

# **DELHI PUBLIC SCHOOL**

# CHAS, BOKARO

TERM AND MONTH-WISE SPLIT-UP SYLLABI OF CLASS – XII FOR THE SESSION

2024-2025

#### **SUBJECT : ENGLISH**

**Text Book :** 1. Flamingo

2. Vistas

Month	WD	Chapter	Key Terms and Concept	Art Integration	Project / Practical	Research Work Blended Learning
		L-1: The Last Lesson (Flamingo)	The story depicts the pathos of the whole situation about how people feel in not learning their language and losing an asset in M. Hamel, the French teacher. It also highlights linguistic chauvinism.	Group Discussion – "Political enslavement is a curse on any nation as it deprives it of its identity."	Write a debate either for or against on the topic – Is it right to expose students to three languages at school. (120-150 words)	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,
		P-1- My Mother at 66 (Flamingo)	The poem captures the complex subtleties of human relationships in a texture of symbols, images and poetic devices. The poem is about childhood fear of separation and the sadness associated with the thought of losing the loved ones. (Coping with childhood fears).	Create a <b>photo</b> <b>album</b> pasting your mother's pictures showing her different stages of life till date.	A report on Old Age Homes.	Secret of Happy Relationship.
April	23	23 L-1: The Third Level (Vistas)	The story revolves around Charley, the protagonist, who claimed to find himself on the third level at the grand Central Station which the rail authorities swore doesn't exist. The Third level refers to the world of fantasy where Charley used to visit as a temporary relief or a medium of escape from the world of harsh realities. Man achieves this by constantly moving between the past, the present and the future	Write an original story to continue where the passage/chapter ended. Be sure to use what you have learned about the character Charley as you tell what happens to him next.	Write an essay on the importance of hobbies and how certain hobbies can help man to keep the past alive.	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,
		L-7-The Interview (Flamingo)	The interview as a communication genre. _The Interview written by Christopher Sylvester briefs the new invention- Part I– Interview in the field of journalism. Part II -is an extract from an interview of Umberto Eco, author of the popular novel, _Name of the Rose' by Mukund Padmanabhan from _The Hindu.' This interview helps us know many aspects of his writing style and ideas.	<b>Group Discussion</b> – Interviews of famous personalities watched by the students.	Excerpts from the interviews of famous personalities	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,
Мау	10	L - 2 : Lost Spring (Flamingo)	The chapter is about the exploitation of children in hazardous conditions. It highlights abject poverty, thoughtless traditions, loss of innocence, importance of education, back breaking hardwork and dismal working conditions. The chapter is about the acceptance of poverty, exploitation as destiny and a dire need to provide the poverty-stricken people, especially the children, a life of dignity and opportunities to dare, dream and do.	Group Discussion- Dreams of the poor, Problems of child labour, Education is the only weapon to better the lot. Art – Bangle Making (Chemistry)	Find out the laws for children mentioned in our constitution.	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,
		Notice Writing	Notice writing is a formal means of communication and its main purpose is to	Collecting Government notices	Notice Writing Worksheet	(Face to face interaction through

			bring a certain piece of information to the notice of a group of people. They are pinned in a particular spot where the concerned people can read the notice.	from the newspapers.		digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,
		P - 2 : An Element ary School (Flaming o)	The poem highlights the harsh realities of life as experienced by the slum children. It based on the theme of social injustice and class inequalities prevailing in the society, effect of social disorder, confusion, chaos and poverty.	Group Discussion : 'Importance of Education'. Video presentation on India's largest slum. Visit to slum school to make them understand the importance of education. Tyrolese valley object	Write the names and support it with pictures - The various slums in India.	Reasons of Poverty and Unemployment in India. Support it with a statistical report in relation to education
		L-3- Deep Water (Flamingo)	A real life personal account of experiencing fear and the steps to overcome it. The story is a psychological analysis of fear from a child's point of view when he was nearly drowned in a swimming pool. The experience of fear and its conquest made him live intensely. He enjoyed every moment of his living.	A clipping on water sports will be shown for understanding the lesson. A Snippet (song delivering courage of Amelia Earhart)	Different styles of swimming. Names and pictures of Indian swimming Champions.	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,
June	21	P-3- Keeping Quiet (Flamingo)	The poet wants to convey that stillness is necessary for reflection and quiet introspection. We can hear the voice of our conscience and thus withdraw ourselves from undesirable actions and contribute to create a society of peace and mutual understanding.	Importance of meditation. Meditation music https://www.youtub e.com/watch?v=58Z NeCS05II https://www.youtub e.com/watch?v=FMrt SHAAPhM	Script Writing and Role Play on establishing Peace and Unity. (Write a script on Peace and Unity and act on it.)	Spiritual Message (Reading exerpts)
		Vistas- L-2- The Tiger King	The story is a satire on the conceit of those in power. The writer has used the literary devices of dramatic irony and humour to create this effect. The story spans from the birth of tiger king to death covering all the landmarks connected with his passion- tiger-hunt.	Short video on save tiger. Presentation on 'Treatment to Wild Life' (Power Point Presentation)	Write a paragraph on the dictum 'Live and let others live'. If you become a king would you prefer ruling your state and discussing on important issues or indulge in petty issues and feel conceited?	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,
		L – 3 – Journey to the end of the World (Vistas)	TishaniDoshi describes the journey to the coldest, driest and windiest continent in the world: Antarctica. The world's geological history is trapped in Antarctica. Geoff Green's_Students on Ice' programme aims at taking high school students to the ends of the world. Doshi thinks that Antarctica is the place to go and understand the earth's present, past and future.	Video Information about Antarctic.	<b>Speech:</b> Biodiversity Loss	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,

		Invitation and Replies	Invitations are extended to relatives, friends, acquaintances and clients on a number of social occasions like marriages, births, engagements, deaths or other public functions. Replying to invitations is essential. It is an essential courtesy to the host who has extended an invitation and also helps the host know how many guests will arrive so that he she may make arrangements accordingly.	Making of Invitation Cards	Practicing telephonic act of inviting people. Learning the courtesy.	Collect the best invitation that you have received and presenting it in the class.
		P-4 : A Thing of Beauty (Flamingo)	A taste of classical poetry with universal appeal and eternal value. The natural bounties are all beautiful things which fill us with joy and remove the gloom in life.	Painting or Photography of Landscapes	What do you think - 'Beauty dwells outside or within?'. Write a paragraph in 150 words.	Beauty of the Universe.
July		L-4 : The Rattrap (Flamingo)	The story has a universal theme that the essential goodness in a human being can be awakened through understanding and love. Edla's kindness and hospitality awakens his conscience and he realises that there is a way out of the trap and returns the money through Edla.	Are you tempted by any thing in life or have you fallen to any of the temptation which made you do even wrong? Should a person be given a chance to reform himself?	<b>Debate</b> on 'The whole World is nothing but a great Rattrap.	Discuss on the temptations in life. Twin Flame Energy
	25	P – 5 : A Roadside Stand (Flamingo)	Robert Frost presents the lives of poor deprived people with pitiless clarity and with the deepest sympathy and humanity. The poor people had constructed a roadside stand to sell their products and earn a living but the rich do not even bother to take a look at it.	<b>Group Discussion -</b> The economic wellbeing of a country depends on a balanced development of the villages and the cities.	Have you ever stopped at the roadside stand while travelling? List your observations.	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,
		L-2:The Enemy (Vistas)	An American prisoner of war is washed ashore in a dying state and is found at the doorstep of a Japanese doctor. Dr.Sadao encounters the dilemma-to live as a private individual whose moral ethical responsibility is to save the soldier or to let the prisoner die. He risks his life, fame and social status-takes him to his house and makes efforts to save him.	Tribute to the Doctors during the pandemic	Writing Viewpoints - Should we hate our enemy if he is in the death trap or should we save?	Japan medical industry – an analysis
		L-3- Should Wizard Hit Mommy? (Vistas)	The story deals with a very serious theme of 'good parenting'. It is about the father who tries to teach moral values through his stories to his daughter and about the worth of originality. It is a sharp contrast about the child's viewpoint and an adult's perception of life	Are nursery rhymes and fairy tales a reflection of reality? Your favourite fairy tale.	Why are we deluded by our peer group in adolescence and childhood?	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,
		Report Writing	Format of Report Writing. Steps to follow. Development of the report.	Creative Writing	Writing on reports on various topics.	Paper cuttings and the collection of newspaper reports.
Aug	23	P- 5- Aunt Jennifer's Tigers (Flamingo)	The poem consists of three quatrains which expose the desolating effects of patriarchy. The poem showcases a fair interplay between rebellion and repression, individual and the social and between personal and political aspects of male chauvinism and suffocation in a married life.	Comic Strip & Critical appreciation of the poem (Creative Writing Task).	Comment on 'Marriage is blissful state'. Or A stage to develop understanding g and relationship.	Details about marriage ceremony of a particular country and the traditional differences.
		L5- Indigo (Flamingo)	The lesson is based on the leadership shown by Mahatma Gandhi to secure justice for oppressed people through convincing argumentation and negotiation. It also mentionsthe contributions made by anonymous Indians to the freedom	A video clip will be shown on the lesson.	a) List some characteristic s of a leader. b) What was Gandhiji's role in freedom movement? c) What do you know	Facts about khadi movemen and spinning wheel.

			movement.		about indigo plantation?		
		Vistas-L-4- On the Face of It	- The lesson is about the pain and isolation, the physically handicapped go through. It highlights the callousness of the society towards them which affects them adversely and they become even more withdrawn. It encourages the readers to be brave enough to face, accept and deal with difficult situations in life. It is about Mr. Lamb, a physically challenged old man who has a positive outlook and attitude towards life.	Group discussion on "It's got nothing to do with my face and what I look like"	-How do you view your life? -How to motivate handicapped people?	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,	
		L -6 Poets and Pancakes (Flamingo)		Group discussion on "It's got nothing to do with my face and what I look like"	How do you view your life? -How to motivate handicapped people?	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,	
		Business letter – Job application	To learn to write to the point business letters in appropriate formal language, precise form and content pertaining to various situations.	Creative Writing	Discussion on Report Writing	Writing on reports on various topics.	
Sept	23	Vistas - L - 5 - Evans Tries an O Level	The story depicts a class of wit between a criminal and the law enforcing authorities in which the prisoner Evans befools the jail authorities and manages to escape from the prison. The governor fails to revoke the escape plan of Evans and proves himself to be good for a giggle gullible governor.	Group discussion - The prison staff often develops a soft corner for those in custody? Do you agree?	Should criminals in prison be given the opportunity of learning and education? Can education bring any reform?	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,	
		L - 6 : Memo ries of Childh ood (Vistas )	The story presents autobiographical episodes from the lives of two women and is an insight into humiliations suffered by the marginalised communities and their relationship with the mainstream culture.	Sharing of a vivid memory from childhood.	Discussion Seeds of rebellion are sown in childhood. Do you agree? Narrate an incident from the history	Trans activist – Lakshmi Narayan Tripathi and Gauri Sawant.	
		Speech/Deba te Writing	know the four models of persuasive writing: (i) Monre's motivated sequence, (ii) problem/solution, (iii) comparison and (iv) using the negative to persuade	Listening : Famous speeches/debates	Drafting/Creative writing of speech and debate.	Writing the script of the latest speech/debate	
Oct	16	L8- Going Places (Flami ngo)	Places- The story of an incurable dreamer and an escapist who belongs to a lower middle class family and indulges in 1 lantasizing and hero worship. It also focuses on the complexities of human relationships among different members of a family.	Broken family ties: What you really lost?	Express your views 'Dreams are extremely important; you cannot achieve it unless you imagine it.'	(Face to face interaction through digital learning) For instance – *Educational video or any documentary *Animation, *PPT Slides, *YouTube link, *Web series *Video game *etc.,	
Nov		Revision and Pr	ractice Test				
Dec		Revision and Pr	ractice Test/ Pre Board				
Jan		Pre Board					

