## SRI GURU NANAK PUBLIC SCHOOL, ADARSH NAGAR, DELHI-110033 CLASS – XI : SCIENCE SYLLABUS BREAKUP 2024-25

### **SUBJECT : ENGLISH CORE(301)**

Dates/ Week	Worki ng ng days	SYLLABUS REFERENCE TOPIC	LEARNING OBJECTIVES STUDENTS SHOULD BE ABLE TO	TEACHING ACTIVITIES	LEARNING RESOURCES
1 <sup>st</sup> April – 12 <sup>th</sup> April	10	Tenses, Clauses, Comprehension, Ch. 1 - Portrait of a lady	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	ASSIGNMENTS	NCERT Text books, BBC, Rachna Sagar
15 <sup>th</sup> April – 30 <sup>th</sup> April	14	Ch 2 - We are not afraid to die Ch 3- Discovering Tut Poem : A Photograph	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skill	ASSIGNMENTS	NCERT Text books, BBC, Rachna Sagar
1 <sup>st</sup> May – 13 <sup>th</sup> May	10	Poster, Advertisement, Ch 1-Summer of Beautiful White Horse	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	Assessment of Listening Skills	NCERT Text books, BBC, Rachna Sagar

1 <sup>st</sup> July – 12 <sup>th</sup> July	11	Ch 4 -The Address	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	ASSIGNMENTS	NCERT Text books, BBC, Rachna Sagar
15 <sup>th</sup> July – 31 <sup>st</sup> July	14	Ch 5 -Mother's day, Speech , Sentence Reordering	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	ASSIGNMENTS	NCERT Text books, BBC, Rachna Sagar
1 <sup>st</sup> Aug – 14 <sup>th</sup> Aug	11	Ch 7 -Adventure Poem-Voice of Rain	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	PROJECT	NCERT Text books, BBC, Rachna Sagar
16 <sup>th</sup> Aug – 31 <sup>st</sup> Aug	11	Ch 7 -Birth, Poem : The Laburnum Top	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	Assessment of Listening Skills	NCERT Text books, BBC, Rachna Sagar

02 <sup>nd</sup> Sept – 07 <sup>th</sup> Sept	05	Ch 8 -Silk Road	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	ASSIGNMENTS	NCERT Text books, BBC, Rachna Sagar
09 <sup>th</sup> Sept – 20 <sup>th</sup> Sept	10		REVISION FOR MID TERM	M EXAM	
23 <sup>rd</sup> SEPT - 7 <sup>th</sup> Oct			MID TERM EXAM		
08 <sup>th</sup> Oct – 19 <sup>th</sup> Oct	06	Debate Writing, Poem-Childhood	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	ASSIGNMENTS	NCERT Text books, BBC, Rachna Sagar
21st Oct – 08th Nov	11	Poem -Father to Son, Note Making	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	ASSIGNMENTS	NCERT Text books, BBC, Rachna Sagar
11 <sup>th</sup> Nov – 30 <sup>th</sup> Nov	16	Poem-Tale of Melon City	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and	ASSIGNMENTS	NCERT Text books, BBC, Rachna Sagar

			prose, enhance English communication skills		
02 <sup>nd</sup> Dec - 21 <sup>st</sup> Dec	16	Comprehension, Note Making	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	ASSIGNMENTS	NCERT Text books, BBC, Rachna Sagar
23 <sup>rd</sup> Dec - 06 <sup>th</sup> Jan '25	10		MOCK YEARLY EXA	AM	
7 <sup>th</sup> Jan'25 – 18 <sup>th</sup> Jan'25	09	Poster, Advertisement	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	ASSIGNMENTS	NCERT Text books, BBC, Rachna Sagar
20 <sup>th</sup> Jan'25 - 07 <sup>th</sup> Feb'25	16	Speech, Debate, Grammar Writing Skill Topics	Comprehend textual content, enhance vocabulary, write with proper expression and in coherence, write answers to questions based on texts, develop finer tastes for poetry and prose, enhance English communication skills	ASSESSMENT OF SPEAKING SKILLS	NCERT Text books, BBC, Rachna Sagar
10 <sup>th</sup> Feb'25 -20 <sup>th</sup> Feb'25	10		REVISION FOR ANNUAL	L EXAM	
LAST WEEK OF FEB' 25  ANNUAL EXAM					

## **SUBJECT: PHYSICS(042)**

Dates/ Week	Worki ng days	SYLLABUS REFERENCE TOPIC	LEARNING OBJECTIVES STUDENTS SHOULD BE ABLE TO	TEACHING ACTIVITIES	LEARNING RESOURCES
15 <sup>th</sup> April -30 <sup>th</sup> April	14	Ch-1:Physical World	Learners will be able to Understand Scope and application of Physics for the betterment of society.	Smart Board Teaching	N.C.E.RT AND NCERT EXEMPLAR
1 <sup>st</sup> May – 13 <sup>th</sup> May	10	Ch-2:Units And Dimensions  Ch-3:Motion In A Straight Line	<ol> <li>Learners will be able to understand significance and importance of dimensional analysis.</li> <li>Learners will be able to understand the term motion as a relative term and classification of motion.</li> <li>Learners will be able to understand the significance of three equations of Motion in our daily life along with it mathematical calculus analysis.</li> </ol>	Smart Board Teaching	N.C.E.RT AND NCERT EXEMPLAR
1st July – 12th July	11	Ch-4:Motion In A Plane	<ol> <li>Learners will be able to understand basics of Scalar and Vector quantities along with its Mathematical analysis (Addition, subtraction, Product, Resolution, Projection).</li> <li>Learners will be able to understand the concept to Projectile and it mathematical analysis (Parabolic path, Maximum height attained, Range, Time off light, Resultant velocity)</li> </ol>	Smart Board Teaching Lab Activity	N.C.E.RT AND NCERT EXEMPLAR

