

PHYSICS Syllabus XI Class

- Unit : 01 PHYSICS AND MEASUREMENT
- Unit : 02 KINEMATICS
- Unit : 03 LAWS OF MOTION
- Unit : 04 WORK, ENERGY, AND POWER
- Unit: 05 ROTATIONAL MOTION
- Unit: 06 GRAVITATION
- Unit : **07** PROPERTIES OF SOLIDS AND LIQUIDS
- Unit : 08 THERMODYNAMICS
- Unit : 09 KINETIC THEORY OF GASES
- Unit : 10 OSCILLATIONS AND WAVES



PHYSICS Syllabus XII Class

Unit : 11 – ELECTROSTATICS

Unit : 12 – CURRENT ELECTRICITY

Unit : 13 - MAGNETIC ETFECTS OF CURRENT AND MAGNETISM

Unit : 14 - ELECTROMAGNETIC INDUCTION AND ALTERNATING CURRENTS

Unit : 15 - ELECTROMAGNETIC WAVES

Unit : 16 - OPTICS

Unit : 17 - DUAL NATURE OF MATTER AND RADIATION

Unit : 18 - ATOMS AND NUCLEI

Unit : 19 - ELECTRONIC DEVICES

EXPERIMENTAL SKILLS FOR XI AND XII CLASS

Unit: **20** - EXPERIMENTAL SKILLS



Unit	DELETED PORTION	NEWLY ADDED PORTION
<mark>01</mark> PHYSICS AND MEASUREMENT	 Scope and excitement; nature of physical laws. Physics, technology and society. Accuracy and precision of measuring instruments. 	
<mark>02</mark> KINEMATICS	 Elementary concepts of differentiation and integration for describing motion. 	



Unit	DELETED PORTION	NEWLY ADDED PORTION
<mark>03</mark> LAWS OF MOTION		
<mark>04</mark> WORK, ENERGY, AND POWER		
05 ROTATIONAL MOTION	 Momentum conservation and centre of mass motion 	



Unit	DELETED PORTION	NEWLY ADDED PORTION
06 GRAVITATION	• Geostationary satellites.	
07 PROPERTIES OF SOLIDS AND LIQUIDS	 Poisson's ratio; elastic energy. Reynold's number Anomalous expansion Qualitative ideas of Black body Radiation. Wein's displacement law and green house effect. Newton's law of cooling and 	



Unit	DELETED PORTION	NEWLY ADDED PORTION
08 THERMODYNAMICS	 Heat engines and refrigerators. 	
<mark>09</mark> KINETIC THEORY OF GASES		
10 OSCILLATIONS AND WAVES	 Free, forced and damped oscillations (qualitative ideas only), Resonance Doppler effect. 	



Unit	DELETED PORTION	NEWLY ADDED PORTION
11 ELECTROSTATICS	• Van de Graaff generator.	
12 CURRENT ELECTRICITY	 Carbon resistors, colour code for carbon resistors Potentiometer-principle and applications to measure potential difference and for comparing emf of two cells; measurement of internal resistance of a cell. 	



Unit	DELETED PORTION	NEWLY ADDED PORTION
13 MAGNETIC ETFECTS OF CURRENT AND MAGNETISM	 Oersted's experiment Cyclotron Magnetic dipole moment of a revolving electron Earth's magnetic field and its elements. Electromagnetic and factors affecting their strengths. Permanent magnets. 	
14 ELECTROMAGNETIC INDUCTION AND ALTERNATING CURRENTS	• LC oscillations	



Unit	DELETED PORTION	NEWLY ADDED PORTION
15 ELECTROMAGNETIC WAVES		
16 OPTICS	 Combination of lens and mirror Dispersion of light though a prism. Scattering of light-blue colour of the sky and reddish appearance of the sun at sunrise and sunset. Human eye, image formation and accommodation, correction of eye defects (myopia and hypermetropia) using lenses. Resolving power of microscopes and astronomical telescopes. 	



