

SSC PUBLIC EXAMS – TELANGANA STATE

MODEL PAPER-3

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
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1. Doctor advised to use 1D lens to a patient what is its focal length? What is his defect of vision
 2. A student unable to Recognise acetic acid (CH_3COOH), and Ethyl Alkahol ($\text{C}_2\text{H}_5\text{OH}$) in a laboratory. How can he ferform experiment with Na_2CO_3 ?
 3. What is the relation between magnetic flux and magnetic flux density. What is the unit of Magnetic flux density.
 4. An object is placed in front of a convex lens at 77 cm and image formed due to it is 30.8cm from this information find out the focal length of the lens.
 5. What could we use to prevent damage to the household circuits due to overloading? What should be its properties?
 6. What are the various parts of furnace used in the extraction of crude metal.
 7. Write the uses of bleaching powder in our daily life.

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. Suppose a person is swimming in a pool. His friend is observing him from the land edge. Whether the person who is swimming can be seen at the same place or not. Imagine and explain the reason
 9. State whether the following elements belong to Dobereiner Triads or not Na, Si, Cl (Atomic weights of Na, Si, C) should be in an order)
 10. What is the reason behind the recognition of carbon as a versatile element.
 11. Draw the shape of V-I graph for a copper wire.
 12. Show the formation of Methane and Ammonia with a neat sketch.
 - 13.

Element	H	He	Li	Be	B	C	Na
Ionisation Energy	1372.0	2372.3	520.2	899.5	860.6	1086.5	495.9

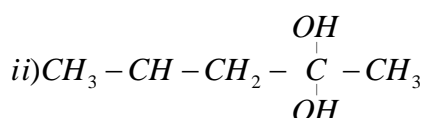
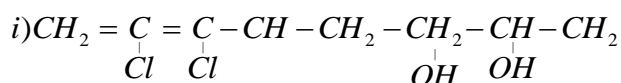
- i) How does ionization energy vary in a group
- ii) How does ionization energy vary in a period

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 one option from each question is to be attempted
 4. Answer each question in 8-10 sentences
14. What is the role of P^H in our digestive system.

(OR)

Write the IUPAC names of the following.



15. Why does 3rd period contains 8 elements and 4th period contains 18 elements in Modern periodic table.

(OR)

Explain the invention of orbital from the quantum mechanical atomic model?

16. How do you appreciate the role of eye lense, Iris, Ciliary muscles in the structure of an Eye which is comparatively equal to a camera.

(OR)

i) What is EMF? How does it forms.

ii) What is lenz's law? How can you apply conservation of energy for electromagnetic induction.

17. Write an experiment to find resistance of a conductor using ohms law and write its procedure and precautions.

(OR)

Write an experiment you did to observe magnetic field due to solenoid.

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. Which of the Method is used for purification of the crude metal. ()
 A) Distillation B) Poling C) Froth floatation D) liquation
19. If an element ${}_{11}\text{X}^{23}$ is in ionic bond with another element 'Y' then what is ion on 'x' ()
 a) +1 b) +2 c) -1 d) -2
20. Bond angle in Beryllium chloride is ()
 a) 180° b) 120° c) 110° d) 104.31°
21. No. of orbital's present in an atom of which $l=1$ ()
 a) 1 b) 2 c) 3 d) 0
22. Which type of chemical reaction is, "Hydrogen reacts with chlorine to give hydrogen chloride. ()
 a) Chemical decomposition b) Chemical displacement
 c) Chemical combination d) Chemical Double de composition
23. Distance between eyelense & Retina is. ()
 a) 2.5cm b) 2cm c) 1.75cm d) 7cm
24. What happens to PH value of river, if rain water enters into it. ()
 a) increases b) Decreases c) Does not change d) Can't say
25. The Temperature of an object B is 45°C . what is the temperature of 'C' if A,B,C are in thermal equilibrium. ()
 a) 45°C b) 50°C c) 40°C d) Can't Say
26. ()
 A) B) C) D)
27. Shells law is. ()
 A) $n_1 \sin i = \frac{\sin r}{n_2}$ B) $\frac{n_1}{n_2} = \frac{\sin r}{\sin i}$ C) $\frac{n_2}{n_1} = \frac{\sin r}{\sin i}$ D) $n_2 \sin i$ Constnt