

**CLASS-10**

**GENERAL SCIENCE , Paper – I**

**2014-15**

**Public Exam-Guess Paper-3**

(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. Convert 47°C into Kelvin scale.
2. Write the rules for sign convention.
3. Explain briefly the reason for the blue of the sky.
4. Explain Faraday's law of induction with the help of activity.

**Group -B**

5. Write the electronic configurations of the following.  
(i) Chlorine                      (ii) Copper
6. Comment on the position of hydrogen in periodic table.
7. Suggest an experiment to prove that the presence of air and water are essential for corrosion. Explain the procedure.
8. How do you condemn the use of alcohol as a social practice?

**Section - II**

**4 x 1 = 4**

**Note :**

1. Answer any four questions from the following.
2. Each question carries one mark.
9. What are the affecting factors of evaporation?
10. Ravi is suffering from Myopia. Which type of lens do you prefer for him?
11. If two equal resistances having 5Ω are connected in series combination. Find the resultant resistance?

12. Balance the chemical equation.



13. An atom is represented by Lewis dot structure as shown in the figure.



Identify the atom.

14. Write the names of any two ores having Sulphur. (Sulphide ores)

**Section - III**

4 x 4 = 16

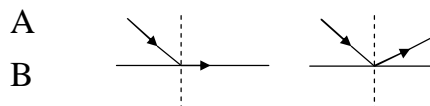
**Note :**

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

**Group -A**

15. How do you appreciate the role of spherical mirrors in daily life?

16. Interpret the following diagrams when light ray gets refraction.



17. The focal length of a converging lens is 20cm. An object is 60cm from the lens.

Where will the image be formed and what kind of image is it?

18. Explain the working of electric motor with a neat diagram.

**Group -B**

19. A light yellow colour substance (some quantity) on a watch glass is put in the sun light. It changes into gray colour powder.

- (a) What is the light yellow colour substance?
- (b) What is the gray colour substance?
- (c) Which type of chemical reaction it is?
- (d) Write the chemical equation for the reaction.

20. Moeller's diagram follows Aufbau's rule. – How can you explain this?

21. Explain the formation of N<sub>2</sub> molecule with a neat diagram using valence bond theory.

22. Write the differences between alkanes, alkenes and alkynes.

**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 that represents the experiment to verify Ohm's law.

24. Draw a neat diagram showing acid solution in water conducts electricity.

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