



JP INTERNATIONAL SCHOOL, GREATER NOIDA
BUSINESS STUDIES (Code No. 054)
CLASS–XI (2019-20)

SYLLABUS MONTH WISE

S.NO.	CHAPTER	MONTH
1.	Nature and Purpose of Business	APRIL
2.	Forms of Business Organisations	MAY
3.	Public, Private and Global Enterprises	JULY
4.	Business Services	AUGUST
5.	Emerging Modes of Business	AUGUST
6.	Social Responsibility of Business and Business Ethics	SEPTEMBER
7.	Sources of Business Finance	SEPTEMBER
8.	Small Business	OCTOBER
9.	Internal Trade	NOVEMBER
10.	International Business & PROJECT	DECEMBER

ACCOUNTANCY:

S.No.	Month	Chapters	Description
1.	April	<ul style="list-style-type: none"> Introduction to Accounting. 	
2.	May	<ul style="list-style-type: none"> Basic Accounting Terms. Accounting Principles Rules of Debit and Credit. Journals and Ledger. 	
3.	July	<ul style="list-style-type: none"> Base of Accounting. Preparation of Accounting Vouchers. 	
4.	August	<ul style="list-style-type: none"> Preparation of Trial Balance. Depreciation. 	
5.	September	<ul style="list-style-type: none"> Ist Term Examination and Revision 	
6.	October	<ul style="list-style-type: none"> Bank Reconciliation Statement. Bills of Exchange. Single Entry System. 	
8.	November	<ul style="list-style-type: none"> Rectification of Errors. Financial Statement (Trading and Profit & Loss Accounts and Balance Sheet) 	
9.	December	<ul style="list-style-type: none"> Single Entry System. Accounting for not for profit origination. Computer Accounting. 	
10.	January	<ul style="list-style-type: none"> Revision and Remaining part of computer accounting. 	
11.	February	<ul style="list-style-type: none"> Revision & Exam. 	

ECONOMICS:

BOOKS : (I) MICRO ECONOMICS-40

(II) STATISTICS FOR ECONOMICS (WRITER :SANDEEPGARG)

S.No.	Month	Chapters	Description
1.	April	<ul style="list-style-type: none"> Indian Economy on the eve of independence. Concept of Economics and Significance. 	
2.	May	<ul style="list-style-type: none"> Indian Economy 1950-1990. Collection of Data. Organisation of Data. 	
3.	June	<ul style="list-style-type: none"> Summer Vacation 	
4.	July	<ul style="list-style-type: none"> Privatisation, Liberalisation and Globalisation. Presentation of Data Diagrammatic Presentation of data 	
5.	August	<ul style="list-style-type: none"> Poverty Measures of Central Tendency Arithmetic Mean. Rural Development Graphic Presentation of Data 	
6.	September	<ul style="list-style-type: none"> 1st Term Exam. 	
7.	October	<ul style="list-style-type: none"> Median Human Capital Formation Sustainable Economic Development. 	
8.	November	<ul style="list-style-type: none"> Mode Employment Index Numbers 	
9.	December	<ul style="list-style-type: none"> Measures of Dispersion 	

		<ul style="list-style-type: none"> Inflation 	
10.	January	<ul style="list-style-type: none"> Correlation Infrastructure Revision 	
11.	February	<ul style="list-style-type: none"> Revision & Exam. 	

COMPUTER SCIENCE:

BOOK NAME: COMPUTER SCIENCE WITH C++

PUBLISHER :DHANPATRAI& PUBLICATION

WRITER :SUMITARORA

S.No.	Month	Chapters	Description
1.	April-May	<p>Introduction to C++:</p> <ul style="list-style-type: none"> General OOP concept: Basic concepts of OOP, Data Abstraction, Encapsulation, Modularity, Inheritance, Polymorphism, Advantage and Disadvantage of OOP. Getting Started: C++ character set, C++ Tokens (Identifiers, Keywords, Constants, Operators,) Structure of a C++ Program (include files, main function), Header files-iostream.h, iomanip.h, cout, cin; use of I/OI operators (<<and>>), Use of endl and setw (), Cascading of I/O operators, compilation, Error Messages; Use of editor, basic commands of editor, compilation, linking and execution. Data Types, Variables and Constants: Concepts of Data types; Built-in Data types: char, int, float and double; Constants: Integer Constants, Character constants (-\n, \t, \b), Floating Point Constants, String Constants; Access modifier: const; Variables of built-in-data types, Declaration\ Initialization of variables, Assignment statement, Type modifier: signed, unsigned, long. Operator and Expressions: Operators: Arithmetic operators (-,+ ,*,/,%), Assignment operator (=), c++shorthand (+=, -=, *-=, /=, %=) Unary operators (-), Increment (++) and Decrement (--), Relation operator (>, >=, <=, !=), Logical operators (I, &&, II), Conditional operator: <condition>? <if false>; Precedence of Operators; Automatic types conversion in expressions, Type casting; 	
2.	July	<p>Flow of control</p> <ul style="list-style-type: none"> Conditional statements: If else, Nested if, switch... case.. default, use of conditional operator, Nested switvch... case, break statement (to be used in switch... case only); Loops: while, do-while, for the Nested loops Number System: Binary, Octal, Decimal, Hexadecimal and conversion between different numbersystems. 	
3.	August	<p>Computer Fundamentals:</p> <ul style="list-style-type: none"> Classification of computers: Basics of computer and its operation; Functional Components and their interconnections, concept of Booting. Software concepts: Types of Software-System Software, Utility Software and Application Software. System Software: Operating System, Compiler, Interpreter and Assembler; 	