15th July – 31st July	14	Ch-5:Laws Of Motion	Learners will be able to understand the Concept of force along all the three Newton's laws of motion.	Smart Board Teaching Lab Activity	N.C.E.RT AND NCERT EXEMPLAR
1st Aug – 14th Aug	11	Ch-6:Work And Energy	<ol> <li>Learners will be able to understand the Concept of concurrent forces and dynamics of circular motion.</li> <li>Learners will be able to understand the Basic concept of work done along with its mathematical analysis and Classification of work.</li> <li>Learners will be able to understand the Concept of mechanical energy, different forms energy and its conservation with necessary matical analysis. Learners will be able to understand the Mechanical power</li> <li>Along with its Practical and SI units.</li> </ol>	Smart Board Teaching Lab Activity	N.C.E.RT AND NCERT EXEMPLAR
16 <sup>th</sup> Aug– 31 <sup>s</sup> Aug	12	Ch-8:Gravitation	<ol> <li>Learners will be able to understand         Concept of gravitational force between         two bodies and its conservative nature.</li> <li>Learners will be able to understand the         Concept of variation of acceleration due         To gravity with height and depth</li> </ol>	Smart Board Teaching Lab Activity	N.C.E.RT AND NCERT EXEMPLAR

02 <sup>nd</sup> Sept  - 07 <sup>th</sup> Sept	05	Ch-7:Rotation	<ol> <li>Learners will be able to understand the concept of centre of mass and centre of gravity of a body.</li> <li>Learners will be able to understand the Concept of Rotational Dynamics and Equations of motion for rotating body.</li> </ol>	Smart Board Teaching Lab Activity	N.C.E.RT AND NCERT EXEMPLAR
09 <sup>th</sup> Sept – 20 <sup>th</sup> Sept	10		REVISION FOR MID TERM EXA	M	·
23 <sup>rd</sup> SEPT - 7 <sup>th</sup> Oct			MID TERM EXAM		
08 <sup>th</sup> Oct -19 <sup>th</sup> Oct	06	Ch-8:Mechanics Of Solids	Learners will be able to understand Practicality of different types of Elastic modulli and Relation between stress and strain	Smart Board Teaching Lab Activity	N.C.E.RT AND NCERT EXEMPLAR
21st Oct – 08th Nov	11	Ch-9:Mechanics Of Fluids (Contd)	<ol> <li>Learners will be able to understand         Practicality of Fluid dynamics in real         life (Pascal's Law, Bernoulli's theorem,         Magnus Effect)</li> <li>Learners will be able to understand         Concept of surface Tension</li> </ol>	Smart Board Teaching Lab Activity	N.C.E.RT AND NCERT EXEMPLAR
11 <sup>th</sup> Nov -30 <sup>th</sup> Nov	16	Ch-10:Thermal Properties Of Matter	Learners will be able to understand the Different methods of heat transfer, Concept of thermal expansion and Laws of cooling	Smart Board Teaching Lab Activity	N.C.E.RT AND NCERT EXEMPLAR
02 <sup>nd</sup> Dec -21 <sup>st</sup> Dec	16	Ch-11: Thermodynamics	<ol> <li>Learners will be able to understand the Concept of Heat, work and Internal energy of the system.</li> <li>Learners will be able to understand the Principle of Heat Engine and Refrigerator.</li> </ol>	Smart Board Teaching Lab Activity	N.C.E.RT AND NCERT EXEMPLAR

23 <sup>rd</sup> Dec -06 <sup>th</sup> Jan '25	10		MOCK YEARLY EXAM		
7 <sup>th</sup> Jan'25 -18 <sup>th</sup> Jan'25	09	Ch-13: Oscillations	<ol> <li>Learners will be able to understand the basic concept of generation of waves along with its Classification and Mathematical analysis and SHM.</li> <li>Learners will be able to understand the Concept of Different forms of energy possessed by a body executing SHM with its mathematical analysis.</li> <li>Learners will be able to understand the Concept of Resonance, free oscillations And maintained oscillations.</li> </ol>	Smart Board Teaching Lab Activity	N.C.E.RT AND NCERT EXEMPLAR
20 <sup>th</sup> Jan'25 - 07 <sup>th</sup> Feb'25	16	Ch-14 :Waves	<ol> <li>Learners will be able to do         Mathematical analysis of waves along its         basic parameters(Amplitude, Frequency         and Phase)         <ol> <li>Learners will be able to understand the             concept of reflection of waves along with             concept of harmonics.</li> </ol> </li> <li>Learners will be able to understand         the Practicality in variation in frequency of</li> </ol>	Smart Board Teaching Lab Activity	N.C.E.RT AND NCERT EXEMPLAR
415			sound due to relative motion between Source and observer.		
10 <sup>th</sup> Feb'25 -20 <sup>th</sup> Feb'25	10		REVISIONFORANNIJAI. FXAN	1	
LAST WEE FEB' 2	K OF	REVISIONFORANNUAL EXAM  ANNUALEXAM			

