FATHER AGNEL SCHOOL
ACP 2017-18
CLASS XI

ENGLISH

MONTH	NO OF DAYS	PERIOD AVAILABLE	TOPIC/ SUB TOPICS TO BE COVERED	PERIODS REQUIRED	WEIGHTAGE	ACTIVITIES/ PROCESSES	RESOURCES/ ICT	ASSESSMENT
April	18	20	COMPREHENSION NOTEMAKING	2 4	12 8	*Reading of the passage *understanding the main idea *locating the relevant points	*extra marks *newspaper articles	worksheets
			NOTICE *purpose *format *content *expression *marking scheme	2	4	*format *content *expression *examples	extra marks	assignments
			ARTICLE *purpose *methodology *format *marking scheme	2	10	*format *content *expression *examples(discussion on a topic and writing the content)	extra marks	Assignments/ worksheets
			PORTRAIT OF A LADY *introduction *author *background *setting *summary	4	3/6	*introduction *reading *explanation *identifying new words, phrases, literary devices etc. *discussion on the theme and related issues	*Textbook *extra marks	*Question/answer *assignments
			A PHOTOGRAPH *introduction *poet *background *setting	3	3	*introduction *reading *explanation *identifying new words, phrases poetic devices etc.	*textbook *extra marks	*Worksheet *reference to contest questions *written test

			*summary			*discussion on the theme and related issues.		
			DETERMINERS *articles *demonstratives *possessives *indefinite adjectives *others	3	3	*words used before a noun to fix its meaning *different kinds *explanation *examples	Extra marks	*assignments *worksheet
			MODALS *will, would shall, should, can, could, may, might, must, ought, need, dare, used to	3	3	*introduction *explanation(uses of modals) *examples	extra marks	*worksheet *assignments
MAY	14	16	THE SUMMAR OF THE BEAUTIFUL WHITE HORSE *introduction *author *background *setting *summary	3	3/6	*introduction *reading *explanation *meaning of difficult words and phrases *discussion on theme and the related issues	*textbook *extra marks	*written test *worksheets
			RANGA; MARRIAGE *introduction. *author *background *setting *summary *message	3	3/6	*introduction *reading *explanation *meaning of difficult words and phrases *discussion on the theme and other related issues	*textbooks *extra marks	*assignments *worksheet
			LETTER TO THE EDITOR *format *content *expression *marking scheme	2	6	*Introduction(purpose) *format *content *grammatical accuracy *examples	*extra marks *current issues(newspaper)	*assignment *worksheet
			LETTER OF PLACING ORDERS&REPLIEs (business letter) *format	2	6	*introduction format *content *expression	extra marks	worksheet

			*content *expression *marking scheme POSER *common issues *events *content *expression	 2	 4	*grammatical accuracy *examples *introduction(purpose) *content *expression *creativity *presentation	 extra marks	 *assignment *worksheet
JULY	21	23	1.WE ARE NOT AFRAID TO DEI…. Introduction Author Background Summary 2.DISCOVERING TUT Introduction Author Setting Background 3letter of complaint Format Sample answer Marking scheme	7 7 5	3/6 3/6 6	Introduction Reading Explanation Identifying new words and phrases Introduction Reading Explanation Discussion of the them and related issues Purpose Format example	Textbook Extra marks Textbook Extra marks Extra marks	Question/answer Assignments Assignments assignment
AUGUST	20	20	1. Letter Of Enquiry 2. Job Application Format Content Expression Marking Scheme 2.Speech Writing	10 5	6 10	Introduction Format Content Grammatical Expression Examples Marking Scheme Format Cintent Expression Example	Extra Marks Extra Marks	Assignments Assignemt

			Tenses	5	3		Extra Marks	Assignment
SEPTEMBER	8	9	1. ALBERT EINSTEIN AT SCHOOL Introduction Background Author Setting REVISION FOR EXAMS	3	3/6	Introduction Silent/loud reading Explanation discussion	Extra marks	Assignment
OCTOBER	17	19	**1.TheAiling Planet** *Introduction *Writer *Summary *Message	3	6/3	1.Introduction 2.Reading 3.Explanation 4.Identifying new words, phrases and literary devices 5.Discussion on related social issues.	1.Textbook 2.Extramarks	1. Written test Assignments/question/answers
			2.Childhood(poem *Introduction *Poet *Purpose *Summary *Theme *Poetic Devices	3	4	1.Introduction 2. Silent and loud reading 3. Explanation 4.poetic devices	1.Textbook 2.Extramarks	Assignments 1.Reference to context 2.Question/answers
			3.Advertisement *Format *Content *Creativity *Language *Expressions	5	4	1.Format 2. Show them an example 3. headline (according to the category) 4.Developing a message (brief) 5.The call to action	-	1.Assignments 2.Worksheets
			4. Reported speech *****What is reported speech *2 .kinds of reported statements. *Examples of the main changes in the tense.	2	2	1.Introduce the topic 2.Teaching reported statements: -When direct speech is in present - When direct speech is in present continuous -When direct speech is in past. 3. Practice all tenses in reported	Extra marks	Worksheets

						speech.		
NOVEMBER	22	24	1.Mother's Day *Introduction *Author *Background *Setting *Characterisation *Theme	5	6/3	1.Introduction 2.Reading 3.Characterisation 4.Explanation 5.Identifying new words and literary devices. 6.Role play 7.Discussion on related social issues	1. Text book 2.Extramarks 3.PPT	1.Speech 2. Mode of Dialogue delivery 3.Written test Question/answers
			2.Report Writing *Format *Content *Expressions *Creativity *Grammatical accuracy	4	10	1.Format 2.Show an example 3.Catchy headline 4.Record of sequence of events 5.Interpretation of the significance of these events or facts 6.Evaluation of the facts 7.Suggestions if required 8. conclusion		1.Well structured 2.Accurate 3.Clear 4.Creativity
DECEMBER	14	15	**1.Father To Son** *****Introduction *Poet *Background *Setting *Theme *Explanation *Poetic Devices	4	4	1.Introduction 2.Silent and loud reading 3.Explanation 4.Identifying new words and poetic devices. 5.Discussion on related social issues.	1. Text book 2.Extra marks 3. PPT	1. Assignment Reference to context and question/answers. 2. Explanation
			2.The Browning Version *Introduction *Author *Background *Setting *Explanation *Summary *Theme	4	6/4	1.Introduction 2. Reading 3. Characterisation 4. Role play 5. Explanation 6. Identifying new words & literary devices 7. Discussion on related social issues.	1.Text book 2. Extramarks 3. Movie	1.Written test

JANUARY	20	22	**1.The Tale of the Melon City** *.Introduction * Poet *Setting *Background *Theme *Poetic devices **2. Birth** 1.Introduction 2.Author 3.Background 4.Setting 5.Summary 6.Theme 7.Characters	4 4	4 6/3	1.Introduction 2.Silent & loud reading 3.Explanation 4. Identifying new words and poetic devices 5.Discussion on related political issues 1.Introduction 2.Reading 3.Explanation 4.Identifying new words and literary devices. 5. Discussion on medical profession. Moral ethics of a doctor.	1.Text book 2.Extramarks 3.PPT 1.Text book 2.Extramarks 3.Movie	1.Explanation 2.Assignment Reference to context &question/answers Written test

MATHEMATICS

MONTH	NO OF DAYS	TOPIC/ SUB TOPICS TO BE COVERED	PERIODS REQUIRED	ACTIVITIES/ PROCESSES	RESOURCES/ ICT	ASSESSMENT
April	18	Ch-4 Principle of Mathematical Induction Ch-1 Set Theory • Sets and their representations • Types of sets • Venn diagrams • Operations on sets • Practical problems on Union and intersection of two sets Ch-2 Relations & Functions • Cartesian product of sets	8 8 2	• Discussion • Lecture method • Illustrations through examples • Grilling through extra questions • NCERT exercises & assignments given for homework	NCERT text book Reference books Educosoft Extramarks	Class test Unit test-1 1Semester Exams 2 Semester Exams

May	14	Ch-2 Relations & Functions
		• Relations
		• Functions
		
		Ch-3 Trignometric Functions
		• Angles (radian & degree measure)
		• Trignometric functions
		  • Trignometric functions of sum and difference of two angles
		  • Trigonometric equations
			6
			
			8
				• Discussion
				• Lecture method
				• Illustrations through examples
				• Grilling through extra questions
				• NCERT exercises & assignments given for homework
					NCERT text book
					Reference books
					Educosoft
					Extramarks
						Class test
						Unit test-1
						1Semester Exams
						2 Semester Exams

July	21	Ch-6 Linear Inequalities • Inequalities • Algebraic solutions of linear Inequalities in one variable and their graphical representation • Graphical solution of linear inequalities in two variables • Solution of system of linear inequalities in two variables Ch-5 Complex Numbers & Quadratic	10 11	• Discussion • Lecture method • Illustrations through examples • Grilling through extra questions • NCERT exercises & assignments given for homework	NCERT text book Reference books Educosoft Extramarks	Class test 1Semester Exams 2 Semester Exams

		Equations • Complex numbers • Algebra of complex numbers • The modulus and the conjugate of a complex number Argand plane & Polar representation Quadratic Equations • Square root of a complex number				
August	20	Ch-7 Permutations & Combinations • Fundamental principle of counting • Permutations • Combinations Ch-8 Binomial Theorem • Binomial theorem for positive integral indices • General and middle terms	12 8	• Discussion • Lecture method • Illustrations through examples • Grilling through extra questions • NCERT exercises & assignments given for homework	NCERT text book Reference books Educosoft Extramarks	Class test 1Semester Exams 2 Semester Exams
Septemb er	8	REVISION	8			Class test Unit test-2 2 Semester Exams
October	17	Ch-9 Sequence and Series • Sequences • Series • Arithmetic Progression • Geometric Progression • Relationship between AM and GM • Sum of n terms of special sequences • Sum to infinity of a GP Ch-10 Sraight Lines • Slope of a line • Various forms of equations of straight lines • General equation of a line Distance of a point from a lineCh-Shifting of origin • Equations of family of lines	10 7	• Discussion • Lecture method • Illustrations through example • Grilling through extra questions • NCERT exercises & assignments given for homework	NCERT text book Reference books Educosoft Extramarks	Class test Unit test-2 2 Semester Exams
Novemb	22	Ch-11 Conic Sections	10	• Discussion	NCERT text	Class test

er		• Sections of a cone • Circle • Parabola • Ellipse • Hyperbola Ch-13 Limits and Derivatives • Intuitive idea of limits • Limits • Limits of trigonometric functions • Derivatives • Limits of exponential and logarithmic functions	12	• Lecture method • Illustrations through examples • Grilling through extra questions • NCERT exercises & assignments given for homework	book Reference books Educosoft Extramarks	2 Semester Exams Class test 2 Semester Exams
Decemb er	14	Ch-12 Introduction of Three Dimensional Geometry • Coordinate axes And coordinate planes in three dimensional geometry • Coordinates of a point in space • Distance between two points Section formula Ch-14 Mathematical Reasoning • Statements • New statements from old • Special words/phrases • Implications • Validating statements	8 6	• Discussion • Lecture method • Illustrations through examples • Grilling through extra questions • NCERT exercises & assignments given for homework	NCERT text book Reference books Educosoft Extramarks	Class test 2 Semester Exams
January	19	Ch-15 Statistics • Measures of dispersion • Range • Mean Deviation • Variance and standard deviation • Analysis of frequency distributions Ch-16 Probability • Random Experiments • Event • Axiomatic approach to probability	8 8	• Discussion • Lecture method • Illustrations through examples • Grilling through extra questions • NCERT exercises & assignments given for homework	NCERT text book Reference books Assignment booklet Educosoft Extramarks	Class test 2 Semester Exams Class test 2 Semester Exams
February	5	Revision				Semester exams

PHYSICS

Month	Number of days	Period available	Topics and Sub topics To be covered	Periods required	weightage	Activities and process	Resources ICT	Assessment
A P R I L	18 Days	21 Periods	Part 1: Unit 1. Introduction, Physical world Physics- scope and excitement Physics technology and society . Chapter2. Units and Measurement Need for measurement:units ofmeasurement,systems of units, SI units , fundamental and derived units. Length, mass and time measurements, accuracy and precision of measuring instruments , errors in measurements,significant figures Dimensions of physicalquantities, dimensional analysis and its applications Unit 2: Kinematics Chapter3-motion in astraightline Elementary concepts of differentiation and integration for describing motion. Uniform and non uniform motion. Average speed and instantaneous velocity, uniformly accelerated motion.Equations of motion for uniformly accelerated motion by CALCULUS mehod. Velocity-time graph and position time graph	4 periods 6 periods 11 periods	7 marks 7marks	Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests Assignments

M A Y	14 Days	18 Periods	Part 1: KINEMATICS MIDSEM 1 ON 16-05-2017 Unit 2: Chapter 4 motion in a plane VECTORS: • Scalar and vector quantities • Position and displacement vectors, general vectors and their notations. Equality of vectors, multiplication of vector by real number, addition and subtraction of vectors. Relative velocity, Unit vector, Resolution of a vector in a plane – rectangular components, Scalar and Vector product of vectors • MIDSEM1 MOTION IN A PLANE Motion in a plane-Cases of uniform velocity and non-uniform acceleration-projectile motion. Uniform circular motion.	10 periods 8 periods	9marks ***<u>Total 23 marks</u>***	Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests Assignments
J U L Y	21 Days	25Periods	Part 1: unit3 Chapter 5.Laws of motion • concept of force .Inertia,Newton`s First law of motion. Momentum and Newton`s second law of motion.Impulse, Newton`s third law of motion.Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces • Static and Kinetic friction.laws	10 periods		Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests

			of friction, rolling friction,lubricatiion,Dynamics of circular motion, Centripetal force, examples circular motion. Motion of vehicles on level road and banked road. PJBL	10 periods 8 periods		students		Assignments
A U G U S T	20 Days	24 Periods	Part 1: Unit 4: Chapter 6-Work ,Power,Energy Work Done by a constant and variable forces.Kinetic Energy.Work Energy Theorem,Power,potential Energy,Conservative Force,Non Conservative Force,Motion in a vertical circle,Elastic and inelastic Collisions in one and two dimensions. Unit 6:Chapter-7-Gravitation Kepler`s laws of planetary motion, The Universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Gravitationalpotential energy and gravitational .Escape velocity. Orbital velocityof a satellite. Geostationary satellites. ***<u>September Revision FOR 8 DAYS and half yearly exam. Syllabus Chapter 1 to 7</u>***	10 periods 16 periods		Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests Assignments
O	17 Days	21 Periods	Chapter 8, Motion of system of particles and rigid body					

