

**GREENLAWNS HIGH SCHOOL**  
**TERMINAL EXAMINATION YEAR 2019 - 20**

**SUBJECT :PHYSICS**  
**TIME :1 1/2 HOURS**

**CLASS: VIII**  
**MARKS:80**

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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.  
Section A- Compulsory Attempt all questions.  
Section B- Compulsory Attempt all questions  
Calculations to be shown on the same page of the numerical.

Section A  
Attempt all the questions

- Q1 [A] Name the following: (6)
- i) The interchange of the left and the right sides in the image of an object in a plane mirror.
  - ii) Relation between Time Period and Frequency of a sound wave.
  - iii) An automatic switch that is used to protect the household wiring from the excessive flow of electric current in a circuit.
  - iv) False impression of a pool of water in front of tree in a desert.
  - v) Only source of sound which produces sound of single frequency.
  - vi) Safe limits for humans to hear sound.
- [B] Explain:
- i) It is difficult to cut cloth using pair of scissor with blunt blade. (1)
  - ii) The metallic outer body of each appliance such as refrigerator, oven etc is connected to the earth wire. (1)
  - iii) Nose bleeding often occurs at high altitudes. (1)
  - iv) An ordinary copper wire should not be used as a fuse wire. (1)
- Q2 [A] Fill in the blanks : (5)
- i) Air is optically \_\_\_\_\_ than glass.
  - ii) A longitudinal wave is composed of compression and \_\_\_\_\_.
  - iii) The switch is connected to the \_\_\_\_\_ wire.
  - iv) In Induction , a positively charged body can make an uncharged body \_\_\_\_\_ charged.
  - v) The pitch of a flute is decreased by \_\_\_\_\_ length of air column in a flute.
- [B] Name the unit in which you pay the cost of your electricity bill? How is it related to Joule. (2)
- [C] State three safety measures that you will observe in thunderstorm. (3)

- Q3 [A] State True or False. If False correct the statement. (4)
- i) A ray of light when passes from glass to air , bends towards the normal.
  - ii) A body experiences the same buoyant force while floating in water or alcohol.
  - iii) The pitch of sound depends on frequency.
  - iv) A glass rod rubbed with silk repels an ebonite rod rubbed with fur.

- [B] Distinguish between: (2 points each) (6)
- i) Real image and Virtual image. (2)
  - ii) Charging by Conduction and Induction . (2)
  - iii) Thrust and Pressure. (2)

Q4 [A] Match the following: (3)

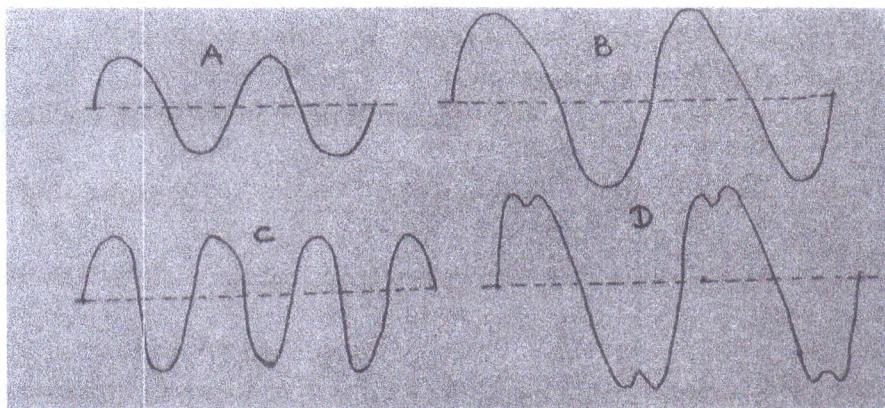
Loudness of sound	Watt
Electric Power	Kgm <sup>-3</sup>
Moment of Force	hertz
Density	kWh
Electrical Energy	Nm
Frequency	Decibel

- [B] Name the three wires in a cable used for wiring in a house. What are its colour codes. (3)
- [C] State three factors on which loudness of sound heard by a listener depends. (3)
- [D] What is Law of Floatation? (1)

Section B ( Attempt all questions)

Q5[A] Figure below shows four waves A,B,C,D. Name the wave which shows. (3)

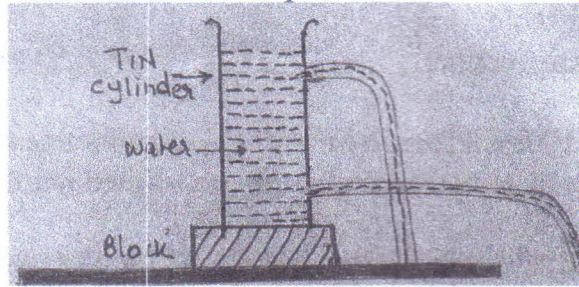
- i) A note from musical instrument.
- ii) A soft note
- iii) A Shrill note.



