School of Chemistry

Aims and Objectives: Session 2023-2024, Semester 2

Module CH1402: Inorganic and Physical Chemistry 1

Course Title: Introductory Spectroscopy

Duration: 5 hours

Lecturer: Dr D. G. Pinto

Aims: To understand the basics of some spectroscopic techniques and to

learn the specific strengths and fields of application of these

techniques.

Objectives:

1. To understand the nature of electromagnetic radiation and to know the energy region relevant for atomic excitations.

- 2. To know typical energy values associated with electronic excitations and to be able to express the energies associated with these excitations in different units.
- 3. To appreciate the discrete nature of atomic excitations based on the Bohr model.
- 4. To understand the origin and the meaning of selection rules.
- 5. To appreciate the relation between atomic properties and the associated spectrum.