#### **GROUP DISCUSSION TOPICS**

- What do you think about 'ageing gracefully'? How can we change the trend of people going for cosmetic surgeries?
- Gender Sensitivity is gender equality concern?
- A.I. in work: how it is going to change the future of workspace?
- Cryptocurrency/ Bitcoin
- Discuss the quote by Mark Zuckerburg "We don't make services to make more money, we make money to make better services".
- Is Dependence on Computers a Good Thing?
- Terrorism in India
- How effective are Indian B-schools?
- Will E-Commerce ruin the retail stores?
- Are Peace and Non-Violence Outdated Concepts?
- Effect of demonetization on common citizen vis-a-vis black money holders
- Discuss Social Media impact on teenagers.
- Are men compromising their careers for the family?
- Are nuclear families a blessing in disguise?
- Artificial Intelligence is taking over the human workforce.
- Is our Political System Reason for our Backwardness?
- #Me Too Campaign
- E-Learning: A Substitute for Classroom Learning?
- Work-Life balance and Need for spirituality.
- The decline in open spaces may lead to negative tendencies in children.

## SUBJECT : Physics Text Book : NCERT

Month	WD / NOP	Chapter/Sub-Topics	Activity	Project / Practical	Smart Board
APRIL	23	chapter–1: Electric Charges and Fields: Electric Charges; Conservation of charge, Coulomb's law-force between two point charges, forces between multiple charges; superposition principle and continuous charge distribution. Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field. Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).	1. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.	<ol> <li>To find resistance of a given wire using metre bridge and hence determine the specific resistance of its material</li> <li>To determine resistance per cm of a given wire by plotting a graph of potential difference versus current.</li> </ol>	Audio and videos
		Electrostatic Potential and Capacitance: Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, 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.			
May	10	<b>Current Electricity</b> : Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, series and parallel combinations of resistors; temperature dependence of resistance. Internal resistance of a cell, potential difference and emf of a cell,	2. To study the variation in potential drop with length of a wire for a steady current	<ul> <li>3. To verify the laws of combination (series/parallel) of resistance using meter bridge.</li> <li>4. To compare the emf of two primary cells using potentiometer.</li> </ul>	Smart Board to explain Kirchho ff's Rules, and Potentio meter
		Moving Charges and Magnetism: Concept of magnetic field, Oersted's experiment. Biot - Savart law and its application to current carrying circular loop. Ampere's law and its	3. To draw the	5. То	
June	21	applications to infinitely	diagram of a given open circuit	determine the	

		long straight wire. Straight and toroidal solenoids (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields.	comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the component s that are not connected in proper order and correct the circuit and also the circuit diagram.	internal resistance of a given primary cell using potentiometer.	
		Moving Charges and Magnetism (Contd.) Force on a current- carrying conductor in a uniform magnetic field,			
		Magnetism and Matter Magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis, torque on a magnetic dipole.			
		<b>Electromagnetic Induction:</b> Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Eddy currents. Self and mutual induction.			Demonstration of eddy currents by video.
JULY	25	Alternating Current: Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance;	. To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such		
		LCR series circuit, resonance; power in AC circuits, power factor, wattless current. AC generator and transformer.			Working of ac generator on video.
AUG	23	Electromagnetic Waves: Basic idea of displacement current, Electromagnetic waves, their characteristics, their Transverse nature (qualitative ideas only). ultraviolet, X-rays, gamma rays) including elementary facts about their uses.			Videos of electromagnetic field in 3D
		Ray Optics and Optical Instruments: Ray Optics: Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and its applications, Microscopes and astronomical	To study the nature and size of the image formed by a (i) convex lens, (ii) concave mirror, on a screen by using a candle and a screen (for different distances of the	<ul><li>6. To find the value of v for different value of u in case of a concave mirror and to find the focal length,</li><li>7. To find the</li></ul>	Examples of use of mirrors and lens via smart board.

SEDT	12	telescopes (reflecting and refracting) and their magnifying powers.	candle from the lens/mirror	focal length of a convex mirror, using a convex lens.	
SEPT	12	<b>EXAM</b> Wave Optics: Wave optics: Wave front and Huygen's principle, reflection Young's double slit experiment and expression for fringe width (no derivation), coherent sources and sustained interference of light, <b>Dual Nature</b> of Radiation and Matter: Dual nature of radiation, Photoelectric effect, Hertz and	10. To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation.	8. To find focal length of a convex lens by plotting graphs between u and v or between 1/u and 1/v. 9. To find the focal length of concave lens	Video of all topics on projector(wave front , huygen principle etc)
ОСТ	16	Atoms : Alpha-particle scattering         experiment; Rutherford's model of         atom; Bohr model, energy levels,         hydrogen spectrum.		using a convex	
		<b>Nuclei :</b> Composition and size of nucleus. Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.		11. To determine refractive index of a glass slab using a travelling microscope.	
		Semiconductor Electronics: Materials, Devices and Simple Circuits Energy bands in conductors, semiconductors and insulators (qualitative ideas only)			Audio and visual aids
NOV		Revision		12. To find refractive index of a liquid by using (i) concave mirror (ii) convex lens and plane mirror.	
DEC	Pre-Board I			•	
JAN	Pre-Board II & P	ractical Exam			
FEB	Board Examination	n			

# SUBJECT :CHEMISTRY

Text Book : NCERT

Month	WD / NOP	Chapter/Sub-Topics	Key Terms and Concept	Art Integration	Project / Practical	Research Work Blended earning
APRIL	23	Ch- Haloalkanes and haloarenes:- Haloalkanes: Nomenclature, nature of C–X bond, physical and chemical properties, optical rotation mechanism of substitution reactions. Haloarenes: Nature of C–X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only). Uses and environmental effects of - dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT Ch- Alcohols, phenols and ethers:- Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration, uses with special reference to methanol and ethanol. Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophillic substitution reactions, uses of phenols. Ethers: Nomenclature, methods of phenols.	bond • Uses and environment effect of haloalkanes and haloarenes • Nomenclature of alcohols, phenols and ethers Preparation, physical and chemical properties of alcohols, phenols and ethers, and uses	Poster making on environme ntal effects of poly halogens compound.	Determin ation of concentra tion/ molarity of KMnO4 solution by titrating it against a standard solution of Ferrous Ammoniu m Sulphate.	A report on Refrigerant poisoning- causes, symptoms and treatment
MAY	10	<b>Ch- Aldehydes, ketones and</b> <b>carboxylic acids:</b> Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition. Reactivity of alpha hydrogen in aldehydes and uses.	<ul> <li>Nomenclature</li> <li>Preparation, physical properties ,chemical properties and uses of aldehydes, ketones and carboxylic acids</li> </ul>	Poem – Three short lines on aldehydes, ketones and carboxylic acids.	Determinat ion of concentrati on/ molarity of KMnO <sub>4</sub> solution by titrating it against a standard solution of (a) oxalic acid	
JUNE	6+15	Ch- Aldehydes, ketones and carboxylic acids(continued):- Nomenclature, acidic nature, methods of preparation, physical and	<ul> <li>nomenclature</li> <li>preparation, physical properties ,chemical properties and uses of</li> </ul>	Clay modelling on bonding in organic 90mpound containing	Test for the functional groups present in organic compound	To investigate the chemical used in textile processing.

		chemical properties, uses. <u>Ch- Amines:</u> Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines.	<ul> <li>amines</li> <li>important of amines in organic synthesis</li> <li>identification of primary, secondary and tertiary amines</li> </ul>	nitrogen	s: Unsaturatio n, alcoholic, phenolic, aldehyde, ketonic, carboxylic and amino (primary groups)	
JULY	25	Ch- Amines( continued): Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry Ch- Biomolecules:- Carbohydrates – Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D-L configuration , glycogen) importance of carbohydrates. Proteins – Elementary idea of $\alpha$ – amino acids, peptide bond, denaturation of proteins; enzymes. Hormones – Elementary idea excluding structure. Vitamins - Classification and functions. Nucleic Acids: DNA and RNA.	<ul> <li>Classificatio         <ul> <li>Monosaccha             rides</li> <li>Amino             acids,             peptide             bond,             denaturation             of proteins,             enzymes             and             hormone.</li> <li>Classificatio             n and             functions</li> </ul> </li> </ul>	Brochure on elementary idea of biomolecul es found in human body. Synthetic polymer paint on wood.	Test for the functional groups present in organic compoun ds: Unsaturat ion, alcoholic, phenolic, aldehyde, ketonic, carboxyli c and amino (primary groups)	The importance of synthetic chemistry in pharmaceutical industry. Scope of synthetic organic chemistry
AUG	23	<b>Ch- Solutions:-</b> Types of solutions, expression of concentration of solutions of solids in liquids, determination of molecular masses using colligative properties, abnormal molecular mass, van't Hoff factor. <b>Ch:- Elecrtrochemistry:-</b> Redox reactions, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and law of electrolysis (elementary idea), dry cell-electrolytic cells and Galvanic cells, lead accumulator, fuel cells, corrosion.	<ul> <li>Types of solutions,</li> <li>expression of concentration of solutions of solids in liquids</li> <li>abnormal molecular mass</li> <li>Vant's Hoff factor</li> <li>Redox reactions</li> <li>EMF</li> <li>Nernst equation and its application to chemical cells</li> <li>Relation between Gibbs energy change and EMF of a cell, conductance in electrolytic solutions</li> <li>Kohlrausch's Law</li> <li>electrolysis and law of electrolysis (elementary idea)</li> </ul>		QUALIT ATIVE ANALY SIS Cations- Pb <sup>2+,</sup> Cu <sup>2</sup> +, Al <sup>3+,</sup> Fe <sup>3+,</sup> Ni <sup>2+,</sup> Zn <sup>2+,</sup> Co <sup>2+,</sup> Mn <sup>2+,</sup> Ba <sup>2+,</sup> Ca <sup>2+,</sup> Sr <sup>2+,</sup> NH <sup>4+</sup> Anions – Cl <sup>-</sup> , Br <sup>-</sup> , I <sup>-</sup> , CO <sub>3</sub> <sup>2-</sup> , NO <sub>3</sub> <sup>1-</sup> , CH <sub>3</sub> COO -, SO <sub>4</sub> <sup>2-</sup>	To understand the role of catalyst in medicines. Co-ordination compounds and its important role in nature

