

SYLLABUS PLAN FOR THE YEAR 2017-2018

PHYSICS- STD. XII

5 PERIODS / WEEK.

MONTH	UNIT	CHAPTER	TOPIC	PORTIONS FOR TEST
APRIL	1.	ELECTROSTATICS	FRICTIONAL ELECTRICITY ELECTRIC FIELD, ELECTRIC POTENTIAL, ELECTRIC FLUX, ELECTROSTATIC INDUCTION	
	2.	CURRENT ELECTRICITY	ELECTRIC CURRENT, OHM'S LAW, KIRCHOFF'S LAW, ELECTRIC POWER	
JUNE	3.	EFFECTS OF ELECTRIC CURRENT	HEATING EFFECT, MAGNETIC EFFECT OF CURRENT, BIOT- SAVART LAW.	
	3.	EFFECTS OF ELECTRIC CURRENT	AMPERE'S CIRCUITAL LAW, MAGNETIC LORENTZ FORCE, FORCE ON A CURRENT CARRYING CONDUCTOR PLACED IN A MAGNETIC FIELD, TORQUE EXPERIENCED BY A CURRENT LOOP	
	4.	ELECTROMAGNETIC INDUCTION AND ALTERNATING CURRENT	ELECTROMAGNETIC INDUCTION, SELF INDUCTION, MUTUAL INDUCTION, METHODS OF INDUCING EMF.	
	4.	ELECTROMAGNETIC INDUCTION AND ALTERNATING CURRENT	AC GENERATOR, EDDY CURRENT, ALTERNATING CURRENT.	
				MONTHLY (UNITS – 1 & 2)

JULY	5.	ELECTROMAGNETIC WAVES AND WAVE OPTICS	ELECTROMAGNETIC WAVES AND THEIR CHARACTERISTICS,EMISSION AND ABSORPTION SPECTRUM,THEORIES OF LIGHT.	MONTHLY (UNITS – 3 &4)
	5.	ELECTROMAGNETIC WAVES AND WAVE OPTICS	SCATTERING OF LIGHT,WAVE FRONT AND HUYGEN'S PRINCIPLE	
	5.	ELECTROMAGNETIC WAVES AND WAVE OPTICS.	INTERFERENCE, DIFFRACTION& POLARISATION OF LIGHT	
	6.	ATOMIC PHYSICS	ATOMIC STRUCTURE, ATOM MODELS (RUTHERFORD'S,BOHR'S AND SOMMERFELD'S )	
AUGUST	6.	ATOMIC PHYSICS	X-RAYS	PRE-QUARTERLY (UNITS -1-5)
	6.	ATOMIC PHYSICS	LASERS & MASERS	
	7.	DUAL NATURE OF RADIATION AND MATTER-RELATIVITY	PHOTOELECTRIC EFFECT,MATTER WAVES, RELATIVITY	
		PRE-QUARTERLY EXAMINATION		
SEPTEMBER		REVISION QUARTERLY EXAMINATION (PRACTICAL & THEORY)	-	QUARTERLY UNITS (1-6) AS PER GOVT.SYLLABUS

SEPTEMBER QUARTERLY HOLIDAYS	8.	NUCLEAR PHYSICS	NUCLEAR PROPERTIES,NUCLEAR FORCES,RADIOACTIVITY	
OCTOBER	8.	NUCLEAR PHYSICS.	RADIO CARBON DATING, NUCLEAR FISSION & FUSION,COSMIC RAYS.	MONTHLY (UNITS-7 & 8)
	9.	SEMICONDUCTOR DEVICES AND THEIR APPLICATIONS	SEMICONDUCTOR THEORY,PN JUNCTION DIODE AND ZENER DIODE, JUNCTION TRANSISTORS.	
	9.	SEMICONDUCTOR DEVICES AND THEIR APPLICATIONS	LOGIC GATES, LAWS AND THEOREMS OF BOOLEAN'S ALGEBRA.	
	9.	SEMICONDUCTOR DEVICES AND THEIR APPLICATIONS	OP-AMP AND MEASURING INSTRUMENTS	
NOVEMBER	10.	COMMUNICATION SYSTEMS	MODES OF PROPAGATION OF WAVES, RADIO-TRANSMISSION AND RECEPTION TELEVISION-TRANSMISSION AND RECEPTION RADAR –PRINCIPLE AND APPLICATIONS DIGITAL COMMUNICATION	PRE-HALFYEARLY (FULL PORTION)
		PRE-HALF-YEARLY EXAMINATION	-	
DECEMBER	-	-	-	HAL-YEARLY (FULL PORTION)
JANUARY	-	-	-	FIRST MODEL (FULL PORTION)
FEBRUARY	-	-	-	SECOND MODEL (FULL PORTION) STUDY HOLIDAYS