- [B] An insect is sitting in front of a plane mirror at a distance of 1 metre from it. (2)
- i) Where is the image of the insect formed
  - ii) What is the distance between the insect and its image.



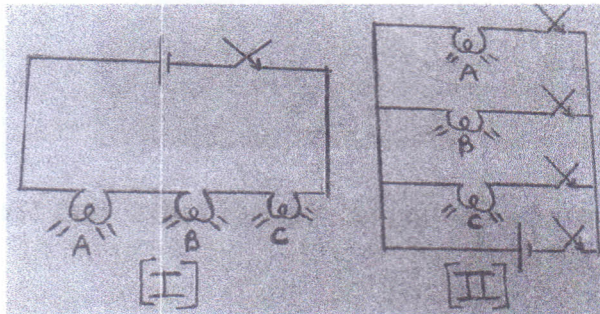
- [C] i) Which fact of the liquid pressure does the diagram below indicate. (1)  
 ii) How can the above factor explain the base of the dam being broad. (1)



- [D] What is an electroscope. Name the two types of electroscope? (3)

- Q6[A] Figure below shows two ways of connecting the three bulbs A and B to a battery. (4)

- i) Name the two arrangements. (1)  
 ii) Which of them do you prefer to use in household circuit. (1)  
 iii) Give reason for above. (1)  
 iv) State the voltage at which electricity is supplied at our house. (1)



- [B] Calculate the density of the solid from the following data. (2)

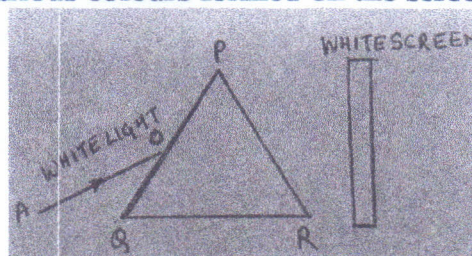
Mass of solid = 195g, Initial volume of water in measuring cylinder = 25mL,  
 Final volume of water when solid is completely immersed = 50mL. Give your answer in S.I unit.

- [C] Which is optically denser: Water or Air? Give Reason. (2)

- [D] Shikha can open a 2.5m wide door by a minimum force of 3.5N. Find the Moment of force needed to open the door. (2)

- Q7[A] i) AO is the ray of white light falling on a prism PQR. Complete the diagram till the light emerges from the prism and falls on the screen. (2)

- ii) State the property of light indicated above. (1)  
 iii) What is the coloured patch on the white screen called. (1)  
 iv) Name the various colours formed on the screen. (1)



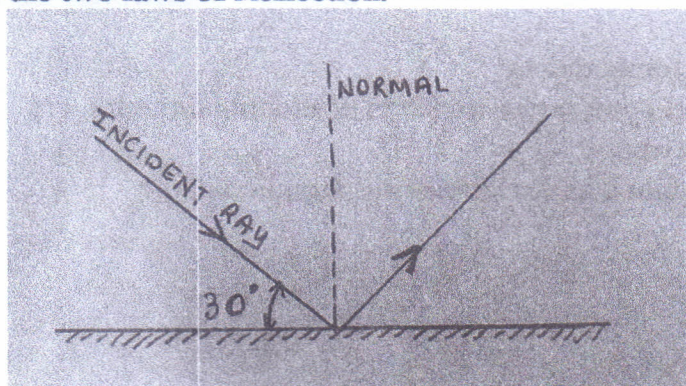
[B] Find the odd one out [State the reason for your answer] (2)

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

[C] An electric bulb of 100W, Electric iron of 750W and a television of 100W are used for 3 hour a day. Calculate Energy consumed per day. (3)

Q8[A] A light ray strikes a reflective plane surface at  $30^\circ$  to the plane mirror. Find (5)

- i) Angle of incidence. (1)
- ii) Angle between the incident ray and the reflected ray. (1)
- iii) Define Reflection. (1)
- iv) State the two laws of Reflection. (2)



[B] A force of 20 N acts normally on a surface area of  $0.4\text{m}^2$ . Find the Pressure exerted on the surface. (2)

[C] State three characteristics of a fuse. (3)

