

SARASWATI MAHILA MAHAVIDHYALAYA, PALWAL

LESSON-PLAN

Class: B.sc 3 year

Semester: EVEN

Subject: atomic n molecular n laser Physics

Session: 2021- 22

Lecture Number	Topics
1	Vector model n spectra of alkali metals penetrating n non penetrating orbits
2	Quantum defect vector model atom , quantum number associated with vector model
3	Spin orbit interaction , energy level of alkali metal n spectral lines various coupling for valence electrons atoms
4	Interaction energy in LS coupling
5	Revision n numerical
6	Larmor theorms orbit magneton spin magnetic moment, total magnet moment
7	Zeeman effect n it's application
8	Zeeman shift quantum theory of A.Z.E , paschen back effect series' for doublets of sodium
9	Stark effect of hydrogen atom ,weak field s. Effect in H - Atom
10	Hyperfine structure of spectral lines
11	Revision ,numerical n test
12	Molecular spectra, rotation energy level , vibration level
13	Electronic energy level, Raman effect ,test
14	Laser properties of laser , Einstein coefficient , possibility of amplication , kinetic of optical absorption
15	Threshold condition, population inversion, laser pumping,
16	Ruby laser ,He-ne laser application of laser in medicine n industry
17	Revision n test

Signature: hemander