SEPT	5+7	EXAM +REVISION	• Galvanic cells, lead accumulator, fuel cells, corrosion.			
OCT	16	<ul> <li>Ch- Chemical Kinetics         <ul> <li>Rate of a reaction</li> <li>(Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half-life (only for zero and first order reactions), concept of collision theory (elementary idea, no mathematical treatment), activation energy, Arrhenius equation.</li> </ul> </li> <li>Ch-Coordination Compounds:-</li> <li>Coordination compounds – Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT; structure and stereoisomerism, importance of coordination compounds (in qualitative analysis, extraction of metals and biological system).</li> </ul>	<ul> <li>Rate of a reaction</li> <li>factors affecting rate of reaction: concentration, temperature, catalyst</li> <li>order and molecularity of a reaction</li> <li>rate law and specific rate constant</li> <li>integrated rate equations and half-life (only for zero and first order reactions)</li> <li>collision theory</li> <li>activation energy and Arrhenius equation.</li> <li>Ligands</li> <li>coordination number</li> <li>IUPAC nomenclature of mononuclear coordination compounds</li> <li>Werner's theory VBT CFT Stereoisomeris m</li> <li>extraction of metals and biological system</li> </ul>	Power point presentatio n on chemical kinetics and its importance Clay modelling on bonding in co- ordination compounds	Anions – Cl <sup>–</sup> , Br <sup>–</sup> ,	Role of minerals found in our body Role of amino acids in human body.
		Ch- d and f Block Elements:- General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transition metals – metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation, preparation and	electronic configuration occurrence and characteristics of transition metals general trends in properties of the first row transition metals – metallic character, ionization enthalpy, oxidation states,	Chart preparation on trends in physical and chemical properties of d and f- block elements. Chromatog raphy butterfly craft		

	properties of K2Cr2O7 and KMnO4. Lanthanoids - Electronic configuration, oxidation states, chemical reactivity and lanthanoid contraction and its consequences. Actinoids - Electronic configuration, oxidation states and comparison with lanthanoids.	ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation preparation and properties of K2Cr2O7 and KMnO4 • Electronic configuration, oxidation states, chemical reactivity and lanthanoid contraction and its consequences.
NOV	REVISION	
DEC	REVISION	
JAN	REVISION	
FEB	BOARD EXAMINATION	

# SUBJECT :BIOLOGY

Text Book : NCERT

Month	WD/NOP	Chapter/Sub-Topics	Key Terms and Concept	Art Integrati on	Project / Practical	Research Work Blended earning
APRIL	23	Sexual reproduction in flowering plants: Flower structure, development of male and female gametophytes, pollination – types, agencies and examples, special modes–apomixis, polyembryony.	: Flower structure, development of male and female gametophytes, pollination – types, agencies and examples, special modes– apomixis, polyembryony.	Preparat ion of natural dyes. Group work: Take intervie w of 5 renowne d gynaeco logist of your locality and make a docume ntary on it.	<ol> <li>To prepare a temporary mount to observe pollen germination.</li> <li>Study of flowers adapted to pollination by different agencies (wind, insect, bird)</li> <li>To prepare a temporary mount of onion root tip to study mitosis.</li> <li>Identification of stages of gamete development i.e T.S. of testes &amp; T.S.of ovary through permanent slides</li> <li>To stud meiosis in onion Bud cell through permanent slides</li> <li>Identification of T.S.of blastul through</li> </ol>	
		<u>Human Reproduction</u> <u>:</u> Male and female reproductive system, menstrual cycle fertilization, embryo development upto blastocyst formation, pregnancy and placenta formation	Male and female reproductive system, menstrual cycle fertilization, embryo development upto blastocyst formation, pregnancy and placenta formation			
MAY	10	Reproductive Health: Need for reproductive health and prevention of STD birth control— need and methods of contraception. Medical termination of pregnancy,	STD birth control—need and methods of contraception. Medical termination of pregnancy, amniocentesis; infertility.	Catchy slogan Writing on Promoti on of Family Plannin g		

		amniocentesis; infertility.				
		Principles of Inheritance and Variation: Mendelian laws of inheritance, deviation from Mendelism, multiple alleles and inheritance of blood groups– chromosome theory of inheritance; chromosomes and genes; sex determination, linkage and crossing over; sexlinked	Mendelian laws of inheritance, multiple alleles and inheritance of blood groups– chromosome theory of inheritance; chromosomes and genes; sex determination, linkage and crossing over; sexlinked	1. Represe nt the dihybrid cross in punnet square by pasting colourfu 1 balls/ marbles on a hard board .	1.Prepare pedigree charts of anyone of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and color blindness 2. Study of Mendelian inheritance using seeds of different colour/size of any plant.	Make a detailed paper presentation on any one Genetic disorders
JUNE	6+15=21	Molecular Basis of Inheritance: Search for genetic material, The DNA, RNA world. DNA packaging, Replication of DNA, Human and rice genome project, DNA finger printing	Search for genetic he DNA, RNA world. DNA packaging, Replication of DNA, Human and rice genome project, DNA finger printing			Write a character sketch of Charles Darwin
JULY	25	<b>Evolution</b> Origin of life; biological evolution and evidences for biological evolution (paleontology, mechanism of evolution - variation (mutation and recombination) and natural selection with examples, Hardy - Weinberg's principle; adaptive radiation; human evolution.	Origin of life; biological evolution ,paleontology, mechanism of evolution - variation (mutation and recombination) and natural selection with examples, Hardy - Weinberg's principle; adaptive radiation; human evolution.		Flash card models showing examples of homologous and analogous organs.	Group Project : Make a ppt presentation on evolution of Homo sapien

		Human Health and Disease Pathogens, parasites causing human diseases(malaria, dengue, chicken gunia, Basic concepts of immunology- vaccines, cancer, HIV and AIDS, typhoid, pneumonia, common cold, amoebiasis,	Pathogens, parasites causing human diseases(malari a, dengue, chicken gunia, vaccines, cancer, HIV and AIDS, typhoid, pneumonia, common cold,	Make informat ive posters on Awaren ess on AIDS. Make it informat ive by adding logos of Govern ment initiativ e in this regard	1.Study of disease causing organisms like Ascaris, Entamoeba, Plasmodium & Roundworm through permanent Slides or specimen. Comment on symptoms of disease that they cause.	To make a ppt on various awareness program on malaria
AUG	23	Microbes in Human Welfare: Role of microbes in household food processing, sewage treatment, energy generation and as bio-control agents and bio-fertilizers.	Role of microbes in household food processing, sewage treatment, energy generation and as bio-control agents and bio- fertilizers		Models specimen showing symbolic association in root modules of leguminous plants,cuscuta on host,lichens.	
SEPT	5+7=12		E	XAM		
ост	16	Biotechnology - Principles and ProcessesGenetic Engineering (Recombinant DNA Technology).Biotechnology and its Application Application of biotechnology in health and agriculture: gene therapy; genetically modified organisms - Bt crops; transgenic animals;	Genetic Engineering (Recombinant DNA Technology). gene therapy; genetically modified organisms - Bt crops; transgenic animals;		Isolatio n of DNA from available plant material such as spinach, green pea seeds, papaya etc.	
		Organisms and Populations Organisms and environment: Habitat and niche, population and ecological adaptations; population attributes - growth, birth rate and death rate, age distribution.	Organisms and environment: Habitat and niche, population and ecological adaptations; population attributes - growth, birth rate and death		1. To study the plant population density by quadrat method 2. Study the plant population frequency by quadrat	

Ecosystem Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy;	rate, age distribution. Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy;	method.	
Biodiversity and its Conservation Biodiversity - Concept, patterns, importance; loss of biodiversity; Red Data Book, Sacred Groves, biosphere reserves, national parks, wildlife, sanctuaries and Ramsar sites.	Biodiversity, Red Data Book, Sacred Groves, biosphere reserves, national parks, wildlife, sanctuaries and Ramsar sites		

#### **SUBJECT : MATHEMATICS**

<b>Text Book :</b>	1. Mathematics Part I and Part II-Text Book for class XII (NCERT
	2. Mathematics R.D Sharma Part I & II, Class XII

Month	W.D.	Chapter/Sub-Topics	Key Terms and Concept	Art Integration n	Project / Practical	Research Work Blended earning
APRI L	23	<b>Relations and Functions</b> Types of relations: reflexive, symmetric, transitive and equivalence relations. Composition of function and invertible function. One to one and onto functions. Binary operation	Types of relations: reflexive, symmetric, transitive and equivalence relations. Composition of function and invertible function. One to one and onto functions. Binary operation	To minimize the cost of food fulfilling the dietary requireme nts.	To verify that the relation R in the set L of all lines in a plane, defined by $R = \{(1, m) : 1    m\}$ is an equivalence relation.	Formation of differential equation to explain the process of cooling of boiled water to a given room temperature.
МАҰ	10	<b>Inverse Trigonometric</b> <b>Functions</b> Definition, range, domain, principal value branch.	Definition, range, domain, principal value branch		To draw the graph of $\sin^{-1}x$ , using the graph of sin x and demonstrate the concept of mirror reflection (about the line y = x).	
		Matrices Concept, notation, order, equality, types of matrices, zero and identity matrix,	Concept, notation, order, equality, types of matrices, zero and identity matrix,		To demonstrate a function which is not one-one but is onto	
		Operation on matrices: Addition and multiplication and multiplication with a scalar.	Operation on matrices: Addition and multiplication and multiplication with a scalar.	Estimatio n of a populatio n of aparticula r region.	To sketch the graphs of $a^x$ and $\log_a x$ , $a>0$ , $a#1$ and to examine that they are mirror images of each other	
JUNE	21	<b>Determinants</b> Determinant of a square matrix (up to 3 x 3 matrices), Applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix solutions, solving system of linear equations in two or three variables	Determinant of a square matrix (up to 3 x 3 matrices), Applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix solutions, solving system of linear equations in two or three variables		To establish a relationship between common logarithm (to the base 10) and natural logarithm (to the base e) of the number x.	To find the time when the area of a rectangle of given dimensions become maximum, if the length is decreasing and the breadth is increasing at given rates.