		<ul style="list-style-type: none"> • Operating System: Need for Operating System, Functions of Operating System (Processor Management, Memory Management, File Management and Device Management) Types of Operating System-Interactive (GUI based), Time Sharing, Real Time and Distributed, Commonly used Operating System: UNIX, LINUX, Windows, Solaris, BOSS (Bharat Operating System Solutions); Mobile OS-Android, Symbian. • Utility Software: Anti Virus, File Management tools, Compression tools and Disk Management tools (Disk Cleanup, Disk Defragmenter, Backup). • Open Source Concepts: Open Source Software, Freeware, Shareware and Proprietary Software. • Application Software: Office Tools-Word Processor, Presentation Tool, Spreadsheet Package, Database Management System; Domain Specific tools- School Management System, Inventory Management System, Payroll System, Financial Accounting, Hotel Management, Reservation System and Weather Forecasting System. • Internal Storage encoding of Characters: ASCII, ISCII (Indian Scripts Standard Code for information interchange) and UNICODE (for multilingual computing). • Microprocessor: Basic concepts, Clock speed (MHz, GHz) 16 bit, 32 bit, 64 bit, 128 bitprocessors; Types - CISC Processors (Complex Instruction Set Computing), RISC Processors (Reduced Instruction Set Computing), and EPIC (Explicitly Parallel Instruction Computing). • Memory Concepts: Units : Byte, Kilo Byte, Mega Byte, Giga Byte, Tera Byte, Peta Byte, Exa Byte, Zetta Byte, Yotta Byte. • Primary Memory : Cache, RAM, ROM • Secondary Memory: Fixed and Removable Storage-Hard Disk Drive, CD/DVD Drive, Pen Drive, Blue Ray Disk. • Input Output Ports/ Connections: Serial, Parallel and Universal Serial Bus, PS-2 port, Infraredport, Bluetooth, Firewire. 	
4.	October	<p>Header File Categorization</p> <ul style="list-style-type: none"> • Standard input/ output functions. <p>Header File</p> <ul style="list-style-type: none"> • Stdio.h <p>Function</p> <ul style="list-style-type: none"> • gets(), puts () <p>Header File Categorization</p> <ul style="list-style-type: none"> • Character Function <p>Header File</p> <ul style="list-style-type: none"> • ctype.h <p>Function</p> <ul style="list-style-type: none"> • isalnum (), isalpha (), isdigit (), islower (), isupper (), tolower (), toupper () <p>Header File Categorization</p> <ul style="list-style-type: none"> • String Function <p>Header File</p> <ul style="list-style-type: none"> • string.h <p>Function</p> <ul style="list-style-type: none"> • strcpy (), strcat (), strlen (), strcmp (), strcmpi (), strcmp (), strupur (), strlwr (), 	

		<p>Header File Categorization</p> <ul style="list-style-type: none"> Mathematical Functions <p>Header File</p> <ul style="list-style-type: none"> math.h <p>Function</p> <ul style="list-style-type: none"> fabs (), pow (), sqrt (), sin (), cos (), abs () <p>Header File Categorization</p> <ul style="list-style-type: none"> Other Functions <p>Header File</p> <ul style="list-style-type: none"> stdlib.h <p>Function</p> <ul style="list-style-type: none"> randomize (), random () 	
5.	November	<p>Introduction to user-defined function and its requirements.</p> <ul style="list-style-type: none"> Defining a function; function prototype, invoking/ calling a function, passing arguments to function, specifying argument data types, default argument, constant argument, call by value, call by reference, returning values from a function, calling function with array, scope rules of functions and variables local and global variables. Relating to Parameters and return type concepts in built-in functions. <p>Structured Data Type:</p> <ul style="list-style-type: none"> Arrays : Introduction to Array and its advantages. One Dimensional Array: Declaration/ initialization of One-dimensional array, inputting array elements, accessing array elements, manipulation of array elements (sum of elements, product of elements, average of elements, linear search, finding maximum/ minimum value) Declaration / Initialization of a String, string manipulations (counting vowels/ consonants/ digits/ special characters, case conversion, reversing a string, reversing each word of a string). Two-dimensional Array: Declaration/ initialization of a two-dimensional array, inputting array elements (sum of row element, column elements, diagonal elements, finding maximum / minimum values). User-defined Data Types : Introduction to use defined data types. 	
6.	December	<p>Structure:</p> <ul style="list-style-type: none"> Defining a structure (keyword structure), declaring structure variables, accessing structure elements, passing structure to functions as value and reference, argument/ parameter, function returning structure array of structure, passing an array argument/ parameter to a function. Defining a symbol name using typedef keyword and defining a macro using #define preprocessor directive. 	
7.	January	<p>Programme Methodology</p> <ul style="list-style-type: none"> General Concepts: Modular Approach, Clarity and Simplicity of Expressions, Use of proper names for Identifiers, Comments, Indentation; Documentation and Program Maintenance; Running and Debugging programs, Syntax Errors, Run-Time Errors, Logical Errors. Problem Solving Methodologies: Understanding of the problem, Solution for the problem, Identifying minimum number of inputs required for output, Writing code to 	

		<p>optimizing execution time and memory storage, step by step solution for the problem breaking down solution into simple steps (modular approach), Identification of arithmetic and logical operations required for solution; Control Structure-Conditional control and looping (finite and infinite).</p> <ul style="list-style-type: none"> • Problem Solving: Introduction to Algorithms/ Flowcharts. 	
8.	February	Revision & Examination	

INFORMATICS PRACTICES (065)

BOOK NAME: INFORMATICS PRACTICES

PUBLISHER :DHANPATRAI& PUBLICATION

WRITER :SUMITARORA

S.No.	Month	Chapters	Description
1.	April-May	<p>(A) Getting started with Programming using IDE</p> <ul style="list-style-type: none"> • Introduction, Rapid Application Development using IDE (Integrated Development Environment) such as Netbeans; Familiarization of IDE using basic Interface components-Label, Text Field, Text Area, Button, Checkbox, Radio Button. (As per appendix A) • Developing General Application (As per the guidelines at appendix B)- Getting Familiar with Java Swing User Interface components-Frame, Dialog, Option Pane, Panel, Scroll Pane, Label, Text Field, Password Field, Text Area, Button, Check Box, Radio Button, Combo Box, List Basic component handling methods and properties set Text(), get Text(), is Selected(), set Selected(). <p>(B) Programming Fundamentals</p> <ul style="list-style-type: none"> • Data Types: Concept of data types; Built-in data types-byte, short, int, long, float, double, char, string, boolean. • Variables: Need to use variable, declaring variables, variable naming convention, assigning value to variables; • Integer object method : parseInt • Double object method : parse Double, parse Float • Control Structures: • Decision Structure-If, if-else, switch; • Looping Structure-while, do.. while, for; 	
2.	July	<p>(B) Programming Fundamentals- Continued</p> <ul style="list-style-type: none"> • Control Structures: • Decision Structure-if, if else, switch; • Looping Structure - while, do.. while, for; <p>Introduction to Computer System</p> <p>(a) Hardware Concepts:</p> <ul style="list-style-type: none"> • Computer Organization (basic concepts) : CPU, Memory (RAM and ROM), I/O devices, Communication bus, ports (serial, parallel), device specific ports; • Input devices: Keyboard, Mouse, Light pen, Touch Screen, Graphic Tablet, 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, Deskjet/ 	

