DAV POLICE PUBLIC SCHOOL JHAJJAR
SYLLABUS
CLASS-10

S.N.	SUBJECT	MONTH	CHAPTER NAME	TOPIC COVERED
1.	**Math**	**April**	1.Real Numbers	• Introduction to Real Numbers • Euclid's Division Lemma • The Fundamental Theorem of Arithmetic • Revisiting Irrational Numbers • Revisiting Rational Numbers and Their Decimal Expansions
2.		**May**	2. Polynomials 3.Pair Of Linear Equations In Two Variables	• Introduction Polynomials • Geometrical Meaning of the Zeroes of a Polynomial • Relationship between Zeroes and Coefficients of a Polynomial • Division Algorithm for Polynomials ✓ • Introduction to Pair Of Linear Equations In Two Variables • Pair of Linear Equations in Two Variables • Graphical Method of Solution of a Pair of Linear Equations • Algebraic Methods of Solving a Pair of Linear Equations • Equations Reducible to a Pair of Linear Equations in Two Variables
3.		**June**	Summer Vacations	
4.		**July**	4.Quadratic Equations 5.Arithmetic Progressions	• Introduction to Quadratic Equations • Quadratic Equations • Solution of a Quadratic Equation by Factorisation • Solution of a Quadratic Equation by Completing the Square • Nature of Roots ✓ • Introduction Arithmetic

					• Progressions
					• nth Term of an AP
					• Sum of First n Terms of an AP
5.		**August**	6.Triangles		• Triangles Introduction
					• Similar Figures
					• Similarity of Triangles
					• Criteria for Similarity of Triangles
					• Areas of Similar Triangles
					• Pythagoras Theorem
					✓
			7.Coordinate Geometry		• Coordinate Geometry Introduction
					• Distance Formula
					• Section Formula
					• Area of a Triangle
6.		**September**	8.Introduction To Trigonometry		• Introduction To Trigonometry
					• Trigonometric Ratios
					• Trigonometric Ratios of Some Specific Angles
					• Trigonometric Ratios of Complementary Angles
					• Trigonometric Identities
7.		**October**	9.Some Applications Of Trigonometry		• Introduction to Some Applications Of Trigonometry
					• Heights and Distances
					✓
			10.Circles		• Circles Introduction
					• Tangent to a Circle
					• Number of Tangents from a Point on a Circle
8.		**November**	11.Constructions		• Introduction to Constructions
					• Division of a Line Segment
					• Construction of Tangents to a Circle
			12.Areas Related To Circles		✓
					• Areas Related To Circles Introduction
					• Perimeter and Area of a Circle- A Review
					• Areas of Sector and Segment of a Circle
					• Areas of Combination of Plane Figures
					•
9.		**December**	13.Surface Areas And Volumes		• Surface Areas And Volumes

				Introduction
			14. Statistics	• Surface Area of a Combination of Solids
				• Volume of a Combination of Solids
				• Conversion of Solid from One Shape to Another
				• Frustum of a Cone
				✓
				• Statistics Introduction
				• Mean of Grouped Data
				• Mode of Grouped Data
				• Median of Grouped Data
			15.Probability	• Graphical Representation of Cumulative Frequency Distribution
				✓
				• Probability Introduction
				• Probability-A Theoretical Approach
10.		**January**	Revision	
11.		**February**	Revision	
12.		**March**	Revision	
1	**Information Technology**	**April**	**Part-B Vocational Skills** **Unit 1: Digital Documentation (Advanced)** Ch-1 Create and Apply Styles in the document	• Styles/ categories in Word Processor Styles and Formatting window
				• Fill Format
				• Creating and updating new style from selection
				• Load style from template another document
				• Creating a new style using drag-and drop
				• Applying styles.
			Ch-2 Insert and use Images in a document	• Options to insert image to document from various sources.
				• Options to modify, resize, crop and delete an image. Drawing objects and its properties.
				• Creating drawing objects and changing its properties.
				• Resizing and grouping drawing objects. Positioning image in the text.
			Ch-3 Create and Use template	• Templates
				• Using predefined templates.
				• Creating a template.
				• Set up a custom default template.

