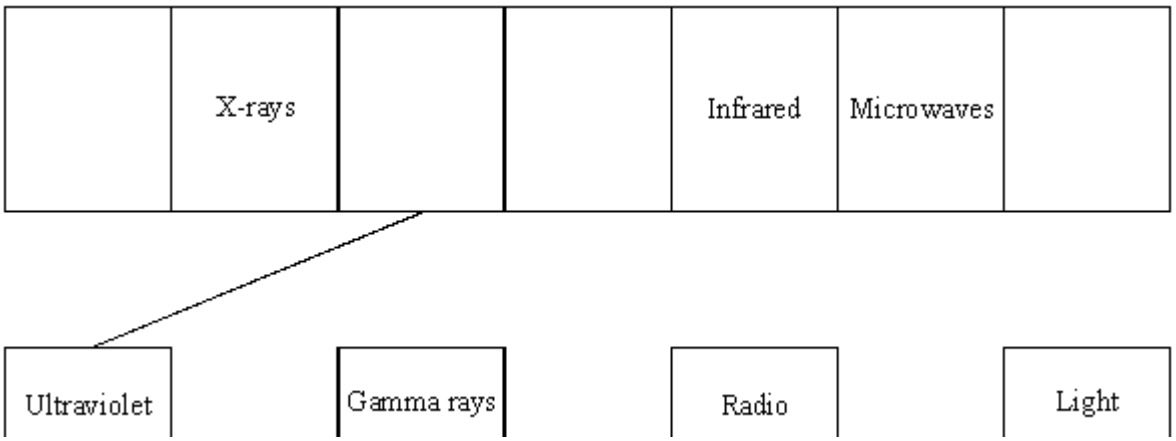
_____

(2)

(Total 4 marks)

Q3.

(a) The diagram represents the electromagnetic spectrum. Four of the waves have not been named. Draw lines to join each of the waves to its correct position in the electromagnetic spectrum. One has been done for you.



(2)

(b) Complete the following sentence by choosing the correct answer and crossing out in the box the two lines which are wrong.

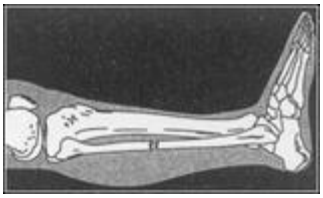
The speed of radio waves through a vacuum is

faster than
the same as
slower than

the speed of light through a vacuum.

(1)

(c) The diagram shows an X-ray photograph of a broken leg.



Bones show up white on the photographic film. Explain why.

_____

_____

_____

(2)

(Total 5 marks)

Q4.

(a) A swimming pool has a wave making machine. The diagram shows the water wave pattern for 3 seconds.

(i) How many water waves are shown in the diagram?

_____

(1)

(ii) What is the frequency of the water waves?

_____

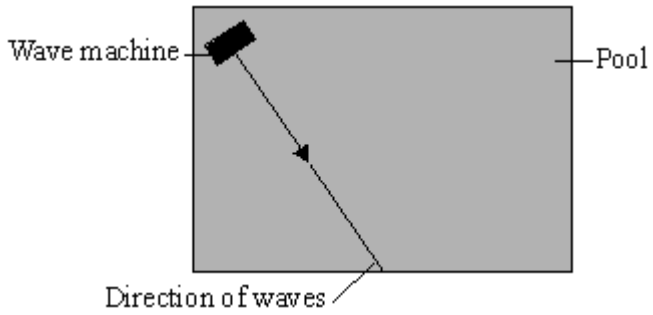
(1)

(iii) Which **one** of the units below is used to measure frequency? Underline your answer.

hertz joule watt

(1)

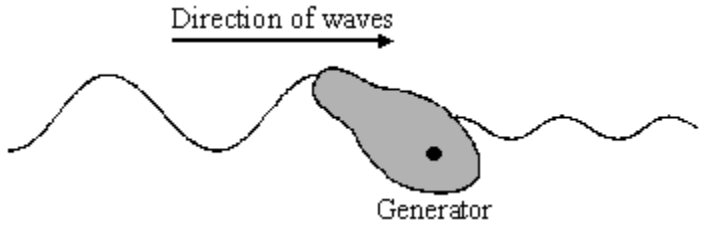
(b) The diagram shows the direction of the waves across the pool. The waves reflect off the side of the pool.



Draw a line on the diagram to show the direction of the waves after they hit the side of the pool.

(1)

(c) The swimming pool is used to test a model of an electricity generator. The waves make the floating generator move up and down. This energy is transferred to electricity.



(i) In the following sentence, cross out the **two** lines that are wrong in the box.

The diagram shoes that the amplitude of the waves

gets larger
stays the same
gets smaller

as the waves pass the generator.

(1)

(ii) What type of energy does the generator transfer to electricity?

_____

(1)

(iii) Energy from ocean waves could be used to generate electricity. Would this be a renewable or non-renewable energy resource?

_____

(1)

(Total 7 marks)