



GOVERNMENT OF TAMIL NADU
TEACHERS RECRUITMENT BOARD

TAMILNADU TEACHER ELIGIBILITY TEST (TNTET)

In the Notification it is mentioned that the questions in the TNTET Paper II will be based on the topics of the prescribed syllabus of the State for Classes VI to VIII with their difficulty level as well as linkages up to the Higher Secondary Stage. Now Teachers Recruitment Board releases the detailed syllabus for Paper II (Classes 6 – 8).

Detailed Syllabus for Paper II (Classes 6 – 8)

Sl. No.	Content	Syllabus (Page No.)	MCQs	Marks	Medium
i.	Child Development and Pedagogy relevant to the age group of 11-14 years (Compulsory)	1-3	30	30	*Tamil/English
ii.	Language-I Tamil/ Telugu/ Malayalam/ Kannada/ Urdu (Compulsory) (For Telugu, Malayalam, Kannada and Urdu the same pattern will be followed as Tamil)	4-5	30	30	
iii.	Language II - English (Compulsory)	6-27	30	30	
iv.	a) For Mathematics and Science Teacher: Mathematics and Science or b) For Social Science Teacher : Social Science or c) For Any other Subject Teacher either iv (a) or iv (b)	28-48 49-74	 60	 60	 *Tamil/English
	Total		150	150	

Chairman

TAMILNADU TEACHER ELIGIBILITY TEST (TNTET)

Syllabus for Paper II (Classes 6-8)

I. Child Development and Pedagogy (Classes 1-5) Syllabus - (Relevant to Age Group 6-11)

UNIT – I GROWTH AND DEVELOPMENT OF THE CHILD

Meaning, concepts and principles of growth and development - Difference between growth and development-Impact of nature and nurture on child development - Stages: infancy, early childhood and adolescence and their dimensions of development: physical, cognitive, moral, emotional and social.

UNIT - II THEORIES OF CHILD DEVELOPMENT

Psycho-social stages (Erikson), Cognitive development (Piaget), Moral development (Kohlberg), Socio-cultural approach to cognitive development (Vygotsky), Ecological systems theory (Bronfenbrenner).

UNIT - III ATTENTION, PERCEPTION AND MEMORY

Attention: Meaning, nature and determinants of attention – Sensation and perception – Laws of perception – errors in perception: Illusion and hallucination – Memory: Meaning, types of memory and strategies for improving memory – Forgetting.

UNIT - IV MOTIVATION AND LEARNING

Motivation: Meaning and definitions-Maslow's theory of motivation and its educational implications – Level of aspiration – Learning: Theories of learning and its educational implications – Cognitive Theory: Jean Piaget - Behaviourist Theory: Pavlov's Classical Conditioning, Skinner's Operant Conditioning and Thorndike connectionism – Constructivist theory: John Dewey – Humanistic Theory: Carl Rogers.

UNIT - V INTELLIGENCE AND CREATIVITY

Intelligence: Meaning definitions and types – Theories of Intelligence: Two factor, Thurston's Group factor, Thorndike's Multi-factor, Guilford's Structure of Intellect, and Gardener's Multiple Intelligence – Intelligence Quotient (IQ) – Assessment of Intelligence - Creativity: Concept, factors and process – Strategies for fostering creativity.

UNIT - VI PERSONALITY

Personality: Meaning, definitions, and determinants of personality – Theories of Personality: Type, trait, and psychoanalytic – Assessment of personality: Projective and non-projective techniques – Adjustment mechanisms.

UNIT - VII SOCIALIZING AGENCIES OF CHILD DEVELOPMENT

Agencies of Socialization: Family, School, Peer and Community – Role of play to children's physical, social, emotional and cognitive development – Impact of media on childhood experiences and development.

UNIT - VIII PEDAGOGICAL CONCERNS – PART I

Teaching and its relationship with learning and learner – Children With Special Needs (CWSN) - Inclusive Education – Understanding of pedagogic methods: Enquiry based learning, Project based learning, Activity based learning, Co-operative and collaborative learning, Individual and Group learning – Paradigms of organizing Learning: Teacher centric, Subject centric and Learner centric – Theory of instruction: Bruner – Phases of Teaching: Pre active, Interactive and Post active - 21st Century teaching skills.

