

ST THOMAS SCHOOL, DHURWA,
RANCHI – 4

SYLLABUS IN DETAIL

(Syllabus divided for Terms and
Months)

CLASS – 7

SUBJECT – PHYSICS

NAME OF BOOK : LEARNING ELEMENTARY PHYSICS (GOYAL PUBLICATION
PRAKASHAN)

TOTAL NUMBER OF PERIOD IN EACH TERM : 1ST TERM (17) 2ND TERM (22) 3RD TERM (24)

TERM/MONTH/WEEK	NO. OF PERIODS IN WEEK	NAME OF THE CHAPTER	TOPIC
I TERM			
8 APRIL to 2 JULY			
WEEK 1	1	PHYSICAL QUANTITIES AND MEASUREMENT	UNIT-1 AREA AND ITS MEASUREMENT
8 APRIL to 9 APRIL			AREA,UNIT OF AREA
			SUB MULTIPLES OF STANDARD UNIT OF AREA,MULTIPLES OF STANDARD OF AREA
WEEK 2	2		FORMULA FOR CALCULATING AREAS OF SOME REGULAR SURFACES
12 APRIL TO 16 APRIL			MEASUREMENT OF AREA OF AN IRREGULAR FLAT SURFACE
WEEK 3	2	PHYSICAL	UNIT-2 VOLUME AND ITS MEASUREMENT
19 APRIL TO 23 APRIL		QUANTITIES	MEASUREMENT OF VOLUME,UNIT OF VOLUME,SUB MULTIPLES OF UNIT OF VOLUME,MEASUREMENT OF VOLUME OF A RECTANGULAR GLASS SLAB,FORMULA FOR CALCULATING THE VOLUME OF REGULAR BODIES,MEASUREMENT OF VOLUME OF LIQUIDS,MEASUREMENT OF VOLUME OF IRREGULAR SOLIDS BY MEASURING CYLINDER
		AND	
WEEK 4	2	MEASUREMENT	UNIT-3 MEASUREMENT OF DENSITY AND SPEED DENSITY, UNITS OF DENSITY,

26 APRIL TO 30 APRIL			DETERMINATION OF DENSITY OF A SOLID BY USING A MEASURING CYLINDER, VARIATION OF DENSITY OF LIQUIDS AND GASES WITH TEMPERATURE, SPEED , UNITS OF SPEED , KIND OF SPEED
WEEK 5	2	FORCE AND PRESSUR: MOTION	UNIT-1 REST AND MOTION –KIND OF MOTION
3 MAY TO 7 MAY			REST AND MOTION
			TYPES OF MOTION
WEEK 6	2		UNIT-2 SPEED AND VELOCITY
10 MAY TO 14 MAY			SPEED ,UNITS OF SPEED
			AVEREGE SPEED
			VELOCITY , KINDS OF VELOCITY
			MASS AND WEIGHT

WEEK 7	2	ENERGY	UNIT-1 ENERGY AND WORK AND THEIR UNITS
14 JUNE TO 19 JUNE			ENERGY AND WORK AND THEIR RELATION
			FACTOR DETERMINING WORK
WEEK 8	2		UNIT-2 VARIOUS FORMS OF ENERGY AND THEIR INTERCONVERSION
21 JUNE TO 25 JUNE			FORMS OF ENERGY, INTERCONVERSION OF ENERGY, LAW OF CONSERVATION OF ENERGY
WEEK 9			REVISION
28 JUNE TO 2 JULY			