				Ch-4 Create and Customize table of contents	• Updating a document. • Changing to a different template. • Using the Template. • Table of contents. Hierarchy of headings. Customization of table of contents. Character styles. • Maintaining a table of contents.
				Ch-5 Implement Mail Merge	• Advance concept of mail merge in word processing • Creating a main document • Creating the data source • Entering data in the field • Merging the data source with main document • Editing individual document • Printing a letter and its address label
2			May	**Unit-2 Electronic Spreadsheet(Advanced)** Ch-1 Analyse data using scenarios and goal seek	• Using consolidating data, Creating subtotals. • Using "what if" scenarios.Using "what if" tools • Using goal seek and solver.
				Ch-2 Link data and spreadsheet	• Setting up multiple sheets. Creating reference to other sheets by using keyboard and mouse. • Creating reference to other document by using keyboard and mouse. • Relative and absolute hyperlinks Hyperlinks to the sheet • Linking to external data. • Linking to registered data sources.
				Ch-3 Share and review a spreadsheet	• Setting up a spreadsheet for sharing. • Opening and saving a shared spreadsheet. • Recording changes. • Add, Edit and Format the comments. Reviewing changes – view,accept or reject changes. Merging and comparing.
				Ch-4 Create and use Macro in spreadsheet	• Using the macro recorder. Creating a simple macro. Using a macro as a function. • Passing arguments to a macro.

					• Passing the arguments areas values. Macros to work like built-in functions. Accessing cells directly. • Sorting the columns using macro
3.		**June**	Summer Vacation		
4.		**July**	**Unit-3 Database Management System** Ch-1 Appreciate the concept of database Management System		• Concept and examples of data and information, • Concept of database, • Advantages of database, • Features of database • Concept and examples of Relational database, • Concept and examples of field, record, table, database, • Concept and examples of Primary key, composite primary key, foreign key, Relational Data base management system
			Ch-2 Create and edit tables using wizard and sql commands		• Introduction to a RDBMS • Database objects – tables,queries, forms, and reports of the database, • Terms in database – table, field, record, • Steps to create a table usingtable wizard, • Data types in Base, • Option to set primary key Table Data View dialog box • DDL Commands
			Ch-3 Perform Operations on table		• Inserting data in the table, Editing records in the table, • Deleting records from the table, • Sorting data in the table, • Referential integrity, • Creating and editing relationships – one to one, one to many, many to many, Field properties.
			Ch-4 Retrieve data using query		• Database query, Defining query, • Query creation using wizard, • Creation of query using design view • Editing a query, • Applying criteria in query – single field, multiple fields, using wildcard, Performing calculations • Grouping of data,

				Ch-5 Create Forms and Reports Using wizard	• Structured Query Language • Forms in Base, • Creating form using wizard, • Steps to create form using Form Wizard, Options to enter or remove data from forms Modifying form, • Changing label, background, • Searching record using Form, • Inserting and deleting record using Form View, • Concept of Report in Base, Creating Report using wizard, Steps to create Report using wizard
5.			August	**Unit-4 Web Application and Securitry** Ch-1 Working With Accessibility Options	• Understand various types of impairment that impact computer usage • Computer Accessibility Dialog box and its tabs • Serial Keys
				Ch-2 Understanding Networking Fundamentals	• Network and its types. Client Server Architecture, Peerto-peer (P2P) Architecture, • internet, World Wide Web, • Benefits of networking • internet, getting access to internet, internet terminology Some of the commonly used Internet connectivity options • Data transfer on the Internet
				Ch-3 Introduction to Instant Messaging	• learn key features of instant messaging Creating an instant messaging • account • Launching Google Talk • Signing In into your Google Talk
				Ch-4 Chatting with a Contact-Google Talk	• Learn to chat with a contact that is already added to your contact list. Sending text chat messages instantly by double-clicking on a contact. • General rules and etiquettes to be followed while chatting. • chatting on various types of messengers • learn and appreciate a blog and

