

**VF - 12**

**PRE - PUBLIC EXAMINATIONS - MARCH 2023**

**GENERAL SCIENCE - Paper I**

**(Physical Science)**

**(English Version)**

**PART - A & B**

**X Class]**

**(Max. Marks: 40)**

**[Time: 1.30 Hrs.**

**Marks : 30]**

**PART - A**

**[Time: 1.15 Hrs.**

**General Instructions :**

- i) Read the question paper and understand every question thoroughly and write answers in given 1.30 hrs. time.*
- ii) 3 very short answer questions are there in Section-I. Each question carries 2 marks. Answer all the questions. Write answer to each question in 3 to 4 sentences.*
- iii) 3 short answer questions are there in Section-II. Each question carries 4 marks. Answer all the questions. Write answer to each question in 5 to 6 sentences.*
- iv) 3 essay type answer questions are there in Section-III. Each question carries 6 marks. Answer any Two questions. Write answer to each question in 8 to 10 sentences.*

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**Section - I**

**Note:** i) 3 very short answer questions are there in section-I.

ii) Answer all the questions. Each question carries 2 marks.

iii) Write answer to each question in 3 to 4 sentences.

**3x2=6**

1. Mention the applications of thermite process in our daily life ?
2. A person is viewing an extended object. If a converging lens is placed in front of his eye, will he feel that the size of object has increased ? Why ?
3. List out the material required to verify Ohm's law ?

**[Turn Over**

## Section - II

Note: i) 3 short answer questions are there in section-II.

ii) Answer all the questions. Each question carries 4 marks.

iii) Write answer to each question in 5 to 6 sentences. 3x4=12

4. Find the distance of the image, and height of image, when an object height 4 cm. is placed on the principle axis at a distance of 10 cm in front of a concave mirror whose radius of curvature is 8 cm.
5. In an atom the number of electrons in M-shell is equal to the number of electrons in the K-shell and L-shell. Answer the following questions.
- Which is the outer-most shell
  - How many electrons are there in its outer-most shell
  - What is the atomic number of element
  - Write the electronic configuration of the element
6. Write the Allotropes of carbon ? And write its applications in our daily life ?

## Section - III

Note: i) 3 essay type questions are there in this section.

ii) Answer any 2 questions. Each question carries 6 marks.

iii) Write answer to each question in 8 to 10 sentences. 2x6=12

7. Write experimental procedure of a metal react with acid. Draw a neat diagram ?

*[Contd..on 3rd page*

8. Write the factors of ionization energy and how it changes in groups and periods ?
9. Draw ray diagrams for convex lens for the following positions and explain the nature and position of image ?
- Object is placed at  $C_2$ .
  - Object is placed between  $F_2$  and optic center P.

