Katwa College

B.Sc. Semester – V (Honours) Internal Examination – 2022

Subject – Physics

Paper CC XII -Solid State Physics

Time – 1 h **Full Marks: 10**

Answer any five questions: 2x5=10

1. What is Crystal? Write down the name of the crystal systems.
2. What do you mean symmetry operation? Write down the name of symmetry operation?
3. What it is atomic packing fraction? Determine the atomic packing fraction of BCC lattice
4. What do you mean by Miller's Indices? Find the angle between the planes of Millers indices (111) and (121).
5. What do you mean by phonons? Write down the name the different phonons.
6. What do you mean by intensity magnetization?
7. The magnetic susceptibility of a medium is 899×10^{-11}. Calculate (i) relative permeability and (ii) absolute permeability.
8. State Curie Law of paramagnetism.
9. What are domains in ferromagnetism?

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