		<p>Inkject/ Bubble Jet Printer, Laser Printer), Plotter, Speaker; Secondary Storage Devices: Floppy Disk, Hard Disk, Compact Disk, Magnetic Tape, Digital Versatile Disk (DVD), Flash Drive, Memory Cards, Comparative properties of storage media.</p> <ul style="list-style-type: none"> • Memory Units: bit, Byte (Kilobyte, Megabyte, Gigabyte, Terabyte, Petabyte Encoding scheme: ASCII, ISCLL& Unicode) • E-wate disposal. <p>(B) Security of Computer System:</p> <ul style="list-style-type: none"> • Sources of attack and possible damages, malware-virus, worms, spyware and cookies as security threat, malaware detection using a tool. Computer security, digital certificate, digital signature, firewall, password, file access permissions. • Type of Software: <p>(a) System Software</p> <ul style="list-style-type: none"> (i) Operating Systems: Need for operating system, major functions of Operating System; Examples of OS for mainframe, PC/Server and mobile devices. (ii) Language Processors: Assembler, Interpreter and Compiler. <p>(b) Utility Software: Compression tools, disk defragmenter, anti-virus.</p> <p>(c) Application Software:</p> <ul style="list-style-type: none"> (i) General Purpose Application Software: Word Processor, Presentation Tool, Spreadsheet. 	
3.	August	<p>Unit-3: Relational Database Management System</p> <p>Database management System</p> <ul style="list-style-type: none"> • Introduction to database concepts: Database, Relational Database, Relation/ Table, Attribute/ Field, Tuple/ Row; • Data Types: Text (CHAR, VARCHAR), Number (Decimal, Int/ Integer), Date and Time • Keys: Candidate Key, Primary Key, Alternate Key, Foreign Key; • Examples of common Database Management System: MySQL, Ingres, Postgres, Oracle, DB2, MS. • SQL, Sybase etc.: Common Database management tools for mobile devices. 	
4.	October-November	<p>Creating and Using a Database:</p> <ul style="list-style-type: none"> • SQL Create command to create a database, USE command to select a databse. • Creating a table: Create command to create a table, SESC command to display a table. • Structure, INSERT command for inserting new rows, inserting new rows with null values and values of all the studied data types. • Displaying table data: Select command for selecting all the columns, selecting specific column(s) using arithmetic operators, operator precedence. • Defining and using column alias. • Eliminating duplicate values from displaying using DISTINCT keyword • Limiting rows during selection (using WHERE clause) 	

		<ul style="list-style-type: none"> Using Comparison operators=,<,>, <=, >=, <>, Between, In, Like (% , __); Logical Operators - AND, OR, NOT and corresponding operator precedence; Working with NULL values. Order by clause: Sorting in Ascending/ Descending order, sorting by column alias name, sorting on multiple columns; Manipulating Data of a Table/ Relation: Update command to change existing data of a table, Delete command for removing row(s) from a table. Restructuring a table: Alter Table for adding new column(s) and deleting column(s); <p>Functions in MySQL:</p> <ul style="list-style-type: none"> String Functions: ASCII(), CHAR(), CONCAT(), INSTR(), UCASE(), LEFT(), LOWER(), LENGTH(), LTRIM(), RIGHT(), RTRIM(), SUBSTR(), TRIM(), UPPER(), ASCII() Mathematical Functions: POWER(), Date and Time Functions: CURDATE(), DATE(), MONTH(), YEAR(), DAYNAME(), DAY OF MONTH(), DAY OF WEEK(), DAY OF YEAR(), NOW(), SYSDATE(). 	
5.	December	<p>Programming Guidelines:</p> <ul style="list-style-type: none"> General Concepts; Modular approach; Stylistic Guidelines: Clarity and simplicity of expressions and names; Comments, Indentation; Running and debugging programs, Syntax Errors, Run-Time Errors, Logical Errors; Problem Solving Methodology: Understanding of the problem, Identifying minimum number of inputs required for output, breaking down problem into simple logical steps. 	
6.	January	<p>Unit 4 : IT Applications</p> <ul style="list-style-type: none"> e-Governance: Definition, benefits to citizens, e-Governance websites and their salient features and societal impacts; e-Governance challenges. e-Business: Definition, benefits to customers and business, e-Business websites and their salient features and societal impacts; netbanking, mobile banking e-Business challenges. e-Learning: -Definition, benefits to students (learners), teachers (trainers) and school (Institution) management; MooCs (Massive Open Online Courses); e-Learning websites and their salient features and societal impacts; e-Learning Challenges. Impact of ICT on Society-Social environmental and economic benefits infomania. Revision 	
7.	February	Revision & Exam	

MATHS:

S.No.	Month	Chapters	Description
1.	April	<p>Unit-1: Sets and Functions.</p> <ul style="list-style-type: none"> Sets and their representations. Empty set. Finite and Infinite sets. Equal sets. Subsets. Subsets of a set of real numbers 	