Unit	DELETED PORTION	NEWLY ADDED PORTION
17 DUAL NATURE OF MATTER AND RADIATION	• Davisson-Germer experiment	
18 ATOMS AND NUCLEI	 Radioactivity-alpha, beta and gamma particles/ rays and their properties decay law. 	



Unit	DELETED PORTION	NEWLY ADDED PORTION
	• Energy bands	
	• Junction transistor, transistor	
19	action, characteristics of a	
ELECTRONIC DEVICES	transistor; transistor as an	
	amplifier (common emitter	1111111
	configuration) and oscillator.	
	transistor as a switch	



Unit	NEWLY ADDED PORTION	
	 Familiarity with the basic approach and observations of the experiments and activities: 	
	 Vernier callipers - its use to measure the internal and external diameter and depth of a vessel 	
20	2. Screw gauge - its use to determine	
EXPERIMENTAL	thickness/diameter of thin sheet/wire	
SKILLS	3. Simple pendulum-dissipation of energy by plotting a graph between the square of amplitude and time.	
	 Metre Scale - the mass of a given object by the principle of moments 	
	5. Young's modulus of elasticity of the material of a metallic wire.	



	6.	Surface tension of water by capillary rise
		and effect of detergents,
	7.	Co-efficient of Viscosity of a given viscous
20		liquid by measuring terminal velocity of a
EXPERIMENTAL		given spherical body,
SKILLS	8.	Speed of sound in air at room temperature
		using a resonance tube,
	9.	Specific heat capacity of a given (i) solid
		and (ii) liquid by method of mixtures.



	10. The resistivity of the material of a given
	wire using a metre bridge
	11. The resistance of a given wire using Ohm's
	law.
	12. Resistance and figure of merit of a
20	galvanometer by half deflection method.
EXPERIMENTAL	13. The focal length of;
SKILLS	(i) Convex mirror
	(ii) Concave mirror, and
	(iii)Convex lens, using the parallax
	method.
	14. The plot of the angle of deviation vs angle
	of incidence for a triangular prism.



	15. Refractive index of a glass slab using a
	travelling microscope.
	16. Characteristic curves of a p-n junction
20	diode in forward and reverse bias.
EXPERIMENTAL	17. Characteristic curves of a Zener diode and
SKILLS	finding reverse break down voltage.
	18. Identification of Diode. LED,. Resistor. A
	capacitor from a mixed collection of such
	items



CHAPTER	DELETED PORTION	NEWLY ADDED PORTION
Some basic concepts of chemistry	-	
Atomic Structure	-	 Elementary ideas of quantum mechanics, Concept of atomic orbitals as one electron Variation of ψ and ψ² with r for 1s and 2s orbitals



CHAPTER	DELETED PORTION	NEWLY ADDED PORTION
Equilibrium	— —	-
Chemical Thermodynamics	 Enthalpy of dilution Third law of thermodynamics 	
States of matter	 Complete chapter is deleted 	



CHAPTER	DELETED PORTION	NEWLY ADDED PORTION
Solid state	 Complete chapter is deleted 	
Chemical Kinetics		-
Solutions		 Significance of Van't Hoff factor
Redox reactions and Electrochemistry	Corrosion	_
Surface Chemistry	 Complete chapter is deleted 	



CHAPTER	NEWLY ADDED PORTION
	 The chemistry involved in the titrimetric exercises-Acids, bases and the use of indicators, oxalic acid vs KMnO₄, Mohr's salt vs KMnO₄ Chemical principles involved in the following
Practical	experiments:
chemistry	 Enthalpy of solution of CuSO₄
	 Enthalpy of neutralization of strong acid and strong base.
	• Preparation of lyophilic and lyophobic sols.
	 Kinetic study of the reaction of iodide ions with hydrogen peroxide at room temperature.



