**Question bank Solid lab**

**Practical Solid Lab**

1. In the absent of magnetic field in Hall Effect experiment can we produce Hall Voltage? Explain your answer.
2. By increasing temperature what will happen to resistance in metal explain?
3. From Bragg's law of reflection and schematic diagram of electron diffraction find the relationship between wavelength (λ) and inter planer distance (d).



1. Impossibility of using visible light to determine crystal structure?
2. How is Hall potential produced?
3. By increasing temperature what will happen to resistance in metal.
4. Name the parameters in the following equations:
5. (a) ∆ρ/ρ◦=α∆T (b) a=d√(h^2+k^2+l^2 ) (c) μ=|σ R\_H |
6. Write the names of two experiments which used to study crystal structure?
7. In the absent of magnetic field in Hall Effect experiment can we produce Hall Voltage? Explain your answer.
8. Why does wavelength of electron in electron diffraction experiment decrease when the voltage increases from 3.5 kv to 4.5kv?

 12- from the optical absorption experiment. Find the energy gap of a semiconductor,

h=6.626×10-34 J/s c = 3×108 m\s