CLASS-10 **GENERAL SCIENCE , Paper – I** **2014-15**

Pre-Public Exam-Guess Paper-1

(Physical Sciences)

(English Version)

Time: 2½ Hours **Parts A and B** **Maximum Marks : 50**

Time : 2 hours **PART-A** **Max. Marks : 35**

Section - I 5 x 2 = 10

Note :

1. Answer any five questions choosing at least two from each group.
2. Each question carries two marks.

Group -A

1. What role does specific heat play in keeping a watermelon cool for a long time after removing it from a fridge on a hot day?

2. Write the differences between real images and virtual images.

3. Write the lens maker's formula and explain the terms in it.

4. Give a few applications of Faraday's law of induction in daily life.

Group -B

5. Give two important uses of washing soda and baking soda.

6. What is nl^x method? How it is useful?

7. Write the differences between the properties of ionic and covalent compounds.

8. Write short notes on froth floatation process?

Section - II 4 x 1 = 4

Note :

1. Answer any four questions from the following.
2. Each question carries one mark.

9. Why do we get dew on the surface of a cold soft drink bottle kept in open air?

10. Write Fermat principle.

11. Write Kirchhoff's junction law.

12. Why do we apply paint on iron articles?

13. Write the valence electronic configurations of chromium and copper.

14. Give the names of functional groups

(i) -CHO (ii) -C=0.

Section - III 4 x 4 = 16

Note :

1. Answer any four questions choosing at least two from each group.
2. Each question carries four marks.

Group -A

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

16. What is total internal reflection? Explain the formation of mirage.

17. What is Myopia? How can we correct it ? Explain.

18. Deduce the expression for the equivalent resistance of three resistors connected in parallel.

Group -B

19. How many types of chemical reactions are there? Name them. Explain each with one example.

20. Explain the significance of Quantum numbers in predicting the positions of an electron in an atom.

21. What is a periodic property? How do the following properties change in a group and period? Explain.

(a) Atomic radius (b) Ionization energy

(c) Electron affinity (d) Electro negativity.

22. Distinguish between esterification and saponification reactions in organic compounds.

Section - IV 1 x 5 = 5

Note :

1. Answer any one question from the following.
2. Each question carries five marks.

23. Draw a neat diagram of an AC generator.

24. Draw a neat labeled diagram of Reverboratory furnace.

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