TERM/MONTH/WEEK	NO. OF PERIODS IN WEEK	NAME OF THE CHAPTER	TOPIC
II TERM			
22 JULY to 9 OCT			
WEEK1	2	LIGHT ENERGY	UNIT-1 LIGHT AND GENERAL TERMS IN UNDERSTANDING LIGHT
22 JULY TO 23 JULY			LIGHT , SPEED OF LIGHT , SOURCES OF LIGHT
WEEK2	2		
26 JULY TO 30 JULY			RAY AND BEAM , PROPAGATION OF LIGHT
WEEK3	2		
2 AUG TO 6 AUG			UNIT-2 REFLECTION OF LIGHT ON PLANE SURFACES REFLECTION OF LIGHT , GENERAL TERMS
WEEK4	2		QUESTION ANSWER DISCUSSION
9 AUG TO 13 AUG			LAW OF REFLECTION , LATERAL INVERSION
WEEK5	2		
16 AUG TO 20 AUG			FORMATION OF IMAGES IN PLANE MIRROR , REGULAR AND IRREGULAR REFLECTION
WEEK6	2		
23 AUG TO 27 AUG			REFLECTING PERISCOPE , USES OF PLANE MIRROR, PRIMARY COLORS ,
WEEK7	2		
30 AUG TO 3 SEP			FORMATION OF SECONDARY COLORS BY COLOR ADDITION COLOR SUBTRACTION
		HEAT	UNIT-1 HEAT ENERGY AND ITS GENERAL EFFECTS
			HEAT ENERGY , GENERAL EFFECTS OF

			HEAT ENERGY
WEEK8	2	HEAT	SOURCES OF HEAT ENERGY ,UNITS OF HEAT
6 SEP TO 10 SEP			UNIT-2 TEMPERATURE AND ITS MEASUREMENT
			TEMPERATURE AND ITS MEASUREMENT, THERMOMETER ,TEMPERATURE SCALES AND THEIR INTER-CONVERSION
WEEK9	2		UNIT-3 THERMAL EXPANSION AND ITS APPLICATIONS
13 SEP TO 17 SEP			THERMAL EXPANSION ,GRAVESANDES RING AND BALL EXPERIMENT ,PRACTICAL APPLICATIONS OF THERMAL EXPANSION
WEEK10	2		UNIT-4 TRANSMISSION OF HEAT
20 SEP TO 24 SEP			CONDUCTION , CONVECTION , RADIATION ,THERMOSFLASK

WEEK11	2		REVISION
27 TO 1 OCT			
TERM/MONTH/WE K	NO. OF PERIO DS IN WEEK	NAME OF THE CHAPTER	TOPIC
III TERM			
8 NOV TO 8 FEB			
WEEK 1	2	SOUND	UNIT-1 SOUND ,ITS PRODUCTION AND PROPAGATION
8 NOV TO 12 NOV			SOUND AS LONGITUDINAL WAVE ,SOURCES OF SOUND, MUSICAL INSTRUMENTS
WEEK 2	2		
15 NOV TO 19 NOV			SOUND NEEDS A MEDIUM TO TRANSMIT HOW TO FIND THE SPEED OF SOUND IN AIR ,
WEEK3	2		UNIT-2 REFLECTION AND CHARACTERISTICS OF SOUND
22 NOV TO 26 NOV			SOME COMMON TERMS USED IN SOUND TECHNICAL APPLICATIONS OF ULTRASONIC SOUND
WEEK4	2		
29 NOV TO 3 DEC			ABSORPTION OF SOUND (SOUND INSULATION)
WEEK5	2		
6 DEC TO 10 DEC			ECHOES , SONAR
WEEK 6	2		
13 DEC TO 17 DEC			CHARACTERISTICS OF A SOUND WAVE
WEEK 7	2		
20 DEC TO 23 DEC			QUESTION ANSWER DISCUSSION WITH NUMERICALS
WEEK 8	2	ELETRICITY AND MAGNETISM	UNIT-1 LAWS OF MAGNETISM AND TEST FOR A MAGNET
3 JAN TO 7 JAN			ATTRACTION AND REPULSION BETWEEN MAGNETS , MAKE YOUR OWN MAGNET ,ELECTROMAGNET ,ELECTRIC BELL
WEEK 9	2		UNIT-2 ELECTRIC CIRCUIT AND ITS COMPONENT
10 JAN TO 14 JAN			QUANTITY OF ELECTRIC CHARGE

			,ELECTRIC CURRENT ,ELECTRIC CELL ,ELECTRICAL RESISTOR
WEEK 10	2		
17 JAN TO 21 JAN			SIMPLE ELECTRIC CIRCUIT SERIES AND PARALLEL , SYMBOLIC REPRESENTATION OF ELECTRICAL COMPONENTS
WEEK 11	2		QUESTION ANSWER DISCUSSION
24 JAN to 28 JAN			
WEEK 12	2		REVISION
31 JAN TO 4 FEB			

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