

Model Question paper

Solid state - I 1

11th Standard

Chemistry

Reg.No. :

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I. Answer all the questions.

II. Use blue pen only.

Time : 00:45:00 Hrs

Total Marks : 30

5 x 1 = 5

Part - A

- 1) The structure of sodium chloride crystal is:
(a) body centred cubic lattice (b) face centred cubic lattice (c) octahedral (d) square planar
- 2) The number of atoms in a face centred cubic unit cell is:
(a) 4 (b) 3 (c) 2 (d) 1
- 3) The 8:8 type of packing is present in:
(a) CsCl (b) KCl (c) NaCl (d) MgF_2
- 4) In a simple cubic cell, each point on a corner is shared by
(a) 2 unit cells (b) 1 unit cells (c) 8 unit cells (d) 4 unit cells
- 5) An amorphous solid is:
(a) NaCl (b) CaF_2 (c) glass (d) CsCl

Part - B

2 x 2 = 4

- 6) What governs the packing of particles in crystal?
- 7) What is meant by 'unit cell' in crystallography?

Part - C

2 x 3 = 6

- 8) What are Miller Indices?
- 9) Mention the number of sodium and chloride ions in each unit cell of NaCl

Part - D

3 x 5 = 15

- 10) Define and explain the following terms
(a) Crystalline solids
(b) Amorphous solids
(c) Unit cell
- 11) Explain the terms Isotropy and Anisotropy.
- 12) Draw a neat diagram of sodium chloride structure and describe it accordingly.
