

GRADE 10 PHYSICAL SCIENCES MARCH TEST

QUESTION 1

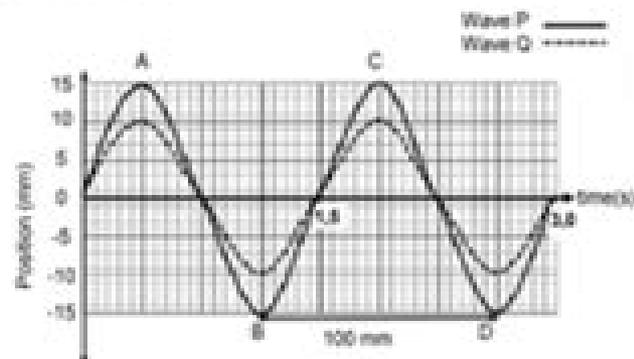
Various options are provided as possible answers to the following questions. Choose the correct answer and write **ONLY** the LETTER (A-D) next to the QUESTION NUMBER (1.1-1.5) on your folio paper. Example 1.6. D.

- 1.1 A positively charged object has:
- Excess electrons
 - A deficiency of electrons
 - An excess of protons
 - A deficiency of protons
- 1.2 Which one of the following types of electromagnetic waves has the **LONGEST** wavelength?
- Gamma rays
 - Ultraviolet
 - Micro waves
 - Radio waves
- 1.3 In which **ONE** of the following do sound waves travel the **FASTEST**?
- Vacuum
 - Water
 - Air
 - Steel
- 1.4 The SI unit for charge is the ...
- Coulomb
 - Volt
 - Ampere
 - Ohm
- 1.5 The relationship between voltage and work done is:
- Inversely proportional
 - Directly proportional
 - Inversely proportional squared
 - Directly proportional squared

[14]

QUESTION 2

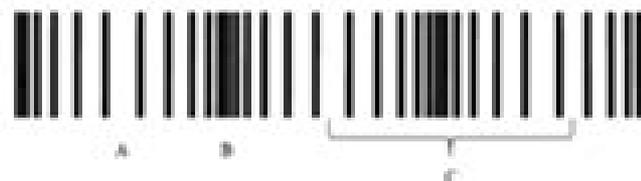
Below is a representation of two waves consisting of continuous pulses. Study it carefully and answer the questions that follow.



- 2.1 Define a pulse. (2)
- 2.2 Identify the type of waves illustrated above as **TRANSVERSE** or **LONGITUDINAL**. (2)
- 2.3 Which one of the two waves, P or Q, has the greatest amplitude? (1)
- 2.4 For wave Q:
- What is the magnitude of its wavelength in metres? (1)
 - What is the frequency of the wave? (1)
 - Calculate the wave speed. (3)
- 2.5 If the waves were sent towards each other and allowed to collide:
- What would be the amplitude of wave P? (2)
 - What would be the amplitude of wave Q? (2)
- [14]

QUESTION 3

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



- 3.1.1 P is the crest of A. Q is the ... (2)

(2)

Grade 1 physical Science Exam Papers

Rosina Ehmman



Grade 1 physical Science Exam Papers:

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for Children Resources for Teachers this new book is an annotated guide to hands on inquiry centered curriculum materials and sources of help in teaching science from kindergarten through sixth grade Companion volumes for middle and high school are planned The guide annotates about 350 curriculum packages describing the activities involved and what students learn Each annotation lists recommended grade levels accompanying materials and kits or suggested equipment and ordering information These 400 entries were reviewed by both educators and scientists to ensure that they are accurate and current and offer students the opportunity to Ask questions and find their own answers Experiment productively Develop patience persistence and confidence in their own ability to solve real problems The entries in the curriculum section are grouped by scientific area Life Science Earth Science Physical Science and Multidisciplinary and Applied Science and by type core materials supplementary materials and science activity books Additionally a section of references for teachers provides annotated listings of books about science and teaching directories and guides to science trade books and magazines that will help teachers enhance their students science education Resources for Teaching Elementary School Science also lists by region and state about 600 science centers museums and zoos where teachers can take students for interactive science experiences Annotations highlight almost 300 facilities that make significant efforts to help teachers Another section describes more than 100 organizations from which teachers can obtain more resources And a section on publishers and suppliers give names and addresses of sources for materials The guide will be invaluable to teachers principals administrators teacher trainers science curriculum specialists and advocates of hands on science teaching and it will be of interest to parent teacher organizations and parents

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benzene ref 1 methyl benzoate ref 2 etc today benzoic acid is most commonly encountered as benzoate

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naoh predict the alkene give the following products on oxidative cleavage with kmno4 in acidic solution draw the product

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web an improved kinetic model for the high temperature oxidation of toluene has been developed using previously established reaction mechanisms for benzene and toluene

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web may 1 2004 oxidation of toluene using aqueous potassium permanganate was studied under heterogeneous condition in the presence of hydrodynamic cavitation and compared with the results of the reaction under acoustic cavitation

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web oct 15 2014 1 answer sorted by 6 here are the three equations describing the reduction of manganese and concurrent oxidation of whatever substrate may be present under basic neutral and acidic conditions respectively $mnx_7 + ox_4x + ex + mnx_6 + ox_4x + 2basic$

what is the mechanism of toluene oxidation by kmno4 reddit - Jul 14 2023

web mar 15 2019 what is the mechanism of toluene oxidation by kmno4 it is quite simple reaction that kmno4 can oxidize benzylic hydrogen in toluene and synthesize benzoic acid however i cannot find exact mechanism of reaction in

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web description treatment of an alkylbenzene with potassium permanganate results in oxidation to give the benzoic acid notes the position directly adjacent to an aromatic group is called the benzylic position the reaction only works if there is a hydrogen attached to the carbon examples

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