M.Sc DEGREE EXAMINATION, EVEN SEMESTER 2021 II Year III Semester PHYSICAL CHEMISTRY - III

Max.marks:25

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

- 1. Discuss about the factors affecting the width of spectral lines.
- 2. Explain Frank Condon principle.
- 3. With necessary diagram explain PQR branches.
- 4. Explain NMR of AX and AMX type molecules.
- 5. Write note on Mc Laffety rearrangement.
- 6. Discuss the origin of quantum numbers.
- 7. Explain LCAO MO theory.