UNIT – IX PEDAGOGICAL CONCERNS – PART II

Learning resources – Self, Home, School, Community, Technology – Class rooms Management : Role of student, teacher and leadership style - Managing behavior problems: Guidance & Counselling - Punishment and its legal implications – Distinction between Assessment for Learning & Assessment of Learning - The Concept of ICT Tools: Computer, Internet, Text Documents, Spread sheets, Presentations.

UNIT – X PEDAGOGICAL CONCERNS – PART III

Integrating with ICT and teaching – Integrating ICT in Assessment - Preparation of multimedia lessons in subjects and planning – Online learning courses for teachers professional development – Open education resources: ICT platforms and MOOC - Continuous Comprehensive Evaluation (CCE): Perspective & Practice – Understanding teaching & learning in the context of National Curriculum Framework (NCF, 2005) & Right to Education Act, 2009.

II. Language - I Tamil (Classes 6 - 8) - (Compulsory)
(Telugu / Malayalam / Kannada / Urdu - Same pattern)

இலக்கணம்

ஆறாம் வகுப்பு	ஏழாம் வகுப்பு	எட்டாம் வகுப்பு
<p>1. எழுத்து - வகை, தொகை, மாத்திரை</p> <p>உயிர் எழுத்துகள்</p> <p>உயிர்க் குறில்,</p> <p>உயிர் நெடில்</p> <p>மெய்யெழுத்துகள்</p> <p>•வல்லினம்</p> <p>•மெல்லினம்</p> <p>•இடையினம்</p> <p>உயிர்மெய்</p> <p>•உயிர்மெய்க் குறில்,</p> <p>•உயிர் மெய் நெடில்</p> <p>2. மொழி முதல், இடை, கடையெழுத்துகள்</p> <p>3. மயங்கொலி எழுத்துகள்</p> <p>4. இன எழுத்துகள்</p> <p>5. சுட்டெழுத்துகள் ,</p> <p>வினா எழுத்துகள்</p> <p>6. சார்பெழுத்து வகைகள் (உயிர்மெய், ஆய்தம் மட்டும் விரிவாக)</p> <p>7. இலக்கணவகைச் சொற்கள் (பெயர், வினை, இடை, உரி)</p> <p>8. பெயர்ச்சொல்லின் வகைகள் (பொருள், இடம், காலம், சினை, குணம், தொழில்)</p> <p>•இடுகுறிப்பெயர்,</p> <p>•காரணப்பெயர்</p> <p>9. அணி - தன்மை அணி</p> <p>•இயல்பு நவீற்சியணி</p> <p>•உயர்வு நவீற்சியணி</p>	<p>1. சார்பெழுத்து - குற்றியலுகரம்</p> <p>2. பகுபதம், பகாப்பதம்</p> <p>•ஒரெழுத்து ஒரு மொழி</p> <p>3. மூவகைப்போலி</p> <p>4. தொழிற்பெயர் - வினையாலணையும் பெயர்</p> <p>5. தொழிற்பெயர் ஆக்க விருதிகள்</p> <p>6. சொல் - இலக்கிய வகை (இயல், திரி, திசை, வட சொற்கள்)</p> <p>7. வினைமுற்று -</p> <p>•குறிப்பு, தெரிநிலை</p> <p>•ஏவல் - வியங்கோள்</p> <p>8. எச்சம்</p> <p>•பெயரெச்சம்</p> <p>•வினையெச்சம்</p> <p>9. அணி</p> <p>•உருவக அணி</p> <p>•ஏகதேச உருவக அணி</p> <p>•தற்குறிப்பேற்ற அணி</p>	<p>1. சார்பெழுத்துகள் குற்றியலிகரம் முதல் ஆய்தக்குறுக்கம் வரை விரிவாக</p> <p>பெட்டிச் செய்தி (தொல்காப்பியர் கூறிய சார்பெழுத்து)</p> <p>2. ஆகுபெயர் - அறிமுகம் (பொருள், இடம், காலம், சினை, குணம், தொழில்)</p> <p>3. வழக்கு - இயல்பு, தகுதி</p> <p>4. வேற்றுமை - விளக்கம், வேற்றுமை உருபுகள், வேற்றுமை வகைகள்</p> <p>வேற்றுமைத்தொகை - (தொகைநிலை, தொகாநிலை - உடன்தொக்கதொகை அறிமுகம்)</p> <p>5. வல்லினம் மிகும் இடம், வல்லினம் மிகா இடம் - அறிமுகம்</p> <p>6. புணர்ச்சி - அறிமுகம் இயல்பு, விகாரம்</p> <p>7. யாப்பு- உறுப்புகள் அறிமுகம் (எழுத்து, அசை, சீர், அடி ஆகிய நான்கு மட்டும் விரிவாக)</p> <p>8. பா வகைகள் - அறிமுகம்</p> <p>9. அணி</p> <p>•பிறிதுமொழிதல் அணி</p> <p>•இரட்டுற மொழிதல் அணி</p>