C T O B E R			Centre of mass of two particle system,Moment of a force, torque,angular momentum ,law of conservation of angular momentum and its applications Equilibrium of rigid bodies ,equations of rotational motion,comparison of linear motion and rotational motion.Moment of inertia .radius of gyration Moment of inertia of simple geometrical objects statement of parallel axis and perpendicular axis theorem and applications Chapter 9, Mechanical properties of solids Elastic behavior .stress-strain relationships.Hooke`s law.Young`s modulus, Bulk modulus,shear modulus of elasticity,elastic energy	10 periods 9 periods	***<u>Laws of motion, work, power,energy, Gravitation and system of particles 17 marks</u>***	Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests Assignments
N O V E M B E R	22 Days	25 Periods	Chapter 9, Mechanical properties of Fluids Pressure due to a fluid coloumn, Pascal`sl aw and its application, effect of gravity on fluid pressure, viscosity, Stoke`s law, terminal velocity, Bernoulli`s theorem and it applications, Surface tension, excess pressure, capillarity and its applications,m Ascent formula <u>Chapter 10 : Thermodynamics</u> Thermal equilibrium and definition	10periods 11	***<u>Properties of bulk matter, Thermal properties, Thermodynamics 20 marks</u>***	Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests

			of temperature (zeroth law of thermodynamics).Heat, work and internal energy. First law of thermodynamics. Isothermal and adiabatic processes. Second law of thermodynamics: reversible and irreversible processes. Heat engine and refrigerator	periods		Of the students		Class tests Assignments
D E C E M B E R	14 Days	18 Periods	Chapter-14-Oscillation Periodic Motion-time Period ,frequency,displacementas a function of time .Periodic Functions. Simple harmonic motion and its equation;phase;oscillations of spring-restoring force and force constent; Energy in S.H.M.Kinetic and potential energies; simple pendulum- derivation of expression for its time period.Free,forced and damped oscillations(qualitative ideas only),resonance.	21 periods		Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests Assignments
J A N U A R Y	19 Days	22 Periods	Chapter-15-Waves Wave motion.Logitudinal and transverse waves,speed of wave motion.Displacment relation for a progressive way.Principle of superposition of waves,reflection of waves,standing waves in strings and organ pipes, fundamental mode and harmonics .Beats and	10periods	***Kinetic theory, oscillations and waves 10 marks***	Narrative Lecture Question answering Discussion Approaches	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation

			Doppler effect Chapter13.Kinetic theory of gases Equation of state of a perfect gas. Assumptions of Kinetic theory of gases,concept of pressure, Kinetic interpretation of temperature,rms speed of gas molecules, degree of freedom , law of eqipartition of gases,mean free path , Avoadro number. Chapter 11, Thermal properties of matter Heat,temperature,thermal expansion of solids,liquids,and gases.specific heat,calorimetry,latent heat Heat transfer,conduction,convection and radiation,thermalconductivity and applications. **PJBL or Class Activity**	6 periods 5 periods		Depending Upon The Relative Knowledge Of the students		Through Oral tests Class tests Assignments
FEBRUARY			SEM 2. COMPLETE SYLLABUS					

CHEMISTRY

MONTH	NO.OF DAYS	PERIOD AVAILABLE	TOPIC/SUBTOPICS TO BE COVERED	PERIODS REQUIRED	WEIGHTAGE (out of 70)	ACTIVITIES/PROCESS	RESOURCES/ICT	ASSESMENT
APRIL	18	18	**CH:1- SOME BASIC CONCEPTS OF CHEMISTRY:** General Introduction: Importance and scope of chemistry. Historical approach to particulate nature of matter, laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules. Atomic and molecular masses, mole concept and molar mass, percentage composition, empirical and molecular formula, chemical reactions, stoichiometry and calculations based on Stoichiometry **CH-2-STRUCTURE OF ATOM -Atomic** number, isotopes and isobars, Thomson's model and its limitations, Rutherford's model and its limitation, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbitals, quantum numbers, shape of s, p and d orbitals, Rules for filling electrons in orbitals – Aufbau principle, Pauli's exclusion principle and Hund's rule, electronic configuration of atoms, stability of half filled and completely filled orbitals.	10 7	5 4	- • Illustrations through examples • Lecture Method • Explanation of different types of questions • Illustrations through examples • Lecture Method • Explanation of different types of questions	- • ICT resources used as Extra marks, • Reference books & NCERT books • Web references • ICT resources used as Extra marks, • Reference books & NCERT books • Web references	• Recap questions to assess the understanding of the chapter • Open ended discussion • Class work. • Assignment booklet. • Class test

MAY	16	16	**Ch-2- Structure of atom (contd)** **Ch 3: Classification of elements and periodicity of properties -** Significance of classification, brief history of the development of periodic table, modern periodic law and the present form of periodic table, periodic trends in properties of elements –atomic radii, ionic radii, Ionization enthalpy, electron gain enthalpy, electronegativity, valency ,metallic character,Nature of oxides		6	- • Illustrations through examples • Lecture Method • Explanation of different types of questions	• ICT resources used as Extra marks, • Reference books & NCERT books • Web references	• Recap questions to assess the understanding of the chapter • Open ended discussion • Class work. • Assignment booklet. • Class test
JULY	20	20	**Ch 3: Classification of elements and periodicity of properties –(contd)** **Ch:4- Chemical Bonding and molecular structure**: Valence electrons, ionic bond, covalent bond: bond parameters, Lewis structure, polar character of covalent bond, covalent character of ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theory, concept of hybridization, involving s,p and d orbital and shapes of some simple molecules, Molecular orbital theory,Bonding in some Homonuclear diatomic molecules,Hydrogen Bonding Ch- 5-**STATES OF MATTER**: Three states of matter, intermolecular interactions, types of bonding, melting and boiling points, role of gas laws in elucidating the concept of the molecule, Boyle's law, Charles law, Gay Lussac's law, Avogadro's law, ideal behaviour, empirical derivation of gas equation, Avogadro's number, ideal gas equation. Deviation from ideal behaviour. Liquid State- vapour pressure, viscosity and surface tension (qualitative idea only)	20 10 12	4 5	• Illustrations through examples • Lecture Method • Explanation of different types of questions	• ICT resources used as Extra marks, • Reference books & NCERT books • Web references	• Recap questions to assess the understanding of the chapter • Open ended discussion • Class work. • Assignment booklet. • Class test

AUGUST	22	22	**Ch-6-Thermodynamics** System and types of system, surrounding, work, heat, energy, extensive and intensive properties, state functions. First law of thermodynamics -internal energy and enthalpy, heat capacity and specific heat, measurement of ΔU and ΔH, Hess's law of constant heat summation, enthalpies of bond dissociation, combustion, formation atomization, sublimation, phase transformation, ionization and solution. Introduction of entropy as a state **Ch-9-Hydrogen**: Position of hydrogen in periodic table, occurrence, isotopes, preparation, properties and uses of hydrogen, physical and chemical properties of water, heavy water, hydrogen peroxide - preparation, properties and structure, hydrogen as a fuel. **Ch-14- Environmental chemistry-** Environmental pollution - air, water and soil pollution, chemical reactions in atmosphere, smog, major atmospheric pollutions, acid rain, ozone and its reactions, depletion of ozone layer and its effect, greenhouse effect and global warming- pollution due to industrial wastes, green chemistry as an alternative tool for reducing pollution, strategies for control of environment pollution	11 3 3	6 3 3	• Illustrations through examples • Lecture Method • Explanation of different types of questions	• ICT resources used as Extra marks, • Reference books & NCERT books • Web references	• Recap questions to assess the understanding of the chapter • Open ended discussion • PBL • Class work. • Assignment booklet. • Class test
SEPTEMBER	4	4	Revision					
OCTOBER	17	17	**Ch- 8- Redox reactions** Concept of oxidation and reduction, Redox reactions, oxidation number, balancing redox reactions, Electrode potential, Electrochemical cells(introduction) **Ch-12- Organic chemistry: some basic principles and techniques**: General introduction, classification and IUPAC nomenclature of organic compounds.	8	3	• Illustrations through examples • Lecture Method • Explanation of	• ICT resources used as Extra marks, • Reference books & NCERT books	• Recap questions to assess the understanding of the chapter • Open ended discussions • Class work.

			Electronic displacements in a covalent bond: inductive effect, electromeric effect, resonance and hyper conjugation. Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carbanions(stability of reaction intermediates), electrophiles and nucleophiles. methods of qualitative and quantitative analysis	15	7	different types of questions	• Web references	• Assignment booklet. • Class test
NOVEMBER	22	22	**Ch-12- Organic chemistry: some basic principles and techniques(contd)** **Ch-10-s block elements:** General introduction, electronic configuration, occurrence, anomalous properties of the first element of each group, diagonal relationship, trends in the variation of properties (such as ionization enthalpy, atomic and ionic radii). Trends in chemical reactivity with oxygen, water, hydrogen and halogens, uses. Preparation and Properties of Some Important Compounds: Sodium chloride, sodium hydroxide and biological importance of sodium and potassium. Calcium oxide and Calcium carbonate and industrial uses of lime and limestone, biological importance of Magnesium and Calcium.	15	8	• Illustrations through examples • Lecture Method • Explanation of different types of questions	• ICT resources used as Extra marks, • Reference books & NCERT books • Web references	• Recap questions to assess the understanding of the chapter • Open ended discussion • PBL • Class work. • Assignment booklet. • Class test
DECEMBER	17	17	**Ch-13-Hydrocarbons** **Classification of Hydrocarbons** **Alkanes** - Nomenclature, isomerism, conformation (ethane only), physical properties, chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis. **Alkenes** - Nomenclature, structure of double bond (ethene), geometrical isomerism, physical properties, methods of preparation, chemical reactions: addition of hydrogen, halogen, water, hydrogen halides (Markonikov's addition and peroxide effect), ozonolysis, mechanism of electrophilic addition. **Alkynes** - Nomenclature, structure of triple bond (ethyne), physical properties, methods of preparation, chemical reactions: acidic character of alkynes,	14	6	• Illustrations through examples • Lecture Method • Explanation of different types of questions	• ICT resources used as Extra marks, • Reference books & NCERT books • Web references	• Recap questions to assess the understanding of the chapter • Open ended discussion • PBL • Class work. • Assignment booklet. • Class test

			addition reaction with - hydrogen, halogens, hydrogen halides and water. **Aromatic Hydrocarbons:** Introduction, IUPAC nomenclature, benzene: resonance, aromaticity, chemical reactions: nitration sulphonation, halogenation, Friedel Craft's alkylation and acylation, mechanism of electrophilic substitution. Directive influence of a substituted in mono- substituted benzene, carcinogenicity and toxicity.					
JANUARY	19	19	**Ch-11- p-block elements:** Group 13 Elements: General introduction, electronic configuration, occurrence, variation of properties, oxidation states, trends in chemical reactivity, anomalous properties of first element of the group, Boron - physical and chemical properties, some important compounds, boron hydrides, Aluminium: Reactions with acids and alkalies, uses. Group 14 Elements: General introduction, electronic configuration, occurrence, variation of properties, oxidation states, trends in chemical reactivity, anomalous behaviour of first elements of the group, Carbon -catenation, allotropic forms, physical and chemical properties. Important compounds of silicon and their uses: silicates and zeolites. **Ch-7- Ch-7- Equilibrium:** Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of mass action, equilibrium constant, factors affecting equilibrium - Le Chatelier's principle, ionic equilibrium - ionization of acids and bases, strong and weak electrolytes, degree of ionization, concept of pH, hydrolysis of salts (elementary idea), buffer solution, solubility product, common ion effect	7 7	5 5	• Illustrations through examples • Lecture Method • Explanation of different types of questions	• ICT resources used as Extra marks, • Reference books & NCERT books • Web references	• Recap questions to assess the understanding of the chapter • Open ended discussion • PBL • Class work. • Assignment booklet. • Class test
FEBRUARY	2		Revision					

BIOLOGY

Month	No. of days	Periods available	Topics/sub topics to be covered	Periods required	Activities/processes	Resources/ICT	assessment
April	18	26	Chapter 1-The Living World. Characteristics of living organisms, taxonomic categories, taxonomic aids, nomenclature. Chapter 2- Biological classification. Five kingdoms-Kingdom monera, protista, fungi ,plantae, animalia; their characteristics. Viruses, viriods, lichens. Chapter 5- Morphology of flowering plants. Root, stem, leaf, flower, inflorescence, fruit, seed, description of some important families. .	3 7 16	To learn how to collect, press, dry and prepare plant specimen with labels for herbarium. To study and describe three locally available common flowering plants, one from each of families Solanaceae, Fabacceae and Liliaceae including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams). Types of root (Tap and adventitious); stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound). Study of different modifications in root, stem and leaves. Study and identification of different types of inflorescence (cymose and racemose).	Educational software-Extramarks, NCERT textbook, reference books, question bank. Newspapers, presser, herbarium sheets and labels. Specimen of plants belonging to the three families, flowers, forceps, dissecting microscope .	Assignments, class tests.
May	14	18	Chapter 5- Morphology of flowering plants.(contd.) Root, stem, leaf, flower, inflorescence, fruit, seed, description of some important families. Chapter 16-Digestion and absorption. Human digestive system, process of digestion and absorption of food, disorders of digestive system.	3 9	Test for the presence of sugar, starch, proteins and fats. To detect these in suitable plant and animal materials To study the effect of salivary amylase on starch. Test for presence of urea in urine. To detect the presence of sugar in	Educational software-Extramarks, NCERT textbook, reference books, question bank. Specimen, permanent slides, models Cavity tiles, iodine, starch, sodium hydroxide solution,	Class tests, oral tests.

			Chapter 17-Breathing and exchange of gases. Human respiratory system, mechanism of breathing, respiratory volume, exchange of gases, transport of gases, regulation of respiration and disorders of respiratory system.	6	urine. To detect the presence of albumin in urine. To detect the presence of bile salts in urine	test tubes. Urine sample and necessary chemicals.	
July	21	29	Chapter 18- Body fluids and circulation. Blood; composition, blood groups, lymph, circulatory system, cardiac cycle, ECG ,disorders of circulatory system. Chapter 19-Excretory products and their elimination. Human excretory system, mechanism of urine formation, other organs of excretion and disorders of excretory system . Chapter 20-Locomotion and movement. Types of movement, structure of muscle , Human skeletal system, joints, disorders of muscular and skeletal system. Chapter 6- Anatomy of flowering plants. Tissues-types of tissues, tissue system, anatomy of dicot and monocot plant, secondary growth.	7 7 7 8	Study of human skeleton and different types of joints with the help of virtual images/models only. Preparation and study of T.S. of dicot and monocot roots and stems (primary). Study of distribution of stomata in the upper and lower surface of leaves. Study of tissues and diversity in shapes and sizes of plant l cells (palisade cells, guard cells, parenchyma, collenchyma, sclerenchyma, xylem, phloem) through temporary/permanent slides.	Educational software-Extramarks, NCERT textbook, reference books, question bank. Model of human skeleton Plant and animal material, necessary chemicals.	Class tests, periodic test.
August	20	27	Chapter 3-Plant kingdom. Algae, bryophytes, pteridophytes, gymnosperms, angiosperms-characteristic features. Plant life cycle and alternation of generation .	10	Study of the specimens/slides/models and identification with reasons Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one	Educational software-Extramarks, NCERT textbook, reference books, question bank.	Class test, home assignments.

