S.S.C. PUBLIC EXAMINATIONS - 2024

GENERAL SCIENCE - PAPER-I (Physical Science)
MODEL PAPER

Time : 2 hrs   **(English Version)**   **Max. Marks : 50**

Instructions :

1) Question paper consists of 4 sections and 17 questions.

2) Internal choice is available 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 shall be written in the answer booklet only.

5) Answers shall be written neatly and legibly.
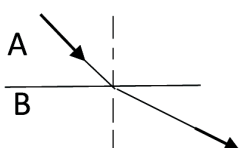

SECTION - I   8 × 1 = 8 M

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

       2) Each question carries 1 mark.

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1. Convert 25° C into Kelvin scale.

2. Give an example for olfactory indicator.

3. From the data given in the table :

    In which material medium light travels faster?

Material Medium	Air	Ice	Water	Diamond
Refractive Index	1.003	1.31	1.33	2.43

4. Which material medium is denser in the given figure?

5. Draw a neat diagram of the shape of biconvex lens.

6. **Assertion 1 :** Sky appears in blue colour due to the scattering of light.

    Assertion 2 : Blue colour has the longest wavelength among all colours of white light.

    A) Both the Assertions are true   B) Both the Assertions are false

    C) Only Assertion 1 is true   D) Only Assertion 2 is true

7. Imagine and write the element that exists in I group I period.

8. How do you appreciate the role of soap in daily life ?

SECTION - II $3 \times 2 = 6$ M

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

      2) Each question carries 2 marks.

9. A prism with an angle of prism A=60° produces an angle of minimum deviation of 30°. Find the refractive index of material of the prism.

10. Pose any two questions to understand the Bohr and Somerfield model of an atom.

11. Imagine the reason and write why the value of ionization potential II is more than the value of ionization potential I.

SECTION - III $3 \times 4 = 12$ M

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

      2) Each question carries 4 marks.

12. Draw any one of the following diagrams :

   (A)   Draw a neat ray diagram of formation of image when the object is kept before a convex lens in the following positions :

      i) at F   ii) between F and P

   (B)   Draw a neat diagram of formation of oxygen (O_2) molecule.

13. **Fill the given table :**

Sub Shell	Orbital	Number of Orbitals	Maximum number of Electrons
$l = 0$		1	
$l = 1$	P		
$l = 3$			10
$l = 4$		7	

14. Write the advantages of parallel and series connections of electric circuits in our daily life.

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

2) Each question carries 8 marks.

3) Each question has an internal choice.

15. A) Define the following :

   1) Dew   2) Fog

   3) Latent Heat of Vaporization   4) Latent Heat of Fusion

   (or)

   B) Write about the working nature of motor.

16. A) Write briefly about the following :

   1) Plaster of Paris   2) Bleaching Powder

   3) Sodium Bicarbonate   4) Sodium Carbonate

   (or)

   B) Explain the chain reaction when methane is reacted with chlorine to get carbon tetrachloride.

17. A) Write the lab activity to understand Lateral Shift using glass lab.

   (or)

   B) Write an activity to understand the corrosion of iron(rusting) in presence of water and air.

WEIGHTAGE TABLE FOR
GENERAL SCIENCE : PAPER I (SSC-2024)
PHYSICAL SCIENCE

		AS-1	AS-2	AS-3	AS-4	AS-5	AS-6	TOTAL QUESTIONS	TOTAL MARKS	
SECTION - I **1 MARK QUESTIONS**	PS	2	1	-	3	1	1	8	8	8
SECTION - II **2 MARK QUESTIONS**	PS	1	2	-	-	-	-	3	6	6
SECTION - III **4 MARK QUESTIONS**	PS	-	-	-	1	1	1	3	12	12
SECTION - IV **8 MARK QUESTIONS** **(Internal Choice)**	PS	2	-	1	-	-	-	3	24	24
								17 Q	50	50