# **SUBJECT: CHEMISTRY(043)**

Dates/ Week	Working days	SYLLABUS REFERENCE TOPIC	LEARNING OBJECTIVES STUDENTS SHOULD BE ABLE TO	TEACHING ACTIVITIES	LEARNING RESOURCES
1 <sup>st</sup> April –12 <sup>th</sup> April	10	CH-8: Redox Reaction	1. Know the concept of redox reactions 2. Calculate oxidation numbers.	Videos on smart panel board from Shiksha House youtube channel https://www.youtube.com /watch?v=rvqLff_eJR8&lis t=PLWUtJwe9Mk5095Gc0 BSXsT1HqBuSIVotv	https://byjus.com/ncert-solutions-class-11-chemistry/ https://unacademy.com/goal/cbse-class-11/GWDPZ/free-platform/chemistry/HHIUGhttps://www.vedantu.com/revision-notes/cbse-class-11-chemistry-notes
15 <sup>th</sup> April – 30 <sup>th</sup> April	14	CH-8 : Redox Reaction(contd.)	Do the balancing of redox reactions	Videos on smart panel board from Shiksha House youtube channel	
1 <sup>st</sup> May – 13 <sup>th</sup> May	10	CH-1: Basic Concepts of Chemistry	<ol> <li>Understand the importance and nature of matter</li> <li>Know the concept of chemical composition</li> <li>Calculate concentration and formula</li> </ol>	Videos on smart panel board from Shiksha House youtube channel https://www.youtube.com /watch?v=rvqLff_eJR8&lis t=PLWUtJwe9Mk5095Gc0 BSXsT1HqBuSIVotv	https://byjus.com/ncert-solutions-class-11-chemistry/https://unacademy.com/goal/cbse-class-11/GWDPZ/free-platform/chemistry/HHIUG

1 <sup>st</sup> July -12 <sup>th</sup> July	11	CH-2 : Structure of Atom	1. Know the different atomic models 2. Learn different quantum numbers and the rules	Videos on smart panel board from Shiksha House youtube channel https://www.youtube.com /watch?v=rvqLff_eJR8&lis t=PLWUtJwe9Mk5095Gc0 BSXsT1HqBuSIVotv	https://www.vedantu.com/r evi sion-notes/cbse-class- 11- chemistry-notes https://byjus.com/ncert- solutions-class-11- chemistry/ https://unacademy.com/go al/c bse-class- 11/GWDPZ/free- platform/chemistry/HHIU G https://www.vedantu.com/r evi sion-notes/cbse-class- 11- chemistry-notes
15 <sup>th</sup> July -31 <sup>st</sup> July	14	CH-2 : Structure of Atom	Understand and calculate the electronic configuration of atoms based on quantum theory	Videos on smart panel board from Shiksha House youtube channel https://www.youtube.com /watch?v=rvqLff_eJR8&lis t=PLWUtJwe9Mk5095Gc0 BSXsT1HqBuSIVotv	https://byjus.com/ncert-solutions-class-11-chemistry/https://unacademy.com/goal/cbse-class11/GWDPZ/free-platform/chemistry/HHIUGhttps://www.vedantu.com/revision-notes/cbse-class-11-chemistry-notes
1 <sup>st</sup> Aug -14 <sup>th</sup> Aug	11	CH-3: Classification of Elements and Periodicity in Properties	<ol> <li>1. Know the history of the periodic table.</li> <li>2. Understand the periodic trends in properties of elements</li> </ol>	Videos on smart panel board from Shiksha House youtube channel https://www.youtube.com /watch?v=rvqLff_eJR8&lis t=PLWUtJwe9Mk5095Gc0 BSXsT1HqBuSIVotv	https://byjus.com/ncert- solutions-class-11- chemistry/ https://unacademy.com/go al/c bse-class-11/GWDPZ /free- platform/chemistry / HHIUG https:// www.vedantu.com/revision- notes/cbse-class-11- chemistry-notes

16 <sup>th</sup> Aug -31 <sup>st</sup> Aug	11	CH- 4: Chemical Bonding and Molecular Structure	1. Learn different bond parameters and their applications 2. Draw the Lewis structures of various covalent molecules	Videos on smart panel board from Shiksha House youtube channel https://www.youtube.com /watch?v=rvqLff_eJR8&lis t=PLWUtJwe9Mk5095Gc0 BSXsT1HqBuSIVotv	https://byjus.com/ncert- solutions-class-11- chemistry/ https://unacademy.com/go al/c bse-class- 11/GWDPZ/free- platform/chemistry/HHI UG https://www.vedantu.com/r evision-notes/cbse-class- 11- chemistry-notes
02 <sup>nd</sup> Sept – 07 <sup>th</sup> Sept	05	CH- 4: Chemical Bonding and Molecular Structure	<ol> <li>Understand the concept of Hybridization</li> <li>Learn the limitations of valence bond theory.</li> <li>Understand the concept of molecular orbital theory</li> </ol>	Videos on smart panel board from Shiksha House youtube channel https://www.youtube.com /watch?v=rvqLff_eJR8&lis t=PLWUtJwe9Mk5095Gc0 BSXsT1HqBuSIVotv	https://byjus.com/ncert-solutions-class-11-chemistry/ https://unacademy.com/goal/cbse-class- 11/GWDPZ/free-platform/chemistry/HHIUGhttps://www.vedantu.com/revision-notes/cbse-class- 11-chemistry-notes
09 <sup>th</sup> Sept -20 <sup>th</sup> Sept	10		REVISION FOR MID	) TERM EXAM	
23 <sup>rd</sup> Sept - 7 <sup>th</sup> Oct			MID TERM EXAM	M	
			1. Know the concept of types of systems and state variables	Videos on smart panel board from Shiksha House	https://byjus.com/ncert- solutions-class-11- chemistry/ https:/