			Chapter 4-Animal Kingdom Basis of classification of animals. Salient features of animals(non-chordates up to phylum level, and chordates up to class level)	10 8	monocotyledonous plant and one dicotyledonous plant and one lichen Study of virtual specimens/slides/models and identification with reasons - Amoeba, Hydra, liverfluke, Ascaris, leech, earthworm, prawn, silkworm, honeybee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.	Dicot and monocot root and stem, necessary chemicals(stain,glycerine) Monocot and dicot leaf, slides, coverslips, necessary chemicals. Permanent slides of plant tissues Slides, specimen/models.	
Septe mber	8	8	Revision				Semester I-examination
Octo ber	17	23	Chapter 8-Cell; The unit of life. Types of cells, cell wall, cell membrane and cell organelles (plastids, mitochondria, endoplasmic reticulum, Golgi bodies/ dictyosomes, ribosomes, lysosomes, vacuoles, centrioles) and nuclear organization. Chapter 10- Cell cycle and cell division. Mitosis, meiosis, cell cycle. Chapter 9-Biomolecules. Basic chemical constituents of living bodies. Structure and functions of carbohydrates, proteins.	9 5 9	Study of mitosis in onion root tip cells and animals cells (grasshopper) from permanent slides.	Educational software-Extramarks, NCERT textbook, reference books, question bank. Permanent slides	Class tests, assignments.
Nove mber .	22	30	Chapter 9-Biomolecules.(contd) Structure and functions of lipids and nucleic acids. *Enzymes* : Types, properties and function. Chapter 11- Transport in plants.	7 7		Educational software-Extramarks, NCERT textbook, reference books, question bank. Potato, sugar solution,	Class tests, assignments.

			Means of transport, plant water relations, pathway of movement of water, root pressure, transpiration and translocation. Chapter 12-Mineral nutrition. Types of nutrients- their role, deficiency symptoms, mechanism of absorption. Nitrogen metabolism. Chapter 13-Photosynthesis in higher plants Mechanism of photosynthesis, C3 and C4 plants, photorespiration, factors affecting photosynthesis.	7 9	Study of osmosis by potato osmometer. Study of plasmolysis in epidermal peels (e.g. Rhoeo leaves). Comparative study of the rates of transpiration in the upper and lower surface of leaves. Study of imbibition in seeds/raisins.	petridish. Leaves, slides, coverslips, hypertonic Hypotonic and isotonic solution. Potted plant, slides, necessary chemical. Raisins, petridish	
December	15	20	Chapter 14- Respiration. Types of respiration, steps (glycolysis, Krebs cycle, oxidative phosphorylation),respiratory quotient. Chapter 15-Plant growth and development. Growth-phases, rate, conditions, growth regulators(phytohormones). Photoperiodism, vernalisation. Chapter 7- Structural organization in animals. Animal tissues-types, structure and function. Morphology, anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of an insect (cockroach). (a brief account only)	7 7 6	Separation of plant pigments through paper chromatography Study of the rate of respiration in flower buds/leaf tissue and germinating seeds. Observation and comments on the experimental set up for showing: a) Anaerobic respiration b) Phototropism c) Effect of apical bud removal d) Suction due to transpiration	Educational software-Extramarks, NCERT textbook, reference books, question bank. Chromatogram, chromatographic chamber, solvent, chlorophyll extract etc. Conical flasks, deliver tube, necessary chemicals, beaker, plant material.	Class tests, assignments, periodic test

January	19	25	Chapter 21- Neural control and coordination. Neurons-types , structure. Human nervous system-CNS and PNS Mechanism of transmission of nerve impulse, reflex action, structure of eye and ear, mechanism of vision and hearing. Chapter 22-Chemical coordination and integration. Human endocrine system-endocrine glands, hormones9types,functions,deficiency symptoms), mechanism of hormone action.	10 10	Study of tissues and diversity in shapes and sizes of animal cells (squamous epithelium, muscle fibers and mammalian blood smear) through temporary/permanent slides. Study of external morphology of cockroach through virtual images/models.	Educational software-Extramarks, NCERT textbook, reference books, question bank. Permanent slides. Model/virtual images of cockroach.	Class test, assignments.
February	5	5	Revision.				Semester II examination.

IP

MONTH	NO. OF DAYS	TOPIC/SUBTOPICS TO BE COVERED	PERIODS REQUIRED	ACTIVITIES/PROCESSES	RESOURCES/ ICT	ASSESSMENT
April	18	Chapter 1: Hardware Concepts Computer organization (basic concepts): CPU, Memory (RAM and ROM), I/O devices, communication bus, ports (serial, parallel, network, phone); Input devices: Keyboard, Mouse, Light pen, Touch Screens, Graphics Tablets, Joystick, Microphone, OCR, Scanner, Smart Card reader, Barcode reader, Biometric sensor, web camera; Output Devices: Monitor/Visual Display Unit (VDU), LCD screen, Television, Printer (Dot Matrix Printer, Desk jet/ Inkjet/ Bubble jet Printer, Laser Printer), Plotter, Speaker; Secondary Storage Devices: Floppy Disk, Hard Disk, Compact Disk, Magnetic Tape, Digital Versatile Disk (DVD), USB Drive, Memory cards - Comparative properties Memory Units: Bit (Binary Digit)/Byte (K, MB, GB, TB and Petabyte) Chapter 2: Software Concepts Operating systems, Need for operating system, major functions of Operating System, Memory Management; Security of system: sources of attack and possible damages, virus and related entities - worms, propagation of these entities, virus detection using a tool, Desktop security, Digital certificates, Digital signature, cookies, firewall, password, file access permissions. Types of Software: System Software, Utility Software,	4 4	• Explanation of literal meaning of all the technical terms related to hardware and shown them the hardware so that they can understand the practical aspects of the same. • Detailed discussion regarding software's. Example of software's should be discussed. • Difference between hardware and softyware.	CBSE text book Reference books Extramarks	Class test Cycle test-1 Cycle test-2 Post Mid Semester Exams Semester Exams

		Application Software and Developer Tools System Software: Productivity Tools General Purpose Application Software: Word Processor, Presentation Tool, Spreadsheet Package, Database Management System; Specific Purpose Application software (for example: Inventory Management System, Purchasing System, Human Resource Management System, Payroll System, Financial Accounting, Hotel Management and Reservation System, etc.); Developer Tools: Compilers and Interpreters, Integrated Development Environment (IDE) General features of Desktop: To be taught through practical. Refer to practical section. Word Processing: To be taught through practical. Refer to practical section. Spresdsheet : To be taught through practical. Refer to practical section. Chapter 4: Introduction to GUI Programming Introduction, Rapid Application Development using IDE (Integrated Development Environment); Familiarization of IDE using basic Interface components-Label, TextField, TextArea, Button, CheckBox, RadioButton. Creation of a simple Swing Application ("Hello World")	8	• Discussion about the basic screen of Net beans to revise the various components/parts of screen and shown them on their system in computer lab • Giving them an example of mall where they can get each and every thing from needle to fridge ie one stop for everything ,the same way is an interface of Net beans where they can write the code, compile the code and even rectify the code		
May	14	Chapter 4: Continued.. **Programming Fundamentals Data Types:** Concept of data types; Built-in data types - byte, short, int, long, float, double, char,	**Theory [05]-Practical [05]**	• Identify the various symbols used in English or hindi language like A-Z, a-z, ?, !etc similarly they can understand the character set of Java	CBSE text book Reference books Extramarks	Class test Cycle test-2 Post Mid Semester Exams

		String (or any object), Boolean; **Variables:** Need to use variable, Declaring Variables, Variable Naming Convention, Assigning value to Variables; **Integer object method:** parseInt **Double object method:** parseDouble **Developing General Application:** Getting Familiar with Java Swing User Interface components- Frame, Dialog, OptionPane, Panel, ScrollPane, Label, TextField, PasswordField, TextArea, Buttob, CheckBox, RadioButton, ComboBox, List, Table, FileChooser, ColorChooser, ToolBar, Menu. Basic component handling methods/attributes setText, getText, add, isSelected, setSelected, getX, getY, addActionListener. Working with Swing controls (jButtons, jLabel, jTextField, jRadioButton, jCheckBox, jButtonGroup, jComboBox, jList, jTable and JOptionPane. (With commonly used properties and methods) Decision Structure - if, if-else	**Theory [15]- Practical [18]**	language • Discussion about the various kinds of data they are using in their daily life like name, dob, mobile number, absent or present, so that they can understand about the various kinds of data types available in any language. • Showing them any online form, so that students can understand various swing controls and their usage • Demonstration of simple program using String and Numeric data type and discussion about the various methods/functions used in coding and also giving them hands on practice of lot more program. • Discussion about the authentication required to access any secured documents like their mail using their user name and password so that they can understand the usage of password field which is used in ATM machines, Net Banking etc		Semester Exams
July	21	Chapter 5 **Control Structures:** Decision Structure - if, if-else, switch; Looping Structure- while, do-while, for; Chapter 6 **Programming Guidelines:** General Concepts; Modular approach; Stylistic Guidelines: Clearity and Simplicity of Expressions, Names, Comments, Indentation; Documentation and Program Maintenance; Running and	**Theory [05]- Practical [10]** **Theory [04]- Practical [00]**	• Discussion about the various live situations to make them clear about all types of Programming Constructs like writing A to Z or promoting from one class to another class is an example of Sequential Constructs. • Another situations like if you score 80% or above than I	CBSE text book Reference books Extramarks	Class test Cycle test-2 Post Mid Semester Exams Semester Exams

		Debugging programs, Syntax Errors, Run-Time Errors, Logical Errors; Problem Solving Methodology and Techniques: Understanding of the problem, identifying minimum number of input required for output, Step by step solution for the problem, breaking down solution into simple steps, Identification of arithmetic and logical operations required for solution,		will give you Mobile otherwise a Chocolate Discussion a lot more situations give them a better idea about Selection Statement • Discussion on situations like take 5 rounds of the field, pluck 10 flowers from the garden help them to understand about the loop ie doing same task again and again. • Showing them demo of all kinds of constructs via simple programs to complicated programs and also give them a lot more programs for practice. • Demonstration of different types of programs which involved various swing control most important selection control like check box, radio button, list box and combo box.		
August	20	Using Control Structure: Conditional control and looping (finite and infinite);	**Theory [10]- Practical [10]**	• Given them various forms to design and write the code for the appropriate buttons. • Discussion about the various events related to the various controls so that they can understand about event driven programming.	CBSE text book Reference books Extramarks	Class test Cycle test-2 Post Mid Semester Exams Semester Exams
September	19	Revision			CBSE text book Reference books Extramarks	Class test Post Mid Semester Exams Semester Exams

October	17	**Database Management System** Introduction to database concepts: Relation/Table, attribute/fields, Tuple / Rows; Data Types - Number, Character and Date Key - Primary Key, Candidate key, Alternate key; Example of common Database Management System- MySQL, INGRESS, POSTGRES, ORACLE, DB2, MS SQL, Sybase.	**Theory [05]- Practical [0]**	• Discussion about the terminology of Database Management System like Table, Database, Primary Key, Foreign Key etc. • Shown them the working of Campuscare (campus MIS Software) where they can understand how to search a student so that they they can understand the importance of Primary Key. • Discussion about various other system where Primary Key is used like Banking System (Account Number or Pan Number), Railway reservation System, Library Management System(Book No) etc • Discussion about type /kind of data about an entity so that they can think what kind of data to be stored while creating a table like book, Hotel, Student etc	CBSE text book Reference books Extramarks	Class test Post Mid Semester Exams Semester Exams
November	22	**Introduction to MySQL** (ANSI SQL 99 standard commands) **Classification of SQL Statements:** DML - SELECT, INSERT, UPDATE, DELETE; DDL - CREATE, DROP, ALTER; SQL SELECT Statement (working with demo/already existing tables): SELECT statement, Selecting All the Columns, Selecting Specific Column, Using Arithmetic Operators, Operator Precedence, Defining and using Column Alias, Duplicate rows and their Elimination (DISTINCT keyword), Displaying Table Structure (DESC command); SELECT Statement Continued: Limiting Rows during selection (using WHERE clause),	**Theory [05]- Practical [0]** **Theory [10]- Practical [10]**	• Demonstration of creating table in My SQL with appropriate Syntax as well as how to insert records/data in table • Discussion /Demonstration of various queries with different clauses. • Taking out the various kinds of reports from Campuscare will be shown to students so that they can understand how different queries result in different report.	CBSE text book Reference books Extramarks	Class test Post Mid Semester Exams Semester Exams

		Working with Character Strings and Dates, Working with NULL values; Using Comparison operators - =, <, >, <=, >=, < >, BETWEEN, IN, LIKE(%), Logical Operators - AND, OR, NOT; Operator Precedence; ORDER BY Clause, Sorting in Ascending/Descending Order, Sorting By Column Alias Name, Sorting On Multiple Columns;				
December	5	**Functions in MySQL:** String Function - CHAR(), CONCAT(),INSTR(), LCASE(), LEFT(), LOWER(), LENGTH(), LTRIM(), MID(), RIGHT(), RTRIM(), SUBSTR(), TRIM(), UCASE(), UPPER(). Mathematical Functions - POWER(), ROUND(), TRUNCATE(). Date and Time Functions - CURDATE() , DATE(), MONTH(), YEAR(), DAYNAME(), DAYOFMONTH(), DAYOFWEEK(), DAYOFYEAR(), NOW(), SYSDATE().	**Theory [15]- Practical [10]**	• Discussion about the term functions along with the demo in MY SQL. • Explanation of all types of functions with different input values so that they can understand the functionality of all the functions. • Demonstration of queries where we use such function so that they can get an exposure of various kinds of queries	CBSE text book Reference books Extramarks	Class test Semester exams
January	19	**Manipulating Data of a Table/Relation:** Inserting New Rows, Inserting New Rows with Null Values, Inserting NUMBER, CHAR and DATE Values, Update Statement to Change Existing Data of a Table, Updating Rows in A Table, Delete statement - removing row/rows from a Table; Creating Table using CREATE TABLE, ALTER TABLE for adding a new column, using naming conventions for column names;	**Theory [10]- Practical [16]**	• Shown them the various option where they can authenticate other as a database administrator like delete option and Edit option. • Explain them the use of such option in live world. • Shown them various queries where they can learn to edit delete various kinds of data from table on the basis of various conditions.	CBSE text book Reference books Extramarks	Class test Semester exams
February	5	Revision				Semester exams