			Ch-5 Creating and Publishing Web Pages-Blogs	• set up title and other parameters in a blog posting comments • using offline blog editors
6.		September	**Unit-4 Web Application and Securitry**	
			Ch-6 Using Offline Blog Editors	• Concept to create blogs using a blog application and publish the blog whenever internet connectivity is available.
			Ch-7 Online Transaction	• concept of e-commerce and various online applications • importance of secure passwords
			Ch-8 Internet Security	• Need of internet security • Cyber threats like phishing, email-spoofing, char spoofing etc. • Best practices for internet security and secure passwords • concept of browser, cookies,backup, antivirus • clearing data in browsers
			Ch-9 Maintain Workplace safety	• Basic safety rules to follow at workplace – Fire safety, • Falls and slips, Electrical safety, • Use of first aid. • Case Studies of hazardous situations
			Ch-10 Prevent Accidents and Emergencies	• Accidents and emergency, • Types of Accidents, • Handling Accidents • Types of Emergencies.
			Ch-11 Protect Health and Safety at work	• Hazards and sources of hazards, • General evacuation procedures, • Healthy living.
7.		October	**Part-A employability Skills** **Unit-1 Communication Skill-II** Ch-1 Demostrate knowledge of Various methods of communication	•
				• Methods of communication, Verbal,Non Verbal,Visual
			Ch-2 Provide descriptive and specific feedback	• Communication cycle and importance of feedback • Meaning and Importance of feedback. • Descriptive feedback-written comments or conversations • Specific and non-specific

				Ch-3 Apply measures to overcome barriers in communication	• feedback • Barriers to effective communication-types and factors. • Measures to overcome barriers ineffective • Communication
				Ch-4 Apply principle of communication	• Principle of effective communication • 7C's of effective communication
				Ch-5 Demonstrate basic writing skills	• Sentence, Phrase,Kinds of Sentence,Parts of Sentence • Parts of speech • Articles • Construction of paragraph
8.			November	**Unit-2 Self-management skills-II**	•
				Ch-1 Apply stress management techniques	• Meaning and Importance of stress management • Stress management techniques- physical exercise,yoga,meditation • Enjoying , going to vacations and holidays with family and friends • Taxing nature walks
				Ch-2 Demonstrate the ability to work independently	• Importance of the ability to work independently • Describe the types of self – awareness • Describe the meaning of self motivation and self –regulation
				Unit-3: Information and Communication Technology Skills-II	
				Ch-1 Distinguish between different operating systems	• Classes of operating systems • Menu,icons and taskbar on the desktop • File concept file operations,file organization,directory structure and file system structure • Creating and managing files and folders
				Ch-2 Apply basic skills for care and maintenance of computer	• Importance and need of care and maintenance of computer • Cleaning computer components • Preparing maintenanace schedule • Protecting computer against viruses • Scanning and cleaning viruses and