08 <sup>th</sup> Oct	06	CH-6: Chemical	2. Learn first law of	youtube channel	/unacademy.com/goal/c
-19 <sup>th</sup> Oct		Thermodynamics	thermodynamics and	https://www.youtube.com	bse-class-
-19 Oct			internal energy	/watch?v=rvqLff_eJR8&lis	11/GWDPZ/free-
				t=PLWUtJwe9Mk5095Gc0	platform/chemistry/HHI
				BSXsT1HqBuSIVotv	<del>UG</del>
					https://www.vedantu.com/r
					evision-notes/cbse-class-
					11-chemistry-notes
					https://byjus.com/ncert-
				Videos on smart panel	solutions-class-11-
a 1 st o			1. Know the relationship	board from Shiksha House	<u>chemistry/</u>
21st Oct	11		between delta U and delta H	youtube channel	https://unacademy.com/go
-08 <sup>th</sup>		CH-6: Chemical	2. Apply Hess law for	https://www.youtube.com	al/c bse-class-
Nov		Thermodynamics	calculating delta H.	/watch?v=rvqLff_eJR8&lis	11/GWDPZ/free-
			3. Learn thermodynamics 2nd and	t=PLWUtJwe9Mk5095Gc0	platform/chemistry/HHI
			3rd law	BSXsT1HqBuSIVotv	<u>UG</u>
					https://www.vedantu.com/r
					evision-notes/cbse-class-
					11-chemistry-notes
			1. Know the equilibrium in		https://byjus.com/ncert-
			physical and chemical	Videos on smart panel	solutions-class-11-
th			processes.	board from Shiksha House	<u>chemistry/</u>
11 <sup>th</sup> Nov	16	CH 7 E 33	2. Apply Le Chatelier's	youtube channel	https://unacademy.com/go
-30 <sup>th</sup>	16	CH-7 : Equilibrium	principle for reversible	https://www.youtube.com	<u>al/c</u> <u>bse-class-</u>
Nov			reactions.	/watch?v=rvqLff_eJR8&lis	11/GWDPZ/free-
			3. Learn the concept of acid	t=PLWUtJwe9Mk5095Gc0	platform/chemistry/HHI
			bases.	BSXsT1HqBuSIVotv	<u>UG</u>
			4. Know the concept of pH,		https://www.vedantu.com/r
			solubility product, common		evision-notes/cbse-class-
			ion effect.		11-chemistry-notes

02 <sup>nd</sup> Dec -21 <sup>st</sup> Dec	16	CH-12: Organic Chemistry some basic principles and techniques	1. Understand the general principles of organic chemistry 2. Know the idea of the mechanism of organic reactions 3. Understand and learn the types of reactions. Understand the fission of covalent bond	Videos on smart panel board from Shiksha House youtube channel https://www.youtube.com /watch?v=rvqLff_eJR8&lis t=PLWUtJwe9Mk5095Gc0 BSXsT1HqBuSIVotv	https://byjus.com/ncert-solutions-class-11-chemistry/https://unacademy.com/goal/cbse-class-11/GWDPZ/free-platform/chemistry/HHIUGhttps://www.vedantu.com/revision-notes/cbse-class-11-chemistry-notes
23rd Dec	4.5		MOCK YEARL	Y EXAM	
-06 <sup>th</sup> Jan '25	10				
7 <sup>th</sup> Jan'25 – 18 <sup>th</sup> Jan'25	09	CH-13: Hydrocarbons	<ol> <li>Know the classification of</li> <li>Learn the structures and IUPAC names.</li> <li>Learn the preparations and properties of alkenes</li> </ol>	Videos on smart panel board from Shiksha House youtube channel https://www.youtube.com /watch?v=rvqLff_eJR8&lis t=PLWUtJwe9Mk5095Gc0 BSXsT1HqBuSIVotv	https://byjus.com/ncert- solutions-class-11- chemistry/ https://unacademy.com/go al/c bse-class- 11/GWDPZ/free- platform/chemistry/HHI UG https://www.vedantu.com/r evi sion-notes/cbse-class- 11-chemistry-notes
20 <sup>th</sup> Jan'25 - 07 <sup>th</sup> Feb'25	16	CH-13: Hydrocarbons (Contd)	<ol> <li>Understand and learn the preparation and properties of alkyne</li> <li>Understand the properties of benzene</li> <li>Learn the reactions of</li> </ol>	Videos on smart panel board from Shiksha House youtube channel https://www.youtube.com /watch?v=rvqLff_eJR8&lis t=PLWUtJwe9Mk5095Gc0	https://byjus.com/ncert-solutions-class-11-chemistry/https://unacademy.com/goal/cbse-class-11/GWDPZ/free-platform/chemistry/HHI