		<p>especially intervals (with notations). Power set. Universal set. Venn Diagrams. Union and Intersection of Sets. Differences of sets. Complement of a set. Properties of Complement Sets. Practical Problems based on sets.</p>	
2.	May	<p>Relations & Functions.</p> <ul style="list-style-type: none"> Ordered pairs, Cartesian product of sets. Number of elements in the cartesian product of two finite sets. Cartesian product of the sets of real (upto $\mathbb{R} \times \mathbb{R}$). Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function as a special kind of relation from one set to another. Pictorial representation of a function, domain, co-domain and range of a function. Real valued functions, domain and range of these functions: constant, identity, polynomial, rational, modulus, signum, exponential, logarithmic and greatest integer functions, with their graphs. Sum, difference, product and quotients of functions. 	
3.	July	<p>Trigonometric Functions</p> <ul style="list-style-type: none"> Positive and negative angles. Measuring angles in radians and in degrees and conversion of one into other. Definition to trigonometric functions with the help of unit circle. Truth of the $\sin^2x+\cos^2x=1$, for all x, Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing $\sin(x\pm y)$ in terms of $\sin x$, $\sin y$, $\cos x$ & $\cos y$ and their simple application. Deducing identities like the following: $\tan(x \pm y) = \frac{\tan x \pm \tan y}{1 \mp \tan x \tan y}, \cot(x \pm y) = \frac{\cot x \cot y \mp 1}{\cot y \pm \cot x}$ $\sin x + \sin y = 2 \sin \frac{x+y}{2} \cos \frac{x-y}{2}, \cos x + \cos y = 2 \cos \frac{x+y}{2} \cos \frac{x-y}{2},$ $\sin x - \sin y = 2 \cos \frac{x+y}{2} \sin \frac{x-y}{2}, \cos x - \cos y = -2 \sin \frac{x+y}{2} \sin \frac{x-y}{2},$ <p>Identities related to $\sin 2x$, $\cos 2x$, $\tan 2x$, $\sin 3x$, $\cos 3x$ and $\tan 3x$. General solution of trigonometric equations of the type $\sin y = \sin a$, $\cos y = \cos a$ and $\tan y = \tan a$.</p> <p>Complex Numbers and Quadratic Equations</p> <ul style="list-style-type: none"> Need for complex numbers, especially $\sqrt{-1}$, to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers. Argand plane and polar representation of complex numbers. Statement of Fundamental Theorem of Algebra, solution of quadratic equations in the complex number system. Square root of a complex number. 	
4.	August	<p>Unit-2:</p> <p>Linear Inequalities</p> <ul style="list-style-type: none"> Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line. Graphical solution of linear inequalities in two variables. Graphical solution of system of linear inequalities in two variables. <p>Sequence and Series</p> <ul style="list-style-type: none"> Sequence and Series. Arithmetic Progression (A.P.). Arithmetic Mean (A.M.) Geometric Progression (G.P.), general term of a G.P., sum of n terms of a G.P., Arithmetic and Geometric series infinite G.P. and its sum, geometric mean (G.M.), relation between A.M. and G.M. Formula for the following special sum: Equation. 	

		<p>Permutation and Combinations</p> <ul style="list-style-type: none"> Fundamental principle of counting n. (n!) Permutations and combinations, derivation of formulae and their connections, simple applications. 	
5.	September	<p>Revision 1st Term Exam</p>	
6.	October	<p>Principle of Mathematical Induction</p> <ul style="list-style-type: none"> Process of the proof by induction, motivating the application of the method by looking at natural numbers as the least inductive subset of real numbers. The Principle of mathematical induction and simple applications. <p>Limits and Derivatives</p> <ul style="list-style-type: none"> Derivative introduced as rate of change both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions, trigonometric, exponential and logarithmic functions. Definition of derivative, relate it to slope of tangent of a curve, derivative of sum, difference, product and quotient of functions. The derivative of polynomial and trigonometric functions. 	
7.	November	<p>Straight Lines</p> <ul style="list-style-type: none"> Brief recall to two dimensional geometry from earlier classes. Shifting of origin. Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point-slope form, slope-intercept form, two-point form, intercept form and normal form. General equation of a line. Equation of family of lines passing through the point of intersection of two lines. Distance of a point from a line. <p>Conic Sections</p> <ul style="list-style-type: none"> Sections of a cone: circles, ellipse, parabola, hyperbola; a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle. <p>Binomial Theorem</p> <ul style="list-style-type: none"> History, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, General and middle term in binomial expansion, simple applications. 	
8.	December	<p>Unit-II Coordinate Geometry</p> <ul style="list-style-type: none"> Introduction to Three-dimensional Geometry Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points and section formula. <p>Unit-IV: Calculus</p> <p>Unit-V : Mathematical Reasoning</p> <ul style="list-style-type: none"> Mathematical acceptable statements. Connecting words/phrases-consolidating the understanding of "if and only if (necessary and sufficient) condition", "implies", "and/or", "implied by", "and", "or", "there exists" and their use through variety of examples related to real life and Mathematics. Validating the statements involving the connecting words difference between contradiction, converse and contrapositive. <p>Unit-VI : Statistics and Probability</p> <p>Statistics</p> <ul style="list-style-type: none"> Measures of dispersion; Range, mean deviation, variance and standard deviation of ungrouped/ grouped data. Analysis of frequency distributions with equal means but different variances. Random experiments; outcomes, sample spaces (set 	

		<p>representation). Events; occurrence of events, 'not', 'and' and 'or' events, exhaustive events, mutually exclusive events, Axiomatic (set theoretic) probability, connections with the theories of earlier classes. Probability of an event, probability of 'not', 'and', and 'or' events.</p> <p>Probability</p> <ul style="list-style-type: none"> • Random experiments, Outcomes, Sample space, Events, Occurrence of events, 'not' and 'or' events, Exhaustive Events, Mutually exclusive events. Axiomatic probability, Connections with the theories of earlier classes. Probability of an event, Probability of 'not', "and" and "or" events. 	
9.	January	Revision	
10.	February	Revision and Final Exam (II Term)	

PAINTING (049):

