

MODEL PAPER-I
SUMMATIVE ASSESSMENT
PHYSICAL SCIENCE-PAPER-1

(English Medium)

(Max.Marks:50)

Class: X

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.

Marks: 50

Time 2.45 Hrs.

SECTION-I

Note: 1. Answer all Questions.

2. Each Question carries $\frac{1}{2}$ Mark

$12 \times \frac{1}{2} = 6$

1. Why does ice floats on water.
2. The refractive index of glass respect to air is 2. Then the critical angle of glass air interface is
a) 0° b) 45° c) 30° 4) 60°
3. Name the part of human eye that helps in changing the focal length of the eye lens.+
4. The lens which can form real and virtual images is
5. For an electric iron of 1 KW rating at 220 fuse of how much capacity is to be used.
6. What is the unit of magnetic flux density.
7. Match the following

SET-A

SET-B

1. Plaster of Paris () a) NaHCO_3
2. Gypsum () b) $\text{CaSO}_4 \frac{1}{2} \text{H}_2\text{O}$
3. Baking Soda () c) $\text{CaSO}_4, 2\text{H}_2\text{O}$.
8. Write the formula for no. of electrons in a shell.
9. The following is not a Dobereiner Traid
a) Li, Na, K b) Cl, Br, I c) Ca, Sr, Ba d) B, Be, C
10. Write the shape of BeCl_2 Molecule?
11. Write the chemical formula of rust
12. Which allotropic Form of Carbon has layered structure

SECTION-II

Note: 1. Answer all the Questions.

2. Each question carries 1 Mark

8x1=8

13. Can you take a photograph of a mirage
14. Define power of accommodation?
15. Write the lens maker's formula?
16. Name the instrument used to measure both electric current and potential difference
17. What are alkalis?
18. What is emission spectrum
19. State Mendeleev's periodic law.
20. Mention two methods which produce very pure metals.

SECTION-III

Note: 1. Answer all the Questions.

2. Each question carries 2 Mark

8x2=16

21. Explain why dogs pant during hot summer days using the concept of evaporation.
22. Determine the refractive index of benzene if the critical angle of it is 42°
23. Explain overloading of household circuits.
24. What are magnetic field lines? List any two characteristics of field lines
25. Plaster of Paris should be stored in a moisture proof container. Explain, Why
26. Which rule is violated in the electronic configuration $1s^02s^22p^4$?
27. Why do only valence electrons involve in bond formation? Why not electron of inner shells? Explain.
28. Define homologous series of carbon compounds mention any two characteristics of homologous series.

SECTION-IV

Note:

1. Answer all the Questions.
2. Each question has internal choice
2. Each question carries 4 Mark 5x4=20

29. a) The rate of rise in temperature depends on the nature of the substance. Prove it with an activity.
(or)
b) Explain the formation of rainbow
30. a) What is baking powder? How does it make the cake soft and spongy.
(or)
b) Write the postulates and Limitations of Bohr atomic model.
31. a) How do you verify experimentally that $\sin i / \sin r$ is a constant.
(or)
b) How do you verify experimentally that the current carrying conductor experiences a force when it is kept in magnetic field.
32. a) Given below is the electronic configuration of elements A, B, C, D
- A) $1s^2 2s^2$
 - B) $1s^2 2s^2 2p^6 3s^2$
 - C) $1s^2 2s^2 2p^6 3s^2 3p^3$
 - D) $1s^2 2s^2 2p^6$
1. Which are the elements coming with in the same period.
 2. Which are the ones coming with in the same group.
 3. Which are the noble gas elements
 4. To which group and period does the elements 'c' belongs
(or)
- b) 1 ml. glacial acetic acid and 1 ml of ethanol are mixed together in a test tube few droops of concentrated sulphuric acid is added in the mixture are warmed in a water bath for 5 min. Answer the following.
- a. Name the resultant compound formed
 - b. Represent the above change by a chemical equation
 - c. What term is given to such reactions.
 - d. What are the special characteristics of the compound formed.
33. a) Draw a neat diagram of Electric motor and label its parts.
(or)
b) Draw a neat diagram of Blast furnace and label its parts.