

Doon Public School

A Senior Secondary School
Sector- 21, Panchkula. Ph: 0172- 2590514

Assignment – 3

Subject-chemistry

Class:XII

Date: 25-10-2018

Q.1 Give difference between crystalline and amorphous solids with example.

Q.2 Derive the packing efficiency of FCC,BCC crystals.

Q.3 The density of copper metal is 8.95 g cm^{-3} . If the radius of copper atom be 127.8 pm , is the copper unit cell is simple cubic, a body centred cubic or face centred cubic structure? (Atomic mass of $\text{Cu} = 63.54 \text{ g mol}^{-1}$, $N_a = 6.02 \times 10^{23} \text{ mol}^{-1}$)

Q.4 How will you distinguish between-

(i) Tetrahedral and octahedral void

(ii) Crystal lattice and unit cell

Q.5 Express the relationship between atomic radius r and the edge length a in the BCC unit cell.

Q.6 Define –(1)unit cell (2)space lattice (3)packing efficiency