மொழித்திறன் பயிற்சிகள்

<p style="text-align: center;">பேசுதல் திறன்</p> <p>உரிய ஒலிப்புடன், உரிய உணர்ச்சி வெளிப்பட, பொருளுணர்வுக்கு ஏற்றாற்போல் குரல், ஏற்றஇறக்கத்துடன் தங்கு தடையின்றி, இயல்பாக, தமக்கான நடையில் பேசுதல்</p>	<p style="text-align: center;">எழுதுதல் திறன்</p> <p>பொதுத் தமிழில், எழுத்து வழக்குச் சொற்களைப் பயன்படுத்தி, பிழைகளின்றி (சந்திப் பிழை, மயங்கொலிப் பிழை, குறில் - நெடில் பிழை, தொடர்பு பிழை) உரிய நிறுத்தக் குறிகளுடன் தெளிவாகப் பொருள் விளங்கத் தமக்கான நடையில் எழுதுதல்</p>
<p>குறிப்பிட்ட தலைப்பில் பேசுதல்</p> <ul style="list-style-type: none"> • உரையாடுதல் • உரையாற்றுதல் • கலந்துரையாடுதல் • கருத்தாடல் • அறிக்கை வாசித்தல் • தொகுத்துரைத்தல் • செய்யுள், உரை நயங்களை எடுத்துக் கூறும் திறன். • வாய்மொழியில் தெளிவாக விண்ணப்பித்தல். 	<p>குறிப்பிட்ட தலைப்பில் உரை எழுதுதல்</p> <ul style="list-style-type: none"> • உரையாடல் • உரையாற்றல் • கலந்துரையாடல் • கருத்தாடல் • அறிக்கை • கட்டுரை • செய்யுள், உரைநயங்களை எழுதும் திறன். • எழுத்துமொழியில் தெளிவாக விண்ணப்பித்தல் (விண்ணப்பங்கள் நிரப்புதல் / எழுதுதல்)
நிகழ்வுகளை ஒருங்கிணைத்தல்.	நிகழ்ச்சி நிரல் தயாரித்தல்.
அறிக்கை வாசித்தல்.	அறிக்கை எழுதுதல்.
நிகழ்ச்சி வருணனை கூறுதல்.	நிகழ்வறிக்கை தயாரித்தல்.
நேர்காணல் நடத்துதல்.	முழுக்கத் தொடர்கள் எழுதுதல்.
செய்திகள், கருத்துகள், நூல்கள் ஆகியவற்றைத் திறனாய்வு செய்து பேசுதல்.	செய்திகள், கருத்துகள், நூல்கள் ஆகியவற்றைத் திறனாய்வு செய்து எழுதுதல்.

III. Language - II English (Classes 6 - 8) - (Compulsory)

Syllabus - English - Class - 6

Learners at the intermediate language level begin to understand and communicate academic content with more sophisticated academic vocabulary and varied grammatical forms [eg. verb tenses]. They continue to develop the four skills through meaningful tasks or activities. Learners will be able to understand spoken English in a range of familiar contexts, namely, the main points and details of messages or announcements that are not very long and follow a conversation, commentary, lecture, speech or AV presentations. They speak with appropriate pronunciation, intonation and stress. They maintain interaction and communicate what they want to express in everyday contexts fairly effectively during pair /group work and interacting with their teacher. They speak with a degree of fluency on matters of personal interest, describe experiences and events, and justify their opinions by using more complex sentences, with some elaboration of details.

They read most words by sight, only decoding very long and unknown words. They are familiar with the appearance and organization of printed texts and read informational texts, short stories and poems for understanding and pleasure. They summarise, recount, predict, link cause and effect and make inferences based on understanding.

They read literary texts and poems in class. They can appreciate concepts of plot, and character through guided tasks. They understand and appreciate the use of poetic devices such as imagery, rhyme and rhythm. They read longer works or stories for pleasure

They consult a dictionary independently. They can refer to books and articles.

