

MUNICIPAL SCHOOLS

GOVT.OF ANDHRA PRADESH
PERIODIC TEST-1

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

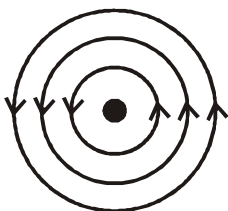
2. Each question carries ½ mark

12×½=6 M

1. Write the equation of Faraday's law of induction
2. Modern periodic table is based on
 - i) Atomic number
 - ii) Atomic size
 - iii) Electronic configuration

A) only i B) only ii C) Both i, ii D) Both i, iii
3. Match the following

Section-A	Section-B
1) Alkali Metals	P) VI A or 16
2) Halogens	Q) I A or 1
	R) VII A or 17
	S) II A or 2



4. From the figure, what is the direction of the current?
5. Which of the following is/are uses of nano tubes
 - A) used as molecular wire
 - B) used as integrated circuits instead of copper
 - C) Bimolecular are inserted on nano tubes to inject them into a single cell

6. What is the IUPAC name of ethylene?
7. Rusting of iron : Oxidation : : Smelting: _____
8. Statement I : Sodium is a high reactive metal
Statement II : Mercury is a moderate reactive metal
Which of the statement is correct?
9. A uniform wire of resistance $10\ \Omega$ is cut into five equal parts. These parts are now connected in series. Find the equivalent resistance of the wire?
10. Express 1 KWH in Joules?
11. Which types of bond will be formed when magnesium reacts with chlorine?
12. Find odd one
 - A) N_2 – triple bond
 - B) H_2 – Single bond
 - C) O_2 – double bond
 - D) F_2 – double bond

Section-II

Note:- 1. Answer all the questions

2. Each question carries 1 mark

8×1=8 M

13. Mention two methods which produce very pure metals?
14. Name the acid present in vinegar
15. Which periodic property measure in picometer?
16. What is the shape of water molecule? What is bond angle in HOH?
17. Define "emf"?
18. On what factors does the resistivity depend?
19. What is meant by a solenoid?
20. How does the ionization energy vary in a group and a period?

Section-III

Note:- 1. Answer all the questions

2. Each question carries 2 marks

8×2=16 M

21. Akshitha said to you that the magnetic field lines are open and they starts at north pole of bar magnet and end at south pole. What questions do you ask Akshitha to correct her saying "Field lines are closed"?
22. What is thermite process? Mention its applications in daily life.

23. Give the names of functional groups
 i) $-OH$ ii) $-C=O$
24. An element has atomic number 19, where would you expect this element in the periodic table and why?
25. What are the differences between ionic and covalent bonds?
26. Two bulbs have ratings 100 W, 220 V and 60 W, 220 V. Which one has the greater resistance?
27. Explain Kirchhoff's junction law with example
28. Give two examples of Doberiner triads?

Section-IV

Note:- 1. Answer all the questions

2. Each question carries 4 marks

5×4=20 M

29. State Ohm's law suggest an experiment to verify it and explain the procedure.

(OR)

How can you verify that a current carrying wire produces a magnetic field with the help of an experiment.

30. Observe the table and answer the questions

Element	Electronic Configuration
P	$1S^2 2S^2 2P^2$
Q	$1S^2 2S^2$
R	$1S^2 2S^2 2P^6 3S^2$
S	$1S^2 2S^2 2P^6$

- a) Which are the S- block elements?
 b) Which are the elements in the same group?
 c) Name the noble gas element?
 d) To which group and period does the element "P" belongs?

(OR)

Observe the following table and answer the questions

Organic Compound	Methane	Ethane	Propane	Butane	Pentane
Formula	CH_4	C_2H_6	C_3H_8	C_4H_{10}	C_5H_{12}

- a) What type of homologous series is this?
 b) Write the general formula of this homologous series
 c) What is meant by homologous series?
 d) Write the next organic compound formula

31. What is hybridisation? Explain the formation of BF_3 molecule using hybridisation.

(OR)

Write short notes on froth floatation process.

32. Explain the cleaning action of soap

(OR)

How does ionic bond form ? Explain with one example.

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

(OR)

Which furnace is generally used for roasting? Draw a neat diagram and label the parts of this furnace.

* * * * ALL THE BEST * * * *

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