COMPUTER SCIENCE

MONTH	NO. OF DAYS	PERIODS AVAILABLE	TOPICS/SUB TOPICS TO BE COVERED	PERIOD REQ	WEIGHTAGE	ACTIVITIES / PROCESS	RESOURCES / ICT	ASSESSMENT
APRIL	18	24	**3. DATA REPRESENTATION** • Binary number system • Decimal number system • Octal number system • Hexadecimal number system • Conversion of binary to decimal system • Conversion of decimal to binary system • Conversion of binary floating numbers to decimal system • Conversion of decimal floating numbers to binary system • Conversion of binary to octal system • Conversion of binary to hexadecimal system • Conversion of decimal to octal system • Conversion of decimal to hexadecimal system • Conversion of hexadecimal to octal system • Conversion of octal to hexadecimal system • ASCII CODE			• Illustrations through examples • Lecture Method • Discussions of new topics & real life situations • Explanation of different types of questions. • Sumita arora questions are done/given as CW & HW.	• Sumita arora Text Book • Reference Books	• Class Test • Registers of CW & HW • Activity done in the class
MAY	14	19	GETTING STARTED WITH C++ • C++ Character set • Tokens ➢ Keywords ➢ Identifiers ➢ Literals ➢ Punctuators			• Illustrations through examples • Lecture Method • Discussions of new topics & real life situations • Explanation of	• Sumita arora Text Book • Reference Books	• Class Test • Registers of CW & HW • Activity done in

			➢ operators • Header file • I/O operators ➢ Output operator << ➢ Input operator >> ➢ Cascading of input and output operator • Complier: Turbo c++ • Type of errors DATA HANDLING • Fundamental Data types ➢ Void ➢ Int ➢ Char ➢ Float ➢ double • Data type modifiers • Variables ➢ Declaration • Initialization ✓ Static ✓ Dynamic • Access modifier Const OPERATORS & EXPRESSIONS IN C++ • Arithmetic ➢ +, -, *, /, % • Increment/ decrement ➢ Post (++, --) ➢ Pre (++, --) • Relational ➢ <, >, <=, >=, !=, == • Logical ➢ AND, OR, NOT • Conditional ➢ ?: • Size of • Comma			different types of questions. • Sumita arora questions are done/given as CW & HW. • PROGRAMS: ➢ AREA OF CIRCLE, SQUARE, RECTANGLE, TRIANGLE ➢ PERIMETER ➢ VOLUME CUBE, CUBOID		the class

			• Assignment (=) • Precedence of operators **FLOW OF CONTROL** • Conditional statements ➢ If-else ➢ If-else-if ladder ➢ Nested if					
JULY	21	28	FLOW OF CONTROL • Conditional statements ➢ If-else ➢ If-else-if ladder ➢ Nested if ➢ Switch ➢ If vs switch			• Illustrations through examples • Lecture Method • Discussions of new topics & real life situations • Explanation of different types of questions. • Sumita arora questions are done/given as CW & HW. • PROGRAMS: ➢ LEAP YEAR ➢ EVEN ODD ➢ CAN VOTE OR NOT ➢ GRADING OF STUDENTS ➢ VOWELS ➢ CALCULATOR	• Sumita arora Text Book • Reference Books	• Class Test • Registers of CW & HW • Activity done in the class
AUGUST	20	27	FLOW OF CONTROL (continued) • Iterative loops ➢ Entry controlled ✓ While ✓ for ➢ Exit controlled ✓ Do- while • Nested loops • Jump statements ➢ Break			• Illustrations through examples • Lecture Method • Discussions of new topics & real life situations • Explanation of different types of questions. • Sumita arora questions	• Sumita arora Text Book • Reference Books	• Class Test • Registers of CW & HW • Activity done in the class

			➢ Return ➢ Exit()			are done/given as CW & HW. • PROGRAMS: ➢ FIBONACCI ➢ FACTORIAL ➢ PRIME NUMBER ➢ ARMSTRONG ➢ STAR PATTERNS ➢ SERIES		
SEPTEMBER	7	10	**REVISION FOR SA1**			• Chapter wise revision • Sample Question paper discussion	• Sumita arora Text Book • Reference Books	
TERM - 2								
OCTOBER	17	22	User defined data type: ARRAY • Need for array • Types of array ➢ Single dimensional ➢ Two dimensional ➢ Multi dimensional • Array initialization ➢ Static ➢ Using loop • Strings • String initialization • Gets() vs cin>> • Ctype.h ➢ Isupper ➢ Islower ➢ Toupper ➢ Tolower ➢ Isdigit ➢ isalpha • String manipulation functions ➢ Strcmpi ➢ Strcmp ➢ Strcat ➢ strcpy			• Illustrations through examples • Lecture Method • Discussions of new topics & real life situations • Explanation of different types of questions. • Sumita arora questions are done/given as CW & HW. • PROGRAMS: ➢ Print reverse of array ➢ Smallest and largest element of array ➢ Vowels, consonenents, digits from string ➢ Convert string to uppercase and lower case	• Sumita arora Text Book • Reference Books	• Class Test • Registers of CW & HW • Activity done in the class

						➢ Replace space by # in string ➢ No of words, spaces in string ➢ String compare ➢ String concatenate ➢ String copy		
NOVEMBER	22	29	• Types of array ➢ Two dimensional ➢ Multi dimensional • 2 D array initialization • Matrices as 2D array • Algebra of matrices • 2D strings			• Illustrations through examples • Lecture Method • Discussions of new topics & real life situations • Explanation of different types of questions. • Sumita arora questions are done/given as CW & HW. • PROGRAMS ➢ Print 3X3 matrix ➢ Row sum ➢ Column sum ➢ Diagonal sum ➢ Transpose ➢ Sum of 2 matrix ➢ Difference of 2 matrix ➢ Multiplication of 2 matrix	• Sumita arora Text Book • Reference Books	• Class Test • Registers of CW & HW • Activity done in the class
DECEMBER	16	23	• User defined functions • Function definition • Return type • Types of function ➢ Function having no return type no arguments ➢ Function having no return type but arguments			• Illustrations through examples • Lecture Method • Discussions of new topics & real life situations • Explanation of different types of questions. • Sumita arora questions	• Sumita arora Text Book • Reference Books	• Class Test • Registers of CW & HW • Activity done in the class

						are done/given as CW & HW. • PROGRAMS ➢ Sum function to print sum of two integers passed as arguments ➢ Return smallest of two integers ➢ Return 1 if even argument and 0 otherwise		
JANUARY	19	25	• Types of function ➢ Function having return type but no arguments ➢ Function having return type as well as arguments • Function prototype • Call by value • Call by reference • Default arguments in function • Array and functions • Scope of variables • Local and global variables • Iomanip.h ➢ Setw ➢ Setprecision STRUCTURES (will not come in exam) ➢ Syntax ➢ Declaration ➢ Initialization ➢ Arrays in structures ➢ Arrays of structures ➢ Functions and structures			• Illustrations through examples • Lecture Method • Discussions of new topics & real life situations • Explanation of different types of questions. • Sumita arora questions are done/given as CW & HW. • PROGRAMS ➢ Palindrome function ➢ Prime function ➢ Return sum of all elements of array ➢ Return no of vowels from string passed as argument ➢ Swap function	• Sumita arora Text Book • Reference Books	• Class Test • Registers of CW & HW • Activity done in the class
FEBRUARY	2	3	REVISION FOR SA2			• Chapterwise revision • Sample Question paper discussion	• sumita arora Text Book • Reference Books	

ECONOMICS

Month	Number of days	Period available	Topics and Sub topics To be covered	Periods required	weightage	Activities and process	Resources ICT	Assessment
A P R I L	18 Days	24 Periods	**Part A:** **Statistics for Economics** **Unit 1: Introduction** Concept of Economics Meaning, scope and importance of statistics in Economics **Unit 2:** **Collection and Organization of Data** Collection of data - sources of data primary and secondary data methods of collecting data some important sources of secondary data Census of India National Sample Survey Organization .**Organization of Data** Meaning and types of variables; Frequency Distribution. **Part B:** **Indian Economic Development** **Unit 4: Development Experience (1947-90) and Economic Reforms since 1991** A brief introduction of the state of Indian economy on the eve of independence.	4 periods 6 periods 6 periods 5 periods	3marks 7 marks 7marks	Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests Assignments
M	14	18	**Part A:** **Statistics for Economics** **Unit 2: Presentation of Data:**				PPts Education	

A Y	Days	Periods	• Tabular Presentation and • Diagrammatic Presentation of Data: • Geometric forms (bar diagrams and pie diagrams), • Frequency diagrams (histogram, polygon and Ogives) and • Arithmetic line graphs (time series graph). **Part B:** **Indian Economic Development** **Unit 4:** **Development Experience (1947-1990)** Common goals of Five Year Plans. Main features, problems and policies of agriculture (institutional aspects and new agricultural strategy, etc.), industry (industrial licensing, etc.) and foreign trade.	10 periods 8 periods		Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests Assignments
J U L Y	21 Days	28 Periods	**Part A:** **Statistics for Economics** **Unit 3: Statistical Tools and Interpretation** **Measures of Central Tendency** • mean (simple and weighted), • median and mode **Part B:** **Indian Economic Development**	10 periods 10 periods	30marks	Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests

			Unit 4: Economic Reforms since 1991 Need and main features – liberalization, globalization and privatization; An appraisal of LPG policies **PJBL**	4 periods	10 marks			Assignments
A U G U S T	19 Days	21 Periods	**Part A:** **Statistics for Economics** **Unit 3: Statistical Tools and Interpretation** **Measures of Dispersion –** absolute dispersion (range, quartile deviation, mean deviation and standard deviation); relative dispersion (co-efficient of quartile-deviation, co-efficient of mean deviation, co-efficient of variation); Lorenz Curve: Meaning and its application. **Part B:** **Indian Economic Development** Unit 5: Current challenges facing Indian Economy Poverty - absolute and relative; Main programs for poverty alleviation: A critical assessment;	16 periods 5 periods		Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests Assignments
	17	21	**Part A:**					

O C T O B E R	Days	Periods	**Statistics for Economics** **Unit 3: Statistical Tools and Interpretation** Correlation - meaning, scatter diagram; Measures of correlation - Karl Pearson's method (two variables ungrouped data) Spearman's rank correlation. **Part B:** **Indian Economic Development** **Unit 5: Current challenges facing Indian Economy** Rural development: Key issues - credit and marketing - role of cooperatives; agricultural diversification; alternative farming - organic farming	12 periods 9 periods		Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests Assignments
N O V E M B E R	22 Days	21 Periods	**Part A:** **Statistics for Economics** **Unit 3: Statistical Tools and Interpretation** **Introduction to Index Numbers** – • meaning, types – • wholesale price index, • consumer price index and • index of industrial production, • uses of index numbers; • Inflation and index numbers.	14 periods		Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests

			Part B: **Indian Economic Development** **Unit 5: Current challenges facing Indian Economy** Human Capital Formation: How people become resource; Role of human capital in economic development; Growth of Education Sector in India	7 periods				Assignments
D E C E M B E R	16 Days	21 Periods	**Part A:** **Statistics for Economics** **Unit 3: Statistical Tools and Interpretation** Some Mathematical tools used in Economics: Equation of a line, slope of a line, slope of a curve. **Part B:** **Indian Economic Development** **Unit 5: Current challenges facing Indian Economy** Employment: Formal and informal, growth and other issues: Problems and policies. Inflation: Problems and Policies Infrastructure: Meaning and Types: Case Studies: Energy and Health: Problems and Policies- A critical assessment;	4 periods 6 periods 4 periods 5 periods		Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests Assignments
J A	19 Days	21 Periods	**Part B:** **Indian Economic Development**					

N U A R Y			**Unit 5: Current challenges facing Indian Economy** Sustainable Economic Development: Meaning, Effects of Economic Development on Resources and Environment, including global warming. **Unit 6: Development Experience of India** A comparison with neighbors India and Pakistan India and China Issues: growth, population, sectoral development and other developmental indicators. **PJBL or Class Activity**	6 periods 6 periods 8 periods		Narrative Lecture Question answering Discussion Approaches Depending Upon The Relative Knowledge Of the students	PPts Education Softwares Tata edge Etc marks	Continuous Evaluation Through Oral tests Class tests Assignments

ACCOUNTS

MONTH	NO OF DAYS	PERIOD AVAILABLE	TOPICS/SUBTOPICS TO BE COVERED	PERIODS REQUIRED	ACTIVITIES/ PROCESS	RESOURCES/ ICT	ASSESSMENT
APRIL	18	24	**Introduction to Accounting** □ Accounting- concept, objectives, advantages and limitations, types of accounting information; users of accounting information and their needs. □ Basic accounting terms: business transaction, account, capital, drawings, liabilities (non - current and current); assets (non-current and current) fixed assets (tangible and intangible assets), receipts (capital and revenue), expenditure (capital, revenue and deferred), expense, income, profits, gains and losses, purchases, purchases returns, sales, sales return, goods, stock, inventory, trade receivables (debtors and bills receivable), trade payables (creditors and bills payable), cost, vouchers, discount - trade and cash.	10	**DETAILED DISCUSSION**	Textbook Power point presentation	Mid Sem-1 Term-1 Class Test Term-2
			Theory Base of Accounting □ Fundamental accounting assumptions: going concern, consistency and accrual. □ Accounting principles: accounting entity, money measurement, accounting period, full disclosure, materiality, prudence, cost concept, matching concept and dual aspect. □ Accounting Standards and IFRS (International Financial Reporting Standards): concept and objectives □ Double entry system of accounting. □ Bases of accounting - cash basis and accrual basis.	10	**DETAILED DISCUSSION**	Textbook Power point presentation	Mid Sem-1 Term-1 Class Test Term-2
			Recording of Transactions □ Accounting equation: analysis of transactions using accounting equation.	4	**DETAILED DISCUSSION ,** Text book questions and examples	Textbook Power point presentation	Mid Sem-1 Term-1 Class Test Term-2

