Physics by fiziks

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"Discipline is the Bridge between Goal and Success"

Study Plan of Atomic and Molecular Physics for Pre-recorded Batches

(For NET-JRF, GATE, JEST, TIFR Aspirant and M.Sc Students)

Days	Enter Your Dates	Topics no. 7 Atomic Physics
Day: 1		Lecture 1: Intoduction of Atomic & Molecular Physics (Atomic & Molecular Physics)
		Lecture 2: Concept of Atomic Spectra (Atomic & Molecular Physics)
Day: 2		Lecture 3: Bohrs Model (Atomic & Molecular Physics)
		Lecture 4: Discussion of Assignment No.1 (Atomic & Molecular Physics)
		Class Test 1: Bohr's Theory and Sommerfeld Model (Atomic & Molecular Physics)
Day: 3		Lecture 5: Magnetic Moment Part-1 (Atomic & Molecular Physics)
		Lecture 6: Magnetic Moment Part-2 (Atomic & Molecular Physics)
Day: 4		Lecture 7: Stern-Gerlach Experiment and Electron Spin (Atomic & Molecular Physics)
		Lecture 8: Fine Spectrum Part-1 (Atomic & Molecular Physics)
Day: 5		Lecture 9: Fine Spectrum Part-2 (Atomic & Molecular Physics)
		Lecture 10: Fine Spectrum Part-3 (Atomic & Molecular Physics)
Day: 6		Lecture 11: Fine Spectrum Part-4 (Atomic & Molecular Physics)
		Lecture 12: Problem discussion of Fine Spectrum (Atomic & Molecular Physics)
Day: 7		Lecture 13: LS Coupling Part-1 (Atomic & Molecular Physics)
		Lecture 14: LS Coupling Part-2 (Atomic & Molecular Physics)
Day: 8		Lecture 15: Problems of LS Coupling (Atomic & Molecular Physics)
		Lecture 16: JJ Coupling and Discussion of Assignment No. 3 (Atomic & Molecular Physics)
		Class Test 2: Fine Structure and LS & JJ Coupling (Atomic & Molecular Physics)
Day: 9		Lecture 17: Zeeman Effect (Atomic & Molecular Physics)
		Lecture 18: Normal Zeeman Effect (Atomic & Molecular Physics)
Day: 10		Lecture 19: Anomalous Zeeman Effect Part-1 (Atomic & Molecular Physics)
		Lecture 20: Anomalous Zeeman Effect Part-2 (Atomic & Molecular Physics)
Day: 11		Lecture 21: Paschen Back Effect (Atomic & Molecular Physics)
		Lecture 22: Problem Discussion of Zeeman Effect (Atomic & Molecular Physics)
Day: 12		Lecture 23: Hyperfine Structure (Atomic & Molecular Physics)
		Lecture 24: Hyperfine Structure-Problem Discussion (Atomic & Molecular Physics)
Day: 13		Lecture 25: Assignment Discussion of Atomic Physics (Atomic & Molecular Physics)
		Class Test 3: Zeeman Effect, Paschen Back and Hyperfine RS (Atomic & Molecular Physics)
Day: 14		Lecture 26: Introduction of Molecular Physics (Atomic & Molecular Physics)
		Lecture 27: Rotational Spectroscopy Part-1 (Atomic & Molecular Physics)
Day: 15		Lecture 28: Rotational Spectroscopy Part-2 (Atomic & Molecular Physics)
		Lecture 29: Vibrational Spectroscopy Part-1 (Atomic & Molecular Physics)
Day: 16		Lecture 30: Vibrational Spectroscopy Part-2 (Atomic & Molecular Physics)
		Lecture 31: Vibrational Rotational Spectroscopy Part-1 (Atomic & Molecular Physics)
Day: 17		Lecture 32: Vibrational Rotational Spectroscopy Part-2 (Atomic & Molecular Physics)
		Lecture 33: Franck Condon Principle and Selection Rules (Atomic & Molecular Physics)
Day: 18		Lecture 34: Raman Spectroscopy Part-1 (Atomic & Molecular Physics)
		Lecture 35: Raman Spectroscopy Part-2 (Atomic & Molecular Physics)

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Day: 19		Lecture 36: Raman Spectroscopy Part-3 (Atomic & Molecular Physics)
		Lecture 37: Raman Spectroscopy Part-4 (Atomic & Molecular Physics)
Day: 20		Lecture 38: NMR & ESR Spectroscopy (Atomic & Molecular Physics)
		Class Test 4: Rotational, Vibrational & Raman Spectroscopy RS (Atomic & Molecular Physics)
Day: 21		Lecture 39: Light Matter Interaction (LASER) (Atomic & Molecular Physics)
		Lecture 40: Einstein Coefficients (LASER) (Atomic & Molecular Physics)
Day: 22		Lecture 41: Optical Resonator (LASER) (Atomic & Molecular Physics)
		Lecture 42: Line Broadening (LASER) (Atomic & Molecular Physics)
Day: 23		Lecture 43: Rate Equations (LASER) (END of Atomic & Molecular Physics)
		Class Test 5: LASER (Atomic & Molecular Physics)