

Here is your **Day 2 — Answer Key**, exactly based on the Day-2 questions I gave you yesterday, aligned with the revised plan.

DAY 2 — ANSWER KEY

PHYSICS — Electric Field Lines & Flux

Q1. Field lines move from?

✓ Positive → Negative

Q2. Do field lines intersect? Why?

✓ No, because at one point you cannot have **two directions of electric field**.

Q3. What does denser field lines represent?

✓ Stronger electric field.

Q4. What is electric flux?

✓ Number of electric field lines passing through a surface.

Q5. Flux due to charge outside a closed surface?

✓ Zero (Gauss Law).

CHEMISTRY — Solid State (Packing, Voids, Unit Cell)

Q1. Coordination number of FCC?

✓ 12

Q2. Packing efficiency of BCC?

✓ 68%

Q3. How many tetrahedral voids per atom?

✓ 2

Q4. Relation between 'a' and 'r' for BCC?

✓ ($a = \frac{4r}{\sqrt{3}}$)

Q5. Which lattice has highest packing efficiency?

✓ FCC (74%)

MATHS — Domain/Range/Functions

Q1. Define function.

✓ A relation where **each input has exactly one output**.

Q2. Domain of $\sqrt{x - 3}$?

✓ $(x \geq 3)$

Q3. Range of $f(x) = x^2$?

✓ $(y \geq 0)$

Q4. What is a bijection?

✓ A function that is **one-one** and **onto**.

Q5. Composite function example?

✓ If $(f(x)=x+1)$ and $(g(x)=x^2)$,
then $(f(g(x)) = x^2 + 1)$.

 **Day 2 Completed Successfully!**

Whenever you're ready →

 **Start Day 3 Plan**