# SSC PUBLIC EXAMS - TELANGANA STATE MODEL PAPER-III 

Sub : Physical Science
CLASS: X
PAPER-I

## Time : 2 hours 45 min

Max. Marks : 40

## Instructions:

1. In the time duration of 2 hours 45 minutes, 15 monutes 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

## Notes:

1. Answer all the questions
2. Each question carries 1 mark
3. Answer each question in 1 or 2 sentences
4. How can you differenciate between strong acid and strong base?
5. Which principles refer for He electronic configuration orientation?
6. This circuit has given wrong away, correct it finally we want series connection.

7. Arrange the low reactivity metals like ascending order $\mathrm{Pt}, \mathrm{K}, \mathrm{Zn}, \mathrm{Ag}, \mathrm{Hg}, \mathrm{Fe}, \mathrm{Au}$
8. How the Glycerol formed?
9. Explain about the formation of Saponification reaction?
10. Write the reasons for dry HCl is Acid or base?

## Section-II

Notes:

1. Answer all the questions
2. Each question carries 2 mark
3. Answer each question in $4-5$ sentences
4. Draw the ray diagrams for image formation, when one object is keeping in different places in front of convexlens?
5. How the four quantum number are helpful to "Ca" Element in the position of outmost last electron?
6. What type of chemical reaction takes place in breath enaliser, that is helped for police to detect suspect drunken driver?
7. Draw the Electrical circuit with help of these values, $R_{1}=4 \Omega, R_{2}=12 \Omega$ are parallel connection and $R_{3}=7 \Omega$ in series connection these are connect to 12 V Battery?
8. Write pridictions for all metals will be getting corrosion?
9. Write the bond formation of $\mathrm{MgCl}_{2}$ using cation formation and Anion formation?

## Section-III

## Notes:

1. Answer all the questions
2. Each question cames 4 mark
3. There is an internal choice for each question. only re option from each question is to the attempted
4. Answer each question in $8-10$ sentences
5. Write about kirchhoff's laws? like junction law and loop law?
(OR)
How can you use the valence bond theory for formation of $\mathrm{BeCl}_{2}$.
6. If Modi wants to protect his eye, give the suggestions about each and every part of eye parts. briefly explain it?
(OR)
Draw the ray diagrams with help of the following Table.

| Position of <br> Candle | Positon of <br> Image | Enlarged <br> Diminished | Invertec <br> Errec <br> Beteeen <br> "F" and "C" <br> Beyand "C"Beyond "C" <br> Beteeen <br> "F" and "C" |
| :---: | :---: | :---: | ---: |
| Between mirror <br> \& "F" | Diminished <br> Behind the <br> mirror | Enlarged | Invert |

16. Write the procedure for dilute HCl is react with Zinc grannuales?
(OR)
Write the procedure for D.C Generator?
17. Determine the Magnetic force a Current carrying wire, which is placed along a uniform magnetic field?

Write the steps to balance the chemical Equation ex; $\mathrm{Fe}_{2} \mathrm{O}_{3}+\mathrm{Al} \quad \mathrm{Fe}+\mathrm{Al}_{2} \mathrm{O}_{3}$.

## Part-B

Time : 30 min
Max. Marks : 10

## Instructions:

1. Answer all the questions
2. Each question carries $1 / 2$ mark
3. Answers are to be written inthe 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.
6. Speed of light $(\mathrm{C})=$ $\qquad$
a) $3 \times 10^{8} \mathrm{~ms}^{-1}$
b) $3 \times 10^{12} \mathrm{~ms}^{-1}$
c) $3 \times 10^{10} \mathrm{~ms}^{-1}$
d) $3 \times 10^{9} \mathrm{~ms}^{-1}$
7. Why does the sky appears as white in hot day.
a) Scatlering of light
b) Dispersion
c) Rafraction
d) Reflection
8. Lens maker's formula
a) $\frac{1}{f}=(n-1)\left(\frac{1}{R_{1}}-\frac{1}{R_{2}}\right)$
b) $\frac{1}{f}=(1-n)\left(\frac{1}{R_{1}}-\frac{1}{R_{2}}\right)$
c) $\frac{1}{f}=(n-1)\left(\frac{1}{R_{2}}-\frac{1}{R_{1}}\right)$
d) $\frac{1}{f}=(1+n)\left(\frac{1}{R_{1}}-\frac{1}{R_{2}}\right)$
9. One solution turns Red to Blue its $\mathrm{P}^{H}$ is likely to be.
a) 1
b) 3
c) 7
d) 14
10. Bleaching powder formula
a) CaOCl 2
b) $\mathrm{Ca}(\mathrm{OH})_{2}$
c) CaO
d) $\mathrm{Na}_{2} \mathrm{CO}_{3}$
11. Avagrado Number =
a) $6.02 \times 10^{23} \mathrm{NA}$
b) $60.2 \times 10^{23} \mathrm{NA}$
c) $6.20 \times 10^{23} \mathrm{NA}$
d) $6.02 \times 10^{32} \mathrm{NA}$
12. The radius of curvaure will be twice to this distnace
a) $2 f$
b) $f / 2$
c) $\mathrm{f} / 4$
d) F
13. Example for amorphous forms
a) Lamp black
b) Buck minster fullerence
c) Diamond
d) Graphite
14. The impurity present in the ore is called as $\qquad$
a) Mineral
b) flux
c) Gangue
d) Slag
15. This law based on the conservation of charge
a) Junction law
b) Looplaw
c) Octet rule
d) Law of Triads
