

Model Paper
SSC PUBLIC EXAMINATIONS JULY-2020
GENERAL SCIENCE
PHYSICAL SCIENCE PAPER

(English medium)

(Max. Marks:46)

Time: 3Hrs 15 Mins.

Class: X

Instructions:

1. There are four sections and 16 questions in the paper.
2. Answers should be written in a given answer booklet.
3. There is internal choice in Section- IV
4. Write all the questions visible & legibly.

Section-I

Note:- 1. Answer all the questions

2. Each question carries 1 mark

6X1=6 M

1. Choose the suitable answers of Section B with Section A

Section A

1. Formula for Snell's Law
2. At critical angle, the angle of refraction

Section B

- P) $n_2/n_1 = \sin r / \sin i$
- Q) $n_1/n_2 = \sin r / \sin i$
- R) 90°
- S) 60°

2. What materials are required in an experiment to produce a rainbow in our classroom?
3. Arrange the orbital in ascending order of their energies

4s, 3p, 4p, 3d

4. X: Mendeleeff's eka-aluminium is Gallium

Y: Mendeleeff's eka-silicon is Germanium .

Which statement is correct?

- A) Both X and Y incorrect B) Both X and Y correct
C) X correct and Y incorrect D) X incorrect and Y correct

5. Write the mathematical expression of Faraday's law of induction?

6. According to IUPAC, what is the suffix for naming an Aldehyde?

Section-II

Note:- 1. Answer all the questions

2. Each question carries 2 marks

4X2=8 M

7. Frame some questions to know about the formation of mirage.
8. The differentiate electron in an atom has following set of quantum numbers are given, then answer the given questions

n	l	m_l	m_s
3	0	0	+1/2

- a) Which orbital this electron belongs b) Write the name of the element

9. State "Modern periodic law"

10. Write any two applications of Faraday's Law of Induction in daily life ?

Section-III

Note:- 1. Answer all the questions

2. Each question carries 4 marks

4X4=16 M

11. Why does tooth decay starts when the p^H of mouth is lower than 5.5 ?
12. Why Sun appear red during sunrise and sunset?
13. A house has 3 tube lights of 20 watts each. On the average, all the tube lights are kept on for five hours. Find the energy consumed in 30 days.

14. Describe with chemical equation how ethanoic acid may be obtained from ethanol

Section-IV

Note:- 1. Answer all the questions

2. Each question carries 8 marks

2X8=16 M

15. Explain the procedure of finding specific heat of solid experimentally

(OR)

What is hybridisation? Explain the formation of BF_3 molecules using hybridisation

16. Draw the ray diagram for the following positions of objects in front of a convex lens mention the characteristics of the image

a) Object is placed beyond $2f_2$ b) Object is placed between focal point and optic center

(OR)

Draw a neat diagram of a furnace which is used for roasting of ore in metallurgy.