

**VILLA THERESA HIGH SCHOOL
FINAL EXAMINATION
STD 8 PHYSICS**

DATE: 25.2.2021

**MARKS: 40
TIME: 1 hr.**

Question 1

- A. Select the correct alternative (2)
- (i) Lightening conductor is made up of
(a) Copper (b) Ebonite (c) Iron
- (ii) The unit of loudness is
(a) hertz (b) decibel (c) cm
- B. State true or false (2)
- (i) A convex mirror is used as a shaving mirror.
(ii) Boiling is a rapid phenomenon.
- C. Fill in the blanks (2)
- (i) A switch is connected to the _____ wire
(ii) Evaporation occurs at _____ temperature.
- D. Define wavelength and state its unit (2)
- E. Define focal length of con cave mirror. If the focal length of a concave mirror is 20 cm, find the radius of curvature. (2)

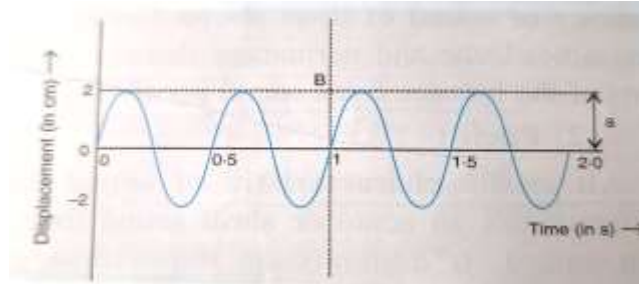
Question 2

- A. Define current and state its unit (2)
- B. Explain a glass stopper stuck in the neck of a bottle can be removed by pouring hot water on the neck of the bottle. (2)
- C. A positively charged glass rod is touched to a positively charged gold leaf electroscope. What will be your observation? (2)
- D. Can copper be used as fuse wire? Give reason (2)
- E. Fill in the blanks (2)
- (i) 1 KW = _____ watt.
(ii) Pitch of a note depends on its _____.

Answer any two from the given questions.

Question 1

- A. From the given figure find (i) Amplitude (ii) Time period (iii) Frequency [3]



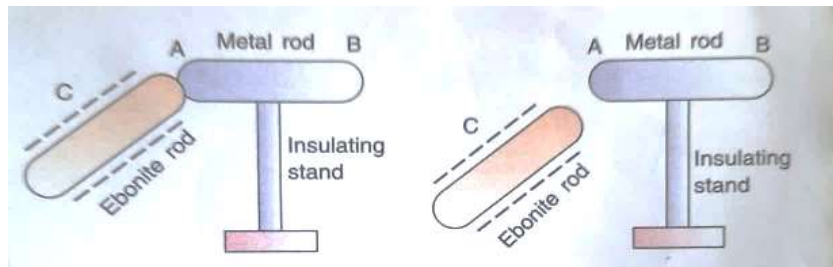
- B. From a battery of potential difference 12 volt, current of 2 A flows through a wire for 30 min. Find:
- The electrical energy supplied by the battery.
 - The power spent. (3)
- C. (i) Lightning and thunder take place in the sky at the same time. Why is lightening seen first and thunder heard later? (2)
- (ii) Distinguish between ultrasonic and infrasonic sound. (2)

Question 2

- A. Explain with reason why crops are destroyed on cold winter nights. (3)
- B. An electric heater is rated 4.5 KW, 660 V. Find
- The safe current which can flow through it
 - Can fuse of current rating 5.4 A be used with it?
 - What must be the current rating of the fuse? (3)
- C. Explain with a neat labelled diagram the charging of a gold leaf electroscope positive by conduction. (4)

Question 3

- A. How are electrical appliances connected in a house circuit: in series or in parallel? Give reason. (3)
- B. In the given figure a metal rod AB placed on an insulating stand.
- i. In figure (a), a negatively charged ebonite rod C is touched with the metal rod AB,
 - ii. In figure (b) , a negatively charged ebonite rod is held near the rod AB. State the kind of charges at the ends A and B of the rod in each case [3]



- C. Draw a ray diagram to show the formation of image of an object placed beyond the centre of curvature of a concave mirror. State the nature and position of the image formed (4)