CHAPTER	DELETED PORTION	NEWLY ADDED PORTION
Classification of elements and periodicity in properties	-	-
Chemical bonding and molecular structure		-



CHAPTER	DELETED PORTION	NEWLY ADDED PORTION
s-block elements	 Completed chapter is deleted 	
p-block elements	 Compounds of p-block Method of preparation Properties and their uses 	
d and f block elements	-	-



CHAPTER	DELETED PORTION	NEWLY ADDED PORTION
Co-ordination compounds	-	-
Metallurgy	 Complete chapter is deleted 	
Hydrogen	 Complete chapter is deleted 	



CHAPTER	NEWLY ADDED PORTION
	 The chemistry involved in the preparation of the following.
	• Inorganic compound; Mohr's salt, potash alum.
Practical	 Chemical properties involved in the qualitative salt analysis;
chemistry	 Cation - Pb²⁺ Cu⁺² Al⁺³ Fe⁺³, Zn⁺², Ni⁺² Ca⁺², Ba⁺², Mg⁺², NH₄⁺
	 Anions - CO₃²⁻, S²⁻, SO₄²⁻, NO₃⁻, Cl⁻, Br⁻, I⁻(Insoluble salt excluded)



CHAPTER	DELETED PORTION	NEWLY ADDED PORTION
Some Basic principles of organic chemistry	_	-
Hydrocarbon	-	-
Organic compounds containing halogens		-
Organic compounds containing Oxygen		



CHAPTER	DELETED PORTION	NEWLY ADDED PORTION
Organic compounds containing Nitrogen	-	-
Biomolecules	-	_
Purification and characterisation of organic compounds		-



CHAPTER	DELETED PORTION	NEWLY ADDED PORTION
Environmental Chemistry	Complete chapter is deleted	
Polymers	Complete chapter is deleted	
Chemistry in everyday life	Complete chapter is deleted	



CHAPTER	NEWLY ADDED PORTION
Practical chemistry	• Detection of extra elements (Nitrogen, Sulphur, halogens) in organic compounds; Detection of the following functional groups; hydroxyl (alcoholic and phenolic), carbonyl (aldehyde and ketones) carboxyl, and amino groups in organic compounds.



SYLLABUS FOR NEET(UG) 2024 BIOLOGY

XI CLASS - SYLLABUS

Unit :-	01 –	Diversity in Living World
		Structural Organisation in animals : 03 - Cell Structure and Function
Unit :-	04 -	Plant Physiology
Unit :-	05 -	Human Physiology

XII CLASS - SYLLABUS

Unit :-	06 –	Reproduction
Unit :-	07 –	Genetics and Evolution
Unit :-	08 -	Biology and Human welfare
Unit :-	09 -	Biotechnology and Its Application
Unit :-	10 -	Ecology and Environment

CHAPTER	DELETED PORTION	NEWLY ADDED PORTION
Diversity in Living World	Three domains of life; Tools for study of Taxonomy-Museum, Zoos, Herbaria, Botanical gardens. Angiosperms classification up to class, characteristic features	No Change
Structural Organisation in animals and plants	and examples. Cockroach	Family (malvaceae, cruciferae, leguminoceae, compositae, graminae) Insect (Frog)
Cell Structure and Function	No Change	No Change
Plant Physiology	Transport in Plants. Mineral nutrition. Plant Growth and Development : Vernalisation; Photoperiodism	No Change
Human	Digestion and	No Change
Physiology Reproduction	Absorption Reproduction in Organisms	No Change
Genetics and Evolution	No Change	No Change
Biology and Human welfare	Improvement in food production	Health and Diseases : (dengue, chikungunya), Tobacco abuse
Biotechnology and Its Applications	No Change	No Change

Organisms and environment: Habitat and niche; Population and ecological adaptations. Ecosystem : Nutrient cycling (Carbon and phosphorous); Ecological succession; Ecological services- Carbon fixation, Pollination, Oxygen release	Ecology and Environment
	environment: Habitat and niche; Population and ecological adaptations. Ecosystem : Nutrient cycling (Carbon and phosphorous); Ecological succession; Ecological services- Carbon fixation, Pollination, Oxygen