S.No.	Month	Chapters	Description
1.	April	Theory : Introduction of Arts : Pre-historic rock painting Practical : Study of elements of art : Study of two or three object composition in pencil : With light and from a fixed point of view	
2.	May	Theory : Art of Indus Valley Civilization Practical : Nature study with oil pastel	
	June	Summer Break	
3.	July	Theory : Pahari School of Art Practical : Nature study with water colour : Composition (market scene)	
4.	June	Summer Break	
5.	July	Theory : Buddhist, Jain and Hindu Art Practical : Landscape study with oil pastel & Water colour	
6.	August	Theory : Ajanta Painting Practical : Still Life study with water colour : Human figure study	
7.	September	Ist Term Exam	
8.	October	Theory : Artist Aspects of Indian Temple Sculpture Practical : Still life study : Composition (Village Scene)	
9.	November	Theory : Study of Indian Bronzes Practical : Nature Study : Composition (Indian Festival)	
10.	December	Theory : Artistic aspects of Indo-Islamic architectures Practical : Still life study : Composition (Daily Life)	
11.	January	Theory : Revision Practical : Still Life Study : Composition : Revision	
12.	February	Revision and Exam	

PHYSICS:

BOOKS & PUBLISHERS :

- (1) **Physics Part-I, Textbook for Class XI, Published by NCERT.**
- (2) **Physics Part-II, Textbook for Class XI, Published by NCERT.**

S.No.	Month	Chapters	Description
1.	March	Unit-1 : Physical World and Measurement <ul style="list-style-type: none"> • Physics-scope and excitement, nature of physical laws; Physics, technology and society. • Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. Length, mass and time measurements; accuracy and precision of measuring instruments; errors in measurement; significant figures. Dimensions of physical quantities, dimensional analysis of its applications. Practical & Activity <ul style="list-style-type: none"> • (P1) To measure diameter of a small spherical/ cylindrical body 	

		<p>using Vernier Callipers...</p> <ul style="list-style-type: none"> (A1) To make a paper scale of given least count, e.g. 0.2cm, 0.5cm. 	
2.	May	<ul style="list-style-type: none"> Frame of reference, Motion in a straight line: Position-time graph, speed and velocity. Elementary concepts of differentiation and integration for describing motion Uniform and non-uniform motion, average speed and instantaneous velocity. Uniformly accelerated motion, velocity time and position-time graphs. Relations for uniformly accelerated motion (graphical treatment). Scalar and vector quantities; Position and displacement vectors, general vectors and their notations; equality of vectors, multiplication and vectors by a 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. Motion in plane. Cases of uniform velocity and uniform acceleration-projectile motion. Uniform circular motion. <p>Practical & Activity</p> <ul style="list-style-type: none"> (P2) To measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume. (P3) To measure diameter of a given wire using screw gauge. (A2) To determine mass of a given body using a metre scale by principle of moments. 	
3.	July	<p>Unit-III : Law of Motion</p> <ul style="list-style-type: none"> Intuitive concept of force. Inertia, Newtons' first law of motion, momentum and Newton's second law of motion; Newton's third law of motion. Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces. Static and kinetic friction, law of friction, rolling friction, lubrication. Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on a level circular road, vehicle on banked road). <p>Unit-IV : Work, Energy and Power</p> <ul style="list-style-type: none"> Work done by a constant force and a variable force; kinetic energy, work-energy theorem, power. Notion of potential energy, potential energy of a spring, conservative forces: conservation of mechanical energy (kinetic and potential energies); non-conservative forces: motion in a vertical circle; elastic and inelastic collisions in one and two dimensions. <p>Practical & Activity</p> <ul style="list-style-type: none"> (P4) To measure thickness of given sheet using screw gauge. (P5) To determine volume of an irregular lamina using screw gauge. (A3) To study the variation in range of a Projectile with angle of projection. 	
4.	August	<p>Unit-V : Motion of System of Particles and Rigid Body</p> <ul style="list-style-type: none"> Centre of mass of a two-particle system, momentum conservation and centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum, laws of conservation of angular momentum and its applications. Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions. 	

		<p>Moment of inertia, radius of gyration. Values of moments of inertia, for simple geometrical objects (no derivation). Statement of parallel and perpendicular axes theorems and their applications.</p> <p>Unit VI : Gravitation</p> <ul style="list-style-type: none"> Keplar's laws of planetary motion. The universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy and gravitational potential. Escape velocity. Orbital velocity of a satellite. Geo-stationary satellites. <p>Practical & Activity</p> <ul style="list-style-type: none"> (P6) To determine radius of curvature of a given spherical surface by a spherometer. (P7) To find the weight of a given body using parallelogram law of vectors. (A4) To observe change to state and plot a cooling curve for molten wax. 	
5.	September	Revision & Half Year Exam	
6.	October	<p>Unit-VII : Properties of Bulk Matter</p> <ul style="list-style-type: none"> Elastic behaviour, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear modulus of rigidity, Poisson's ratio; elastic energy. Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes). Effect of gravity on fluid pressure Viscosity, Stokes' law, terminal velocity, Reynold's number, streamline and turbulent flow, critical velocity. Bernoulli's theorem and its applications. Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise. Heat, temperature, Thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; Cp, Cv-calorimetry; change of state-latent heat capacity. Heat transfer-conduction, convection and radiation, thermal conductivity, Newton's law of cooling. Qualitative ideas of Blackbody radiation, Wien's displacement law, Stefan's law Green house Effect. <p>Practical and Activity</p> <ul style="list-style-type: none"> (P8) Using a simple pendulum, plot L-T and L-T² graphs. Hence find the effective length of second's pendulum using appropriate graph. (P9) To find the force constant of a helical spring by plotting a graph between load and extension. (A5) To observe and explain the effect of heating on a bi-metallic strip. 	
7.	November	<p>Unit-VIII : Thermodynamics</p> <ul style="list-style-type: none"> Thermal equilibrium and definition 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 process. Heat engine and refrigerator. <p>Unit-IX : Behaviour of Perfect Gases and Kinetic Theory of Gases</p> <ul style="list-style-type: none"> Equation of state of a perfect gas, work done is compressing a 	

		<p>gas.</p> <ul style="list-style-type: none"> • Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom, law of equipartition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number. • 'Practical • (P10) To determine Young's modulus of elasticity of the material of a given wire. • (P11) To study the relationship between the temperature of a hot body and time by plotting a cooling curve. • (P12) To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P and V, and between P and V. 	
9.	December	<p>Unit X : Oscillations and Waves</p> <ul style="list-style-type: none"> • Periodic motion - time period, frequency, displacement as a function of time. Periodic functions. Simple harmonic motion (S.H.M) and its equation; phase; oscillations of a spring-restoring force and force constant; 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. • Wave motion. Transverse and longitudinal waves, speed of wave motion. Displacement relation for a progressive wave. Principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats, Doppler effect. <p>Practical</p> <ul style="list-style-type: none"> • (P13) To determine the surface tension of water by capillary rise method. • (P14) To determine specific heat capacity of a given (i) solid (ii) liquid, by method of mixtures. • (P15) To study the relation between frequency and length of a given wire under constant tension using sonometer. 	
10.	January	<ul style="list-style-type: none"> • Wave motion. Transverse and longitudinal waves, speed of wave motion. Displacement relation for a progressive wave. Principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats, Doppler effect. • Revision 	
11.	February	<ul style="list-style-type: none"> • Revision • Practical Exam & Final Exam. 	