		<ul><li>aromatic compounds</li><li>4. Understand the resonance effect of various groups present on benzene</li></ul>	BSXsT1HqBuSIVotv	UG https://www.vedantu.com/r evi sion-notes/cbse-class- 11-chemistry-notes			
10 <sup>th</sup> Feb'25 -20 <sup>th</sup>	10						
Feb'25	10	REVISION FOR ANNUAL EXAM					
LAST WEEK OF FEB' 25		ANNUAL E	XAM				

# **SUBJECT : MATHEMATICS(Code 041)**

MONTH	NO. OF WOR KING DAYS	SYLLABUS REFERENCE TOPIC	LEARNING OBJECTIVES STUDENTS SHOULD BE ABLE	TEACHING ACTIVITIES	LEARNING RESOURCES
		CH 9 Sequence and Series	Geometric Progression (G.P), Relation between Arithmetic mean and Geometric mean.	PRACTICE SHEET	NCERT TEXTBOOK & EXEMPLAR, ALL
12 <sup>th</sup> APR- 30 <sup>th</sup> APR	15	CH 5 Complex Numbers and Quadratic Equations	Need of complex numbers, use of complex numbers, modulus and conjigate of complex numbers.		IN ONE BY ARIHANT PUBLICATIONS
1 <sup>st</sup> MAY - 13 <sup>th</sup> MAY	10	CH 1 SETS	To understand Concept of sets, subsets ,powerset and apply them to problems. problem pictorially using venn diagrams.	PRACTICE SHEET	NCERT TEXTBOOK & EXEMPLAR, ALL IN ONE BY ARIHANT PUBLICATIONS

			To understand relation and functions.,		NCERT
1 <sup>st</sup> JULY -	11	CH 2 RELATION FUNCTION	To identify domain and codomain of	PRACTICE SHEET	TEXTBOOK &
12th JULY	11		functions		EXEMPLAR, ALL
					IN ONE BY
					ARIHANT
					PUBLICATIONS
15 <sup>th</sup> JULY –					NCERT
31 <sup>st</sup> JULY –	14		To solve problems on radianand	PRACTICE SHEET	TEXTBOOK &
SI" JULI	14	CH 3 TRIGONOMETRIC	degree measure of angles.		EXEMPLAR, ALL
		FUNCTIONS	degree measure or angles.		IN ONE BY
			To use identities in solving problems.		ARIHANT
					PUBLICATIONS
					NCERT
1st AUG -	11	CH 6 LINEAR INEQUALITIES	To find graphical solutions to system	PRACTICE SHEET	TEXTBOOK &
14 <sup>th</sup> AUG			of equations		EXEMPLAR, ALL
					IN ONE BY
					ARIHANT
					PUBLICATIONS
					NCERT
415		CH 6 LINEAR INEQUALITIES	To find graphical solutions to system	PRACTICE SHEET	TEXTBOOK &
16 <sup>th</sup> Aug –	11		of equations		EXEMPLAR, ALL
31 <sup>st</sup> Aug					IN ONE BY
					ARIHANT
					PUBLICATIONS
a and a					NCERT
02 <sup>nd</sup> Sept –	0.5			PRACTICE SHEET	TEXTBOOK &
07 <sup>th</sup> Sept	05	CH 15 STATISTICS	To find mean deviation about mean,		EXEMPLAR, ALL
			median .variance & standard		IN ONE BY
			deviation for all types of data .		ARIHANT
4					PUBLICATIONS
09 <sup>th</sup> Sept –	10				
20 <sup>th</sup> Sept	10	REVISION	FOR MID TERM EXAMS		

23 <sup>rd</sup> SEPT - 7 <sup>th</sup> OCT					I
8 <sup>th</sup> OCT- 19 <sup>th</sup> OCT	6	CH 7 PERMUTATIONS AND COMBINATIONS	Number of ways in which a particular arrangement can be done.	PRACTICE SHEET	NCERT TEXTBOOK & EXEMPLAR, ALL IN ONE BY ARIHANT PUBLICATIONS
21st OCT- 8th NOV	11	CH 7 PERMUTATIONS AND COMBINATIONS (CONTD)	Number of ways in which a particular combinations can be done.	PRACTICE SHEET	NCERT TEXTBOOK & EXEMPLAR, ALL
8 NOV		CH 8 BINOMIAL THEOREM	To find expansion using binomial theorem.	TRACTICE SHEET	IN ONE BY ARIHANT PUBLICATIONS
11 <sup>th</sup> NOV- 30 <sup>th</sup> NOV	16	CH 10 STRAIGHT LINES	To find Slope of line, Calculate angle between 2 line, To use various forms of equation of line. To calculate distance between 2 parallel lines.	PRACTICE SHEET	NCERT TEXTBOOK & EXEMPLAR, ALL IN ONE BY ARIHANT PUBLICATIONS
2st DEC- 21st DEC		CH 12 THREE DIMENSIONAL GEOMETRY	To understand coordinate axes, octants, planes, coordinates of a point distance between two points .	PRACTICE SHEET	NCERT TEXTBOOK & EXEMPLAR, ALL
	16	CH 11 CONIC SECTION	To find equation of circle in various forms. To understand the geometry of conic sections. To find equations of parabola, ellipse,hyperbola. To apply the knowledge of conic section.		IN ONE BY ARIHANT PUBLICATIONS