JULY	25	<b>Continuity and</b> <b>Differentiability</b> Continuity and differentiability, inverse trigonometric functions, derivative of implicit functions. Concept of exponential and logarithmic functions.	Continuity and differentiability, inverse trigonometric functions, derivative of implicit functions. Concept of exponential and logarithmic functions.	To find the time when the area of a rectangle of given dimension s become maximum, if the length is decreasing and the breadth is increasing at given rates.	<ol> <li>To verify Rolle's Theorem.</li> <li>To verify Lagrange's Mean Value Theorem.</li> </ol>	
		Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second order derivatives. Mean value theorem.	Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second order derivatives. Mean value theorem.		To find analytically the limit of a function $f(x)$ at $x =$ c and also to check the continuity of the function at that point.	
		Applications of Derivatives Applications of derivatives: Increasing/decreasing functions, tangents and normals,	Applications of derivatives: Increasing/decreasing functions, tangents and normals,		To understand the concepts of decreasing and increasing functions.	
AUG	23	Applications of Derivatives Applications of derivatives: Increasing/decreasing functions, tangents and normals, Integrals : Integration as inverse process of differentiation. Integration of a variety of functions by substitution,	Applications of derivatives: Increasing/decreasing functions, tangents and normals, Integration as inverse process of differentiation. Integration of a variety of functions by substitution,	To measure the shortest distance between two skew lines and verify it analyticall y		Formation of differential equation to explain the process of cooling of boiled water to a given room temperature.
SET	12	EXAM				
ОСТ	16	ApplicationsoftheIntegrals:Applications infinding the area under simplecurves, especially linesDifferentialEquationsDefinition, order and degree,generalandparticularsolutionsofadifferentialequation.	Applications in finding the area under simple curves, especially lines . Definition, order and degree, general and particular solutions of a differential equation		To understand the concepts of absolute maximum and minimum values of a function in a given closed interval through its graph.	

		<u>Vectors</u> : Vectors and scalars, magnitude and direction of a vector. Direction cosines and direction ratios of a vector.	Vectors and scalars, magnitude and direction of a vector. Direction cosines and direction ratios of a vector	To verify that angle in a semi- circle is a right angle, using vector method	To find the time when the area of a rectangle of given dimensions become maximum, if the length is decreasing and the breadth is increasing at given rates.	
		Three - dimensional Geometry : Direction cosines and direction ratios of a line joining two points. Distance of a point from a plane. Angle between two lines and two planes and a line and a plane.	Direction cosines and direction ratios of a line joining two points. Distance of a point from a plane. Angle between two lines and two planes and a line and a plane.			Finding the coordinates of different points identified in your classroom using the concepts of three dimensional geometry and also find the distances between the identified points
		<u>Linear Programming :</u> Introduction, related terminology such as constraints, objective function, optimization, different types of linear programming (L.P.)	Introduction, related terminology such as constraints, objective function, optimization, different types of linear programming (L.P.)	To evaluate the definite integral $\int_{a}^{b} \sqrt{(1-x^{2})^{2}}$ as the limit of a sum and verify it by actual integratio n.	To measure the datortest distance between two skew lines and verify it analytically	
NOV	17	Revision				
DEC	22	Revision				
JAN	19	Revision				
FEB	07	Revision				

#### SUBJECT : <u>Computer Science(083)</u>

#### Text Book : 1. TEXT BOOK NCERT

Computer Science with Python (Author Name: Preeti Arora, Publication: Sultan Chand)
 Textbook of Computer Science with Python (Author Name: Vijay Kumar Pandey,

Publication: Avich	al Pub Company)
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Month	WD	Chapter/Sub-Topics	Key Terms and Concept	Art Integration	Project / Practical	Research Work Blended earning
APRIL	23	Unit 3: Database Management Database concepts: introduction to database concepts and its need Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key) Structured Query Language: introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical) Database Management (continued): aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause, joins: cartesian product on two tables, equi-join and natural join.	DBMS,RDBMS,Pri mary Key,Foreign Key,alternet key,candidate key, Degree,cardinality, DDL,DML,DCL Like ,update, delete.	Make a chart paper to show the relationship of the table. Take one example and show the process of creating table. Integrated with Paining and Sketch poster making ,flow chart on making project file and corelated with referential integrity.	Students will do the practical of writing queries to create table, insert data and delete data of a table in SQL interface.	By using database connectivity with mysql and python. To connect database with python project. *Making a video or any documentary related to internet security.
MAY	10	Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using fetchone(), fetchall(), rowcount, creating database connectivity applications.	Cursor,fetchone(), fetchall()	Making Flow chart on Interface of python with an SQL database	Students will do the practical of SQL queries as well as Python programs to merge programming file with database. Project:	* By using Sql queris of having clause, joins: cartesian product on two tables, equi-join and natural join Students learns many more about Sql Queries.

					Write a program in Python where students will enter their choice of Foreign language and store this choice in database using following fields: Name of the students Admission number Class Section Choice of Foreign language.	
JUNE	6+15= 21	Unit 1: Computational Thinking and Programming – 2 Revision of Python topics covered in Class XI. Functions: types of function (built-in functions, functions defined in module, user defined functions) creating user defined function, arguments and parameters, default parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope). Exception Handling: Introduction. Syntax Error Run time Error Logical Error Handling Exceptions using try-except-finally blocks.	Local & global variables, flow of execution. Syntax Error Run time Error Logical Error	Make a Project on Student Registration System with help of different platform. Make a Project integrated with culture of different state of India.	Students will do the practical of writing program in Python interface. Project work and Revision/Pract ical Work on Function. Students will do the practical of writing program in Exceptions using try- except-finally blocks.	<ul> <li>*Making a video or any documentary related to cyber security.</li> <li>Practical assignment no 5- 10</li> <li>*Making a video or any documentary related to system security.</li> <li>Practical assignment no 11-13</li> </ul>
JULY	25	Unit 1: Computational Thinking and Programming – 2 (continued): Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths . Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause writing/appending data to a text file using write() and writelines(), reading	CSV, file open modes (r, r+, w, w+, a, a+), open using file open modes (rb, rb+, wb, wb+, ab, ab+), dump() and load()	Make a Project on Student Registration System with help csv file.	Students will do the practical of writing programs in Python interface using file features.	*Making a video or PPT on types of files or any documentary related to file security. Practical assignment 14-20.

		from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file . CSV file: import csv module, open / close csv file, write into a csv file using csv. writerow() and read from a csv file using csv. reader () Python libraries: creating python libraries. Unit 1: Computational Thinking and Programming – 2 (continued): CSV file: import csv module, open / close csv file, write into a csv file using csv.writerow() and read		Integrated with		
AUG	23	from a csv file using csv.reader() Data Structure: Stack, operations on stack (push & pop), implementation of stack using list. <b>Unit 3: Computer Networks:</b> Evolution of networking: introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET) Data communication terminologies: concept of communication, components of data communication (sender, receiver, message, communication media, protocols), measuring capacity. of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)	CSV ,PUSH,POP,csv.rea der(),csv.writerow()	Paining and Sketch poster making & flow chart on making project file. Integrated with painting & Making flow chart to display on Evolution of networking. Making PPT on Data communication terminologies	Students will do the practical of writing programs in Python by using csv.writerow() and csv.reader(). Students will do the practical of writing programs in Python interface using import statement and stack operations.	*Making a video or any documentary related to data security. Practical assignment no 21-25. *Making a PPT on or any documentary related to Data communication terminologies
SEPT	5+7=1 2	Revision on Python function. Exception handling. File handling in python. Project work and Revision/Practical Work on				

OCT16Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card)Wireless, LAN, MAN, WWFI card)data communication using cartoon and other materials. Use ball t show the transfer of data from one place to another place.OCT1616Wireless, topologies (Bus, Star, Tree) Unit 2: Computer Networks (continued):Wireless, LAN, MAN, WWW, HTP,FTP, YML, HTML, TCP/I PWireless, LAN, MAN, WAN,P AN, Topology, RJ45, WWW, HTP,FTP, YML, HTML, TCP/I PMake a video on Network Protocol. Explain about Network Protocol using some example. You can use any model alsoNOY17Tetworks (koth), AN
NOV     17     Revision       DEC     22     Practical and Revision

#### **SUBJECT : ECONOMICS**

# Text Book: 1, N,C,E,R,T

Refere	ence b	ook:- 1,Macroeconomics b	y T, R, Jain (by V, K	, Global Publication)	2, Economic D	vevelopment and
Indian E	Econom	y by T, R, Jain (by V, K, Glo	obal Publication) 3,			

Mont h	WD	Chapter/Sub-Topics	Key Terms and Concept	Art Integration	Project / Practical	Research Work
April	NOP	Unit 1: National Income and Related Aggregates National Income and Related Aggregates : What is Macroeconomics? Basic concepts in macroeconomics: consumption goods, capital goods, final goods, final goods, sintermediate goods; stocks and flows; gross investment and depreciation, Circular flow of income (two sector model); and Welfare Methods of calculating National Income – Value Added or Product method, Expenditure method, Income method, Aggregates related to National Income: Gross National Product (GNP), Net National Product (NNP), Gross Domestic Product (GDP) and Net Domestic Product (NDP) - at market price, at factor cost Real and Nominal GDP, GDP	Gross Domestic Product (GDP) – Gross National Product (GNP) – Net National Product (NNP) National Income (NI), Personal Income (PI) – Disposable Income (DI) Consumption Expenditure – Investment Expenditure Government Expenditure Net Exports (X-M)	Documentary filmmaking: National income and related aggregates can be explored through documentary filmmaking; Students can create short documentaries that explore the impact of globalization on different communities or examine the role of government policies in shaping the economy	Collect data on the economic performance of your chosen country, You can use data from government sources, international organizations such as the World Bank or the International Monetary Fund, or other reliable sources, Make sure you use data from a recent year or years to ensure the relevance of your analysis,	Blended Learning Blended learning can help to improve the overall effectiveness and efficiency of teaching and learning national income and related aggregatesby combining the benefits of traditional classroom instruction with online learning, blended learning can provide a more flexible and adaptive learning experience that meets the diverse needs of students,
May	10	Unit 2: Money and Banking Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Govt, Bank, Banker's Bank, Control of Credit through Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement	Money Supply Currency:, Central Bank Reserve Requirements Fractional Reserve Banking Monetary Policy: Interest Rates, Inflation: Deflation Commercial Banks Credit Creation	Create art projects that explore the history of money: Students can create artwork that explores the history of money, such as creating paintings or sculptures that depict the evolution of coins and currency,	The role of banking in economic development: Banks play a critical role in providing access to credit and capital for businesses and individuals, which can spur economic growth and development, You could examine how banking	The impact of central bank policies on the economy: This could involve researching how central banks use interest rates, quantitative easing, and other policies to control the money supply and stabilize the economy, Students could explore the historical context of central bank

