LESSON PLAN

DISCIPLINE: PHYSICS	SEMESTER: FIRST	NAME OF THE TEACHING FACULTY: MS. ARATI SARANGI SR. LECT. (MATH & SC.)

SUBJECT: ENGG. PHYSICS	NO. OF. CLASSES ALLOTED PER WEEK	SEMESTER FROM 25/10/2022 to 20/2/2023
WEEK	CLASSDAY	THEORY
1ST	1st	Physical quantities, fundamental and derived units, systems of units
	2nd	dimension and Dimensional formulae of physical quantities.
2ND	1st	Principle of homogeneity, Checking the dimensional correctness
	2nd	Scalar and Vector, Vector Representation ,types of vectors. Triangle and Parallelogram law of vector Addition , Numerical.
3RD	1st	Resolution of Vectors –Numericals.
	2nd	Vector multiplication (scalar product and vector product of vectors).
4TH	1st	Concept of Rest and Motion,Displacement, Speed, Velocity, Acceleration & FORCE
	2nd	Equations of Motion under Gravity (upward and downward motion)
5TH	1st	Circular motion: Angular displacement, Angular velocity and Angular acceleration, Relation between –(i) Linear & Angular velocity, (ii) Linear& Angular acceleration).
	2nd	Projectile, Expression for Equation of Trajectory, Time of Flight,
6TH	1st	Maximum Height and Horizontal Range for a projectile fired at an angle, Condition for maximumHorizontal Range.
	2nd	Numericals, Class Note & Assignment Checking
7TH	1st	Electrostatics, Coulombs laws
	2nd	Unit charge,Absolute & Relative Permittivity
8TH	1st	Electric potential and Potential difference Electric field & field intensity
	2nd	Capacitance ,Series and Parallel combination of Capacitors
9TH	1st	Magnet, Properties of a magnet. Coulomb's Laws in Magnetism, Unit Pole
	2nd	Magnetic field & Field intensity , Magnetic lines of force
10TH	1st	Magnetic & Flux Density (B)
	2nd	Electric Current, Ohm's law and its applications.
11TH	1st	Series and Parallel combination of resistors
	2nd	Kirchhoff's laws
12TH	1st	Wheatstone's Bridge
	2nd	Numericals
13TH	1st	Classnote & Assignment Checking
	2nd	Electromagnetism ,Force acting on a current carrying conductor placed ina uniform magnetic field,
14TH	1st	Fleming's Left Hand Rule
	2nd	Faraday's Laws of Electromagnetic Induction, Lenz's Law (Statement) Fleming's Right Hand Rule
15TH	1st	Wireless Transmission – Ground Waves, Sky Waves, Space Waves
	2nd	Numericals & Assignment Checking

25/10/22

Signature of Faculty

25/10/22

Signature of HOD