BIOLOGY:

S.No.	Month	Chapters	Description
1.	April	<p>Unit-1 : Diversity in living world</p> <ul style="list-style-type: none"> • The Living World. • Biological Classification. • Plant Kingdom. • Classification of Animals. 	
2.	May	<p>Unit-2 : Structural organization in plants and animals.</p> <ul style="list-style-type: none"> • Morphology of flowering plants. • Anatomy of flowering plants. 	

3.	July	Unit-3 : Cell structure and function. <ul style="list-style-type: none"> • Structural organisation in plants and animals. • Cell the unit of life. • Biomolecules 	
4.	August	Unit-4 : Plant Physiology <ul style="list-style-type: none"> • Cell cycle and cell division. • Transport in plants. 	
5.	September	First Semester Exam (Revision)	
6.	October	Unit-4 : Plant Physiology <ul style="list-style-type: none"> • Mineral nutrition. • Photosynthesis in plants. • Respiration in plants. 	
7.	November	Unit-5 : Human Physiology <ul style="list-style-type: none"> • Plant growth and development. • Digestion and absorption. • Breathing and exchange of gases. • Body fluids and circulation. 	
8.	December	Unit-5 : Human Physiology <ul style="list-style-type: none"> • Excretory products and their elimination. • Locomotion and movement. 	
9.	January	Unit-5 : Human Physiology <ul style="list-style-type: none"> • Neural control and co-ordination. • Chemical co-ordination and integration. Revision	
10.	February	Revision & Term 2 Examinations	

CHEMISTRY:

S.No.	Month	Chapters	Description
1.	April	Unit-I : Some Basic Concept of Chemistry Practical : Characterization and Purification of Chemical Substances. <ul style="list-style-type: none"> • Crystallisation of impure samples of any of the following : Alum, Copper Sulphate, Benzoic Acid. 	
2.	May	Unit-I : Some Basic Concept of Chemistry Cont... Unit-IX : Hydrogen Practical : Characterization and Purification of Chemical Substances. <ul style="list-style-type: none"> • Crystallisation of impure samples of any of the following : Alum, Copper Sulphate, Benzoic Acid. 	
3.	July	Unit-II : Structure of Atom Unit-III : Classification of Elements and Periodicity in Properties. Practical : Quantitative Estimation <ul style="list-style-type: none"> • Using a chemical balance. • Preparation of Standard Solution of Oxalic Acid. • Determination of Strength of a given solution of sodium Hydroxide by Titrating it against standard solution of Oxalic Acid. 	
4.	August	Unit-IV : Chemical Bonding and Molecular Structure. Unit-VIII : Redox Reaction Unit-X : S Block Elements (Alkali and Alkaline Earth Metals)	
5.	September	Revision and 1st Term Exam	

6.	October	Unit -XII :Organic Chemistry : Some Basic Principles and Techniques. Unit-V : States of Matter : Gases and Liquids Unit-XI : Some P Block Elements (Group 13 and 14)	
7.	November	Unit-XIII : Hydrocarbons	
8.	December	Unit-VI : Chemical Thermodynamics Practical : Qualitative Analysis <ul style="list-style-type: none"> • Determination of one anion and one cation in a given salt. • Cations : Pb², Zn², NH⁴ • Anions : CO₃, SO₄, NO₂, Cl, CH₃COO 	
9.	January	Unit-VII : Equilibrium Practical : Qualitative Analysis <ul style="list-style-type: none"> • Determination of one anion and one cation in a given salt. 	
10.	February	<ul style="list-style-type: none"> • Revision • Final Exam 	

BUSINESS STUDIES:

S.No.	Month	Chapters	Description
1.	April	<ul style="list-style-type: none"> • Nature and Purpose of Business. • Forms of Business Organisation (cont.) 	
2.	May	<ul style="list-style-type: none"> • Forms of Organisation (Cont.) 	
3.	June	<ul style="list-style-type: none"> • Summer Vacation 	
4.	July	<ul style="list-style-type: none"> • Public, Private and Global Enterprises • Business Services 	
5.	August	<ul style="list-style-type: none"> • Emerging Modes of Business 	
6.	September	<ul style="list-style-type: none"> • Revision (1st Term Exam) 	
7.	October	<ul style="list-style-type: none"> • Social Responsibility of Business and Business Ethics 	
8.	November	<ul style="list-style-type: none"> • Sources of Business Finance 	
9.	December	<ul style="list-style-type: none"> • Small Business 	
10.	January	<ul style="list-style-type: none"> • Internal Trade 	
11.	February	<ul style="list-style-type: none"> • International Business • PRT • Revision 	

ENGLISH:

BOOKS :HORNBILL, SNAPSHOT AND THE CANTERVILLE GHOST

S.No.	Month	Chapters	Description
1.	April	Hornbill <ul style="list-style-type: none"> • A Photograph • The Portrait of Lady. Snapshot: <ul style="list-style-type: none"> • The summer of the beautiful • White Horse Writing Skills: <ul style="list-style-type: none"> • Reordering, Error Correction, Editing, Notice. 	
2.	May	Hornbill <ul style="list-style-type: none"> • The Voice of the Rain. Snapshot: <ul style="list-style-type: none"> • The Address The Canterville Ghost	