					systems differ across countries and regions, and how these differences impact economic growth and development,	policies, as well as analyze recent examples like the Federal Reserve's response to the COVID-19 pandemic,
June	21	UNIT: 3 Determination of Income and Employment Aggregate demand and its components, Propensity to consume and propensity to save (average and marginal), Short-run equilibrium output; investment multiplier and its mechanism , Meaning of full employment and involuntary unemployment, Problems of excess demand and deficient demand; measures to correct them - changes in government spending, taxes and money supply	Disposable Income -, Consumption, Investment -, Government Spending - Aggregate Demand Aggregate Supply, Inflation, Unemployment -, Multiplier Effect Fiscal Policy Monetary Policy - Business Cycle	Visual Storytelling: Students can create visual stories using different art forms such as drawing, painting, or photography, that demonstrate the various ways income and employment affect people's lives, This will not only help them understand these concepts but also develop their storytelling skills,	Define the circular flow of income and explain its components (households, firms, government, and the rest of the world) Explain how income and employment are generated in this model	The relationship between government policies and income inequality: Analyze how different government policies (e.g., taxation, welfare programs) affect income inequality, You can compare different countries or time periods to see how changes in policy have affected income inequality over time,
July	25	Part B: Indian Economic Development Unit 1: Development Experience (1947-90) and Economic Reforms since 1991: A brief introduction of the state of Indian economy on the eve of independence, Indian economic system and common goals of Five Year Plans, Main features, problems and policies of agriculture (institutional aspects and new agricultural strategy), Industry (IPR 1956; SSI – role & importance) and foreign trade, Economic Reforms since 1991: Features and appraisals of liberalisation, globalisation and privatisation (LPG policy); Concepts of demonetization and GST	Nehruvian socialism Five-Year Plans:, License Raj:, Green Revolution:, Import substitution industrialization Liberalization:, Privatization, Globalization:, Foreign Direct Investment (FDI):	Art and globalization: The period of economic reforms since 1991 saw India opening up to the world and becoming more integrated into the global economy, This can be a topic of study for art education as well, by exploring how Indian art and artists have responded to this process of globalization, For example, you could analyze the work of contemporary Indian artists who are working in a global context, or those who are exploring themes of cultural identity and globalization in their work,	Describe the economic policies implemented by India during this period, including the Five-Year Plans and the Green Revolution Discuss the successes and failures of these policies, and their impact on India's economy Analyse the role of the public sector and the private sector in India's economic development during this period	Analysis of the Green Revolution in India: The Green Revolution was a period of agricultural growth in India that started in the 1960s, This research topic can explore the factors that led to the success of the Green Revolution, its impact on the Indian economy, and the challenges it faced,
Aug	23	Unit 2: Current challenges facing Indian	Inflation:, Unemployment,	Infographic design: Ask students to	Unemployment: Unemployment	COVID-19 Pandemic: The

		Economy Human Capital Formation: How people become resource; Role of human capital in economic development; Growth of Education Sector in India Rural development: Key issues - credit and marketing - role of cooperatives; agricultural diversification; alternative farming - organic farming Employment: Growth and changes in work force participation rate in formal and informal sectors; problems and policies Sustainable Economic Development: Meaning, Effects of Economic Development on Resources and Environment, including global warming REVISION FOR THE	Income inequality: Slow economic growth:, Agricultural distress: Fiscal deficit:, Banking sector crisis: Digital divide Environmental degradation: Geopolitical tensions	create an infographic that visually represents the current challenges facing the Indian economy, This can include graphs, charts, and other visual representations of data, The use of color, images, and other design elements can help students convey complex information in an engaging and accessible way,	is a major challenge facing the Indian economy, With a growing population and limited job opportunities, the unemployment rate in India is very high, The COVID-19 pandemic has worsened this situation, with many people losing their jobs and businesses shutting down,	outbreak of the COVID-19 pandemic has had a severe impact on the Indian economy, You could explore the various challenges faced by different sectors, such as the impact on small businesses, job losses, supply chain disruptions, and the overall economic slowdown,
Sept	12	TERM-I EXAMINATION				
Oct	16	Unit 4: Government Budget and the Economy Government budget - meaning, objectives and components, Classification of receipts - revenue receipts and capital receipts; Classification of expenditure – revenue expenditure and capital expenditure, Balanced, Surplus and Deficit Budget – measures of government deficit,	Government Budget Fiscal Policy: Monetary Policy:, Deficit: Debt:, Inflation: Gross Domestic Product (GDP, Taxation, Public Goods: Crowding Out: Multiplier Effect:, Automatic Stabilizers	Infographics: Creating infographics that visually represent data related to government budgets and the economy is a great way to incorporate art into this topic, Students can create posters or digital graphics that illustrate the impact of government spending on the economy,	PPT on budget of our country for FY-2023-24	The role of government spending in stimulating economic growth: Analyze the historical data to investigate how government spending affects economic growth, Are there any specific areas of government spending that have a more significant impact on the economy than others?
Oct	16	UNIT 5 Balance of Payments Balance of payments account - meaning and components; Balance of payments – Surplus and Deficit Foreign exchange rate - meaning of fixed and flexible rates and managed floating, Determination of exchange rate in a free	Current Account: Capital Account: Financial Account: direct investment, portfolio investment, and other investments, Trade Balance: Current Account Balance: Capital Account Balance: Financial Account	Infographics: Creating infographics that visually represent data related to Balance of payments	Make a project on balance of payments between India and rest of the world	N,A,

	market, Merits and demerits of flexible and fixed exchange rate, Managed Floating exchange rate systemUnit 8: Development Experience of India:A comparison with neighbours India and Pakistan India and China Issues:economic growth, population, sectoral development and other	<ul> <li>Balance:</li> <li>Balance of Payments</li> <li>Surplus/Deficit:</li> <li>Demographic profile</li> <li>liberalization, and</li> <li>globalization</li> <li>Human Development</li> <li>Indicators</li> <li>GLF</li> <li>proletarian</li> <li>Cultural campaign</li> </ul>	Infographics: Creating infographics that visually represent data related to India China and Pakistan economic conditions and development	Examining the social development of India, Pakistan, and China and comparing the quality of life indicators such as literacy rates, healthcare access, and education levels, This could involve conducting	Evaluate the political developments in India, Pakistan, and China, including the role of democracy
	other Human Development Indicators			conducting surveys, analyzing existing data sets, and interviewing experts in the field,	
Nov 2	22				
Dec					

#### SUBJECT : ACCOUNTANCY

# Text Book: 1. N.C.E.R.T

# 2. DOUBLE ENTRY BOOKKEEPING

Mont h	WD NOP	2. DOUBLE ENTRY Chapter/Sub-Topics	Key Terms and Concept	Art Integration	Project / Practical	Research Work Blended Learning
April	23	<ul> <li>Accounting for partnership firms Fundamentals</li> <li>Preparation of profit and loss appropriation account</li> <li>Partners' capital accounts under fixed and fluctuating method</li> <li>Adjustment regarding interest on partner's loan</li> <li>Interest on partners drawings</li> <li>Interest on partners' capital</li> <li>Partners salaries and commission</li> <li>Past Adjustment</li> <li>Guarantee of profits</li> </ul>	Partnership deed Provisions of partnership Act 1932 Appropriation of Profit Charge against profit Fixed capital method Fluctuating capital method	<b>Integrated with</b> Painting and Sketch Poster Making, Role plays on rights and liabilities of partners.	Project on the contents of partnership deed of Go pro and Red bull.	Face to face interaction through digital learning like educational video/ documentary on partnership deed/YouTube link.
May	10	<ul> <li>Goodwill: Nature and valuation <ul> <li>Meaning of Goodwill</li> <li>Factors affecting for valuing goodwill.</li> <li>Need for valuing Goodwill.</li> <li>Classification of goodwill</li> <li>Methods for valuing goodwill:</li> <li>Average profit method: Simple and weighted.</li> <li>Super profit method</li> <li>Capitalization method: Capitalization of average profit and capitalization of super profit.</li> </ul> </li> </ul>	Favorable location Efficiency of management. Purchased Goodwill. Self-Generated Goodwill. Inherent Goodwill.	<b>Integrated with</b> Painting and Sketch Poster Making, Role plays on rights and liabilities of partners.	Project on methods used on valuation of goodwill.	Find out the various methods of valuation of Goodwill and the formulas to calculate.
June	21	<ul> <li>Change in profit sharing ratio among the existing partners.</li> <li>Concept of reconstitution of partnership</li> <li>Sacrificing ratio and gaining ratio</li> <li>Accounting treatment of goodwill, Reserves, Accumulated profit,</li> <li>Revaluation of assets and liabilities</li> <li>Preparation of balance sheet of the reconstituted firm</li> <li>Admission of a partner</li> <li>Calculation of new and sacrificing ratio</li> <li>Accounting treatment of Goodwill in case of admission of a partner as per AS – 26</li> <li>Preparation of Revaluation account, Partner's capital account and Balance sheet</li> <li>Adjustment of Capital : When total capital is known; when total capital in unknown and hidden goodwill</li> </ul>	Sacrificing ratio.         Gaining ratio.         Accumulated         profit & reserves.         Revaluation of         Assets &         reassessment of         Liabilities         Treatment of         Goodwill.         Accounting         standard 26         Adjustment of         capital.         Sacrificing ratio.         Calculation of new         ratio.         Treatment of         Goodwill when         new partner	<b>Integrated with</b> Painting and Sketch Poster Making, Role plays on treatment of goodwill, adjustment of capital, treatment of reserve and accumulated profit & loss etc.	Project on effect of change in profit sharing ratio of an imaginary partnership firm. Project on effect of admission of a partner in case of imaginary partnership firm.	Face to face interaction through digital learning like educational video/ documentary on partnership deed/YouTube link of different topics of the chapter like change in profit sharing ratio, treatment of goodwill when new partner is admitting, adjustment of capital when new partner is admitting etc. Make a imaginary partnership firm with some accounting information regarding reserves. Accumulated profits, revaluation of assets and liabilities etc and change the profit-sharing ratio and prepare the accounting treatment for that. Make a imaginary partnership firm with some accounting information regarding reserves. Accumulated profits, revaluation of assets and liabilities etc and change the profit-sharing ratio and prepare the accounting treatment for that. Make a imaginary partnership firm with some accounting information regarding reserves. Accumulated profits, revaluation of assets and

