**SUMMATIVE ASSESSMENT**
**PHYSICAL SCIENCE-PAPER-3**
(English Medum)

Class: X (Max.Marks:50) Time: 2.45 Hrs.

---

**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 only.
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

12 X ½ =6 m

NOTE: 1) Answer all questions
2) Each question carries ½ Marks.

1. The heat energy supplied to a substance during melting is known as .....
2. During the dilution of acid Preethi added to water to acid, preatham added acid to water who is correct.
3. What is the unit of refractive index
4. Draw the diagram of plano convex lens
5. Define power of accommodation.
6. **Match the following**

| SET-A | SET-B |
|---|---|
| 1. Principal quantum number | a) ms |
| 2. Spin quantum number | b) l |
| | c) n |

7. Electron configuration of an atom is 2,8,7 to which of the following elements would it be chemically similar.

A) Nitrogen (Z=7) B) Fluorine (Z-=9)
C) Phosphorous (Z=15) D) Argon (z-18)

8. $X : \ddot{\underset{..}{Y}}$ : The name of suggest for elements x and y
9. What is the resistance of an electric arc lamp if the lamp was 20 Amp when connected to a 220 V line.
10. List any one point of difference between AC and DC.

11. Sttement-1 Bauxite is a ore of copper statement-II. The formula of Galena is pbs.
    A. Statement I is True II is false.
    B. Statement I is false II is true
    C. Statement I & II are True
    D. Statement I & II are false.
12. IUPAC name of alkane containing 3 carbon atom is ……..

**SECTION-II**

8x1=8 m

NOTE: 1) Answer all questions
2) Each question carries 1 Marks.

13. Why does ray of light bent when it travels from one medium toi another.
14. On which factor does the colour of the scattered white light depend.
15. Write the Lens formula
16. Resistance of an incandescent filament of a lamp is more than that when it is at the room temperature why.
17. Write a short note about the pH of he soil.
18. Write about Zeeman effect.
19. How does metallic characters change when we move across a period.
20. Name two metals other than aluminum which are obtained by electrolytic reduction.

**SECTION-III**

8x2=16 m

NOTE: 1) Answer all questions
2) Each question carries 2 Marks.

21. Why do we get dew on the surface of a cold soft drink bottle kept in open air.
22. Why is it difficult to shoot a fish swimming in water.
23. A wire of length 1 mm and radius 0.1 mm has a resistance of 100Ω find the resistivity of the material.
24. Derive Faraday's Law of Induction from of conservation of energy.
25. How does the flow of and rain into a river make the survival of aquatic life in a river difficult.
26. What is an orbital? How is it different from Bohr's orbit.

27. Predict the reason for low melting point for covalent compounds when compared with ionic compounds,

28. Give one example of esterification reaction

## SECTION-IV

5x4=20 m

NOTE:
1) Answer all questions
2) Answer any one from internal choice of each questions.
3) Each questions carries 4 Marks

29. a) What is the " Principle of method of mixtures" verify it with an activity.

(OR)

b) Explain two activities for the formation of artificial rainbow.

30. a) Give four important uses of washing Soda and baking Soda

(OR)

a) Explain the formation of $N_2$ molecule by using valence bond theory.

31. (a) How do you verify experimentally that the focal length of a convex lens is increased when it is kept in water. (or)

(b) How can you verify that a current caring wire produces a magnetic field with the help of experiment.

(OR)

32. a) Elements of one short period of the periodic table are given below in the order from left to right.

Li, Be, B, C, N, F, Ne

**Answer the following**

i) To which period, do these elements belong.

ii) One element of this period is missing which is the missing element and where it should be placed.

iii) Which of the above elements belong to the family of halogens? What is its electro negativity value.

iv) How does the metallic character vary in the period.

32. (b) Complete the following Table

| **Functional Group** | **Structural Formula** | **Example** | **Suffix** |
|---|---|---|---|
| Alcohol | R-OH | -- | -01 |
| Amine | -- | $CH_3NH_2$ | -- |
| Ketone | R-CO-R | -- | -One |
| Aldehyde | R-CHO | -- | -- |
| Ester | -- | -- | -oate |

33. a) Draw a neat diagram of an AC Generator and label its parts

OR

b) Draw a neat diagram of Riverboratory furnace and lable it neatly.