MAY	14	22	**Recording of Transactions** □ Accounting equation: analysis of transactions using accounting equation. (Contd) □ Rules of debit and credit: for assets, liabilities, capital, revenue and expenses. □ Books of original entry: format and recording - Journal. □ Cash book: simple cash book, cash book with bank columns and petty cash book. □ Other books: purchases book, sales book, purchases returns book, sales returns book and journal proper.	4 2 5 6 5	**DISCUSSION ,** Text book questions and examples	Textbook Power point presentation	Mid Sem-1 Term-1 Class Test Term-2
JULY	21	33	**Preparation of Ledger and Trial Balance** □ □ Ledger - format, posting from journal, cash book and other special purpose books, balancing of accounts. □ Trial balance: objectives and preparation	15 8	**Explanation** Text book questions and examples	Textbook Power point presentation	Mid Sem-1 Term-1 Class Test Term-2
AUGUST	20	28	**Rectification of Errors** □ Errors: types-errors of omission, commission, principles, and compensating; their effect on Trial Balance. □ Detection and rectification of errors; preparation of suspense account. **Preparation of Bank Reconciliation Statement** □ Bank reconciliation statement- concept, calculating bank balance at an accounting date: need and preparation. Corrected cash book balance.	16 12	**DISCUSSION ,** Text book questions and examples **DISCUSSION ,** Text book questions and examples	Textbook Self prepared questions out of textbook	Term-1 Class Test Term-2 Term-1 Class Test Term-2
SEPTEMBER	7	12	**Preparation of Bank Reconciliation Statement (Contd.)** □ Bank reconciliation statement- concept, calculating bank balance at an accounting date: need and preparation. Corrected cash book balance. **Vouchers** □ Origin of transactions- source documents/ supporting vouchers (invoice, cash memo, pay	4 4	**DISCUSSION ,** Text book questions and examples	Textbook Self prepared questions out of textbook	Term-1 Class Test Term-2 Term-1 Class Test

			in slip, cheque etc.), debit note, credit note, Preparation of accounting vouchers – cash (debit and credit) and non-cash (transfer). **REVISION & PBL**	 4	**DISCUSSION ,** Understanding of vouchers with examples		Term-2
OCTOBER	17	27	**Depreciation, Provisions and Reserves.** Depreciation: concept, need and factors affecting depreciation; methods of computation of depreciation: straight line method, written down value method (excluding change in method) Accounting treatment of depreciation: by charging to asset account, by creating provision for depreciation/ accumulated depreciation account, treatment of disposal of asset. Provisions and reserves: concept, objectives and difference between provisions and reserves; types of reserves- revenue reserve, capital reserve, general reserve and specific reserves. **Accounting for Bills of Exchange.** Bills of exchange and promissory note: Definition, features, parties, specimen and distinction. Important terms : term of bill, due date, days of grace, date of maturity, discounting of bill, Endorsement of bill, bill sent for collection, dishonor of bill, noting of bill, retirement and renewal of a bill. Accounting treatment of bill transactions. '	12 3 12	**DISCUSSION ,** Text book questions and examples **DISCUSSION ,** Text book questions and examples	Textbook Self prepared questions out of textbook Textbook Self prepared questions out of textbook	Mid Sem-2 Class Test Term-2 Mid Sem-2 Class Test Term-2
NOVEMBER	22	35	**Financial statements:** objective and importance. Trading and profit and loss account: gross profit, operating profit and net profit. Balance sheet: need, grouping, marshalling of assets and liabilities. **Adjustments in preparation of financial statements :** with respect to closing stock,	10 25	**DISCUSSION ,** Text book questions and examples	Textbook Self prepared questions out of textbook	Mid Sem-2 Class Test Term-2 Class Test Term-2

			outstanding expenses, prepaid expenses, accrued income, income received in advance, depreciation, bad debts, provision for doubtful debts, provision for discount on debtors, abnormal loss, goods taken for personal use, goods distributed as free samples and manager's commission. Preparation of Trading and Profit and Loss account and Balance Sheet of sole proprietorship.				
DECEMBER	14	21	Financial Statements (Contd.) Incomplete records: uses and limitations. Ascertainment of profit/loss by statement of affairs method.	8 13			Class Test Term-2
JANUARY	19	32	**Not-for-profit organizations:** concept. Receipts and Payments Account: features and preparation. Income and Expenditure Account: features, preparation of income and expenditure account and balance sheet from the given receipts and payments account with additional information. **Revision**	24 8	**DISCUSSION,** Text book questions and examples	Textbook Self prepared questions out of textbook	Class Test Term-2

BST

MONTH	NO OF DAYS	PERIOD AVAILABLE	TOPICS/SUBTOPICS TO BE COVERED	PERIODS REQUIRED	ACTIVITIES/PROCESS	RESOURCES/ICT	ASSESSMENT
APRIL	18	21	**UNIT 1: Nature and Purpose of Business:** • Concept and characteristics of business. • Business, profession and employment • Objectives of business - Economic and social, role of profit in business • Classification of business activities: Industry and Commerce. • Industry - types: primary, secondary, tertiary - • Commerce - trade and auxiliaries to trade • Business risks **UNIT 2: Forms of Business organizations** • Sole Proprietorship- meaning, features, merits and limitations. • Hindu Undivided Family Business: features. • Cooperative Societies- features, types, merits and limitations.	15 6	**Starter activity:** I am the question **Case study** Detailed Description Identifying business opportunities in Primary industry **Starter Activity**: These are a few of my favourite things The power of partnerships A Rolls-Royce **case study**	Starting a business http://business.gov.in/starting business/index.php case study-risk http://businesscasestudies.co.uk/eurostar/calculating-and-managing risk/introduction.html#axzz3UGyBSJrS http://businesscasestudies.co.uk/rolls-royce/the-power-of-partnerships/introduction.html#axzz3UWze8NWU	Mid Sem-1 Term-1 Class Test Mid Sem-1 Term-1 Class Test
MAY	14	21	**Forms of Business organizations (cont.d)** • Partnership- Features, types, merits and limitations of partnership and partners, registration of a partnership firm, partnership deed. Type of partners. • Company: private and public company -features, merits and limitations.	21	**The Road To Creating An IPO** **Flowchart**	http://www.investopedia.com/articles/investing/080613/road-creating-ipo.asp http://www.agcorp	Mid Sem-1 Term-1 Class Test Term-2

			• Formation of a company- four stages, important document (MOA, AOA, relevances of certificate of incorporation and certificate of commencement. • Starting a business - Basic factors.			.in/images/formation-of-indian-company.pdf	
JULY	21	30	**UNIT 3: Public, Private and Global Enterprises** • Private sector and public sector enterprises. • Forms of public sector enterprises: features, merits and limitations of departmental undertakings, statutory corporation and Government Company. • Changing role of public sector enterprises. • Global enterprises, Joint ventures, Public Private Partnership – Features **Unit 4: Business Services** • Banking: Types of bank accounts- savings, current, recurring, fixed deposit and multiple option deposit account. • Banking services with particular reference to issue of bank draft, banker's cheque (pay order), RTGS (Real Time Gross Settlement) NEFT (National Electronic Funds Transfer), bank overdraft, cash credits and e- banking.	20	**Class Debate** **Applied Information** **Detailed Description** **Application**	Disinvestment pesb.gov.in/ Extra marks.com/ tataclassedge http://en.wikipedia.org/wiki/Retail_banking	Term-1 Class Test Term-1 Class Test
AUGUST	20	32	**Unit 4: Business Services** (cont.d) • Insurance: principles, concept of life, health, fire and marine insurance. • Postal and telecom services: mail (UPC, registered post, parcel, speed post and	10	**Group Discussion** **Can your business run smoothly without appropriate insurance**	http://career.guru99.com/top-50-insurance-interview-questions/	Term-1 Class Test

			courier) and other services. **Unit 5: Emerging Modes of Business** • E-business - scope and benefits, resources required for successful e-business implementation, online transactions, payment mechanism, security and safety of business transactions. • Outsourcing-concept, need and scope of BPO (business process outsourcing) and KPO (knowledge process outsourcing). • Smart cards and ATM's meaning and utility **Unit 6: Social Responsibility of Business and Business Ethics** • Concept of social responsibility • Case for social responsibility	14 8	**cover?** **Starter Activity**: I am the question You say we pay **Case study**- outsourcing Zara vs H&M	http://www.diva-portal.org/smash/get/diva2%3A230949/FULLTEXT01.pdf	Term-1 Class Test Term-1 Term-2
SEPTEMBER	7	11	**Unit 6: Social Responsibility of Business and Business Ethics** (cont.d) • Responsibility towards owners, investors, consumers, employees, government and community • Environment protection and business • Business Ethics **REVISION**	6 5	**Starter Activity**: These are few of my favourite thing **Case study** TATA STEEL	http://businesscasestudies.co.uk/case-studies/by-topic/#axzz3UGyBSJrS	Term-1 Term-2
OCTOBER	17	23	**PART B: FINANCE AND TRADE** **Unit 7: Sources of Business Finance** • Concept of business finance • Owner's funds - equity shares, preference share, GDR, ADR, IDR and retained earnings. • Borrowed funds: debentures and bonds, loan from financial institution, loans	23	**Starter Activity**: These are few of my favourite things You say we pay	https://the-international-investor.com/investment-faq/american-	MID SEM-2 TERM-2 CLASS TEST

			from commercial banks, public deposits, trade credit, ICD (inter corporate deposits).		**How to buy ADRs and GDRs**	depositary-receipt-adr-global-depositary-receipt-gdr	
NOVEMBER	22	30	**Unit 8: Small Business** • Small scale enterprise as defined by MSMED Act 2006 • Role of small business in India with special reference to rural areas. • Government schemes and agencies for small scale industries: National Small Industries Corporation and DIC with special reference to rural, backward and hilly areas **Unit 9: Internal Trade** • Services rendered by a wholesaler and a retailer • Types of retail -trade - Itinerant and small scale fixed shops	20 10	**Visit to cottage industry** **Starter Activity**: Consider all possibilities **Starter Activity**: Consider all possibilities		MID SEM-2 TERM-2 CLASS TEST TERM-2 CLASS TEST
DECEMBER	16	21	**Unit 9: Internal Trade** • Large scale retailers - Departmental stores, chain stores, mail order business • Concept of automatic vending machine • Chambers of Commerce and Industry: Basic functions • Main documents used in internal trade: Performa invoice, invoice, debit note, credit note. LR (Lorry receipt) and RR (Railway Receipt) • Terms of Trade: COD (Cash on Delivery) , FOB (Free on Board), CIF (Cost, Insurance and Freight), E&OE (Errors and Omissions Excepted)	21	**Group Discussion** Why Trade Shows Deliver Value to Retailers **Visit to an export house**	http://www.forbes.com/sites/nicoleleinbachreyhle/2014/06/29/why-trade-shows-deliver-value-to-retailers/	
JANUA	19	29	**Unit 10: International Trade**	29			

RY			• Meaning, difference between internal trade and external trade: Meaning and characteristics of international trade. • Problems of international trade: Advantages and disadvantages of international trade • Export Trade - Meaning, objective and procedure of Export Trade • Import Trade - Meaning, objective and procedure: Meaning and functions of import trade; purpose and procedure • Documents involved in International Trade; documents involved in export trade, indent, letter of credit, shipping order, shipping bills, mate's receipt, bill of lading, certificate of origin, consular invoice, documentary bill of exchange (DA/DP), specimen, importance • World Trade Organization (WTO) meaning and objectives		**CASE STUDY** HSBC **Analysis** When your contract manufacturer becomes your competitor	http://businesscasestudies.co.uk/hsbc/partners-in-international-trade/introduction.html#axzz3UGyBSJrS http://www.arrunada.org/en/Publications/z15/When-Your-Contract-Manufacturer-Becomes-Your-Competitor.axd	
FEBRUARY	2		**REVISION**				

PSYCHOLOGY

MONTH	NO.OF DAYS	PERIOD AVAILABLE	TOPIC/SUBTOPICS TO BE COVERED	PERIODS REQUIRED	WEIGHTAGE (out of 70)	ACTIVITIES/PROCESS	RESOURCES/ICT	ASSESMENT
APRIL	18	26	<u>Introduction to Psychology</u> Nature of Psychology; Evolution of the discipline of Psychology; Developments of Psychology in India; Psychology and other disciplines; Linkage across psychological processes. Emerging perspectives: Evolutionary Psychology, Cultural Psychology and Positive Psychology.	16	8	-paper pen activity to introduce the topic -group discussion on the responses of the students - explanation of key concepts - PPT presentation followed by a lecture on it -debate -question-answer session	-power point presentation - software like Extramarks - textbooks -case studies and articles from newspapers and magazines	- worksheet (objective) -class test (descriptive) -Quiz and MCQs
MAY	14	18	<u>Methods of Psychology</u> Goals of Psychological enquiry; Some important methods: Observation, Naturalistic, Experimental, Correlational studies; Interview, Case study; Psychological tools: Tests, Questionnaires; Qualitative Methods, Ethical issues in the study of psychological processes.	20	9	-set induction method to introduce the topic -group discussion on the responses of the students - explanation of key concepts - PPT presentation followed by a lecture on it -debate -question-answer session	-power point presentation - software like Extramarks - textbooks -case studies and articles from newspapers and magazines	- worksheet (objective) -class test (descriptive) -Quiz and MCQs
JULY	21	29	<u>The Bases of Human Behaviour</u> Evolutionary perspective on human behaviour; Biological and cultural roots; Nervous System and endocrine systems; Structure and relationship with behaviour and experiences; Brain and behaviour; Role of neurotransmitter in behaviour. State of consciousness and wakefulness. Genetic bases of behaviour; Cultural and human	20	8	-showing a vedio to introduce the topic -group discussion on the responses of the students - explanation of key concepts - PPT presentation followed by a lecture on it -debate	-power point presentation - software like Extramarks - textbooks -case studies and articles from newspapers and magazines	- worksheet (objective) -class test (descriptive) -Quiz and MCQs

			behaviour; Socialization, Enculturation And Acculturation; Globalization; Diversity and pluralism in the Indian context			-question-answer session		
	21	29	<u>Human Development</u> Meaning of development; Factors influencing development; Contexts of development; Overview of developmental stages: Prenatal, Infancy, Childhood, Adolescence (particularly issues of identity, health, social participation and moral development), Adulthood and Old age.	16	7	-a video on children development to introduce the topic -group discussion on the responses of the students - explanation of key concepts - PPT presentation followed by a lecture on it -debate -question-answer session	-power point presentation - software like Extramarks - textbooks -case studies and articles from newspapers and magazines	- worksheet (objective) -class test (descriptive) -Quiz and MCQs
AUGUST	22	27	<u>Sensory and perceptual process</u> Knowing the world; Nature of stimuli; Nature and functioning of sense modalities; Sensory Adaptation; Attention; Nature and Determinants; Selective and sustained attention; Principles of Perceptual organization; Role of perceiver-characteristics in perception; Perceptual phenomenon After images; Space Perception; Perceptual constancy, Illusions, Socio-cultural influences on perception	20	8	-paper pen activity to introduce the topic -group discussion on the responses of the students - explanation of key concepts - PPT presentation followed by a lecture on it -debate -question-answer session	-power point presentation - software like Extramarks - textbooks -case studies and articles from newspapers and magazines	- worksheet (objective) -class test (descriptive) -Quiz and MCQs
SEPTEMBER	8	8	Revision					
OCTOBER	17	23	<u>Learning</u> Nature of learning: Paradigms of learning; Classical and operant conditioning, Observational Learning, Cognitive learning, Verbal learning, Concept learning, Skill learning; Factors facilitating learning; Transfer of learning: Learning styles, Learning disabilities; Some applications	20	8	-paper pen activity to introduce the topic -group discussion on the responses of the students - explanation of key concepts - PPT presentation followed by a lecture on it	-power point presentation - software like Extramarks - textbooks -case studies and articles from newspapers and magazines	- worksheet (objective) -class test (descriptive) -Quiz and MCQs