			admitted.			liabilities etc. then admit a new partner with different terms and condition and prepare all the necessary accounting treatment for that.
July	25	Retirement of a partner • Calculation of new and gaining ratio • Accounting treatment of goodwill in case of retirement of a partner. • Preparation of Revaluation account, Partner's capital account and Balance sheet • Adjustment of Capital: (i) When total capital is of the new firm is known. (ii) when total capital of the remaining partners is to be in new profit-sharing ratio. (iii) When total capital is of the new firm is equal to total capital before retirement. (iv) When retiring partner is to be paid through amount brought by the remaining partners in a manner to make their capital proportionate to their new profit-sharing ratio and also leave a desired cash balance. Death of a partner • Calculation of profit based on time and sales • Preparation of deceased partner's capital account. • Preparation of executor's account	Gaining ratio. Treatment of goodwill in case of retirement of a partner. Treatment of reserve & accumulated profit & loss. Partners loan account. Settlement of loan of retiring partner. Executors account Methods of calculation of shares of profit/loss of deceased partner. a. On the basis of time & turnover.	<b>Integrated with</b> Painting and Sketch Poster Making, Role plays on treatment of goodwill, adjustment of capital, treatment of reserve and accumulated profit & loss, calculation of profit or loss of deceased partner up to the date of death etc.	Project on accounting treatment of different items on retirement & death of a partner in case of imaginary partnership firm.	Face to face interaction through digital learning like educational video/ documentary on partnership deed/YouTube link of different topics of the chapter like change in profit sharing ratio, treatment of goodwill when a partner is retired from the firm, adjustment of capital when a partner is retired or dead etc. Make a imaginary partnership firm with some accounting information regarding reserves. Accumulated profits, revaluation of assets and liabilities etc. then one partner will retire with different terms and condition and prepare all the necessary accounting treatment for that
Aug	23	<ul> <li>Dissolution of a partnership Firm</li> <li>Accounting entries for dissolution of firm</li> <li>Preparation of dissolution or realization account, partners' capital account and bank account.</li> <li>PART- B Company Accounts</li> <li>Accounting for share capital</li> <li>Accounting treatment of issue of share at par and premium</li> <li>Under subscription of shares</li> <li>Over subscription of shares</li> <li>Issue of shares for consideration other than cash</li> <li>Forfeiture and re-issue of shares</li> </ul>	Realization         account.         Dissolution of         partnership and         partnership form.         Dissolution by         court.         Firm's debt and         private debt.         One person         company         Private Company         Public Company         Equity shares         Preference shares         Consideration         other than cash         Over-subscription         Under-subscription         Calls in arrears.         Calls in advance.         Pro-rata allotment.         Forfeiture and         reissue of shares	<b>Integrated with</b> Painting and Sketch Poster Making of Dissolution_of partnership and partnership form. One person company, Private Company, Public Company, Equity shares, Preference shares etc.	Project on the provisions of act regarding the dissolution of partnership firm. Project on a Public Ltd. Regarding accounting entries of issue of shares and their provisions on Co. Act 2013.	Face to face interaction through digital learning like educational video/ documentary on partnership deed/YouTube link of settlement of accounts U/s 48, several types of companies, types of shares issued in the market, stock exchange, presentation of share capital in company's Balance Sheet, information for the necessary acts regarding dissolution of partnership firm etc.
Sept	5+7	<ul> <li>Issue of Debentures</li> <li>Issue of debentures for cash at par, premium and discount from the point of view of redemption</li> <li>Issue of debentures for consideration other than cash</li> <li>Issue of debentures as</li> </ul>	Debenture Redeemable debenture Convertible debenture <u>Consideration</u> other than cash	Integrated with Painting and Sketch Poster of types of debentures issued by the company, methods used for redemption of	Project on any Indian Public Ltd. Co. about the types of debentures issued in the financial market and presentation of debenture in the balance sheet of the	Face to face interaction through digital learning like educational video/ documentary on partnership deed/YouTube link of , several types of companies, types of debenture issued in the market, stock exchange,

		<ul> <li>collateral security</li> <li>Accounting treatment of interest on debentures</li> <li>Writing off discount or loss on issue of debentures</li> </ul>	Collateral securities Debenture redemption reserve Debenture redemption investment Lump-sum method Conversion method	debenture, provisions of company act regarding redemption of debenture etc	company as per schedule III part I of the company act 2013.	presentation of debenture in company's Balance Sheet as per schedule III part I of the company act 2013,
Oct	16	<ul> <li>PART - C</li> <li>Analysis of financial statements</li> <li>Format of balance sheet.</li> <li>Heads and contents of balance sheet</li> <li>Preparation of comparative and common size income statement.</li> <li>Preparation of comparative and common size balance sheet</li> <li>Accounting ratios</li> <li>Liquidity Ratios: Current ratio; Liquid ratio</li> <li>Solvency ratios: Debt - equity ratio; Total asses to debt ratio; Proprietary ratio; Interest coverage ratio</li> <li>Activity ratios: Inventory turnover ratio; Trade receivable ratio; working capital turnover ratio; Gross profit ratio; Net profit ratio; Operating ratio; operating profit ratio; operating profit ratio; return on investment.</li> </ul>	Vertical analysis Horizontal analysis Liquidity ratio Solvency ratio Profitability ratio Working capital Capital employed. Turnover ratio Average inventory EBIT EBT	<b>Integrated with</b> Painting and Sketch Poster of types ratio calculate by the company, formula used to calculate the ratio etc	Project on the comparative and common size income statement and balance sheet, accounting ratio calculated with the help of financial statement of any public ltd. Co.	Face to face interaction through digital learning like educational video/ documentary on partnership deed/YouTube link of preparation of comparative and common size financial statement and calculation of different accounting ratio with the help of financial statement.
Nov	17	<ul> <li>Cash Flow Statement</li> <li>Computation of cash flow from different activates:</li> <li>Cash flow from operating activities</li> <li>Cash flow from investing activities</li> <li>Cash flow from financing activities</li> <li>Preparation of cash flow statement.</li> </ul>	Direct method Indirect method Operating activities Non-operating activities Investing activities Financing activities. Accounting standard -3 revisied.		Comprehensive and specific projects on Cash flow of any public Ltd.	Face to face interaction through digital learning like educational video/ documentary on partnership deed/YouTube link of regarding the transaction of operating activities , Investing activities and Financing activities and prepare a cash flow with the help of financial statement.
Dec	22	Revision				
Jan	19	Revision				
Feb	07					

# SUBJECT : BUSINESS STUDIES Text Book : 1. N.C.E.R.T 2 VK Publication

Mont	WD	Chapter/Sub-Topics	Key Terms and	Art Integration	Project / Practical	Research Work	
h	NOP	Chapter/Sub-Topics	Concept		1 Toject / Tractical	Blended Learning	
April	23	Nature and significance of         management         • Modern Concept of management         • meaning of management         • Characteristics         • Objectives of management         • Importance of management         • Nature of management         • Levels of management         • Functions of management         • Coordination         Principles of Management         • Meaning of principles of management         • Features         • Importance of Management principles         • Fayol's principles of management         • Scientific management developed by F.W.Taylor         • Comparison between Fayol and Taylor	Effectiveness & Efficiency. management as a science, art and profession. Levels of management- Top level Middle level Lower level Coordination. Techniques of scientific management. Time study Motion study Method study Fatigue study Principles of management. Gang plank Spam of Management Grapevine	<b>Integrated with</b> Painting and Sketch Poster of principles of management, scientific principle of management, levels of management and the persons included in it etc. Poster Making	Project on evaluation on management principle Project on work of F. W. Taylor	Face to face interaction through digital learning like educational video/ documentary/YouTub link of importance of management, function of management, principles of management etc.	
May	10	<ul> <li>Business</li> <li>Environment</li> <li>Meaning of Business environment</li> <li>Features / Nature of business environment</li> <li>Importance of business environment</li> <li>Dimensions of business environment</li> <li>The features of new economic policy</li> </ul>	Business Environment         Social Environment         Political environment         Technological         Environment         Legal Environment         Demonetization         Liberalization,         Privatization &         globalization.	<b>Integrated with</b> Painting and Sketch Poster of Dimension of Business environment (Social, Political, Technological, Legal etc.)	Project on different dimensions of business environment which effect the business organisation.	Face to face interaction through digital learning like educational video/ documentary/YouTu be link of dimensions of business environment which effect the business organization, Demonetization. Liberalization, Privatization & globalization. etc.	
June	21	<ul> <li>Planning</li> <li>Meaning of planning</li> <li>Features of planning</li> <li>Importance of planning</li> <li>Limitations of planning</li> <li>Planning process</li> <li>Types of plans</li> <li>Organizing</li> <li>Concept of organizing</li> <li>Features of organizing</li> <li>Organizing process</li> <li>Significance/ importance of organizing.</li> </ul>	Single and standing plans. Budget & programme. Organizing structure Functional & divisional structure. Formal & informal organization. Delegation & Decentralization.	<b>Integrated with</b> Painting and Sketch Poster of planning process, organizational structure, formal & informal organization, functional & divisional structure Delegation & de-centralization.	Project on organizational structure and the list of the directors / managers and their working style.	Face to face interaction through digital learning like educational video/ documentary/YouTu be link of dimensions of types of plan prepared by the management of an organization, how the functional and divisional structure framed.	
July	25	Organizing <ul> <li>Organizational structure</li> </ul>	Specialized duties of management.		Project on organizational chart	Face to face interaction through	

