

GREENLAWNS HIGH SCHOOL
FINAL EXAMINATION YEAR 2022 - 23

SUBJECT :PHYSICS

TIME : 2 HOURS

CLASS: VIII

MARKS:80

INSTRUCTIONS

The time given at the head of the paper is the time allotted for writing the paper.

This question paper is divided into two sections.

Attempt all questions. of Section A and Section B.

Show all the working of the numericals neatly with correct units

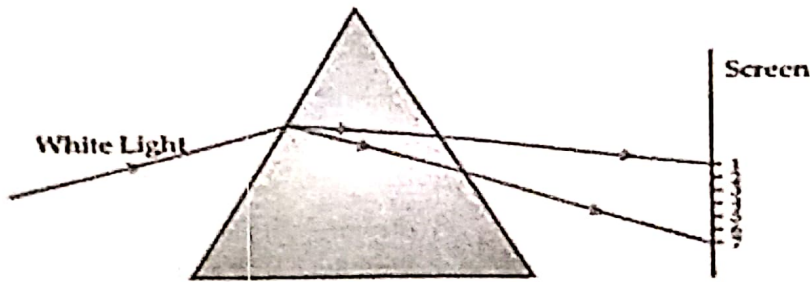
Section A (40 Marks)

Attempt all the questions

- Q1 Fill in the blanks (Write only answers) (10)
- i. Sound waves are produced when an object _____
 - ii. Lightning Conductor is made up of _____
 - iii. A Constant hearing of sound level above _____ dB can cause headache and permanent damage to the ear of the Listener
 - iv. Mass = Density x _____
 - v. An atom is electrically _____
 - vi. The Voltage at which Electricity is supplied to our houses is _____
 - vii. False impressions of water under the tree in desserts is called _____
 - viii. The density of a body which sinks in water is _____ than 1000Kg/m^3
 - ix. The number of Vibrations produced by a particle of the medium in one second is called the _____ of the sound wave.
 - x. Each appliance must have its switch connected to the _____ wire.

- Q2A) Match the following: (4)
- | | |
|---|---|
| i. Glass rod rubbed with silk acquires | a. Determines Density of Liquid |
| ii. Eureka Can | b. It bends away from the normal |
| iii Ray of light passing from water to air | c. Negative charge |
| iv. Ebonite rubbed with fur acquires | d. Frequency |
| v. Density Bottle | e. It bends towards the normal |
| vi. Pitch | f. Positive Charge |
| vii Early sunrise | g. Determines of density of Irregular solid |
| viii Ray of light passing from air to water | h. Refraction |

Q2B) A narrow beam of white light is passing through a glass prism as shown in the figure below (6)



- i. State the phenomenon observed in the above set up. [1]
- ii. Define the above phenomenon [1]
- iii. State one example where can we observe this phenomenon in Nature [1]
- iv. What do you mean by Spectrum? [1]
- v. Name which colour light has the maximum and minimum in a transparent medium? [2]

Q3A) Write True or False for each statement . Correct the statement if False (5)

- i. To find whether a body is charged or not , an uncharged electroscope is used.
- ii. Flow of protons constitutes electric current
- iii. The density of a liquid decreases with increase in temperature.
- iv. The safe limit of loudness of audible sound is above 80dB.
- v. The heating of a Fuse wire does not depend on its length .

Q3B) State three factors on which loudness of sound heard by a listener depends (3)

Q3C) An electric appliance is rated as 125 W , 250 V. How much current will flow Through the appliance when in use? (2)

Q4A) Differentiate between (2 points) (4)

- i. Real image and Virtual image
- ii. Conductors and Insulators

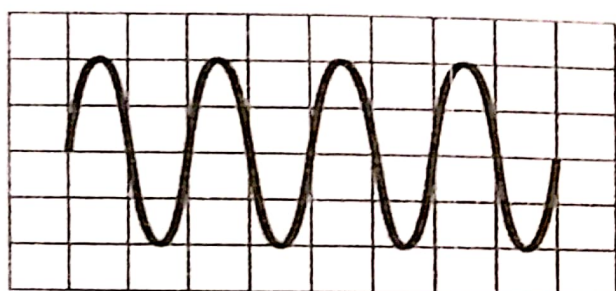
Q4B) The Relative Density of alcohol is 0.8. What will be the density of alcohol in Kg/m^3 ? (2)

Q4C) What is the colour and the purpose of the live and the neutral wires ? (4)

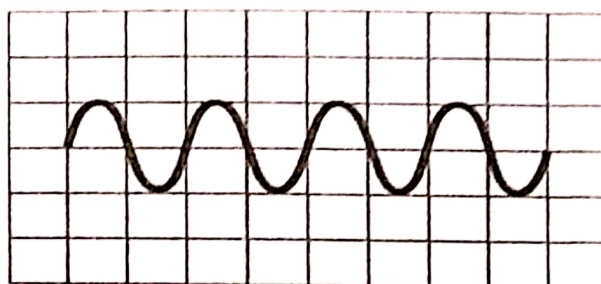
Section B (40 Marks)
(Attempt all questions)

