



GRADE 10 PHYSICAL SCIENCES MARCH TEST

QUESTION 1

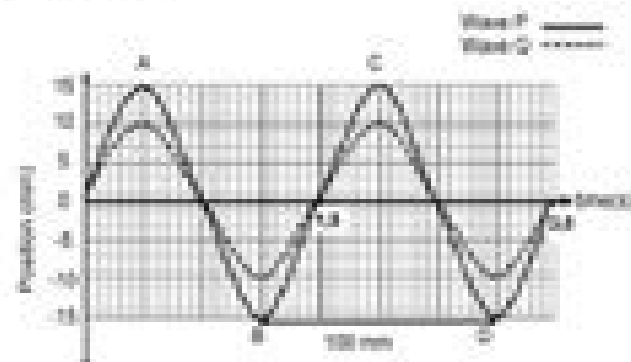
Various options are provided as possible answers to the following questions. Choose the correct answer and enter ONLY the LETTER (A-D) next to the QUESTION NUMBER (q1 1-15) on your Data paper. Example: 1.6. D

- 1.1 A positively charged object has:
 - A. a negative electric field
 - B. an electric field of positive
 - C. an electric field of negative
 - D. an electric field of positive
- 1.2 Which one of the following types of electromagnetic waves has the LONGEST wavelength?
 - A. Ultraviolet
 - B. Gamma
 - C. Microwave
 - D. X-ray
- 1.3 In which ONE of the following do sound waves travel the FASTEST?
 - A. Vacuum
 - B. Water
 - C. Air
 - D. Steel
- 1.4 The SI unit for charge is the ...
 - A. Coulomb
 - B. Volt
 - C. Ampere
 - D. Joule
- 1.5 The relationship between voltage and work done is:
 - A. Inverse
 - B. Directly proportional
 - C. Inversely proportional
 - D. Indirectly proportional

[10]

QUESTION 2

Below is a representation of two waves consisting of continuous pulses. Study carefully and answer the questions that follow.

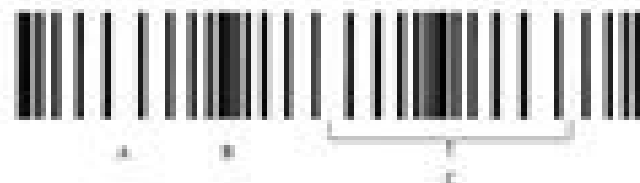


- 2.1 Define a pulse. (2)
- 2.2 Identify the type of waves illustrated above as **TRANSVERSE**. (2)
- 2.3 Which one of the two waves, P or Q, has the greatest amplitude? (1)
- 2.4 For wave Q:
 - 2.4.1 What is the magnitude of its wavelength in metres? (1)
 - 2.4.2 What is the frequency of the pulse? (1)
 - 2.4.3 Calculate the wave speed. (2)
- 2.5 If the waves were sent towards each other and allowed to collide:
 - 2.5.1 What happens to wave P's amplitude? (2)
 - 2.5.2 What happens to wave Q's amplitude? (2)

[14]

QUESTION 3

- 3.1 The diagram below shows different parts on a longitudinal wave.



- 3.1.1 What is the name of region C? (2)

(2)

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CL Gary



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