VAILANKANNI VOICE - JUNE & JULY 2023

Grade: XII

MONTH	WEEK	TOPIC	INTEGRATED PORTION	ACTIVITY	WORKSHEET
English (June)	I	Third Level		Letter to the Editor	Third Level
	II	A Thing of Beauty		Listening skill (Aesthetics)	A Thing of Beauty
	III	Journey to the End of the Earth		Report Writing	Journey to the End of the Earth
	IV	Deep Water		Speaking Assessment	(I developed a phobia…)
English (July)	I	The Rattrap		Article Writing	Worksheet on Rattrap
	II	The Rattrap & Roadside Stand		Project Work	Worksheet on Roadside stand
	III	Roadside Stand, Indigo		Project Work	Worksheet on Article Writing
	IV	Indigo, The Enemy		Project Work	Worksheet on Indigo
Maths (June)	I	Concept, Notations, order, Equality,Type of matrices. Transpose, Sysm metric	Previously asked JEE question models Problems from JEE book	Visualising matrices using graphing software	mcq on matrices previosly asked board questions.
	II	Operations on Matrices, Invertible Matrices, Skew Symmetric matrices.			
Maths (July)	I	Determinant of a square matrix (3x3), Determinants in finding the area of triangle adjoint and inverse of a square matrix		solve previous year CBSE questions	Determminants / matrices of mod & GEFs
	II	Consistency, inconsistency of system of linear equations.	Hot questions and GEFs	Visualising matrices using graphing software	MCQs on determinants previously asked Board Questions
		Solving system of linear equations in two or three variables using inverse of a matrix			
	III	Solving system of linear equations in two or three variables using inverse of a matrix			Determinants of mod and GEFs.
	IV	Maxima and Minima Simple Problems	Hot questions and GEFs	Year questions from app of derivatives	MCQs on application on derivatives.
	I	Chapter 2B : Electrical potential energy of a system of two-point charges and of electric dipole in an electrostatic field.	NCERT : T JEE : P NEET : P		Excercise problems

Physics (June)	**II**	Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarization, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor (no derivation, formulae only).	NCERT : T JEE : P NEET : P	Knowledge about different materials	PYQ's
	III	Chapter 3 : Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity, temperature dependence of resistance, Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel	NCERT : T 3.1 - 3.11 JEE : P 19.1 - 19.14 NEET : P 17.1 - 17.10		Excercise problems
	IV	Kirchhoff's rules, Wheatstone bridge.	NCERT : T 3.12 - 3.13 JEE : P 19.15 - 19.81 NEET : P 17.11 - 17.36	Simple Wire connections and Knowledge about Circuit Daigrams	PYQ's

Physics (July)	**I**	Chapter 4 : Concept of magnetic field, Oersted's experiment. Biot - Savart law and its application to current carrying circular loop. Ampere's law and its applications to infinitely long straight wire. Straight solenoid (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields. Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors-	NCERT : T 4.1 - 4.8 JEE : P 21.1 - 21.30 NEET : P 18.1 - 18.10		Excercise problems
	II	Definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer- its current sensitivity and conversion to ammeter and voltmeter Chapter 5 : Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines.	NCERT : T 4.9 - 4.10 JEE : P 21.31 - 21.39 NEET : P 18.11 - 18.40 NCERT : T 5.1 - 5.3 JEE : P 21.31 - 21.39 NEET : P 19.1 - 19.7	Bar Magnet Experiments	PYQ's

	III	Magnetic properties of materials- Para-, dia- and ferro - magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties.	NCERT : T 5.4 - 5.5 JEE : P 21.40 - 21.98 NEET : P 19.8 - 19.26		Excercise problems
	IV	Chapter–6 : Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction.	NCERT : T 6.1 - 6.8 JEE : P 22.1 - 22.81 NEET : P 20.1 - 20.41		PYQ's
Chemistry (June)	June 12-17 June19-24	Solutions : 1. Types of solutions, expressing concentration of solutions solubility, ideal & Non Ideal	Level - I , MCQs , Level -II MCQs	Qustions from NCERT examplers Exercises	Numericals
	June 26 - July 1	Holo Alkane and Haloarenes , Classification, Nature of C - X Bond, Method of preparation	Level - I , MCQs	Questions from NCERT examplers	Numericals
Chemistry (July)	JULY 3 - 8	Physical properties , Chemical Reactions, Polyhologne Componds	Level II MCQs	Questions From NCERT	Numericals
	July17-22	Electro chemistry : Electro Chemical cells, Galvanic cells, Nernst Equations, Conductance of Electrolytic solutions, Batteries, Fule cells, Corrosion, Kohlraush law and its applications	level I MCQs	Questions from NCERT examplers , Do working the galvaniv cell and its working in lab	E cell- calculation
	July 24-29	Alcohols, phenols, ethers classification, nomenclature group, properties, chemical reaction uses	level I MCQs, level II MCQs	Questions from NCERT examples	Numericals
Biology (June)	I	The principles of inheritance , human reproduction, Monohybrid Cross, Fertilization & Implantation	Other Experiments,	video Presentation	Numericals Questions
	II	Monohybrid Cross, Fertilization & Implantation	Extra Exercises	Chart Preparation	MCQ
	III	Dihybrid cross, Reproductive Health	Calculation	Calculations Picture based presentation	MCQ
	IV	Chromosomal Theory, Microbes in HumanWelfare	Extra Information	PPT on Linkage	MCQ

Biology (July)	I	Molecular basis of inheritance the DNA, Evolution of life Form's theory	other examples in detailed structure of DNA	other examples	Diagram based questions MCQ
	II	Replication Transcription, Mechanism of evolution of orgin & evolution of man	Explanation of total enzymes	Video Presentation	sample questionsMCQ
	III	Genetic code translation, Organisms & population	Information from other materials	Extra information, video presentation	Diagram based questions MCQ
	IV	Lac operon Human Genome Project, Population Interactions	Other examples of operon	Video presentation	MCQ

Computer Science (June)	I	Computational thinking and programming-2	Data structure-1 -Introduction – Different Data structure- Operation on Data structure-Linear list Data structure	Lab Activity to code Linear list Data structure & Diagrammatic Algorithm	MCQ Type
	II	Computational thinking and programming-2	Data structure-1 – Traversing Linear list – Nested / 2D List in Python	Lab Activity to code Linear list Data structure by using Searching ,Traversing,Sorting Algorithm	Case Based Question
	III	Computational thinking and programming-2	Data structure- II – Queue- Implementation Queues in Python- variation in Queues – Queue Application	Lab Activity to code Queue Algorithm in Data structure & Diagrammatic Algorithm	Programming Based Questions
	IV	Computational thinking and programming-2	Data Structure-II- Stacks- Implementation Stacks in Python- Stack Application -Variation	Lab Activity to code Stacks Algorithm in Data structure & Diagrammatic Algorithm	Programming Based Questions
Computer Science (July)	I	Computational thinking and programming-2	File Handling - 1	Text file	MCQ Type
	II	Computational thinking and programming-2	Binary , Text, CSV	Binary & CSV file	Case Based Question
	III	Computational thinking and programming-2	Python 1 & 2	Python Exercise	Programming Based Questions
	IV	Computational thinking and programming-2	Date structure II - Stacks - Implementation	Lab Activity to code Stacks Algorithm in Data structure & Diagrammatic Algorithm	Programming Based Questions