Q5A) Calculate the density of the solid from the following data. (3)
Mass of solid = 195g, Initial volume of water in measuring cylinder = 25mL,
Final volume of water when solid is completely immersed = 50mL

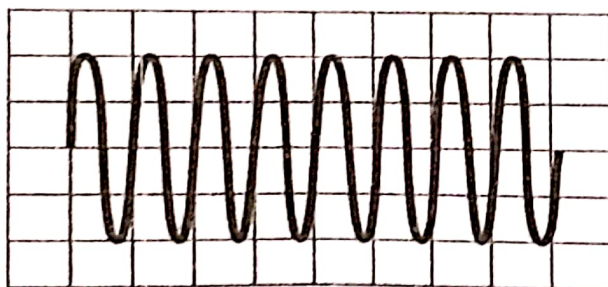
Q5B) The Figure below shows 4 waves A,B,C,D. Refer the figure and answer the Questions below: (5)



(A)



(B)



(C)

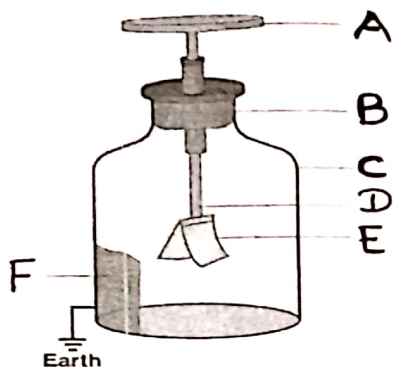
- i. Which Sound wave (A) or Sound wave (B) is louder? Give reason
- ii. Which Sound wave (A) or Sound wave (C) is louder? Give reason
- iii. Which vibrating body produces sound waves of single frequency like above?

Q5C) State the two laws of Refraction? (2)

Q6A) The mass of an empty Gravity bottle is 35grams , when filled with water its Mass changes to 75gms. The mass of the same bottle with Ethanol is 67gms Calculate the Relative Density of Ethanol? (2)

Q6B) Which is optically denser : Water or Air? Give Reason (2)

Q6C) Refer to the figure below. It shows a Gold leaf Electroscope. Label the part Mentioned. Below in the diagram. Answer the following questions (4)



- i. Label the parts A,B,C,D,E,F [3]
- ii. Define an Electroscope [1]

Q6D) The density of water is 1.0 g/cm^3 . The density of iron is 7.8 g/cm^3 . The density of mercury is 13.6 g/cm^3 . Answer the following: (2)

- i. Will a piece of Iron float or sink in water?
- ii. Will a piece of iron float or sink in mercury?

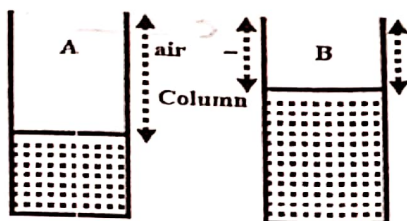
Q7A) Find the odd one out [state the reason for your answer] (2)

- i. piano, guitar, violin, table
- ii. Cotton, rubber, plastic, copper

Q7B) Define the Following: (2)

- i. Refraction of Light
- ii Amplitude of the sound wave

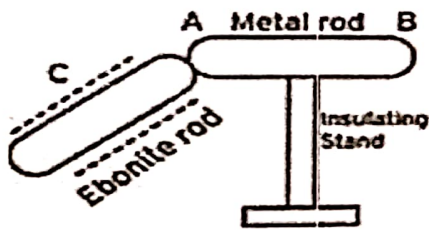
Q7C) The Figure below shows two jars A and B containing water upto different heights. (2)



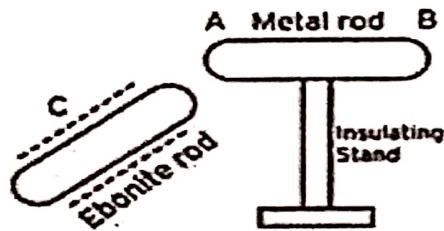
- p. What is the relation between the pitch and the length of the air column in Wind instruments
- ii. Which jar will produce sound of higher pitch when air is blown in them

- Q7D) Can sound reach us from space. Give reason (2)
Q7E) Explain why is the metal covering of an electrical appliance earthed? (2)

- Q8A) The Figure below shows a metal rod AB on an insulating stand. In figure(a) a negatively charged ebonite rod is touched with metal rod AB and in figure (b) a negatively charged ebonite rod is held near the rod AB. Answer the following questions: (4)
- i. State the method of charging the conductor and the kind of charges at ends A and B of the metal rod AB in figure (a) [2]
 - ii. State the method of charging the conductor and the kind of charges at ends A and B of the metal rod AB in figure (b) [2]



Figure(a)



Figure(b)

- Q8B) Answer the questions given below (6)
- i. Write the full form of M.C.B? [1]
 - ii. Can we use copper wire as a fuse wire? Give reason. [2]
 - iii. State any 3 precautions to be taken while using Electricity? [3]
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