M.Sc. DEGREE EXAMINATION, EVEN SEMESTER 2021 II Year III Semester Crystal Physics

Max.marks :25

Answer any **FIVE** questions $(5 \times 5 = 25)$ Marks

- 1. Derive the expression for critical free energy of formation of disc shaped nucleus.
- 2. Discuss the growth of crystals from gel using single diffusion method.
- 3. Write notes on FTIR Characterization.
- 4. Discuss about the construction of X ray diffractometer.
- 5. Explain the formation of hydrogen bonding with suitable examples.
- 6. Discuss in detail about Liquid phase epitaxy.
- 7. Explain the concept of reciprocal lattice. Derive Braggs law.