23 <sup>rd</sup> DEC'24- 6 <sup>th</sup> JAN' 25	10	MO	CK YEARLY EXAM		
7 <sup>th</sup> JAN'25- 18 <sup>th</sup> JAN'25	9	CH 16 PROBABILITY	To find sample space, To identify between Exhaustive events and mutually exclusive events.	PRACTICE SHEET	NCERT TEXTBOOK & EXEMPLAR, ALL IN ONE BY ARIHANT PUBLICATIONS
20 <sup>th</sup> JAN'25 -7 <sup>th</sup> FEB'25	16	CH 13 LIMITS & DERIVATIVES	To understand limiting values of different functions like trignometric , polynomial. To understand the concept of derivatives , calculation of derivatives using first principle, To use various rules for finding derivatives	PRACTICE SHEET	NCERT TEXTBOOK & EXEMPLAR, ALL IN ONE BY ARIHANT PUBLICATIONS
10 <sup>th</sup> FEB- 20 <sup>th</sup> FEB'25	10	REVISIO	ON FOR YEARLY EXAM		
LAST WEE	K OF		YEARLY EXAM		

# **SUBJECT: BIOLOGY(044)**

**FEB 2025** 

Dates/ Week	Worki ng days	SYLLABUS REFERENCE TOPIC	LEARNING OBJECTIVES STUDENTS SHOULD BE ABLE TO	TEACHING ACTIVITIES	LEARNING RESOURCES
1 <sup>st</sup> April -12 <sup>th</sup> April		Chapter-17: Breathing and	mechanism of breathing and its regulation in humans - exchange of	Used videos to show the mechanism of breathing in humans, study about respiratory disorders.	Bank of biology

15 <sup>th</sup> April – 30 <sup>th</sup> April	14	Chapter-18: Body Fluids and Circulation	disorders related to respiration - asthma, emphysema, occupational respiratory disorders  Composition of blood, blood groups, coagulation of blood; composition of lymph and its function; human circulatory system - Structure of human heart and blood vessels; cardiac cycle, cardiac output, ECG	Preparation of blood smears to study different types of	Biology lab
1 <sup>st</sup> May – 13 <sup>th</sup> May	10	Chapter-2: Biological Classification	Chapter-2: Biological Classification Five kingdom classification; Salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroids.	Observation of animal specimen and slides of various phyla	Biology lab
1 <sup>st</sup> July – 12 <sup>th</sup> July	11	Chapter-4: Animal Kingdom	Chapter-4: Animal Kingdom Salient features and classification of	Observation of animal specimen and slides of various phyla	Biology lab

15 <sup>th</sup> July – 31 <sup>st</sup> July	14	Chapter-4: Animal Kingdom 20: Locomotion and Movement CH 20 SKELETON SYSTEM	(salient features and at a few examples of each category). (No live animals or specimen should be displayed.) Skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, Chapter-20: Locomotion and Movement osteoporosis, gout. Types of movement - ciliary, flagellar, muscular; Chapter-	various phyla  Observe and the bone set of human skeleton system to study various	Biology lab Biology lab
1 <sup>st</sup> Aug –14 <sup>th</sup> Aug	11	Chapter-8: Cell-The Unit of Life	Chapter-8: Cell-The Unit of Life Cell theory and cell as the basic unit of life, structure of prokaryotic and eukaryotic cells; Plant cell and animal cell; cell envelope; cell membrane, cell wall; cell organelles - structure and function; endomembrane system, endoplasmic reticulum, golgi bodies, lysosomes, vacuoles, mitochondria, ribosomes, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus.	Observe and study various types of cells with the help of temporary and permanent slide preparation.	Biology lab
16 <sup>th</sup> Aug -31 <sup>st</sup> Aug	11	Chapter-22: Chemical Coordination and Integration	Chapter-22: Chemical Coordination and Integration Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads; mechanism of hormone action (elementary idea); role of hormones as messengers and regulators, hypo - and hyperactivity and related	Study the role of various hormone sin human body and also to know about the hormonal disorders.	Various source like books and and internet.

02 <sup>nd</sup> Sept -07 <sup>th</sup> Sept	05	Chapter-22: Chemical Coordination and Integration	Disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's disease. Note: Diseases related to all the human physiological systems to be taught in brief.	Study the role of various hormone sin human body and also to know about the hormonal disorders	Various source like books and and internet.
20th Sept	10		REVISION FOR MID TER	M EXAM	
23 <sup>rd</sup> SEPT - 7 Oct			MID TERM EXAM		
08 <sup>th</sup> Oct – 19 <sup>th</sup> Oct	06	Ch-9: Biomolecules	Chapter-9: Biomolecules Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, nucleic acids; Enzyme - types, properties, enzyme action. (Topics excluded: Nature of Bond Linking Monomers in a Polymer, Dynamic State of Body Constituents – Concept of Metabolism, Metabolic Basis of Living, The Living State)	To study the action of salivary action on substrate starch to know about the enzymatic action.  To study the effect of temperature and ph on the enzymatic action	Biology lab
21st Oct – 08 <sup>th</sup> Nov	11	Ch-10: Cell Cycle and Cell Division	Cell cycle, mitosis, meiosis and their significance	Study the stages of mitosis and meiosis through temporary and permanent slides.	Biology lab
11 <sup>th</sup> Nov -30 <sup>th</sup> Nov	16	Ch-19: Excretory Products and their Elimination	Modes of excretion - ammonotelism, ureotelism, uricotelism; human excretory system – structure and function; urine formation, osmoregulation; regulation of kidney function - renin - angiotensin, atrial natriuretic factor, ADH and diabetes insipidus; role of other organs in excretion; disorders - uremia, renal	Study about heamodylasis	Through internet videos and review studies

