

**(2 marks)**

- 1. What is the difference between drift current and diffusion current?**
- 2. What do you mean by a periodic potential.**
- 3. What are phonons?**
- 4. Define mobility of electrons?**
- 5. Define Lorentz Number**
- 6. Graph between energy and wavenumber.**
- 7. Graph between energy and density of state for 1d and 3 d**
- 8. What is the effect of doping on the band gap of semiconductor.**
- 9. How the position of fermi level changes with doping.**
- 10. Define law of mass action.**