TENTH CLASS MODEL PAPER (TG)

SUMMATIVE ASSESSMENT - 1 (2025-26)

General Science Paper - 1 (Physical Science) - English Version

Time: 1 Hr. 30 Min. **PART - A & B** **Max.Marks: 40**

Instructions: 1) Read the question paper carefully and understand.

2) Answer the questions under Part-A in the answer sheet provided.

3) Part-A contains three Sections (I, II, III).

4) Part-B answers should be written in the given brackets and attach it to the Part-A answer sheet.

5) Write the answers following instructions given in each section.

Time: 1 Hr. 15 Min. **PART - A** **Marks: 30**

SECTION - I

Instructions: i) Very short answer questions.

ii) Answer All questions.

iii) Write the answers in 3 - 4 sentences.

iv) Each question carries 2 marks. **$3 \times 2 = 6$**

1. Write your two observations while observing different types of images formed by a concave mirror.

2. Imagine what would have happened if the lens were not found?

3. What are the various phenomenon involved in formation of rainbow with a water drops?

SECTION - II

Instructions: i) Short answer questions.

ii) Answer All questions.

iii) Write the answers in 5-6 sentences.

iv) Each question carries 4 marks. **$3 \times 4 = 12$**

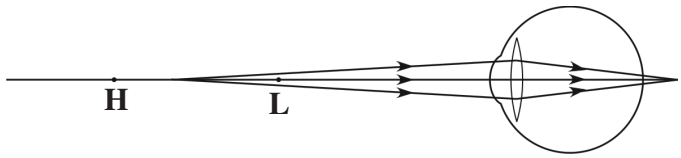
4. Balance the following equations.

i) $BaCl_2 + H_2SO_4 \longrightarrow BaSO_4 + HCl$

ii) $Cu_2S + O_2 \longrightarrow Cu_2O + SO_2$

5. What are the uses of plaster of paris?

6. Observe the figure and answer the following questions.



i) What type of vision defect is it? ii) What do the letters H and L refer to?

iii) What is the reason for this defect?

iv) Draw the figure showing the corrections to the defect.

SECTION - III

Instructions: i) Essay type questions.

ii) Answer any Two questions.

iii) Write the Answers in 8-10 sentences.

iv) Each question carries 6 marks. **$2 \times 6 = 12$**

7. What are the apparatus required to experimentally prove the 'water of crystallization' of a salt, and describe the experimental procedure with a neat diagram.

8. Explain the principles used to explain the electronic configuration with one example each.

9. Draw the ray diagrams to represent the formation of images by a convex lens when the object is kept at various positions on a principal axis.

Time: 15 Min. **PART - B** **Marks: 10**

Instructions: i) Write the answers to the questions under Part-B on the question paper itself and attach it to the answer book of Part-A.

ii) Each question carries 1 mark.

iii) Marks will not be awarded in any case of over writing, rewritten or erased answers.

iv) Write the capital letter (A, B, C, D) showing the correct answer for the following questions in the brackets provided against them. **$10 \times 1 = 10$**

1. The focal length of a convex mirror is 16cm. What is its radius of curvature?

1) 4 cm 2) 8 cm 3) 16 cm 4) 32 cm ( )

2. Select the correct balanced chemical equation of the following. ( )

A) $2Cr_2O_3 + 8NaOH + 2O_2 \longrightarrow 4Na_2CrO_4 + 4H_2O$

B) $FeCl_3 + 3H_2O \longrightarrow 2Fe(OH)_3 + 3HCl$

C) $Ca_3(PO_4)_2 + 3SiO_2 + 5C \longrightarrow 3CaSiO_3 + P + 5CO$

D) $4KMnO_4 + 6H_2SO_4 \longrightarrow 2K_2SO_4 + 4MnSO_4 + 6H_2O + 5O_2$

3. Match the following. ( )

i) Bleaching Powder	a) Making toys
ii) Sodium hydrogen carbonate	b) Glass, soap, and paper industries
iii) Sodium carbonate	c) Antacid
iv) Plaster of paris	d) Textile industry

1) i-b, ii-c, iii-d, iv-a 2) i-d, ii-c, iii-b, iv-a

3) i-c, ii-d, iii-a, iv-b 4) i-a, ii-b, iii-c, iv-d

4. Which of the following matching is incorrect? ( )

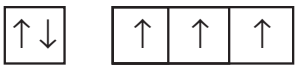
A) O - $1s^2 2s^2 2p^4$ B) Ne - $1s^2 2s^2 2p^6$

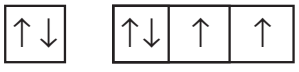
C) Na - $1s^2 2s^2 2p^6 3s^1$ D) Ar - $1s^2 2s^2 2p^6 3s^2 3p^5$

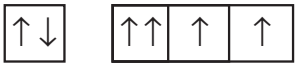
5. The image of an object is formed by the human eye at its ( )

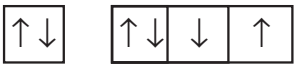
1) Iris 2) Cornea 3) Retina 4) Optic nerve

6. Which of the following is violation of Pauli's exclusion principle ( )

A) 

B) 

C) 

D) 

7. Myopia can be corrected using ( )

1) Plano convex lens 2) Biconvex lens

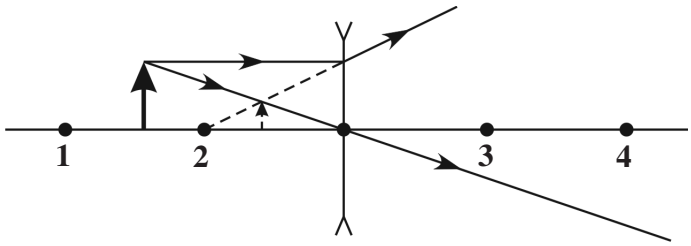
3) Biconcave lens 4) Bifocal lens

8. According to Aufbau's principle, the correct order of energies of 3d, 4s, and 4p orbitals is. ( )

A) 4p < 3d < 4s B) 4s < 4p < 3d

C) 4s < 3d < 4p D) 3d < 4s < 4p

9.

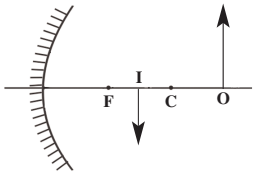


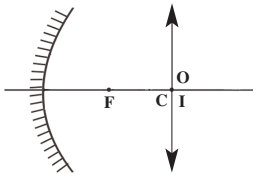
The parts marked in the ray diagram are ( )

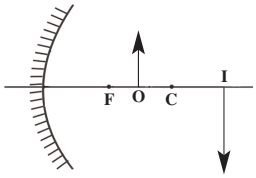
A) 1-C_2, 2-F_2, 3-F_1, 4-C_1 B) 1-C_1, 2-F_1, 3-F_2, 4-C_2

C) 1-F_2, 2-C_2, 3-C_1, 4-F_1 D) 1-F_1, 2-C_1, 3-C_2, 4-F_2

10. An object is placed in front of the concave mirror, then object distance, image distance, and magnifications as per the sign conventions, i.e., -u,+v, +m for the following one diagram is ( )

A) 

B) 

C) 

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