		<ul style="list-style-type: none"> Chapter-1, 2D7 : E8 <p>Writing Skills:</p> <ul style="list-style-type: none"> Notemaking, Poster 	
3.	July	<p>Hornbill</p> <ul style="list-style-type: none"> We're not afraid to Die.... <p>Snapshot:</p> <ul style="list-style-type: none"> Ranga's Marriage <p>The Canterville Ghost</p> <ul style="list-style-type: none"> Chapter-3 <p>Writing Skills:</p> <ul style="list-style-type: none"> Advertisements (All Types) 	
4.	August	<p>Hornbill</p> <ul style="list-style-type: none"> Discovering TUT <p>The Canterville Ghost</p> <ul style="list-style-type: none"> Chapter-4 <p>Writing Skills:</p> <ul style="list-style-type: none"> Business Letters, Enquiry, Placing Order, Complaint and Replies. 	
5.	September	First Term	
6.	October	<p>Hornbill</p> <ul style="list-style-type: none"> The Ailing Planet <p>Snapshot:</p> <ul style="list-style-type: none"> Albert Einstein at School <p>The Canterville Ghost</p> <ul style="list-style-type: none"> Chapter-5 <p>Writing Skills:</p> <ul style="list-style-type: none"> Job Application, Speech, Factual Description-Person, Place, Event. 	
8.	November	<p>Hornbill</p> <ul style="list-style-type: none"> Childhood <p>Snapshot:</p> <ul style="list-style-type: none"> Mother's Day <p>The Canterville Ghost</p> <ul style="list-style-type: none"> Chapter-6 <p>Writing Skills:</p> <ul style="list-style-type: none"> Letter to the Editor, Report, Writing 	
9.	December	<p>Hornbill</p> <ul style="list-style-type: none"> The Browning Version <p>Snapshot:</p> <ul style="list-style-type: none"> Birth Father to Son <p>The Canterville Ghost</p> <ul style="list-style-type: none"> Chapter-7 <p>Writing Skills:</p> <ul style="list-style-type: none"> Revision 	
10.	January	<p>Snapshot:</p> <ul style="list-style-type: none"> The Tale of Melon City <p>Revision</p>	

HISTORY:

S.No.	Month	Chapters	Description
1.	April	<ul style="list-style-type: none"> Introduction-Early Societies (Section-I) Timeline I (6 MYA to 1 BCE) From the beginning of time 	
2.	May	<ul style="list-style-type: none"> Early Cities Introduction-Empires (Section-II) Timeline II (100 BCE to 1300 CE) An Empire Across three Continents 	
3.	July	<ul style="list-style-type: none"> Central Islamic Lands Nomadic Empires 	
4.	August	<ul style="list-style-type: none"> Introduction - Changing Tradition (Section III) Timeline III (c. 1300 to 1700) Three Orders 	
5.	September	<ul style="list-style-type: none"> 1st Term Exam 	
6.	Ocober	<ul style="list-style-type: none"> Changing Cultural Traditions Confrontation of Cultures 	
7.	November	<ul style="list-style-type: none"> Introduction - Section IV (Towards Modernisation) Timeline IV (c. 1700 to 2000) The Industrial Revolution 	
8.	December	<ul style="list-style-type: none"> Displacing Indigenous People 	
9.	January	<ul style="list-style-type: none"> Paths to Modernization. Map work Project Work Revision 	
10.	February	<ul style="list-style-type: none"> Revision & Exam 	

POLITICAL SCIENCE:

PART-A : INDIAN CONSTITUTION AT WORK

PART-B : POLITICAL THEORY

PUBLISHER :NCERT

S.No.	Month	Chapters	Description
1.	April	PART-A <ul style="list-style-type: none"> Chapter-1 : Constitution : Why and How? PART-B <ul style="list-style-type: none"> Chapter-1 : Political Theory : An Introduction 	
2.	May	PART-A <ul style="list-style-type: none"> Chapter-2 : Rights in the Indian Constitution. PART-B <ul style="list-style-type: none"> Chapter-2 : Freedom 	
3.	June	SUMMER VACATION	
4.	July	PART-A <ul style="list-style-type: none"> Chapter-3 : Election and Representation. Chapter-4 : Executive. PART-B <ul style="list-style-type: none"> Chapter-3 : Equality 	
5.	August	PART-A <ul style="list-style-type: none"> Chapter-5 : Legislature Chapter-4 : Social Justice 	

		PART-B Chapter-5 : Rights	
6.	September	REVISION AND TERM I EXAMINATION	
7.	October	PART-A • Chapter-6 : Judiciary PART-B • Chapter-6 : Citizenship • Chapter-7 : Nationalism	
8.	November	PART-A • Chapter-7 : Federalism • Chapter-8 : Local Self Governments PART-B • Chapter-8 : Secularism	
9.	December	PART-A • Chapter-9 : Constitution is a Living Document. PART-B • Chapter-9 : Peace	
10.	January	PART-A • Chapter-10 : The Philosophy of the Constitution. PART-B • Chapter-10 : Development • Revision	
11.	February	REVISION & II TERM EXAMINATION	

PHYSICAL EDUCATION:

BOOK : 1. HEALTH AND PHYSICAL EDUCATION

WRITER : DR. V.K. SHARMA (SARASWATI)

S.No.	Month	Chapters	Description
1.	April	• Changing trends and career option in physical education.	
2.	May	• Physical Fitness, Wellness and Lifestyle. • Olympic Movement.	
3.	June	• Summer Vacation	
4.	July	• Yoga • Doping	
5.	August	• Physical Activity Environment. • Test and Measurement in Sports. • Fundamental of anatomy and physiology.	
6.	September	• 1st Term Exam	
7.	October	• Biomechanics and Sports	
8.	November	• Psychology and Sports	
9.	December	• Training in Sports	
10.	January	• Revision	
11.	February	• Revision & Exam	

हिंदी

- पुस्तके : आरोहभाग-1 (एन० सी० आई० आर० टी०)
 वितानभाग-1 (एन० सी० आई० आर० टी०)
 व्याकरण अभिव्यक्ति और माध्यम (एन० सी० आई० आर० टी०)

