

Model Question Paper

Solid State - II - Part II

12th Standard

Chemistry

Reg.No. :

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I. Answer all the questions.

II. Use Blue pen only.

III. Question No 17 is compulsory

Time : 01:00:00 Hrs

Total Marks : 60

5 x 1 = 5

Section-A

- 1) An example for Frenkel defect is
(a) NaCl (b) AgBr (c) CsCl (d) FeS
- 2) Semiconductors which exhibit conductivity due to the flow of excess negative electrons are called
(a) Super conductors (b) n-type semiconductors (c) p-type semiconductors (d) Insulators
- 3) In the Bragg's equation for diffraction of X-rays, 'n' represents
(a) The number of moles (b) Avogadro number (c) A quantum number (d) Order of reflection
- 4) The number of close neighbours in a body centered cubic lattice of identical spheres is
(a) 6 (b) 4 (c) 12 (d) 8
- 5) The crystals which are good conductors of electricity and heat are
(a) Ionic crystals (b) Molecular crystals (c) Metallic crystals (d) Covalent crystals

Section-B

7 x 3 = 21

- 6) What is a vitreous state?
- 7) Give two examples for AB and AB₂ type ionic crystallites.
- 8) What is imperfection in solids?
- 9) What is coordination number?
- 10) Write a note on the assignment of atoms per unit cell in fcc.
- 11) Write a short note on metallic crystals. (or) What is a metallic bond?
- 12) How are glasses formed?

Section-C

5 x 5 = 25

- 13) How Bragg's equation is used for determining crystal structure.
- 14) Explain Bragg's spectrometer method.
- 15) Explain the nature of glass.
- 16) What is Bragg's equation? Write its significance.
- 17) a) Explain Bragg's spectrometer method.

(OR)

- b) Explain Schottky defect and Frenkel defect.
