

Maharana Pratap Mahavidyalaya, Jungle Dhusan, Gorakhpur

B Sc-IST Semester (PHYSICS BASIC COURSE)

[2022-23]

DATE	LECT NO	TEACHER NAME		UNIT NAME	TOPIC NAME
01/08/2022	1	AV		UNIT I	Physical quantities, important units, dimensional analysis, error analysis.
03/08/2022	1	SKT		UNIT II	Heat: Conservation of Energy,
10/08/2022	2	AV		UNIT II	Temperature, heat capacities,
11/08/2022	2	SKT		UNIT I	thermal expansion and conductivity. Light: Mirrors, prism, lenses,
20/08/2022	3	AV		UNIT II	human eye, microscope and telescope.
22/08/2022	3	SKT		UNIT I	Mechanics: concepts of velocity, acceleration, momentum
27/08/2022	4	AV		UNIT II	Electromagnetic spectrum, Hydrogen spectral lines, Solar Fraunhofer lines
30/08/2022	4	SKT		UNIT I	force and energy. Gravity: Projectiles and satellites, orbits of planets,
06/09/2022	5	AV		UNIT II	Electricity: Current, Potential, Resistance,
07/09/2022	5	SKT		UNIT II	Capacitance and Inductance.
16/09/2022	6	AV		UNIT I	eclipses, solar system, stars and galaxies. Elementary idea of origin of the universe.
19/09/2022	6	SKT		UNIT I	Household appliances.
24/09/2022	7	AV		UNIT I	Sound: oscillations, waves, concept of musical notes
26/09/2022	7	SKT		UNIT I	Conductors, Insulators and Semi-conductors.
01/10/2022	8	AV		INTRODUCTION TO TENSORS	Principle of invariance of physical laws w.r.t. different coordinate systems as the basis for defining tensors.
07/10/2022	8	SKT		WAVE MOTION	reflection of waves and phase change, pressure and energy distribution.
13/10/2022	9	AV		WAVE MOTION	. 4-vectors. Index notation and summation convention. Symmetric and skew-symmetric tensors.

14/10/2022	9	SKT		INTRODUCTION TO TENSORS	Coordinate transformations for general spaces of nD, contravariant, covariant & mixed tensors and their ranks,
20/10/2022	10	AV			REVISION
22/10/2022	10	SKT			REVISION