				removing SPAM file temporary files and folders
9.		**December**	**Unit-4 Entrepreneurial skills-II** Ch-1 List the characteristics of successful entrepreneur	• Entrepreneurship and society • Qualities and functions of entrepreneur • Role and importance of an entrepreneur • Myth about entrepreneur • Entrepreneurship as a career option
			Ch-2 Demonstrate the Knowledge of importance ,problems and solutions related to sustainable development	Definition of sustainable development Importance of sustainable development Problems related to sustainable development
10.		**January**	Revision	
11.		**February**	Revision	
12.		**March**	Revision and Final examination	
	Social science			
1		**April**	Contemporary India -II	
			1.Resources and Development	Types of Resources, Development of Resources, Resources Planning in India, Land Resources, Land Utilization, Land use Pattern in India, Land Degradation and Conservation Measures, Soil as a Resource, Classification of Soil, Soil Erosion and Soil Conservation
			2. Forest and Wildlife	Biodiversity and Biological Diversity, Flora and Fauna in India, Vanishing Forests, Asiatic Cheetah: Where did they go? ,The Himalayan Yew in Trouble, Conservation of Forest and wildlife in India, Project Tiger, Types and Distribution of Forest and Wildlife Resources, Community and Conservation
			3. Water Resources	Water Scarcity and the need for Water Conservation and Management, Multipurpose River Projects and Integrated Water Resources Management, Rainwater Harvesting
			4. Agriculture	Types of Farming, Cropping Pattern, Major Crops , Technological and Institutional Reforms, Impact of Globalization on Agriculture
			5. Minerals and Energy Resources	What is a mineral? , Mode of occurrence of Minerals ,Ferrons and Non-Ferrons Minerals , Non-Metallic Minerals , Rock Minerals , Conservation of Minerals , Energy Resources , Conventional and Non-Conventional , Conservation of

				Energy Resources
2		**May**	6.Manufacturing Industries	Importance of manufacturing , Contribution of Industry to National Economy , Industrial Location , Classification of Industries, Spatial distribution , Industrial pollution and environmental degradation , Control of Environmental Degradation
			7. Life Lines of National Economy	Transport – Roadways, Railways, Pipelines, Waterways, Airways , Communication , International Trade , Tourism as a Trade
3		**June**	Summer Vacations	
4		**July**	Understanding Economic Development	
			1. Development	What Development Promises - Different people different goals , Income and other goals , National Development , How to compare different countries or states? , Income and other criteria , Public Facilities , Sustainability of development
			2. Sectors of the Indian Economy	Sectors of Economic Activities , Comparing the three sectors , Primary, Secondary and Tertiary Sectors in India , Division of sectors as organized and unorganized , Sectors in terms of ownership: Public and Private Sectors
5		**August**	3.Money and Credit	Money as a medium of exchange , Modern forms of money , Loan activities of Banks , Two different credit situations , Terms of credit , Formal sector credit in India , Self Help Groups for the Poor
			4. Globalization and the Indian Economy	Production across countries , Interlinking production across countries , Foreign Trade and integration of markets , What is globalization? , Factors that have enabled Globalisation, World Trade Organisation, Impact of Globalization on India , The Struggle for a fair Globalisation
			5. Consumer Rights	Rights of the Consumers,The Consumer in Market Place, Consumer Movement, Consumer Rights,
6		**September**	**Democratic Politics – II**	
			1. Power Sharing	Case Studies of Belgium and Sri Lanka , Why power sharing is desirable? , Forms of Power Sharing
			2. Federalism	What is Federalism? , What make India a Federal Country? , How is Federalism practiced? , Decentralization in India
7		**October**	3. Democracy and Diversity	Case Studies of Mexico , Differences, similarities and divisions , Politics of social divisions
			4. Gender, Religion and Caste	Gender and Politics , Religion,

				Communalism and Politics, Caste and Politics
			5. Popular Struggles and Movements	Popular Struggles in Nepal and Bolivia , Mobilization and Organization , Pressure Groups and Movements
			6. Political Parties	Why do we need Political Parties? , How many Parties should we have? , National Political Parties , State Parties , Challenges to Political Parties , How can Parties be reformed?
8		**November**	7. Outcomes of Democracy	How do we assess democracy's outcomes? , Accountable, responsive and legitimate government , Economic growth and development , Reduction of inequality and poverty , Accommodation of social diversity , Dignity and freedom of the citizens
			8. Challenges to Democracy	Thinking about challenges , Thinking about Political Reforms, Redefining democracy
			India and the Contemporary World – II	
			1. The Rise of Nationalism in Europe	The French Revolution and the Idea of the Nation , The Making of Nationalism in Europe , The Age of Revolutions: 1830-1848 , The Making of Germany and Italy , Visualizing the Nation , Nationalism and Imperialism
			2. Nationalism in India	The First World War, Khilafat and Non - Cooperation , Differing Strands within the Movement , Towards Civil Disobedience , The Sense of Collective Belonging
9		**December**	3. The Making of a Global World	The Pre-modern world , The Nineteenth Century (1815-1914) , The Inter war Economy , Rebuilding a World Economy: The Post-War Era
			4. The Age of Industrialization	Before the Industrial Revolution , Hand Labour and Steam Power , Industrialization in the colonies , Factories Come Up , The Peculiarities of Industrial Growth , Market for Goods
			5. Print Culture and the Modern World	The First Printed Books , Print Comes to Europe , The Print Revolution and its Impact , The Reading Mania , The Nineteenth Century , India and the World of Print , Religious Reform and Public Debates , New Forms of Publication , Print and Censorship
10		**January**	Revision	
11		**February**	Revision	
12		**March**	Revision	
1	**Science**	**April**	1.Chemical reactions and Equation	1. Chemical reactions and Equations:- Chemical equation, Balanced chemical

					equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation, and reduction.
				15. Our Environment	15. Our Environment: Eco-system, Environmental problems, Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substance
				10.Light- Reflection and Refraction	10. Light- Reflection and Refraction:- Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification.
2			**May**	10. Light- Reflection and Refraction	10. Light- Reflection and Refraction Laws of refraction, refractive index. Refraction of light by the spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens. Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.
				2. Acids, Bases, and salts	2. Acids, Bases, and salts:Their definitions in terms of furnishing of H+ and OH– ions, General properties, examples and uses, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris
				3. Metals and Non-metals	3. Metals and Non-metals: Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds; Corrosion and its prevention.
3			**June**	SUMMER VACCATION	
4			**July**	16. Management of natural resources	16. Management of natural resources: Conservation and judicious use of natural resources. Forest and wildlife; Coal and Petroleum conservation. Examples of people's participation for conservation of natural resources. Big dams: advantages

				and limitations; alternatives, if any. Water harvesting. Sustainability of natural resources.
			11. The human eye and the colourful world	11. The human eye and the colourful world: functioning of various parts of human eye, defects of vision and corrections, applications of various lenses and mirrors.
			4. Carbon and its compounds	4. Carbon and its compounds: Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series.
5		**August**	4. Carbon and its compounds	4. Carbon and its compounds: Homologous series.
			7. Control and coordination	7. Control and coordination: CNS and PNS, hormones, tropism, nastic movement, phytohormones, nervous system, positive and negative feedback.
			12. Electricity	12. Electricity: Electric current, potential difference and electric current. Ohm's law; Resistance, resistivity, Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life. Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R
6		**September**	8. How do organisms reproduce?	8. How do organisms reproduce? Reproduction in animals and plants (asexual and sexual) reproductive health-need and methods of family planning. Safe sex vs HIV / AIDS. Child bearing and women's health.
			13. Magnetic effects of electric current	13. Magnetic effects of electric current: Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left Hand Rule, Electric Motor, Electromagnetic induction. Induced potential difference, Induced current. Fleming's Right Hand Rule, Electric generator, Domestic electric circuits.
7		**October**	9. Heredity and evolution	9. Heredity and evolution: Heredity; Mendel's contribution - Laws for inheritance of traits: Sex determination:

				brief introduction, Evolution, evidences of evolution, speciation, and human Evolution.
			14. Sources of energy	14. Sources of energy: sun the ultimate source of energy, conventional source of energy, alternative or non conventional sources of energy.
8		**November**	6. Life process	6. Life process: Living Being'. Basic concept of nutrition, respiration, transport and excretion in plants and animals.
9		**December**	5.Periodic classification of elements	5.Periodic classification of elements: Need for classification, early attempts at classification of elements (Dobereiner's Triads, Newland's Law of Octaves, and Mendeleev's Periodic Table), Modern periodic table, gradation in properties, valency, atomic number, metallic and non-metallic properties.
10		**January**	Revision	
11		**February**	Revision	
12		**March**	Revision and Final examination	
	English			
1	First flight	**April**	chapter-1: A letter to God : Dust of Snow (poem) : Fire and Ice (poem)	About the author, Explanation of the chapter, keywords, question answer, exercise of the book.
	Foot prints without feet		Chapter-1 : A Triumph of Surgery	
2.	First flight	**May**	chapter-2 : Nelson Mandela- long walk to Freedom : A Tiger in the Zoo(poem)	About the author, Explanation of the chapter , keywords , question answer, exercise of the book . Definition of punctuation & Tenses, its types and exercise of the chapter. And steps of writing a letter and an application , unseen passage.
	Foot prints without feet		Chapter- 2 : The Thief's story Chapter-3 : The Midnight Visitor	
	Grammar		Punctuation, Tenses	
	Composition		Personal, business, official letters	
	Reading skill		Unseen passages	
3.		**June**		
4.	First flight	**July**	chapter-3 : Two stories about Flying	Explanation of the chapter , about the

			: His first flight , black Aero plane
			
			     : How to tell wind animals(poem)
			
			     : The Ball poem
			
			Chapter -4 : A Question of Trust
			Chapter-5 : Footprints Without Feet
				author ,keywords , question answer, exercise of the book
				Definition of Direct speech and Indirect speech, its rules and exercise of the chapter. Format of writing (events ,incidents)

	Foot prints without feet			
	Grammar		Reported speech	
	Composition		Writing skills (Description of function / events/ incidents)	

5.	First flight	**August**	chapter-4 : From the Diary of Anne Frank
			     : Amandal ! (poem)
			     : Animal (poem)
				Explanation of the chapter , about the author ,keywords , question answer, exercise of the book
				Definition of Modals & sentences ,its types and exercise of the chapter.

	Foot prints without feet		Chapter-6 : The making of a Scientist	
	Grammar		Modals, Sentences	
	Composition		Dialogue completion	
6.	First flight	**September**	chapter-5 The Hundred Dresses part-1 Chapter-6 The Hundred Dresses part-2	Explanation of the chapter, about the author ,keywords , question answer, exercise of the book Definition of clauses & sentences, its types and worksheet of the chapter. And format of poster making
	Foot prints without feet		Chapter-7 The Necklace	
	Grammar		Clauses, Sentences	
	Composition		Poster making	
7.	First flight	**October**	chapter -7 : Glimpse of India i) A Baker From God	Explanation of the chapter, about the author ,keywords , question answer,

			ii) Coorg iii) Tea from Assam The Tree (poem)	exercise of the book Definition of non-Finites, its types and worksheet of the chapter. And format of making report
	Foot prints without feet		Chapter-8 : The Hack driver	
	Grammar		Non- Finites	
	Composition		Reports (present and past happening)	
8.	First flight	**November**	chapter-8 : Mizbil the Otter : Fog (poem)	Explanation of the chapter, about the author ,keywords , question answer, exercise of the book Definition of preposition, its rules and worksheet of the chapter. And format of advertisement
	Foot prints without feet		Chapter-9 : Bholi	
	Grammar		Preposition	
	Composition		Advertisement	
9.	First flight	**December**	chapter-9 : Madam Rides the Bus : The Tale of Custard the Dragon (poem) Chapter-10 :The Sermon at Benares :For Anne Gregory (poem)	Explanation of the chapter, about the author ,keywords , question answer, exercise of the book Definition of figure of speech , its types and worksheet of the chapter. And steps of discussion and conversation
	Foot prints without feet		Chapter-10 The Book that saved the earth	
	Grammar		Figure of speech	
	Composition		Conversation and discussion	
10.	First flight	**January**	chapter-11 : Proposal	Explanation of the chapter, about the author ,keywords , question answer, exercise of the book
	Foot prints without feet		Revision	

	Grammar		Revision	
	Composition		Revision	
11		**February**	Revision	
12		**March**	Revision	