			of learning principles.			-debate -question-answer session		
NOVEMBER	22	30	<u>Human Memory</u> Nature of memory; Information Processing Approach; Levels of Processing; Memory systems; Sensory memory; Short-term memory Long term memory; Knowledge representation and organization in memory; Memory as a constructive process; Memory and Emotions; Nature and causes of forgetting; Enhancing memory; Brain and memory	20	8	-a video on brain games -paper pen activity to introduce the topic -group discussion on the responses of the students - explanation of key concepts - PPT presentation followed by a lecture on it -debate -question-answer session	-power point presentation - software like Extramarks - textbooks -case studies and articles from newspapers and magazines	- worksheet (objective) -class test (descriptive) -Quiz and MCQs
DECEMBER	16	20	<u>Language and Thought</u> Building blocks of thinking; Thought and language: Nature and interrelationship; stages of cognitive development; Development of language and language use; Reasoning; Problem-solving; Decision making; Creative thinking: Nature, Process and development.	20	7	-paper pen activity to introduce the topic -group discussion on the responses of the students - explanation of key concepts - PPT presentation followed by a lecture on it -debate -question-answer session	-power point presentation - software like Extramarks - textbooks -case studies and articles from newspapers and magazines	- worksheet (objective) -class test (descriptive) -Quiz and MCQs
JANUARY	19	25	<u>Motivation and Emotion</u> Nature of motivation; Biological needs; social and psychological motives: Achievement, Affiliation and Power, Maslow's hierarchy of needs; Emerging concept; Competence, Self-efficacy and Intrinsic Motivation; Nature of emotions; Physiological, cognitive and cultural bases of emotions; Expression of emotion; Positive emotions: Happiness, Optimism, Development of Positive emotions; Managing negative emotions such as fear and anger	18	7	-paper pen activity to introduce the topic -group discussion on the responses of the students - explanation of key concepts - PPT presentation followed by a lecture on it -debate -question-answer session	-power point presentation - software like Extramarks - textbooks -case studies and articles from newspapers and magazines	- worksheet (objective) -class test (descriptive) -Quiz and MCQs
FEBRUARY	5	5	Revision					

MONTH	NO. OF DAYS	PERIOD AVAILABLE	TOPIC/ SUBTOPICS TO BE COVERED	PERIODS REQUIRED	WEIGTAGE	ACTIVITIES/ PROCESSES	RESOURCES/ ICT	ASSESSMENT
April 2017	**18 days (2 weeks and 4 days)**	**20 periods** **17 periods for Unit II**	**<u>Unit I:</u>** **Concept of Home Science and its scope** -evolution of discipline of home science -five major areas -relevance in improving the quality of life **<u>Unit II:</u>** **Human Development : life span Approach (Part I)** a)Infancy (birth to 2 years)- Physical, motor, social, emotional development expression of emotions, socialization, cognitive and language development b)Early childhood (3-6 years) c)Childhood(7-11years): behavioral problems of children and suggestive measures	**3 periods** **15 periods**	5 marks 20 marks	Group discussion -Personal experiences Visit a child care center/ crèche /nursery school. Observe a child for his/her social, emotional, physical and cognitive development. Compare the same with the milestones. Observe a child with special needs- write a report on his/her special requirement related to – Care, education, physical infrastructural needs etc.	-Videos related to the topic - lecture by special education - lecture by school counselor	Class test
May 2017	**14 days (2 weeks)**	**14 periods**	**Unit III- Food, Nutrition , health and fitness** a)Definition of food, nutrition,(WHO) health and fitness. b)Functions of food -Physiological -Psychological -Social c)Selection of food for optimum	**5** **5**	15 marks	Plan and prepare a dish rich in selected nutrients- Iron, calcium, Protein Fiber. Prepare one preserved food product- jams, pickles, squash etc Prepare a label for any preserved food item	Videos related to the topic.	Class Test

			nutrition and good health - Nutrients-sources, functions, deficiency diseases and its prevention; Proteins Carbohydrates Fats	**4**		Prepare dishes involving germination, fermentation or any other combination.		
May 2017	**5 days**	**20 periods (extra classes)**	**UNIT III contd**… Vitamins- fat soluble (A, D, E, K)and Water soluble (B1,B2, Niacin, Folic Acid, B12 and Vit. C) Minerals- Calcium, Iron, Zinc and Iodine)	10 10			Videos related to deficiency diseases.	Class test
July 2017	**21 days (3 weeks)**	**21 periods**	d)maximizing nutritive value of food by proper selection, preparation and storage -selection and storage of food -food processing -preparation of food **Unit IV- Family and Community resources** a)Concept of family and family resources - Human resources- knowledge, skill time, energy, aptitude. -Non human resources-money , goods and property. -Community facilities- Schools, parks, hospitals, roads, transport, library, fuel and fodder.	**15 periods for Unit II** **6 Periods for unit III**	15 marks	Prepare different types of dishes using various methods of cooking. Critically evaluate your residential space and suggest improvement. Using elements of design prepare rangoli, flower arrangement and one accessory for decoration.		Class test

August 2017	**21 days (3 weeks)**	**21 periods**	Unit IV contd… b) Management -meaning and need for management -steps in management -decision making and its role in management c)Time ,energy and space management - need and procedure -work simplification	7 7 7		Prepare a day's routine- listing all the activities and time spend in each. Critically evaluate for improvement for time and energy saving.	Videos related to the topic.	Class test
September 2017	**7 days**	**8 periods**	need and ways of space management -elements of art and principles of design -use of colour ,light and accessories in space management	4 4		Group discussion Clean different articles made of - silver, gold, brass, plastics and glass.	Videos related to the topic.	Class test Semester test
October 2017	**17 days (2weeks and 3days)**	**18 periods**	- Dimensions of colour, classification of colour and colour schemes. **UNIT V :** **Fabric and Apparel** -Introduction to fiber Science a)Classification of fiber- natural, manufactured and blended b)characteristics of fiber c) Suitability for use **Fabric construction** a)yarn making b)weaving	**7 periods** **11 periods**	10 marks	Collect different types of fabric. Visit to a craft museum. Make a sample of plain, rib, basket, twill and satin or sateen weave.	Videos related to the topic.	Class test

November 2017	**22 days**	**28 periods**	c) Effects of weave on appearance, durability and maintenance of garment d) Other method of fabric construction- knitting, felting and bonding **Fabric Finishes** a)meaning and importance b)Classification of finishes	7 7 7 7			Videos related to the topic.	
December 2017	**16 days**	**21 periods**	**Dyeing and Printing** a)Importance of dyeing and printing b)Types and sources of dyes- natural and synthetics c)Methods of dyeing and printing	5 5 5 6		Identification of various types of fibers using burning test. Prepare five samples of tie and dye.	Videos related to the topic.	Class test
January 2018	**19 days**	**22 Period**	**Unit V : Community Development and extension (part I)** a)Respect for girl child b) Income generating schemes: DWCRA,MGNREGA Communication – concepts and methods **Unit II** - protection from preventable diseases - substitute care at home and outside -special needs and care of disadvantaged and differently abled children -managing emergencies		5 marks	Plan a message for – respect a girl child -women empowerment - income generating schemes using different modes of communication Group discussion -Personal experiences -spend a day with a differently abled child. Observe the needs and problems. Collect an immunization chart of 2-3 children in your locality and observe the milestones mentioned in it and different type of vaccinations	Videos related to the topic.	

						administered to children. Prepare an educational toy by using local material.		
FEBRUARY			REVISION					

PHYSICAL EDUCATION

MONTH	NO. OF DAYS	PERIOD AVAILABLE	TOPIC/ SUBTOPICS TO BE COVERED	PERIODS REQUIRED	WEIGTAGE	ACTIVITIES/ PROCESSES	RESOURCES/ ICT	ASSESSMENT
April	**18**	**10**	**Changing trends &career in physical education:** Definition aims and objectives, development post-independence, concept & principles of integrated and adaptive physical education, special Olympic bharat, career options in physical education.	10	5	Lecture cum interactive Method Discussion on various topics	Software like Extramarks	Oral Test Class test
May	14	10	**Physical fitness, wellness and lifestyle:** Meaning and importance of physical fitness, wellness and lifestyle, components of physical fitness, components of wellness, preventing health threats through lifestyle change, components of positive lifestyle.	10	4	• Lecture Method •Discussion on various topics		Oral Test Class test
			Olympic movement: Ancient & modern Olympics, Olympic symbols, ideals, objectives Values, international Olympic committee, dronacharya award, arjuna award &Rajeev Gandhi khel ratna award, chacha Nehru sports award, Paralympic movement	10	6	• Lecture Method •Discussion on various topics	PPTs, Softwares like Extramarks Softwares Extramarks Software like Extramarks	Oral Test Class test Practical test
July	21	13	**Yoga:** meaning and importance of yoga, yoga as an Indian heritage, elements of yoga, introduction to asanas, pranayama, meditation And yogic kriyas, physiological benefits of asanas and pranayama, prevention and management of common lifestyle diseases; obesity, asthma, Diabetes, hypertension and back pain	10	4	Lecture cum interactive Method	Software like Extramarks	Oral Test Class test Practical test
			Doping: concept and classification of doping, prohibited substances and methods, athletes responsibility, side effects of prohibited substances, ergogenic aids and doping in sports, doping control procedure	10	5	Lecture cum interactive Method Numerical Solving	Software like Extramarks Chemistry Lab –	Oral Test Class test
August	20	13	**Physical activity environment:** introduction to	10	5	Lecture cum	Software like	Oral Test

			physical activity, concept and need of sports environment, essential elements of positive sports environment, principles of physical activity environment, components of health related fitness			interactive Method	Extramarks	Class test
September	8	9	Behavior change technique for physical activity, exercise guidelines at different stages of growth	8	4	Lecture cum interactive method	Extramarks	Oral Test Class Test
October	17	14	**Test and measurement in sports**: meaning of test and measurement, importance of test and measurement in sports, calculation of BMI and waist-hip ratio, somatotypes(endomorphy, Mesomorphy & ectomorphy) Procedures of anthroprometric measurement-height, weight, arm, leg length and skin fold	12	5	Lecture cum interactive method	Extramarks	Oral Test Class Test
November	18	15	**Fundamentals of anatomy and physiology**: define anatomy, physiology and its importance, function of skeleton system, classification of bones and types of joints, properties of muscles, structure and function of muscles,	12	8	Lecture cum interactive method	Software like Extramarks	Oral Test Class Test
			Structure and functions of respiratory system, mechanism of respiration, introduction to circulatory system and structure of heart, oxygen debt and second wind	8	3	Lecture cum interactive method	Software like Extramarks	Oral Test Class Test
December	15	8	**Biomechanics and sports:** meaning and importance of biomechanics, newton's law of motion and their application in sports, levers and its types, equilibrium – dynamic, static and center of gravity and it application, force-centripetal and centrifugal forces. **Psychology and sports:** Definition and importance of psychology, differentiate between			Lecture cum interactive method	Software like Extramarks	Oral Test Class Test
January	20	11	Growth & development, adolescent problems and their management, define learning, laws of learning and transfer of learning, plateau & causes, emotion. **Training in sports:** meaning & concept of sports training, principles of sports training, warming up& limbering down, load, adaptation & recovery, Skill, technique and style, overload & how to overcome it			Lecture cum interactive method	Software like Extramarks	Oral Test Class Test

HISTORY

MONTH	NO. OF DAYS	PERIOD AVAILABLE	TOPIC/ SUBTOPICS TO BE COVERED	PERIODS REQUIRED	WEIGTAGE	ACTIVITIES/ PROCESSES	RESOURCES/ ICT	ASSESSMENT
April	18	23	Views on the origin of human beings Early humans : Ways of obtaining food Patterns of residence Making tools Modes of communication :language and art Historians' views on present day hunting- gathering societies	14		1.Students will be asked to study the stories most religions have about the creation of human beings which do not correspond with scientific discoveries and compare them with the history of human evolution as discussed in this chapter. 2.Group discussion Students will be divided into two groups . one group will discuss the advantages and the other group will discuss the disadvantages of using ethnographic accounts to reconstruct the lives of the earliest people.	Extra marks, Text book , Archaeological journal - Puratatva	Pen paper test ; oral test ; class response; home assignment
MAY	14	14	The origin of cities and Growth of early urban societies The early cities in Iraq (Mesopotamia) Mesopotamia and its geography Significance of urbanism Transport system Role of temple and kings The life in the city The earliest cities of Mesopotamia:	12		Students will hold a discussion on - Why a system of writing is essential for the birth of a civilzation? Peer group teaching Students will study and discuss the cuneiform script .	Extra marks, Text book .	Pen paper test ; oral test ; class response; home assignment

			a)Ur b)Mari The development of writing The system of writing Historians' debate on uses of writing					
JULY	21	29	Roman empire - 27 BCE to 600 CE 1.Political evolution 2.Gender ,literacy and culture 3.Economic expansion 4.Social hierarchies 5.Religion 6.Late antiquity 7.Historians' views on the institution of slavery. 1.The rise of Islam in Arabia: faith,	12 12		Activity 1. Students will be asked to imagine that the emperor Trajan had actually managed to conquer India and the Romans had held on to the country for several centuries . In what ways do the students think India might be different today? Activity 2 Students will be asked to watch any one of the following movies and discuss the same in the class: a.Benhur b.Gladiator c.Spartacus d.The eagle Activity 3 Students will be asked to go through the chapter carefully and pick out some basic features of Roman society and economy which the students think make it look quite modern. Activity 1.	Extra marks, Text book . Extra marks,	Pen paper test ; oral test ; class response; home assignment Pen paper test ;