02 <sup>nd</sup> Dec -21 <sup>st</sup> Dec	16	Chapter-13: Photosynthesis in Higher Plants	failure, renal calculi, nephritis; dialysis and artificial kidney, kidney transplant Photosynthesis as a means of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration. C3 and C4 pathways; factors affecting photosynthesis.	To perform activities showing that co2, water, sunlight and chlorophyll are necessary conditions for photosynthesis			
23 <sup>rd</sup> Dec – 06 <sup>th</sup> Jan '25	10		MOCK YEARLY EXAM				
7 <sup>th</sup> Jan'25 – 18 <sup>th</sup> Jan'25	09	Chapter-14: Respiration in Plants	; Chapter-14: Respiration in Plants Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle	To perform activities showing that co2, water ,sunlight and chlorophyll are necessary conditions for photosynthesis	Biology lab		
20 <sup>th</sup> Jan'25 - 07 <sup>th</sup> Feb'25	16	Ch 5 Plant morphology	Study of various plant modifications, stypes of roots , flors , leaves , fruit formation and types	Conduct quiz related to respiratory pathways like glycolysis ,	Various internet sources Visit to near by garden for study various types of plant morphology.		
10 <sup>th</sup> Feb'25							
Feb'25	10		REVISION FOR ANNUAL	LEXAM			
LAST WEEK OF FEB' 25 ANNUAL EXAM							

### SUBJECT: COMPUTER SCIENCE(083)

Dates/ Week	Worki ng days	SYLLABUS REFERENCE TOPIC	LEARNING OBJECTIVES STUDENTS SHOULD BE ABLE TO	TEACHING ACTIVITIES	LEARNING RESOURCES
15 <sup>th</sup> April – 30 <sup>th</sup> April		Unit, Mobile system  Ch 6: Getting Started with  Python	The learner: -Identifies different input-output devices Their functioningUsage  Ability to understand and apply basic computational thinking. 2. Logic of Programming language	Observe the functioning of computer system. Work with different input- output devices. Chart for Introduction of Python as Programming language. Plus and Minus of Python.	Link of youtube video: https://www.youtube.com/w atch?v=q4nWVTJv4V8 Link of youtube video: https://www.youtube.com/w atch?v=aKjc3q1oGG4  Link of youtube video: https://www.youtube.com/w atch?v=dwl41ebTOxA
1 <sup>st</sup> May – 13 <sup>th</sup> May	10	Ch 7 : Python Fundamentals	Ability to understand the notion of Python Fundamentals 2. Tokens. 3. Expressions		Link of youtube video: https://www.youtube.com/w atch?v=L21L-Rp5j7l
1 <sup>st</sup> July – 12 <sup>th</sup> July	11	Ch 8 : Python Data Handling	Data types and how to use it in different situations.	Flash cards for different data types	Link of youtube video: https://www.youtube.com/watch?v=L21L-Rp5j7l

15 <sup>th</sup> July – 31 <sup>st</sup> July	14	Ch 9 : Flow of Control	<ol> <li>Conditional statements:         if, if- else, if-elif-else;</li> <li>Notion of iterative computation and control flow:         for(range(), len()), while, using flowcharts.</li> </ol>	Programs: a) to compute absolute value b) divisibility of a number. c) table of a number d) Fibonacci, tribonacci series	Computer Science by Preeti Arora
1 <sup>st</sup> Aug – 14 <sup>th</sup> Aug	11	Ch 10 : String Manipulation	<ol> <li>Definition, Creation of a string,         Traversal of a string.     </li> <li>Operations on a string,</li> <li>Functions/methods,</li> <li>String Slicing</li> </ol>	Program for: a) checking palindrome. b) to show number of vowels in a string. To count strings starting with 'A'	Computer Science by Preeti Arora
16 <sup>th</sup> Aug -31 <sup>st</sup> Aug	11	Ch 11 : List Manipulation	Lists: 1. Definition, Creation of a list, Traversal of a list. 2. Operations on a list, 3. functions/methods, 4. Lists Slicing; Nested lists;	Program for: a) finding the maximum, minimum, mean of numeric values stored in a list; b) linear search on list of numbers. c) for counting the frequency of elements in a list.	Computer Science by Preeti Arora
02 <sup>nd</sup> Sept -07 <sup>th</sup> Sept	05	Programming Revision	<ul><li>Flow of Control</li><li>String operations</li><li>List Functions</li></ul>		Computer Science by Preeti Arora

09 <sup>th</sup> Sept – 20 <sup>th</sup> Sept	10	REVISION FOR MID TERM EXAM & PRACTICAL EXAM			
23 <sup>rd</sup> SEPT - 7 <sup>th</sup> Oct		MID TERM EXAM			
08 <sup>th</sup> Oct – 19 <sup>th</sup> Oct	06	Ch 12 : Tuple	Tuples: Definition, Creation of a Tuple, Traversal of a tuple. 2.Operations on a tuple, functions/methods, Nested tuple; Tuple slicing;	counting the frequency of elements in a tuple.	Computer science by Preeti Arora
21st Oct – 08th Nov	11	Ch 12 : Dictionaries	Dictionary: Definition, Creation, Accessing elements of a dictionary, add an item, modify an item in a dictionary,Traversal, 3.functions/methods	Programs: count the number of times a character appears in a given string using a dictionary create a dictionary with names of employees, their salary and access them.	Computer Science by Preeti Arora
11 <sup>th</sup> Nov -30 <sup>th</sup> Nov	16	Ch 14 : Sorting Techniques	Sorting: Bubble sort and Insertion sort along with best, average and worst case for sorting elements stored in a list	Programs : Bubble sort technique Insertion sort	https://youtu.be/6S2wxupK Om0
02 <sup>nd</sup> Dec -21 <sup>st</sup> Dec	16	Ch 2 : Data Representation	Number System: numbers in base 2, 8, 16 and binary addition. Encoding Schemes: ASCII, ISCII and Unicode 2	Chart for Number System. Assignments for Encoding Schemes	https://youtu.be/O9CXnbkW kpI
23 <sup>rd</sup> Dec – 06 <sup>th</sup> Jan '25	10	MOCK YEARLY EXAM			

