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

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. Write the differences between evaporation and boiling.

2. Why don't we prefer a concave mirror as a rear-view mirror in the vehicles?

3. What is the focal length of double concave lens kept in air with two spherical surfaces of radii R_1= 30cm and R_2= 60cm. Take refractive index of lens as n=1.5.

4. How can you appreciate the role of a small fuse in house wiring circuit in preventing damage to various electrical appliances connected in the circuit?

Group -B

5. What do you mean by corrosion? How can you prevent it?

6. Draw a neat diagram that shows the filling order of atomic orbitals.

7. How Lewis dot structure helps in understanding bond formation between atoms?

8. All ore are minerals but all minerals are not ores. – explain.

Section - II   4 x 1 = 4

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

9. If we want to form virtual image by a convex lens, where can we keep the object ?

10. If a white sheet of paper is stained with oil, the paper turns transparent. Why?

11. Write Lenz's rule.

12. Write any two uses of Plaster Of Paris (POP).

13. How many 'm' values are possible for l =3 ?

14. What happens when a small piece of sodium is dropped into ethanol?

<center>**Section - III**   4 x 4 = 16</center>

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

<center>**Group -A**</center>

15. Draw suitable rays by which we can guess the position of the image formed by a concave mirror.

16. How do you verify experimentally that sin i /sin r is a constant?

17. What is Hypermetropia? How can we correct it ? Explain with a diagram.

18. If R_1, R_2 and R_3 resistances are connected in parallel combination, then derive a formula for finding the resultant resistance R.

<center>**Group -B**</center>

19. Write about the importance of P^H in daily life.

20. Define the modern periodic Law. Discuss the construction of the long form of the periodic table.

21. What is hybridisation? Explain the formation of BF_3 molecule with a neat diagram.

22. Distinguish between addition reactions and substitution reactions with examples.

<center>**Section - IV**   1 x 5 = 5</center>

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

23. Draw a neat labeled diagram of an electric motor.

24. Draw the diagram showing Froth Floatation.