

**PRACTICE PAPER - I**

SCIENCE - PHYSICAL SCIENCE - PAPER-I

జూనియర్ 1<sup>st</sup>  
శ్రీ ప్రతిభ

Time : 2.00 Hrs ]

[ Max.Marks : 50

**INSTRUCTIONS :-**

1. Question paper consists of 4 sections and 17 questions.
2. Internal choice is there only for Q.No 12 in section-III and for all the questions in section-IV
3. In the duration of 2 Hours, 15 Minints of time is allotted to read the question paper.
4. All answers should be written in the answer booklet only.
5. Answers should be written neatly and legibly.

**SECTION - I****Note : 1) Answer all the Questions****8x1=8 Marks****2) Each Questions carries 1 Mark.**

1. An element reacts with oxygen to give a compound with a high melting point. This compound is also soluble in water Guess and write the element.
2.  $CaO(s) + H_2O \rightarrow Ca(OH)_2 + Heat$ , Which type of reaction it is?  
i) Chemical combination ii) Exothermic iii) Endothermic iv) Displacement  
1) i and iii 2) i and ii 3) iii and iv 4) ii and iv
3. Analyse the given equation and answer the question  
 $CaSO_4 \cdot \frac{1}{2} H_2O + 1\frac{1}{2} H_2O \rightarrow CaSO_4 \cdot 2H_2O$
4. Write the general formula of Alkynes.
5. Which of the following is an application of the thermite process?  
a) Making of electrical cookers b) Joining of railway railings  
b) To prevent corrosion d) Removing hardness of Water.
6. The red light has a wavelength about .....times greater than blue night.
7. Draw the symbol of convex and concave lens.
8. Write the Mirror Formula.

**SECTION - II****Note : 1) Answer all the Questions****2) Each Questions carries 2 Marks.****3x2=6 Marks**

9. Oxides :  $Na_2O, SO_2, Al_2O_3, ZnO, MgO$   
a) Choose and write amphoteric Oxides.  
b) Choose and write oxides with acidic nature.
10. By seeing ceramic containers instead of metal containers for storage of pickles, reshma got many doubts in her mind what would be those doubts?
11. Predict the reason for blurred vision.

**SECTION - III**

- Note :** 1) Answer all the Questions  
2) Each Questions carries 4 Marks.

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3x4=12 Marks  
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12. Draw a diagram that shows refraction of light through a triangular glass prism.

(Or)

Draw the diagram of activity showing water of Crystallisation of Copper Sulphate.

13. Write the applications of the heating effect of electric current.

S.No	Material	Resistivity ( $\Omega\text{-m}$ )
01.	Silver	$1.6 \times 10^{-8}$
02.	Copper	$1.62 \times 10^{-8}$
03.	Ebonite	$1 \times 10^{-5}$
04.	Nichrome	$100 \times 10^{-6}$
05.	Mercury	$94 \times 10^{-8}$
06.	Glass	$1 \times 10^{10}$

14.

Answer the following questions from the data given in the table.

- Which among nichrome and mercury is a better conductor?
- Which material is suitable for electrical wires?
- Which material is suitable to make handles of electrical devices?
- What are the units of resistivity?

**SECTION - IV**

- Note :** 1) Answer all the Questions  
2) Each Questions carries 8 Marks.

3x8=24 Marks

15. a) i) Why do stars twinkle ? Explain?  
ii) Explain why the planets do not twinkle?

(Or)

- i) Write the new cartesian sign convention for reflected by spherical mirrors.  
ii) Write the differences between convex mirror and concave mirror.

16. a) i) Describe the formation of NaCl molecule.  
ii) Why do ionic compounds have high melting points?

(Or)

- i) Describe the formation of methane molecule.  
ii) Write the differences between saturated and unsaturated hydrocarbons.

17. a) Derive  $\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$

(Or)

- How do you demonstrate a chemical double displacement reaction?