

Total No. of Printed Pages : 4

Question Booklet Sl. No.

5438343

GENERAL SCIENCE, Paper – I
(Physical Science)
 (English Version)

Time : 2 Hours

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 minutes of time is allotted to read the question paper.
- 4) All answers should be written in the answer booklet only.
- 5) Answer should be written neatly and legibly.



SECTION – I

(8×1=8)

Note : 1) Answer all the questions.

2) Each question carries 1 mark.



1. Predict and write why preparation of lime water is considered as an exothermic reaction.
2. Acidic nature of a substance is due to the formation of _____ ions in solution.
3. Observe the following table :



Substance	Lemon juice	Blood	Milk of magnesia
pH value	2.2	7.4	10

In the above table which is strong acid ?




4. Which is the most ductile metal in nature ?


5. Write any one use of vinegar.



6. The human eye forms the image of an object at its _____

- a) Cornea b) Iris c) Pupil d) Retina

7. Draw the symbol of an 'Ammeter'. 

8. What is the commercial unit of electric energy ? 

SECTION – II

(3×2=6)

Note : 1) Answer **all** the questions.

2) **Each** question carries **2** marks.

9. Fill the table :

Class of compounds	Formula of functional group
1. Alcohol	Al_2
2. H_2O_2	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}-\text{OH} \end{array}$



10. Frame any two questions to understand the concept of refraction.

11. Predict and write why the tungsten is used as filament in electric lamps ?



SECTION – III

(3×4=12)

Note : 1) Answer **all** the questions.

2) **Each** question carries **4** marks.

12. Draw **any one** of the following diagrams.

A) Draw the ray diagrams of image formed when the object is placed in front of a concave mirror in the following positions :

- i) at 'C'
ii) between P and F



B) Draw the diagram which shows that acid solution in water conducts electricity.

②

13. Give two important uses of each of the following :

1) Bleaching powder

2) Baking soda



14.

Material medium	Air	Rock salt	Water	Diamond	Benzene
Refractive index	1.0003	1.54	1.33	2.42	1.50

Observe the above table and answer the following questions.



- Which medium has highest optical density ?
- In which medium speed of light is minimum ?
- In which medium the light travels faster ?
- Which medium has least optical density ?



SECTION – IV

(3×8=24)

Note : 1) Answer **all** the questions.

2) **Each** question carries **8** marks.

3) **Each** question has an **internal** choice.

15. Explain what is Myopia and how can you rectify it.

OR



Define the following terms :

- Electric current
- Potential difference
- Electric Resistance
- Electric power.

16. Write the balanced chemical equations for the following reactions.

a) Calcium hydroxide + Carbon dioxide \rightarrow Calcium carbonate + Water

b) Zinc + Silver nitrate \rightarrow Zinc nitrate + Silver

c) Aluminium + Copper chloride \rightarrow Aluminium chloride + Copper

d) Barium chloride + Potassium sulphate \rightarrow Barium sulphate + Potassium chloride

OR

Explain the mechanism of the cleaning action of soaps.

17. Explain the experimental procedure to show that a current-carrying conductor placed in a magnetic field experiences force on it.

OR

Explain the experimental procedure to investigate the conditions under which iron rusts.