7 <sup>th</sup> Jan'25 – 18 <sup>th</sup> Jan'25	09	Ch 3 : Boolean Logic	NOT, AND, OR, NAND, NOR, XOR, NOT, truth tables	PowerPoint presesntaion for Boolean Logic Circuits on Smart Panel Board	https://youtu.be/zfMxkjOtC ws
20 <sup>th</sup> Jan'25 - 07 <sup>th</sup> Feb'25		Ch 15 : Cyber Safety	identity protection, confidentiality, social networks, cyber trolls and bullying	PowerPoint presentation for Cyber safety and security on Smart Panel Board	Computer Science by Preeti Arora
10 <sup>th</sup> Feb'25 -20 <sup>th</sup> Feb'25			REVISION FOR ANNUAL	L EXAM	
LAST WEEK OF FEB' 25		ANNUAL EXAM			

### **SUBJECT: PHYSICAL EDUCATION(048)**

Dates/ Week	Worki ng days	SYLLABUS REFERENCE TOPIC	LEARNING OBJECTIVES STUDENTS SHOULD BE ABLE TO	TEACHING ACTIVITIES	LEARNING RESOURCES
1 <sup>st</sup> April _12 th April	10	Ch 1:Management of sports Events	Organising, Staffing, Directing and Controlling		You tube videos on smart Board panel
15 <sup>th</sup> April -30 <sup>th</sup> April	14	Ch 1:Management of sports Events	Various Committees and their Responsibilites		You tube videos on smart Board panel

1 <sup>st</sup> May – 13 <sup>th</sup> May	10	Ch 1:Management of sports Events	Fixture & Its Procedure	You tube videos on smart Board panel
1 <sup>st</sup> July -12 <sup>th</sup> July	11	Ch:2 Children & Women in sports	Common Postural Deformities	You tube videos on smart Board panel
15 <sup>th</sup> July – 31 <sup>st</sup> July	14	Ch:2 Children & Women in sports	Menarche, Menstruation Dysfunction, female Athletics Triad	You tube videos on smart Board panel
1 <sup>St</sup> Aug -14 <sup>th</sup> Aug	11	Ch:3 Yoga & Preventive Measure for lifestyle Discuss	Cure & Prevent Obesity by Asanas	You tube videos on smart Board panel
16 <sup>th</sup> Aug -31 <sup>st</sup> Aug	11	Ch:3 Yoga & Preventive Measure for lifestyle Discuss	Cure & Prevent Diabetes by Asanas	You tube videos on smart Board panel
02 <sup>nd</sup> Sept – 07 <sup>th</sup> Sept	05	Ch:3 Yoga & Preventive Measure for lifestyle Discuss	Cure & Prevent Asthma by Asanas	You tube videos on smart Board panel
09 <sup>th</sup> Sept – 20 <sup>th</sup> Sept	10	REVISION FOR MID TERM EXAM		
23 <sup>rd</sup> SEPT - 7 <sup>th</sup> Oct		MID TERM EXAM		
08 <sup>th</sup> Oct -19 <sup>th</sup> Oct	06	Ch:3 Yoga & Preventive Measure for lifestyle Discuss	Cure & Prevent Hypertension by Asanas	You tube videos on smart Board panel

21st Oct – 08th Nov	11	Ch:4 Physical Education and Sports For CWSN	Competition For Disables	You tube videos on smart Board panel
11 <sup>th</sup> Nov -30 <sup>th</sup> Nov	16	Ch:4 Physical Education and Sports For CWSN	Advantages of physical Activites for CWSN	You tube videos on smart Board panel
02 <sup>nd</sup> Dec -21 <sup>st</sup> Dec	16	Ch:4 Physical Education and Sports For CWSN	Strategies for CWSN	You tube videos on smart Board panel
23 <sup>rd</sup> Dec -06 <sup>th</sup> Jan '25	10	MOCK YEARLY EXAM		
7 <sup>th</sup> Jan'25 -18 <sup>th</sup> Jan'25	09	Ch:5 Sports and Nutrition	Concept of Balance Diet Macro & Micro Nutrients	You tube videos on smart Board panel
20 <sup>th</sup> Jan'25 - 07 <sup>th</sup> Feb'25	16	Ch:5 Sports and Nutrition	Control weight, pitfalls of diet , food in tolrence	You tube videos on smart Board panel
10 <sup>th</sup> Feb'25 -20 <sup>th</sup> Feb'25	10		REVISION FOR ANNUAL EX	XAM
LAST WEEK OF FEB' 25			ANNUAL EXAM	