			community and politics 2.The Caliphate: Expansion ,civil wars and sect formation 3.The Umayyads and the centralization of polity 4.The Abbasid revolution 5.Break-up of the Caliphate and the rise of the Sultanates 6.Economy: Agriculture, urbanization and commerce 7.Learning and culture 8.Historians' view points on the nature of the crusades			Discussion on - How were the Islamic architectural forms different from those of the Roman empire? Activity 2 Discussion on - The effects of the Crusades on Europe and Asia	Text book .	oral test ; class response; home assignment
AUGUST SEPTEMBER	20 7	28 7	1.The nature of nomadism 2.Social and political background of mongols 3.Formation of empires 4.Social , political and military organization 5.Conquests and relations with other states 6.Historians' views on nomadic societies and state formation.	10		Activity 1. Keeping the nomadic element of Mongols and Bedouin societies in mind how, in your opinion , did their respective historical experiences differ ? What explanations would you suggest account for these differences? Activity 2 Discussion on - Significance of trade to the Mongols Activity 3 Watch any one of the following movies and discuss the same in the class: a. Genghis khan (1965) starring Omar Sharif b. Genghis khan (1992) starring Richard Tyson, Charlton Heston, Pat Morita c. Mongol (2007) directed by Sergei Bodrov- Academy award nominee for best foreign language	Extra marks, Text book .	Pen paper test ; oral test ; class response; home assignment

						film		
OCTOBER	17	24	Western Europe -13th to 16th century 1.An introduction to feudalism 2. Feudal society and economy :The three orders a.The clergy b.The nobility c.The peasants, free and unfree 3.Factors affecting social and economic relations 4.A fourth order? New towns and towns people 5.Historians' views on decline of feudalism	12		Activity 1. Students will be asked to read the first section of the book - Man's Worldly Goods written by Leo Huberman and discuss the same in the class. Activity 2 Discuss examples of expected patterns of behaviour between people of different social levels , in a medieval manor, a palace, and in a place of worship. Activity 3 Imagine and describe a day in the life of a craftsman in a medieval French town.	Extra marks, Text book .	Pen paper test ; oral test ; class response; home assignment
NOVEMBER	22	31	Europe-14th to 17th century 1.New ideas and new trends in literature and arts 2.Relationship with earlier ideas 3.The contribution of West Asia 4.Historians' view points on the validity of the notion 'European Renaissance'.	12		Activity 1. Students will hold a discussion on the issues on which the protestants criticised the Catholic church. Activity 2 Compare and contrast the different architectural processe of modern period of India and also discuss the European Renaissance's effect on India's architecture.	Extra marks, Text book .	Pen paper test ; oral test ; class response; home assignment
			America - 15th to 18th century 1.European voyages of exploration 2.Search for gold, enslavement, raids, extermination. 3.Indegenous people and cultures - a.The Arawaks	12		Activity 1. Students will discuss the differences between the Arawaks and the Spanish. Which of these differences would the students consider	Extra marks, Text book .	Pen paper test ; oral test ; class response; home assignment

			b.The Aztecs c.The Mayas d.The Incas 4.The history of displacements 5.Historians' view points on the slave trade			most significant and why? Activity 2 Discussion on the effects of contact of the European people with the natives of South America. Describe their reactions to the settlers and Jesuits. Activity 3 The class will be divided into 5 groups and each group will be given a topic to be presented in the class either through a skit, role play or ppt. The topics are as following: a. The Arawaks b. The Aztecs c. The Mayas d. The Incas e. Slave trade		
December	16	19	England - 18th to 19th century 1.Innovations and technological change 2.Patterns of growth 3.Emergence of a working class 4.Historians' view points and debate on 'Was there an industrial revolution'	12		Activity 1. Discussion on the developments in Britain and in other parts of the world in the eighteenth century that encouraged British industrialization. Activity 2 Students will be asked to find out more about the Ironbridge Gorge and also suggest why it is today a major heritage site. Activity 3 Discuss the effects of early	Extra marks, Text book .	Pen paper test ; oral test ; class response; home assignment

						industrialization on British towns and villages and compare these with similar situations in India.		
			North America and Australia -18th to 20th century 1.Eurpean colonies in North America and Australia 2.Formation of white settler societies 3.Displacement and repression of local people 4.The Gold Rush and growth of industries 5.Historians' opinion on the impact of European settlement on indigenous populations. 6.Winds of change	12		Activity 1. Students will be divided into four groups and will be asked to imagine an encounter in California in about 1880 between four people : a former African slave , a Chines labourer, a German who had come out in the Gold Rush and a native of the Hopi tribe and narrate their conversation. Activity 2 Students will be asked to watch the movie - Australia starring Nicole Kidman and hugh Jackman and discuss the same in the class. Activity 3 In 1911, it was announced that New Delhi and Canberra would be built as the capital cities of British India and of the Commonwealth of Australia . Compare and contrast the political situations of the native people in these countries at that time.	Extra marks, Text book .	Pen paper test ; oral test ; class response; home assignment
January	19	24	East Asia : Late 19th and 20th century 1.Japan a. The polital system b.The Meiji restoration	14		Activity 1. Students will be asked to contrast the encounter of the Japanese and the Aztecs with the europeans.	Extra marks, Text book .	Pen paper test ; oral test ; class response; home assignment

February	2	2	c.Modernising the economy d.Aggressive nationalism e.Westernization and tradition f.Daily life g.After defeat : Re-emerging as a Global economic power 2.China a.Establishing the Republic b.The rise of the communist party of China c.Establishing the New Democracy:1949-65 d.Conflicting visions:1965-78 e.Reforms from 1978 f.The story of Taiwan 3.Historians' debate on meaning of modernization			Activity 2 Discussion on Mao Zedong and the Communist Party of China to find out whether they were successful in liberating China and laying the basis for its current success.		

POL SCIENCE

MONTH	NO. OF DAYS	PERIOD AVAILABLE	TOPIC/ SUBTOPICS TO BE COVERED	PERIODS REQUIRED	WEIGTAGE	ACTIVITIES/ PROCESSES	RESOURCES/ ICT	ASSESSMENT
April	18	18	Making of the Constitution • Meaning & need of a constitution • Composition & function of a Constitution • Sources of the Constitution	6	4	Explanation of the lesson sub-topic wise using smart class & discusssions	Smart class	Mid sem 1
			Fundamental Rights • Need of bill of rights in a Constitution • What FRs are provided by our Constitution • Various interpretations by the courts influencing FRs • How has provision of FRs provided the basis for civil liberties movement in India? • What are Fundamental Duties/DPSP	5	4	Explanation in the form of flow chart .	Smart class	Mid Sem 1
			System of Representational Democracy • Different methods of Representation • Why was the first past the post system chosen in India? What have been the effects of this system? • System of reserved seats- why & the provisions to ensure free & fair elections, role of election Commission	8	6	Lecture method will be followed. Some illustrations will be explained through flow-chart method & with examples.	Smart class Writing board	Mid-Sem 1
May	16	16	Executive • Meaning of executive • Why was the parliamentary system chosen over other forms of govt. • Need of a Constitutional head • How are the PM & Chief ministers elected	6	8	Explanation of the lesson sub-topic wise using smart class & discussions.	Smart class	Mid-Sem 1

			• Powers of President, PM, CM, Council of ministers, governor					
May	16	16	Legislature • Need of Parliament & two houses • How are the Parliament and state assemblies constituted • What are the powers of Rajya sabha & Lok Sabha? • How are the laws passed? • How is the executive made accountable? • Constitutional means to prevent defection	7	8	Lecture method will be followed. Some illustrations will be explained through flow-chart method & with examples.	Smart class/white board	
July	20	20	Judiciary • Meaning of Rule of Law • Need of an independent judiciary/provisions in India • How are judges appointed • What are the powers of high Courts and supreme courts? • How do they use their jurisdiction for public interest	6	6	Explanation followed by discussions in the class.	Smart class	Mid-Sem 2
July	20	20	Federalism • Meaning of federalism • How does federalism ensure accommodation of diversities? • In which ways is the Indian Constitution federal? • Why are there special provisions for some states and areas	8	4	Explanation in the form of flow chart method.	Smart class/white board	Mid-Sem 2
July	20	20	Local Government • Why do we need decentralization of power? • What has been the status of local govt. in the Constitution? • Basic features of rural & urban local govts. • What has been the effect of giving constitutional status to local govts.?	9	4	Discussion & peer group teaching	Smart class/board/charts	Mid-sem 2
August	22	22	Constitution as a Living Document • How has the Constitution changed since its inception? • What is the Amendment Procedure of the	7	6	Explanation & Group discussions.	Smart class/white board	

			Constitution? • How has the working of democracy affected the Constitution?					
August	22	22	Political Philosophy underlying the Constitution? • What are the core provisions of the Constitution? • What is the vision underlying these core provisions? • How is this vision shaped by modern Indian political thought?	7		Explnation through smart class	Smart class	Sem 1 (Part A)
August September	22 4	22 4	Part B: Political Theory Introduction to Political Theory • What is politics? • Can political arguments be resolved through reasoning? • Why do we need political theory?	4	6	Explanation with the help of examples from daily life experiences.	Smart class	Mid-Sem2
October	17	17	Freedom • Meaning • Reasonable constraints on individual liberty • How are the limits defined?	8	14	Explanation with the help of examples from daily life experiences	Smart class	Mid-Sem2
October	17	17	Equality • Do all differences involve inequality? • Does equality imply sameness? • Major forms of inequality • How can equality be realized?	8		Explanation with the help of examples from daily life experiences	Smart class	Mid-Sem 2
November	22	22	Social Justice • Is Justice all about fairness? • Relationship b/w justice and equality • Different forms of injustice • Ways in which justice can be secured.	6		Explanation with the help of examples from daily life experiences	Smart class	Periodic test
Nove	22	22	Rights	6	8	Explanation with the help of	Smart class/white	Periodic test

mber			• How is a right different from a claim? • Major kinds of right claims • How do we 6resolve a conflict between individual and community rights? • How does the state enable and obstruct rights?			examples from daily life experiences	board	
Nove mber	22	22	Citizenship • Who is a citizen? • What are relevant grounds for inclusion and exclusion? • How are new claims to citizenship negotiated? • Can we have a global citizenship?	5	6	Explanation with the help of examples from daily life experiences.	Smart class	Periodic test
Dece mber	17	17	Nationalism • How are the boundaries of a nation defined? • Must every nation have a state? • What demands can a nation make on its citizens? • What is the basis of the right to self-determination?	8	4	Explanation & group discussions	Smart class	
Dece mber	17	17	Secularism • Meaning • Which domains of life does it relate to? • What is a secular state? • Why do we need secular state in modern times? • Is secularism suitable for India?	7	6	Explanation with the help of examples from daily life experiences	Smart class	
Janua ry	19	19	Peace • What is peace? • Does peace always require non-violence? • Under what conditions is war justified? • Can armament promote global peace?	9	6	Explanation with the help of examples from daily life experiences	Smart class	
Janua ry Febru ary	19 2	19 2	Development • Meaning • Is there a universally accepted model? • How to balance the claims of present generation with claims of future generations?	9		Explanation with the help of examples from daily life experiences	Smart class	Sem 2 (entire Part A & B)

GEOGRAPHY

MONTH	NO. OF DAYS	PERIOD AVAILABLE	TOPICS/ SUB TOPICS TO BE COVERED	PERIODS REQUIRED	ACTIVITIES/ PROCESSES	RESOURCES / ICT	ASSESSMENT
APRIL	18	18	PART A: UNIT I/ CH I: GEOGRAPHY AS A DISCIPLINE: • Why should we study Geography? • Geography is a Dynamic Subject. • Geography as Integrating Discipline ➢ Physical Geography and natural Sciences ➢ Geography and Social Sciences • Branches of Geography Based on Systematic Approach ➢ Physical geography ➢ Human Geography ➢ biogeography • Branches of Geography Based on Regional Approach • Physical Geography and its Importance	4	Discussion, Lecture Method. Question bank Students' Participation Extramarks, Select a forest as a natural resource and prepare a map of India showing the distribution of different types of forest and write about the economic importance of forests for the country.	NCERT text book Question bank Extramarks,	Map work Class response, Home Assignments Mid Semester 1 Semester 1
APRIL	18	18	PART A: UNIT II/ CH 2: THE ORIGIN AND THE EVOLUTION OF THE EARTH: • Early Theories • Origin of the Universe • The Star Formation • Formation of Planets • Our Solar System • The Moon • Evolution of the Earth • Evolution of the Lithosphere • Evolution of the Atmosphere and Hydrosphere • Origin of Life	5	Discussion, Lecture Method. Question bank Students' Participation Extramarks, https://www.youtube.com/watch?v=VTRIKgKLI_Y	NCERT text book Question bank Extramarks, https://www.youtube.com/watch?v=VTRIKgKLI_Y	Map work Class response, Home Assignments Mid Semester 1 Semester 1

APRIL	18	18	PART A: UNIT II/ CH 3: INTERIOR OF THE EARTH: • Sources of Information about the Interior • Earthquake ➢ Types and Effects of earthquake • Structure of the Earth ➢ The Crust ➢ The Mantle ➢ The Core • Volcanoes ➢ Shield Volcanoes ➢ Composite Volcanoes ➢ Caldera ➢ Flood Basalt Provinces ➢ Mid-ocean Ridge Vvolcanoes • Volcanic landforms	5	Discussion, Lecture Method. Students' Participation To find out the ten most active volcanoes in the world and locate them in a map.	NCERT text book Question bank Extramarks, https://www.youtube.com/watch?v=DnBggrCdkN0	Map work Class response, Home Assignments Mid Semester 1 Semester 1
			Practical) CH 1: INTRODUCTION TO MAPS: • Essentials of Map Making • History of Map Making • Types of maps ➢ Based on size ➢ Based on Functions ➢ Uses of maps	2		NCERT text book Atlas Topographical Sheet 63k/12	Class Response Practical file work Semester 1
MAY	14	18	PART A: UNIT II/ CH 4: DISTRIBUTION OF OCEANS AND CONTINENTS: • Continental Drift • Evidence in support of the Continental Drift • Post Drift Theories • Ocean floor Configuration • Concept og Sea Floor spreading • Plate Tectonics • Plate Boundaries- Divergent, Convergent,	6	Discussion, Lecture Method. Students' Participation Prepare a collage related to damages caused by an	NCERT text book Question bank Extramarks, https://www.y	Map work Class response, Home Assignments Mid Semester 1

			Transform • Movement of the Indian Plate		earthquake.	outube.com/watch?v=MEh4B1Pv8YE	Semester 1
MAY	14	18	PART B: UNIT 1/ CH 1: INDIA-LOCATION : • Location • Implication of latitudinal and longitudinal extent of India • Size • India and its Neighbours	3	Discussion, Lecture Method. On a graph show the area and population of all the Union Territories	Extramarks World Political map	Class response, Home Assignments Mid Semester 1 Semester 1
MAY	14	18	PART B: UNIT 1I/ CH 2: Structure and Physiography: • The North and North –Eastern Mountains ➢ Northwestern Himalayas ➢ The himachal and Uttarakhand Himalayas ➢ Darjiling and Sikkim Himalayas ➢ Arunachal Himalayas ➢ Eastern Hills and Mountains • The Northern Plains • The peninsular mountains ➢ Deccan plateau ➢ Central Highlands ➢ Northeasteern Plateau • The Indian Desert • The Coastal Plains • The Islands	5	Discussion, Lecture Method. Students' Participation Make al ist of major Himalayan peaks from the east to the west with the help of an Atlas	NCERT text book Question bank Extramartks, Physical maps of India https://www.youtube.com/watch?v=ih5OMGeLeMM	Map work Class response, Home Assignments Mid Semester 1 Semester 1
MAY	14	18	(Practical) CH 2: MAP SCALE • Methods of Scale ➢ Statement of Scale ➢ Graphical Scale ➢ Representative Fraction • Conversion of Scale • Construction of Scale	4	To construct graphical scale on the given data.	NCERT text book	Class Response Practical file work Semester 1