		<ul> <li>Formal and informal organization</li> <li>Delegation of authority</li> <li>Centralization and decentralization</li> <li>Staffing</li> <li>Concept</li> <li>Importance of staffing</li> <li>Staffing and human resource management</li> <li>Staffing process</li> <li>Components/ Elements/ Aspects of staffing</li> <li>Methods of training: on the job and off the job</li> </ul>	Recruitment and its         sources.         External and internal         sources of recruitment.         On the job and off the         job training.         Induction training,         vestibule training,         apprenticeship training         and internship         training.	<b>Integrated with</b> Painting and Sketch Poster of organizational chart of TISCO & Staffing process of Infosys	of TISCO & Staffing process of Infosys	digital learning like educational video/ documentary/YouTu be link of Induction training, vestibule training, apprenticeship training and internship training, On the job and off the job training, Recruitment, and its sources.
Aug	23	Directing         • Meaning and Introduction         • Features of Directing         • Importance of directing         • Elements of directing         • Supervision         • Motivation         • Leadership         • Communication         Concept         • Nature of controlling         • Importance of controlling         • Relationship between planning and controlling         • Controlling process	Motivation         Maslow's         Hierarchy of need.         Financial & non- financial incentives.         Leadership and its various styles.         Formal & informal communication.         Barriers of communication.         Controlling and its process.	<b>Integrated with</b> Painting and Sketch Poster of Maslow's Hierarchy of need, Barriers of communication.	Project on Financial & non-financial incentives provided by TATA Steel Ltd.	Face to face interaction through digital learning like educational video/ documentary/YouTu be link of Maslow's Hierarchy of need, Financial & non- financial incentives, Leadership and its various styles, Barriers of communication.
Sept	12	<ul> <li>PART- B <ul> <li>Financial</li> <li>management</li> <li>Meaning and <ul> <li>characteristics of</li> <li>financial management</li> </ul> </li> <li>Objectives of financial <ul> <li>management</li> <li>Financial decisions</li> <li>Financial planning</li> <li>Capital structure.</li> <li>Fixed and working <ul> <li>capital.</li> </ul> </li> <li>Working capital (Short <ul> <li>tem investment decision)</li> </ul> </li> <li>Financial <ul> <li>Market</li> <li>Meaning of Financial <ul> <li>market</li> <li>Features of financial <ul> <li>market</li> <li>Tools of money market</li> <li>Capital market.</li> <li>Tools of capital market</li> </ul> </li> </ul></li></ul></li></ul></li></ul></li></ul>	Financial         management.         Investment, financing         and dividend dicision.         Capital structure.         Fixed & working         capital.         Financial market.         Capital market &         money market.         Call money, treasury         bill, trade bill.         Primary market and         secondary market.         Stock exchange.         SEBI	<b>Integrated with</b> Painting and Sketch Poster of Instruments use to collect money from money market & capital market, functions of SEBI.	Project on objective & functions of SEBI.	Face to face interaction through digital learning like educational video/ documentary/YouTu be link of Investment, financing and dividend dicision, Capital market & money market, functions of SEBI.
Oct	16	Marketing Management • Meaning of Marketing management • Marketing • What can be marketed? • Marketing and selling • Marketing management	Marketing philosophy. Marketing mix. Branding, labbelling and packaging. Physical distribution	<b>Integrated with</b> Painting and Sketch Poster of Sales promotion, slogans for publicity of product in market.	Project on marketing management of a particular product.	Face to face interaction through digital learning like educational video/ documentary/YouTu be link of Branding, labbelling and packaging.

		<ul> <li>philosophy</li> <li>Functions of marketing</li> <li>Understand the concept of physical distribution.</li> <li>Explain the components of physical distribution.</li> <li>Describe the various channels of distribution.</li> </ul>	and its channels. <u>Promotion mix.</u> <u>Advertising.</u> <u>Sales promotion</u> <u>Public relation.</u>			Physical distribution and its challels, Promotion mix, Advertising, Sales promotion, Public relation.		
Nov	17	<ul> <li>Consumer protection</li> <li>Importance of consumer protection</li> <li>Legal protection to consumer</li> <li>Consumer rights</li> <li>Consumers responsibilities</li> <li>Redressal agencies under the consumer</li> <li>rotection Act 1986 and their jurisdiction</li> <li>Role of consumer organization and NGOs</li> </ul>	Consumer protection. Consumer protection Act. Redresasal machinery Remedies. NGOs	<b>Integrated with</b> Painting and Sketch Poster of Consumer rights Consumers responsibilities Redressal agencies under the consumer	Project on Redressal agencies under the Consumer rights Consumers responsibilities.	Face to face interaction through digital learning like educational video/ documentary/YouTu be link of protection Act 1986 and their jurisdiction.		
Dec	22			Revision				
Jan	19	Revision						

#### SUBJECT: PHYSICAL EDUCATION

#### **Text Book:**

# ESSENTIALS OF PHYSICAL EDUCATION

**By** Dr. Loveleena Nadir and Dr. Anil Nadir

PUBLICATION: SULTAN CHAND

Month	WD NOP	Chapter/ Sub-Topics	Key Terms and Concept	Art Integration	Project / Practical	Research Work Blended Learning
April	23	CH - 1 = MANAGEMENT OF SPORTING EVENTSFunctions of sports events Management (Planning, Organizing, Staffing, Directing & Controlling)Various Committees & their responsibilities (Pre, during & post)- Fixtures and its procedures – Knock- out (Bye & Seeding) & League (Staircase & Cyclic) - Intramural and Extramural – Meaning, Objectives and its Significance. Community Sports – Purpose and benefits.CH - 2 = Children & women in Sports - Exercise guidelines of WHO for different age groups. Common postural deformities- knock knees, flat foot, round shoulders, Lordosis, Kyphosis, Scoliosis and bowlegs and their respective corrective measures. . Women participation in Sports – Physical, Psychological and Social 	• Planning, organizing, Staffing, Directing & Controlling.	Poster Making of various committees and fixtures.	Diagram making of Planning and fixtures.	NA
May	10	CH - 3 =Yoga as Preventive measure forlifestyle Disease- Procedure, Benefits &Contraindication:ObesityDiabetesAsthmaHypertensionBack Pain and Arthritis	Procedure, Benefits & contraindication of Obesity, diabetes, Asthma and Hypertension.	Yoga chart making by students	Practical file making.	NA
June	21	<u>CH - 4 =</u>	Special Olympics,	Chart making of all	Practical file	NA

	Physical Education & Sports for CWSN (children with special Needs – Divyang). Organizations promoting Disability Sports (Special Olympics; Paralympics. Deaflympics) Concept of Classification and Division Sports Concept of Inclusion in sports, its need, and Implementation Advantages of Physical Activities for children with special needs. . Strategies to make Physical	Paralympics, Deaflympics	Olympics.	making.	
July 25	Activities assessable for children with special Needs CH - 5 = SPORTS & NUTRITION - Concept of Balanced Diet and Nutrition . Macro and Micronutrients: Food sources and functions . Nutritive and Non- Nutritive Components of Diet . Eating for Weight control – A Healthy Weight, The Pitfalls of Dieting, Food Intolerance and Food Myths . Importance of Diet in Sports-Pre, During and Post competition Requirements CH - 6 = Test & Measurement in Sports Fitness Test – SAI Khelo India Fitness Test in school [Age group 5- 8 yrs./ class 1-3: BMI, Flamingo Balance Test, Plate Tapping Test; Age group 9- 18yrs/ class 4-12: BMI, 50mt Speed test, 600mt Run/Walk, Sit & Reach flexibility. test, Strength Test (Abdominal Partial Curl Up, Push-Ups for boys, Modified Push-Ups for girls)]. . Measurement of Cardio-Vascular Fitness – Harvard Step Test – Duration of the Exercise in Seconds x100/5.5 X Pulse count of 1-1.5 Min after Exercise; . Computing Basal Metabolic Rate (BMR).	Concept of balanced diet, Macro and Micro nutrients Nutritive and Non- Nutritive components. Fitness test – SAI KHELO INDIA BMR SENIOR CITIZEN FITNESS TEST	Making of diet chart of different age group. Picture chart making of fitness test.	Practical file making.	NA

		<ul> <li>Rikli &amp; Jones - Senior Citizen</li> <li>Fitness Test - Chair Stand Test for</li> <li>lower body</li> <li>strength, Arm Curl Test for upper</li> <li>body strength, Chair Sit &amp; Reach</li> <li>Test for</li> <li>lower body flexibility, Back Scratch</li> <li>Test for upper body flexibility, Eight</li> <li>Foot Up &amp; Go Test for agility, Six</li> <li>Minute Walk Test for Aerobic</li> <li>Endurance.</li> <li>Johnsen – Methney Test of Motor</li> <li>Educability (Front Roll, Roll,</li> <li>Jumping</li> </ul>				
Aug	23	Half-Turn, Jumping full turn) CH - 7 = Physiology & Injuries in Sports - Physiological factors determining components of Physical Fitness . Effect of exercise on Muscular System . Effect of exercise on Cardio- Respiratory System . Physiological changes due to ageing . Sports injuries: Classification (Soft Tissue Injuries – Abrasion, Contusion, Laceration, Incision, Sprain & Strain; Bone & Joint Injuries - Dislocation, Fractures - Green Stick, Comminuted, Transverse, Oblique & Impacted)	Components of physical fitness, Effect of exercise on MUSCULAR SYSTEM, CARDIO- RESPIRATORY SYSTEM SPORTS INJURIES	Making of sports injuries Chart.	Practical file making.	NA
Sept	12	CH - 8 =Biomechanics & Sports- Newton's Law of Motion & itsapplication in sports Types of Levers and theirapplication in Sports Equilibrium – Dynamic and Staticand Centre of Gravity and itsapplication in sports. Friction and SportsCH - 9 =Psychology & sports. Personality; its definition & types(Jung Classification & Big FiveTheory) Motivation, its type & techniques.	-Newton's law and its application in sports. -Equilibrium -Centre of gravity -Friction -Projectile Personality's – Definition and types Jung classification, Big five theory. Aggression, Psychological attributes, Self-esteem,	Picture chart making of jung classification and big five theory.	Practical file making.	NA

		<ul> <li>Exercise Adherence: Reasons, Benefits &amp; Strategies for Enhancing it.</li> <li>Meaning, Concept &amp; Types of Aggressions in Sports.</li> <li>Psychological Attributes in Sports</li> <li>Self Esteem, Mental Imagery, Self Talk, Goal Setting.</li> </ul>	Mental imagery, Self-talk, Goal setting.			
Oct	16	<u>CH - 10=</u> <u>Training in Sports</u> . Concept of Talent Identification and Talent Development in Sports . Introduction to Sports Training Cycle – Micro, Meso, Macro Cycle. . Types & Methods to Develop – Strength, Endurance, and Speed . Types & Methods to Develop – Flexibility and Coordinative Ability	Talent identification, Talent development, Sports training cycle – Micro, Meso and Macro, Types and method to develop – STRENGTH, ENDURANCE, SPEED, FLEXIBILITY, COORDINATIVE ABILITY.	Pictorial chart making of sports training cycle.	Practical file making.	NA
Nov	17	REVISIONS & CHAPTERWISE TEST				
Dec	22	REVISIONS & CHAPTERWISE TEST				
Jan	19	REVISIONS & CHAPTERWISE TEST				
Feb	07	REVISIONS & CHAPTERWISE TEST				

