

-Shikshan Maharshi Dr. Bapuji Salunkhe

**Dattajirao Kadam Art's Science & Commerce College Ichalkaranji.**

**Department of Physics**

**B. Sc. III, Semester-V**

**Atomic, molecular & Astrophysics PAPER-XII**

**Course outcome**

**After successful completion of the course, the student is expected to:**

1: know about different atom model and will be able to differentiate different atomic systems, different coupling schemes and their interactions with magnetic and electric fields.

2: Have gained ability to apply the techniques of microwave and infrared spectroscopy to elucidate the structure of molecules

3: Be able to apply the principle of Raman spectroscopy and its applications in the different field of science & Technology.

4: To become familiar with different resonance spectroscopic techniques and its applications

5: to find solutions to problems related different spectroscopic systems.

6: Describe theories explaining the structure of atoms and the origin of the observed spectra.

7: Identify atomic effect such as Zeeman Effect and Anomalous Zeeman effect

8: Explain the observed dependence of atomic spectral lines on externally applied electric and magnetic fields.