JULY	21	23	PART A: UNIT III/ CH 5: MINERALS AND ROCKS: • Physical Characteristics of Minerals • Some major minerals and their characteristics • Rocks ➢ Igneous Rocks ➢ Sedimentary Rocks ➢ Metamorphic rocks • Rock Cycle	3	Discussion, Lecture Method. Students' Participation Collect different rock samples and try to recognise them from their physical characteristics.	NCERT text book Question bank Extramarks,	Map work Class response, Home Assignments Mid Semester 1 Semester 1
JULY	21	23	PART A: UNIT III/ CH 6: GEOMORPHIC PROCESSES; • Endogenic Processes ➢ Diastrophism ➢ Volcanism • Exogenic processes • Weathering • Chemical Weathering process ➢ Solution, Carbonation, Hydration, Oxidation, • Physical Weathering Processes ➢ Unloading, Temperature Changes and Expansuon, Freezing ,Thawing and Frost Wedging,Salt Weathering • Biological Activity and Weathering • Significance of weathering • Mass Movement • Landslides • Erosion and Deposition • Soil and Soil Contents • Process of Soil Formation • Soil forming factore: ➢ Parent material ➢ Topography ➢ Climate ➢ Biological Activity ➢ Time	7	Discussion, Lecture Method. Students' Participation Depending upon the topography and materials around you, observe and record climate, possible weathering process and soil contents and characteristics.	NCERT text book Question bank Extramarks,	Map work Class response, Home Assignments Mid Semester 1 Semester 1

JULY	21	23	PROJECT	8	Presentation Power Point Presentation Group Work		File work Viva Semester 1
			(Practical) CH 3: LATITUDE, LONGITUDE AND TIME: • Parallels of latitudes • Meridians of longitude • Longitude and Time	5	To construct the parallels of latitudes and longitudes. To find out the time of a place based on the longitude.	NCERT text book	Class Response Practical file work Semester 1
AUGUST	20	23	PART B: UNIT 1I/ CH 3: DRAINAGE SYSTEM: • The Himalayan Drainage ➢ Evolution Of The Himalayan Drianage • The River Systems Of The Himalayan Drainage ➢ The Indus System ➢ The Ganga System ➢ The Brahmaputra System • The Peninsular Drainage System ➢ Evolution Of The Himalayan Drainage • River Systems Of The Peninsular Drainage • Smaller Rivers Flowinf Towards The West • River Regimes • Extent O Usability Of River Water	7	Discussion, Lecture Method. Students' Participation Make comparative bar diagram to show the length of the course of the rivers	NCERT text book Question bank Extramarks Physical maps of India showing rivers	Map work Class response, Home Assignments Mid Semester 1 Semester 1
AUGUST	20	23	PART A: UNIT III/ CH 7: LANDFORMS AND THEIR EVOLUTION: • Running Water: • Stages of a River ➢ Youth, Mature, Old • Erosional Features ➢ Valleys, potholes and plunge pools, incised meanders, river terraces • Depositional valleys ➢ Alluvial fans, Deltas, Floodplains, ➢ meanders, braided channels,. • Running Water: • Stages of a River	8	Discussion, Lecture Method. Students' Participation Identify the landforms, materials and processes around your area.	NCERT text book Question bank Extramarks https://www.youtube.com/w	Map work Class response, Home Assignments Mid Semester 1 Semester 1

			➢ Youth, Mature, Old • Erosional Features ➢ Valleys, potholes and plunge pools, incised meanders, river terraces • Depositional valleys ➢ Alluvial fans, Deltas, Floodplains, meanders, braided channels,. • Groundwater • Erosional Features ➢ Pools, Sinkholes, Caves • Depositional valleys ➢ Stalactites, stalagmites, Pillars • Glaciers: • Erosional Features ➢ Cirque, horns and Serrateed Ridges,Troughs • Depositional valleys ➢ Moraines, Eskers, outwash Plains, Drumlins • Waves and Currents • Erosional Features ➢ Cliffs, Terraces, Caves and Stacks • Depositional valleys ➢ Beaches and Dunes, Bars, and Spits, • Winds • Erosional Features ➢ Pediments and Peniplains, Palayas, Mushroom Rocks • Depositional valleys ➢ Sand Dunes			atch?v=SfJ-XfPtBas	
AUGUST	20	23	PART A: UNIT IV/ CH 8: COMPOSITION AND STRUCTURE OF THE ATMOSPHERE: • Composition of the atmosphere • Gases • Water vapour • Dust particles • Structure of the atmosphere	3	Discussion, Lecture Method. Students' Participation	NCERT text book Question bank Extramarks	Map work Class response, Home Assignments Mid Semester 1 Semester 1

AUGUST	20	23	(Practical) CH 4: MAP PROJECTION: • Elements of Map Projection • Classification of Map Projection • Construction ➢ Conical Projection With One Standard Parallel ➢ Cylindrical Equal Area Projection	4	To construct map projection with the given data	NCERT text book Atlas	Class Response Practical file Work Semester 1
SEPTEMBER	7	7	REVISION				
OCTOBER	17	21	PART A: UNIT IV/ CH 9: SOLAR RADITION, HEAT BALANCE AND TEMPERATURE: • Solar Radiation • Variability of Insolation • Heating and Cooling of the Atmosphere • Heat Budgrt of the Planet Earth • Factors controlling Temperature Distribution • Inversion of Temperature	7	Discussion, Lecture Method. Students' Participation Select any four cities in different parts of the world and record their temperature for a month. Then prepare a bar graph to show the temperature variation and analyse them.	NCERT text book Question bank Extramarks	Map work Class response, Home Assignments Mid Semester 1 Semester 1
OCTOBER	17	21	PART A: UNIT VI/ CH 15: LIFE ON THE EARTH: • Ecology • Types of Ecosystems • Structure ans Functions of Ecosystem • Biogeochemical Cycles • Ecological balance	4	Discussion, Lecture Method. Students' Participation Show the distribution of the different biomes on the outline map of the world.	NCERT text book Question bank Extramarks	Map work Class response, Home Assignments Mid Semester 1 Semester 1
OCTOBER	17	21	(Practical) CH 5: TOPOGRAPHICAL MAPS: • Contours	6	To interpret the Topographical Sheet	NCERT text book	Class Response Practical file

			➢ Basic features ➢ Drawing of Contours and their Cross Sections ➢ Steps for drawing cross section • Identification of Cultural features from topographical sheets • Interpretation of Topographical Maps		63k/12 To construct cross-section from the given contour lines and identification	Topographical Sheet 63k/12	work Semester II
OCT OBER	17	21	(Practical) CH 6: INTRODUCTION TO AERIAL PHOTOGRAPHS: • Uses Of Aerial Photographs • Advantages of Aerial Photographs • Types of Aerial Photographs • Difference between a map and an Aerial Photograph • Scale of Aerial Photograph	3	To find out the scale of Aerial photograph	NCERT text book Samples of Aerial Photographs	Class Response Practical file work Viva Semester 1I
NOV EMB ER	22	23	PART A: UNIT IV/ CH 10: ATMOSPHERIC CIRCULATION AND WEATHER SYSTEM: • Atmospheric pressure • World distribution of Sea level Pressure • Forces affecting the Celocity and Direction of Wind • General circulation of the Atmosphere Distribution	7	Discussion, Lecture Method. Students' Participation From a satellite image of cloud cover, try to infer its movement and compare it with theat of the weather news.	NCERT text book Question bank Extramarks	Map work Class response, Home Assignments Mid Semester 1I Semester 1I
NOV EMB ER	22	23	PART A: UNIT IV/ CH 11: WATER IN THE ATMOSPHERE: • Evaporation and Condensation ➢ Dew, ➢ Frost, ➢ Fog and Mist, ➢ Clouds • Precipitation	4	Discussion, Lecture Method. Students' Participation Browse through the weather news from june to December and find out the	NCERT text book Question bank Extramarks NCERT text book	Map work Class response, Home Assignments Mid Semester 1I

			➢ Convectional rain ➢ Orographic rain ➢ Cyclonic Rain • World distribution of Rainfall		extreme rainfall in the country. Try to analyse the cayse of these rainfall in different areas.	Question bank Extramarks	Semester 1I
NOV	22	23	PART A: UNIT IV/ CH 12: WORLD CLIMATE AND CLIMATE CHANGE • Koppen's Scheme Of Classification Of Climate ➢ Tropical Humid Climate ➢ Dry Climate ➢ Cold Snow Forest Climates ➢ Polar Climates ➢ Highland Climates Temperature • Climate Change • Causes of Climatic Change • Global Warming	5	Discussion, Lecture Method. Students' Participation Collect information about the Kyoto Declaration related to global climatic changes.	NCERT text book Question bank Extramarks	Map work Class response, Home Assignments Mid Semester 1I Semester 1I
NOV	22	23	PART A: UNIT V/ CH 13: WATER (OCEANS): • Hydrological Cycle • Relief of the Ocean Floor ➢ Continental Shelf ➢ Continental Slope ➢ Deep Sea plain ➢ Oceanic Deeps or Trenches • Minor relief Features ➢ Mid-oceanic Ridges ➢ Seamount ➢ Submarine canyons ➢ Guyots ➢ Atoll • Factors affecting temperature Distribution • Salinity of Ocean Water • Horizontal and Vertical distribution of Salinity	4	Discussion, Lecture Method. Students' Participation Identify the areas of mid oceanic ridges from the Indian Ocean.	NCERT text book Question bank Extramarks Images of the ocean floor.	Map work Class response, Home Assignments Mid Semester 1 Semester 1
NOV	22	23	(Practical) CH 7: INTRODUCTION TO REMOTE SENSING: • STAGES IN Remote Sensing • Sensors • Interpretation of Satellite Imageries ➢ Conical Projection With One Standard Parallel	3	To identify various features from images and draw conclusion from them.	NCERT text book Remote sensing images	Class Response Practical file work Viva Semester 1I

			➢ Cylindrical Equal Area Projection				
DEC	16	18	PART B: UNIT 1II/ CH 4: CLIMATE : • Unity And Diversity In The Monsoon Climate • Factors Determining The Climate Of India • Factors Related To Air Pressure And Wind • Mechanism Of Weather In The Winter And Summer Season • The Nature Of Indian Monsoon • Rain Bearing Systems And Rainfall Distribution • Break In The Monsoon • The Cold Weather Season • The Hot Weather Season • The South West Monsoon Season • Characteristics Of Monsoonal Rainfall • Season Of Retreating Monsoon • Traditional Indian Seasons • Distribution Of Rainfall • Climatic Regions Of India • Monsoons and the Economic life in India	7	Discussion, Lecture Method. Students' Participation Interview at least five people to find out how the monsoon affect them.	NCERT text book Question bank Extramarks Climatic maps of India	Map work Class response, Home Assignments Mid Semester 1I Semester 1I
DEC	16	18	PART B: UNIT 1II/ CH 5: NATURAL VEGETATION: • Types of Forest ➢ Tropical Evergreen and Semi Evergreen forests ➢ Tropical Deciduous forests ➢ Tropical thorn forests ➢ Montane forests ➢ Littoral and swamp forests • Forest Cover in India • Forest Conservation in India • Social Forestry • Farm Fprestry • Wildlife • Wildlife Conservation in India • Biosphere Reserve Nilgiri, Nanda Devi, Sunderbans, Gulf of Mannar	3	Discussion, Lecture Method. Map Work to locate different forest types and biospheres in India.	NCERT text book Question bank Extramarks Forest and Wildlife maps of India	Map work Class response, Home Assignments Mid Semester 1I Semester 1I

DEC	16	18	PART A: UNIT V/ CH 14: MOVEMENT OF OCEAN WATER: • Waves • Tides ➢ Types of tides ➢ Importance of Tides • Ocean Currents ➢ Types of Ocean Currents ➢ Effects of Ocean Currents	4	Discussion, Lecture Method. Students' Participation Visit a lake or a pond and observe the movements of waves. throw a stone and notice how waves are generated	NCERT text book Question bank Extramarks	Map work Class response, Home Assignments Mid Semester 1I Semester 1I
JAN	19	22	PART A: UNIT VI/ CH 16: BIODIVERSITY AND CONSERVATION: • Genetic Diversity • Importance of Biodiversity ➢ Ecological role of Biodiversity ➢ Economic role of Biodiversity ➢ Scientific role of Biodiversity • Loss of Biodiversity • Conservation of Biodiversity	3	Discussion, Lecture Method. Students' Participation Collect the names of national parks, sanctuaries and biospheres reserves of the state where you belong to and mark them on a map.	NCERT text book Question bank Extramarks	Map work Class response, Home Assignments Mid Semester 1 Semester 1
	19	22	PART B: UNIT 1II/ CH 6: SOILS: • Classificastion of Soils ➢ Alluvial Soils ➢ Black Soils ➢ Red and Yellow Soils ➢ Laterite Soils ➢ Arid Soils ➢ Saline Soils ➢ Peaty Soils ➢ Forest Soils • Soil Degradation • Soil erosion • Soil Conservation		Discussion, Lecture Method. Map Work	NCERT text book Question bank Extramarks Soil Maps of India	Map work Class response, Home Assignments Mid Semester 1I Semester 1I

JAN	19	22	PART B: UNIT IV/ CH 7: NATURAL HAZARDS AND DISATERS : • Classification of Natural Disasters • Natural Disasters in India ➢ Earthquake ➢ Tsunami ➢ Tropical Cyclone ➢ Floods ➢ Droughts ➢ Landslides • Disaster management	4	Discussion, Lecture Method. Map Work of the affected and the disaster prone areas	NCERT text book Question bank Extramarks	Map work Class response, Home Assignments Mid Semester 1I Semester 1I
JAN	19	22	(Practical) CH 8: WEATHER INSTRUMENTS, MAPS and CHARTS: • Weather Instruments • Weather maps and Charts • Weather map interpretation	4	To interpret the given weather map	NCERT text book Question bank Extramarks Weather maps	Class Response Practical file work Semester II
JAN	19	22	PROJECT	7	Presentation Power Point Presentation Group Work		File work Viva Semester 1
FEB	2	2	REVISION				