#### **SUBJECT : PAINTING/GRAPHICS**

#### Text Book: 1. History of Indian art part 2 (NCERT)

Month	W.A.	story of Indian art part 2 (NCER) Chapter/Sub-Topics	Key Terms and Concept	Art Integration	Project / Practical	Research Work Blended earning	
		Theory; Chapter - 1 The Manuscript Painting Traditions	Elements of				
APRIL	23	Manuscript Painting Traditions art		History-	Draw 2	To find out	
		Practical- Landscape in pencil shading	Knowledge of manuscript	our ancient books	pencil shading landscap <u>e</u>	no. of scripts used in India	
		Practical- Landscape in pencil shading			landscap <u>c</u>	in muia	
		Theory; Chapter -2 The Rajasthani School of Painting	Origin and development of Rajasthani art and its sub school				
<b>N # 4 N</b> 7	10	Theory; Chapter -2 The Rajasthani School of Painting		Using shapes	Make a		
MAY	10	Practical - Landscape painting in water colour		and lines to	file on Mughal	To know our rich culture heritage	
		Practical - Landscape painting in water colour		compose a drawing	miniature		
		Theory; Chapter -2 The Rajasthani School of Painting	Origin and development of Rajasthani art and its sub school	In maths in various topics as trigonometr y,	<u>Minimum 2</u> still life or <u>Object has</u> to be done		
		Theory; Chapter -2 The Rajasthani School of Painting					
JUNE	21	Practical- Still life/Object drawing and pencil shading				To learn our cultural	
		Practical- Still life/Object drawing and pencil shading		mensuration		heritage	
		Theory chapter -3 The Mughal School of Miniature Painting	e PaintingOrigin and development of Mughal art and its sub schoolShapes and mensuratio n mathsMini 2 stil or O has t done colou	Shapes and	Minimum 2 still life or Object		
		Theory chapter -3 The Mughal School of Miniature Painting				To learn	
JULY	25	Practical- Draw and paint object drawing with water colou		has to be done in coloured with water	our cultural heritage		
		Practical- Draw and paint object drawing with water colou			<u>colour</u>		
		Theory; Chapter- 4 The Decani Schools of Paintings			Minimum 2		
		Theory; Chapter- 4 The Decani Schools of Paintings	Origin and development	Shapes and	flower has to be done	To learn	
AUG	23	Practical- Draw and shade any flower in pencil or charcoal	of Deccan art and its sub school	mensuratio n maths	in pencil shading or	our cultural heritage	
		Practical- Draw and shade any flower in pencil or charcoal			Charcoal		
SEPT	12	Theory; Chapter-5 The Pahari Schools of Paintings	Origin and development of Pahari art		Make a project file on Pahari	To learn	
SEF I	12	Theory; Chapter-5 The Pahari Schools of Paintings	and its sub school		school of art	our cultural heritage	

OCT	16	Theory; Chapter -6 The Bengal School and Cultural Theory; Chapter -6 The Bengal School and Cultural Practical- Composition of flower in water colour Practical- Composition of flower in water colour Theory; Chapter- 7 The Modern Indian Art Chapter- 8 The living Art Traditions of India	Origin and development of Bengal art and its sub school	Shapes and mensuratio n maths	Minimum 2 flower has to be done in water colour	To learn our cultural heritage
NOV						
DEC						
JAN						
FEB						

# SUBJECT: HINDUSTANI MUSIC (VOCAL)

	WD		Koy Torms and	Art	Project /	Research Work
Month	NOP	Chapter/Sub-Topics	Key Terms and Concept	Art Integration	Practical	Blended Learning
April May	23	Brief study of the following :- Alankar, Kan, Meend, Khatka, Murki, Gamak Taal - "Rupak Dhamar and Jhaptaal" Parichay with Tala Notation and hand Demonstration with Thah, Dugun, Tigun and Chaugun Laykari.	Key Terms Taali Matra Bibhag Swar Khali Theka Alankar Ekgun	Integration with Songs in this Particular taals	Making Project file regarding this Taals and different Variations of it	Finding About other Taal which contains same no of maatras
June	6+15	Brief study of the following	Key Terms			
July	25	Gram, Murchhana, Alap, Tana. Raag - Bhairav & Bageshri ( Parichay and One Drut Khayal with simple elaborations and few tanas along with Tarana and Dhamar)	<ul> <li>Jaati</li> <li>Thaat</li> <li>Vadi</li> <li>Samwadi</li> <li>Aaroh</li> <li>Avroh</li> <li>Pakad</li> </ul>	Integration with Songs in this Particular Raag	Making projects regarding this raag Tarana and Dhamar for this	NO
Aug	23	<ul> <li>Detail study of the following</li> <li>Sangeet Ratnakar</li> <li>Sangeet Parijat</li> <li>Life sketch and Contribution</li> <li>Faiyaz Khan,</li> <li>Bade Ghulam Ali Khan,</li> </ul>	<ul> <li>Key Terms</li> <li>Origin</li> <li>Writer</li> <li>Concepts</li> <li>Valuable works</li> <li>Musical background of the Artists</li> <li>Gharana</li> </ul>	Integration with real life events of them and interveiws	Writing about them in Describe mannor in project file	NO
Sept	5+7		Revisi	on	•	
Oct	16	<ul> <li>Raag - Malkoush and Suddh</li> <li>Sarang( Parichay and One Drut Khayal with simple elaborations and few tanas along with Tarana and Dhamar)</li> <li>Life sketch and Contribution</li> <li>Krishna Rao Shankar Pandit</li> </ul>	<ul> <li>Key Terms</li> <li>Jaati</li> <li>Thaat</li> <li>Vadi</li> <li>Samwadi</li> <li>Aaroh</li> <li>Avroh</li> <li>Pakad</li> </ul>	Integration with Songs in this Particular Raag	Writing the notation of Bandish along with tha taal script	NO
Uct		<ul> <li>Tuning of Tanpura</li> <li>Historical development of Time Theory of Ragas</li> </ul>	Key Terms > 4 Taar > Aati > Khunti > Tumba > Tabli > Sandhiprakash > Purvang > Uttarang	Integration with the raag timimgs and swar	Project Regarding the Time theory And Concept of Poorvang and Utraang Swar Raag	NO

# SUBJECT: GENERAL STUDIES

Text Book: N.C.E.R.T

Month	WD	Chapter/Sub-Topics	Key Terms and Concept	Art Integration	Project / Practical	Research Work Blended Learning
April	23	Science and Society	<ul> <li>I. The Nature of Science. Different aspects of Science, viz. the content, process and attitude The language of Science- facts, hypothesis, theories and laws.</li> <li>II. Science as a social enterprise. The manner in which modern Science and technology shape modern culture, values, and institutions on one hand and how modern values shape Science and technology on the other. The progress of Science-major landmarks in the history of Science in India.</li> <li>III. The Scientific spirit Scientific attitude Dispelling superstitions and myths. Assistive technology for the differently abled.</li> </ul>	do a small project, where they identify a problem, frame hypothesi s, gather data and analyze it to test the hypothesi s.	organize a debate for the whole class on 'Science- a boon or bane'.	enumerate ways in which Science and technology have changed lives particularly in the context of differently abled children.
May	10	Contemporary Problems of Indian Society	<ul> <li>I. Poverty Meaning, genesis and broad measures to alleviate it. Nature of poverty in rural and urban India.</li> <li>II. Illiteracy Causes and consequences Measures to eradicate illiteracy.</li> <li>III. Unemployment Nature and extent of unemployment Ameliorative measures to reduce unemployment - Vocational education, skill-based education.</li> <li>IV. Social Inequalities Kinds Implications.</li> <li>V. Population and health declining sex ratio, infant mortality, malnutrition, obesity and other lifestyle diseases. The way forward.</li> </ul>	make group presentation s (collage, charts, posters) on the contemporar y problems of Indian society by using only newspaper clippings as a resource.	contribute towards solving social problems such as illiteracy. Students may volunteer to teach one illiterate person in their locality.	conduct a small survey on status of literacy/ employment/ income in their locality.
June	6+15	Cultural Heritage of India	<ul> <li>I. The historical framework of India's heritage and culture.</li> <li>II. Evolution of Indian culture</li> <li>Historical background- from the Indus</li> <li>Valley civilization to the British period and Indian renaissance.</li> <li>Shaping of Indian ethos and syncretism.</li> <li>III. The cultural heritage of India.</li> <li>Performing arts- dance, music, theatre etc. Language and literature, Crafts Paintings, Architecture Cuisines Textiles</li> </ul>	practice meditation, 'pranayam' and 'yogasana' for health benefits and better understand ing of Indian culture.	effectively use paintings, short films and other material developed by the Centre for Cultural Resources and Training (CCRT) to appreciate the arts, crafts and architecture of India.	develop resource files on Sufi saints of Kashmir/Delhi/Raj asthan etc. Poets/saints of the Bhakti period. Mughal influence on Indian architecture. Relevance of the teachings of Kabir/ Thiruvalluvar in today's Indian society.
July	25	India's Freedom Struggle	I. The first war of independence-1957. II. Indian freedom struggle a) the moderates b) the radicals c) the revolutionaries. III. The contribution of leaders IV. Nurturing freedom and democracy.	watch a movie based on India's freedom struggle	read about the history of India's freedom struggle and submit an article about	present the life history of Indian freedom fighters through a short role play/skit

				and submit a review	events or personalities that impress them.	
Aug	23	Constitutional Values	Preamble to the Indian Constitution (understanding the spirit of the Constitution): Justice: Social, economic and political Liberty of thought, expression, belief, faith and worship, Equality of status and of opportunity Fraternity, the dignity of individual and the unity and integrity of the Nation Secularism. II Key features of the Constitution of India, Fundamental Rights, Directive Principles of State Policy and Fundamental Duties, Citizenship Organs of Government Federalism. III Some legal provisions (relevant to children)	develop a code of conduct which may relate to one of the Fundamen tal Duties.	prepare biographies of the makers of the Constitution.	read the Preamble to the Constitution of India and highlight the values reflected in it. They may then present a play to showcase these values.
Sep	5+7= 12	Human Rights	Human rights: Historical perspective. The philosophical foundations of human rights. The United Nation's declaration of human rights Civil and political rights. Economic, social and cultural rights Human rights of vulnerable groups. Human rights: Violation and remedies, Gender equality	read articles related to human rights, for example, United Nation's Universal Declaratio n of Human Rights and discuss	observe their surroundings for any human rights violation.	prepare short investigatory projects based on current events as reported in the press and identify: Who is the victim? Who has violated his/her human rights? Which right has been violated? What is the abuse committed? How was the victim protected?
		Constitutional Values 1. Preamble to the Indian Constitution. 2. Key features of the Constitution of India	Work in groups of 5 – 7 and develop a code			
Oct	16	Human Rights 1. Historical perspective 2. The philosophical foundations of human rights 3. The united nation's declaration of human rights		Code of conduct which may relate to one of the Fundamen tal Duties.		Students will read the literature of different cultures and identify the common message of humanity as envisaged through the provisions of human rights.