क्र०सं०	मास	अध्याय	विवरण
1.	अप्रैल	गद्य -पाठ-1 • नमक का दरोगा पद्य -पाठ-1 • कबीर व्याकरण- • अपठित गद्यांश, काव्यांश, पत्र-लेखन, फीचर, आलेख, रिपोर्ट तथा अनुच्छेद लेखन • पूरक पुस्तिका, पाठ-1 भारतीय गायिकाओं में बेजोड़ लता मंगेशकर (पाठ वाचन)	
2.	मई	गद्य -पाठ-2 • मियाँ नसीरुद्दीन पद्य -पाठ-2 • मीरा व्याकरण- • जनसंचार माध्यम-परिभाषा, महत्त्व, उपयोगिता, अनुच्छेद, पत्र, फीचर, आलेख, रिपोर्ट • पूरक पुस्तिका-पाठ-1, भारतीय गायिकाओं में बेजोड़ लतामंगेशकर (प्रश्नोत्तर)	
3.	जुलाई	गद्य -पाठ-3 और 4 • अप्पू के साथ ढाई साल • विदाई संभाषण	

		<p>पद्य -पाठ-3 और 4</p> <ul style="list-style-type: none"> ● पथिक ● वे आंखें <p>व्याकरण-</p> <ul style="list-style-type: none"> ● जनसंचार माध्यम-संचार के तत्व प्रकार एवं विशेषताएँ, अपठित काव्यांश, पत्र, फीचर, अनुच्छेद, आलेख, रिपोर्ट ● पूरक पुस्तिका-पाठ-2, राजस्थान के रजत बूँदे (पाठवाचन) 	
4	अगस्त	<p>गद्य -पाठ-5</p> <ul style="list-style-type: none"> ● गलतालोहा <p>पद्य -पाठ-5</p> <ul style="list-style-type: none"> ● घर की याद <p>व्याकरण-</p> <ul style="list-style-type: none"> ● जन संचार माध्यम-कार्य विकास, अनुच्छेद, अपठित गद्यांश, अपठित काव्यांश, पत्र लेखन, फीचर, आलेखक रिपोर्ट ● पूरक पुस्तिका-राजस्थान की रजत बूँदें (प्रश्नोत्तर) 	
5	सितम्बर	प्रथम सत्रीय परीक्षा	
6	अक्टूबर	<p>गद्य -पाठ-6</p> <ul style="list-style-type: none"> ● स्पीति <p>पद्य -पाठ-6</p> <ul style="list-style-type: none"> ● चंपा काले अक्षर नहीं चिन्हाती <p>व्याकरण-</p> <ul style="list-style-type: none"> ● पत्रकारिता के विविध आयाम, परिभाषा, समाचार एवं उसके तत्व संपादन, फीचर, पत्र लेखन, अनुच्छेद लेखन 	

		<ul style="list-style-type: none"> ● पूरक पुस्तिका, पाठ-3, आलो आंधारी (पाठ वाचन) 	
7	नवंबर	<p>गद्य -पाठ-7 और 8</p> <ul style="list-style-type: none"> ● रजनी ● जामुन का पेड़ <p>पद्य -पाठ-7 और 8</p> <ul style="list-style-type: none"> ● गज़ल ● अक्क महादेवी <p>व्याकरण-</p> <ul style="list-style-type: none"> ● पत्रकारिता के विविधा आयाम-पत्रकारिता के प्रमुख प्रकार ● पूरक पुस्तिका, पाठ-3, आलो आंधारी (प्रश्नोत्तर) फीचर, आलेख, रिपोर्ट 	
8	दिसम्बर	<p>गद्य -पाठ-9</p> <ul style="list-style-type: none"> ● भारत माता <p>पद्य -पाठ-9</p> <ul style="list-style-type: none"> ● सबसे खतरनाक <p>व्याकरण-</p> <ul style="list-style-type: none"> ● फीचर, अनुच्छेद, पत्र, अपठित, काव्यांश, आलेखक, रिपोर्ट ● पूरक पुस्तिका, पुनरावृति 	
9	जनवरी	<p>गद्य -पाठ-10</p> <ul style="list-style-type: none"> ● आत्मा का ताप <p>पद्य -पाठ-10</p> <ul style="list-style-type: none"> ● आओ मिलकर बचाएँ <p>व्याकरण-</p> <ul style="list-style-type: none"> ● फीचर, आलेख, रिपोर्ट, पत्र लेखन ● पूरक पुस्तिका-पुनरावृति 	





JP INTERNATIONAL SCHOOL

NATIONAL CADET CORPS SYLLABUS (CLASS XI)

SESSION 2019-20

S.No.	MONTH	UNIT	CONTENT
1	APRIL	NATIONAL CADET CORPS	Aims and Objective of NCC, Organization, training and the NCC song, Incentives
2	MAY	NATIONAL INTEGRATION	Religions, culture, traditions and customs of India, National Integration: Importance and necessity, Freedom struggle and nationalist movements in India
3	JULY	DRILL	Foot Drill, Arms Drill, Ceremonial Drill
4		WEAPON TRAINING	Weapon Training
5	AUGUST	PERSONALITY DEVELOPMENT AND LEADERSHIP	Introduction to Personality Development, Self awareness, Communication Skills, Leadership traits, Time Management
6		DISASTER MANAGEMENT AND CIVIL AFFAIRS	Civil defence organization and NDMA, Types of emergencies and natural disasters, Assistance during natural and other calamities: Floods, cyclones, earth quakes, accidents
7	OCTOBER	SOCIAL AWARENESS AND COMMUNITY DEVELOPMENT	Basis of social service and its need, Rural development programmes, Contribution of youth towards social welfare, Civic responsibility, Causes and prevention of HIV AIDS
8		HEALTH AND HYGIENE	Structure and function of the human body, Hygiene and sanitation, Infectious and contagious diseases and its prevention
9	NOVEMBER	ADVENTURE AND OBSTACLE TRAINING	Slithering, Obstacle training
10		ENVIRONMENT AWARENESS AND CONSERVATION	Natural resources-conservation and management, Water conservation and rain water harvesting