PHYSICS SCHEME
CLASS: - SS1

SN	TOPICS	CONTENT
1	Fundamental and derived quantities and units	1. Fundamental quantities: mass, length, time and electric charge 2. Fundamental units: kg, m, s, Amp etc 3. Derived quantities: Force, speed, velocity etc 4. Derived units: ms^{-1}, m^3, m^2, $Kgms^{-1}$ etc
2	Position, distance and displacement	1. Measurement of distance 2. Concept of defection 3. Distinction between distance and displacement
3	Time	1. Concept of time 2. Ways of measuring time
4	Motion	1. Types of motion • Random motion • Translational motion • Rotational motion • Oscillatory motion • Relative motion
5	Motion Motion, speed and velocity	1. Causes and effects of motion 2. Types of forces • Contact forces • Force field 3. Reducing friction 4. Simple idea of circular motion 1. Concept of speed 2. Concept of velocity 3. Distance-time graph or displacement time graph
6	Rectilinear acceleration	1. Concept of acceleration 2. Uniform/non-uniform acceleration 3. Velocity-time graph

	Scalars and Vectors	4. Analysis of rectilinear motion 1. Concept of scalars 2. Concept of vectors 3. Distinction between scalar and vectors
7	Work, energy and power	1. Concept of work energy and power 2. Interchangeability of work and energy 3. Determination of work energy and power 4. Work done in force field 5. Types of energy (mechanical) • Potential energy • Kinetic energy 6. Conservation of mechanical energy

8	Heat energy	1. Concept of temperature 2. Effects of heat on change of state, expansion, vaporization 3. Expansirity
9	Heat energy	1. Transferred by conduction convection, radiation
10	Electric charges	1. Production of charges 2. Types of changes 3. Distribution of charges 4. Storage of charges
11	Description and property of fields	1. Concept of fields 2. Types of fields • Gravitational field • Magnetic field
12	Description and property of fields	• Electric field 3. Properties of a force field
13	Gravitational field	1. Acceleration duel to gravity 2. Shape and dimension

		of the earth.
14	Electric field	1. Electric lines of force 2. Potential difference and electric current 3. Production of electric current 4. Electric circuit 5. Electric conduction through materials 6. Ohm's law.

15	Particulate water of matter.	1. Structure of matter: • Evidence of particle nature of matter • Simple atomic structure 2. Molecules • Their nature • Size 3. Crystal structure of matter
16	Particulate nature of matter	1. States of matter • Solid • Liquid and • Gas 2. Photons: Particle nature of photons
17	Fluid at rest and motion	1. Surface tension definition and effects 2. Viscosity 3. Applications
18	Units of measurement	Units in industry
19	Electrical continuity testing	Continuity faults in electric circuits
20	Solar collector	1. Solar energy 2. Solar panel for energy supply