

PH 8252 Physics for Information Science
Important 2Mark questions

Unit I

1. What are the drawbacks of classical free electron theory?
2. Define the term Fermi temperature.
3. Define mobility of electrons.

Unit II

1. What is a Semiconductor?
2. What are indirect band gap semiconductors? Give example.
3. Distinguish between intrinsic and extrinsic semiconductors.

Unit III

1. Define magnetic field intensity.
2. The critical field for niobium at 0 K is 2×10^5 A/m and 1×10^5 Am/at 8 K. Calculate the transition temperature of the element.
3. What is curie temperature?

Unit IV

1. What is meant by dielectric loss?
2. Write the applications of ferroelectric materials.
3. Mention the properties of dielectric materials.

Unit V

1. Mention the different types of metallic gases.
2. Mention any four methods to produce nano materials.
3. What is Kerr effect?