

SSC PUBLIC EXAMS – TELANGANA STATE**MODEL PAPER-1****SUB : GENERALSCIENCE****Class: X****Paper-I****Time : 2 hours 45 min****Max. Marks : 40****Instructions :**

1. In the time duration of 2 hours 45 minutes, 15 minutes of time is allotted to read and understand the question paper.
2. Answer the questions under PART-A on Separate answer book
3. Write the answers to the questions under PART-B on the question paper itself and attach it to the answer book of PART-A

Part-A**Time : 2 hours 15 min****Max. Marks : 40****Instructions :**

1. PART-A comprises of three sections I, II, III
2. All the questions are compulsory
3. There is no overall choice. However, there is internal choice to the questions under section III

Section-I**Note :****7x1=7**

1. Answer all the questions
 2. Each question comes 1 mark
 3. Answer each question in 1 or 2 sentences
1. Write the differences between convex and concave mirror.
 2. Dry HCl gas does not change the colour of Dns litmus paper where as HCl aqueous solution changes colour of blue litmus paper into red. Why?
 3. Draw a diagram showing total internal reflection
 4. What is orbital? How it is difference when we compare to BOHR's Orbit?
 5. What is the resistivity of a conductor of length l and radius 0.1mm of resistance 100Ω .
 6. What is the difference between Roasting calcinations. Give one example for each.
 7. Observe the following table.

Material	Fog	Water	Benzene	Carbondi sulphide
Refractive index	1.31	1.33	1.50	1.63

In which of the above speed of light is less?

Section-II**Note :****6x2=12**

1. Answer all the questions
 2. Each question comes 2 mark
 3. Answer each question in 4-5 sentences
8. Your friend is unable to find the difference between evaporation and Boiling. Ask some questions to your to teacher to make him to understand.
 9. Why does plaster of Paris stored in Moisture proof containers.
 10. Lenses are used in Binoculars. Why? Gather information regarding this.
 11. Alkal Metals belong to IA group have metallic properties in an increasing order in group from top to bottom support this with proper information.
 12. Draw simple diagram to show how electrons re arranged in the following corlent molecules.
 13. Draw a graph a wire through which current passing it 'I' and potential difference 'V'.

Section-III**Note :****4x4=16**

1. Answer all the questions
 2. Each question comes 4 mark
 3. There is an internal choice for each question. Only re option from each question is to be attempted
 4. Answer each question in 8-10 sentences
14. Explain working of electric motor with a neat sketch.

(OR)

Write the procedure and materials require to conduct on experiment when carbonates & metal carbonates reacts with acids gives salts and carbon dioxide and water.

15. Balance the chemical equations
 - a) $\text{NaOH} + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$
 - b) $\text{Hg}(\text{NO}_3)_2 + \text{KI} \rightarrow \text{Hg} \text{KNO}_3$
 - c) $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$
 - d) $\text{KClO}_3 \rightarrow \text{KCl} + \text{O}_2$
 - e) $\text{C}_3\text{H}_8 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$

(OR)

How do you appreciate the importance of spherical mirrors in our daily uses?

16. What type of experiment that you have choose to understand Faraday's laws? For this which type of equipments should be needed? Give some advises to get the good results?

(OR)

Suggest an experiment to prove that the presence of air and water are essential for corrosion.

Explain the procedure.

17. How does Lewis dot structure helps us to understand bonding between toms.

(OR)

Explain Thernite process. How does this process helps us in our daily life.

PART-B**Time : 30 min.****4x4=16**

1. Answer all the questions
2. Each question carries ½ mark
3. Answers are to be written in the question paper only.
4. Marks will not be awarded in any case of overwriting rewriting or erased answers.
5. Write Capital Letter (A,B,C,D) Showing the current answer for the following questions in the brackets against them.

18. Formula of Gypsum is ()
 A) $\text{CuSO}_4 \cdot 2\text{H}_2\text{O}$ B) $\text{CaSO}_4 \cdot \frac{1}{2} \text{H}_2\text{O}$ C) $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ D) $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$
19. Which of the inert gas element is not having octet in outer electronic configuration ()
 a) Helium b) Argon c) Krypton d) Redon
20. Bases that dissolve in water are called ()
 a) Neutral b) Bases c) Acids d) NH_3
21. Which of the compound is having pyramidal structure ()
 a) H_2O b) HCl c) CH_4 d) NH_3
22. What is the value of Gram molar volume. ()
 a) 2.24l b) 2.24ml c) 22.4l d) 22.4 ml
23. force acting on current carrying wire perpendicular to uniform magnetic field ()
 a) 0 b) ILB c) $2 ILB$ d) $ILB/2$
24. Current passing through wire depends on ()
 a) Only potential difference between ends of a wire
 b) Only Resistance of a wire
 c) a and b d) Does not depend on any factor
25. What is focal length of Plano convex lense of refractive index 'n' and radius 'R' ()
 a) $F=R$ b) $F=R/2$ c) $F=R/(n-1)$ d) $f=(n-1)$
26. Which of the following does not change Refraction. ()
 a) wavelength b) frequency c) speed of light d) All the above
27. Temperature of Ice when it is melting. ()
 a) Constant b) Increases c) Decreases d) Cant say