

# MUNICIPAL SCHOOLS

GOVT.OF ANDHRA PRADESH  
PERIODIC TEST-2

PHYSICAL SCIENCE - I  
(English Medium)

---

---

**CLASS-X****Max.Marks: 50****Time :2.45 hr.****Instructions:**

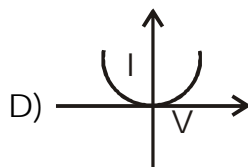
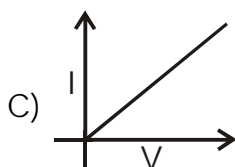
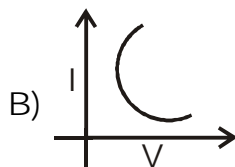
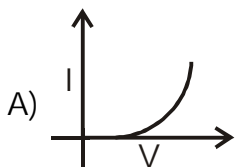
1. There are four sections and 33 questions in the paper.
2. Answers should be written in a given answer booklet.
3. There is internal choice in Section- IV
4. Write all the questions visible & legibly.
5. 15 minutes are given for reading the question paper and 2.30 hours given for answering questions

---

**Section-I****Note:-1. Answer all the questions****2. Each question carries ½ mark****12×½=6 M**

1. What is the value of latent heat of vaporization of water?
2. Match the following:  
Section-A                      Section-B  
A)  $p^H > 7$                       p) Neutral solution  
B)  $p^H = 7$                       q) Basic solution  
C)  $p^H < 7$                       r) Acidic solution
3. Choose the wrong statement about refraction of light  
a) During refraction, light follows Snell's law  
b) Refraction is a result of change in speed of light at the interface  
c) During the refraction, colour of the light changes  
d) At critical angle of incidence, the angle of refraction is  $90^\circ$
4. Among the following cases the image formed by a convex lens is real?  
a)  $f < u < 2f$       b)  $2f < u < \infty$       c) at  $2f$                       d)  $0 < u < f$
5. What do we call the process of adjusting the focal length of eye lens?
6. Which rule is violated in the electronic configuration  $1s^0 2s^2 2p^4$ ?
7. Statement-I : 4f elements are called lanthanides  
Statement-II : s, p block elements except noble gases are called representative elements.  
Which of the following statement/statements is/are correct?

8. Which of the following is not a covalent compound  
 a)  $BeCl_2$       b)  $BF_3$       c)  $CaCl_2$       d)  $CH_4$
9. Which of the following V-I graph represent ohmic conductor



10. "If you grab the current carrying wire with your right hand in such way that thumb is in the direction of current, then the curled fingers shows the direction of the magnetic field" - what is this rule?
11. Which substance is added to remove gangue?
12. Diamond: Tetra hydral environment : : Graphite : \_\_\_\_\_

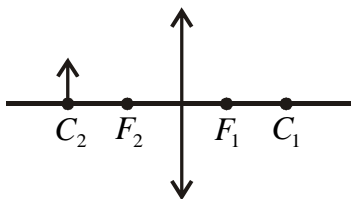
### Section-II

Note:- 1. Answer all the questions

2. Each question carries 1 mark

8×1=8 M

13. What is a critical angle
14. Complete ray diagram



15. Write lens maker's formula
16. What are the magnetic quantum number values for  $3p$  orbital?
17. State "Modern periodic law"
18. Why does the picture appear distorted when the bar magnet is brought close to the television screen?
19. What is the role of furnace in metallurgy?
20. How does atomic radius vary in a period and a group?

**Section-III****Note:- 1. Answer all the questions****2. Each question carries 2 marks****8×2=16 M**

21. How much heat energy is required, when 10g of ice at  $0^{\circ}\text{C}$  convert to  $75^{\circ}\text{C}$  of water.
22. Why does not distilled water conduct electricity?
23. Harsha tells Siddhu that the double convex lens behaves like a convergent lens. But Siddhu knows that Harsha's assertion is wrong and corrected Harsha by asking some questions. What are the questions asked by Siddhu?
24. Why does the sky sometimes appear white?
25. How do you appreciate the role of esters in every day life?
26. Draw the structure of Methane molecule and mention bond angle
27. What do you mean by electric shock? Explain how it takes place.
28. Explain Hund's rule

**Section-IV****Note:- 1. Answer all the questions****2. Each question carries 4 marks****5×4=20 M**

29. Suggest an experiment to prove that the rate of evaporation of a liquid depends on its surface area and vapour already present in surrounding air

(OR)

How do you verify experimentally that  $\sin i/\sin r$  is constant

30. Why does tooth decay start when the  $p^{\text{H}}$  of mouth is lower than 5.5

(OR)

Distinguish between esterification and saponification reactions of organic compounds.

31. Deduce the expression for the equivalent resistance of three resistors connected in series.

(OR)

Explain the correction of the eye defect Hypermetropia

32. The element having atomic number 17. Answer the following questions.
- Which period does the element belong?
  - Which group does the element belong?
  - Write the name of the family.
  - Is the element metal or non-metal?

(OR)

Fill in the table

Molecule	Hybridisation	Shape	Bond angle	Number of lone pair of electrons
$H_2O$				
$NH_3$				
$BeCl_2$				
$BF_3$				

33. Which device is used to convert mechanical energy into electrical energy? Draw a neat diagram and label the parts of this device.

(OR)

Which method is suitable to enrich sulphide Ores? Draw a neat diagram and label the parts.

\* \* \* \* ALL THE BEST \* \* \* \*

Question Paper Prepared and Verified By :  
M.SRINIVASA RAO SA (PS)  
A.F.C.SCHOOL, GUDIVADA  
PH:9848143855  
Mail ID: srinivasarao.midde@gmail.com