They compose a variety of short pieces like postcards and messages. They recognise different kinds of paragraph structure such as narration, description and process and write three paragraph essays by collecting ideas, drafting, revising etc. and apply the concept of paragraph structure, on simple topics using familiar sentence patterns. They punctuate sentences using comma, full stops, question marks, exclamation marks and apostrophes.

Area/ Skills	Objective	Learning Outcome	Classroom transactions	Evaluation
Listening	Understand spoken English in a range of familiar contexts.	Can <ul style="list-style-type: none">Understand main points of messages, announcements, commentaries, short	Listen to <ul style="list-style-type: none">Announcements over radio, TV, telephone, over audio visual systems or	Listen and mark T/F; MCQ; label a diagram or complete

		<p>conversations, mini talks /lecture/speech or AV presentations on topics of academic / general nature</p> <ul style="list-style-type: none"> • Locate specific details for various purposes 	<p>those made by the teacher</p> <ul style="list-style-type: none"> • Conversation or discussions in pairs/between small groups commentary over audio visual system • and comment, mark, label, answer, discuss or respond appropriately as required 	<p>sentences, tables or mind maps. Use diagrams, mind maps to recount or summarize.</p>
Speaking	<p>Speak with appropriate pronunciation, intonation and stress in a range of familiar contexts.</p>	<p>Can participate in teacher led or peer group conversations in class, using a range of structures, about</p> <ul style="list-style-type: none"> • matters of personal interest • feelings/experiences and events • their opinions or ideas on topics of general interest <p>Participate effectively in pair/group work using,</p> <ul style="list-style-type: none"> • appropriate pronunciation • intonation • word and sentence stress. 	<p>Group discussions, pair and share talk</p> <p>Short talks to whole class</p>	<p>Express opinions and ideas in continuous speech for half a minute. Take turns to speak on a subject or event sentences/or suggest an alternate end to the story.</p>
Reading ReadingComprehension	<p>Read words by sight and decoding only long and unknown words. Read texts for understanding</p>	<p>Learners read stories and texts with appropriate speed and expression</p> <p>Can read stories or texts and</p> <ul style="list-style-type: none"> • Understand the flow of plot, development of 	<p>Read various kinds of age appropriate texts</p> <p>Sequence events or information to</p>	<p>Read or recite aloud in class</p>

	<p>information, short stories for pleasure and poems for enjoyment and appreciation.</p>	<p>character and analysis of values/themes.</p> <ul style="list-style-type: none"> • Predict events while reading • Identify with characters and find joy in reading • Appreciate the use of dialogues and settings • Link story to real life and find relevance <p>Can read information texts and</p> <ul style="list-style-type: none"> • Understand general meaning • Locate details, • link cause and effect • Extract information for own purpose • Make inferences • Understand basic paragraph organization <p>Can understand the organization of elements in a dictionary, as words, phrase, sound, meaning, spelling and parts of speech.</p>	<p>show chronology classify link cause and effect compare or contrast</p> <p>Read, discuss and write about plot, character and story in brief.</p> <p>Read information texts, discuss in groups and complete various activities like MCQ; mind maps; tables to transcode information etc.</p>	<p>Activity types used in class: MCQ, true/false, table filling, labeling, matching etc.</p>
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Dictionary skills	Refer to a dictionary independently.			
Writing	Write a variety of short pieces: messages, post cards and short essays of not more than three small paragraphs	<p>Can</p> <ul style="list-style-type: none"> • write short messages and design relevant post cards based on familiar themes. • Plan, gather ideas with coherent information, draft, finally write and revise small coherent paragraphs using appropriate linking devices. • recognize different kinds of paragraph structures such as narration, description, and process • use appropriate punctuation devices, as, full stops, comma, exclamation marks, and apostrophes. 	Participate in process writing activities of various kinds to practice and improve writing skills	
Grammar	<p>Use a range of grammatical structures accurately to communicate meaning</p> <p>Use the appropriate structure and form for</p>	<p>Can</p> <ul style="list-style-type: none"> • connect grammar forms with meaning and function • use grammatical structures accurately appropriately in speech and writing • recognize and indicate 	Editing tasks of various types: correction, deletion, omission, transformation etc. based on grammar items highlighted in class or text	Integrated grammar tasks

	<p>communicative purposes. Use the following <u>Sentence types</u>: imperative, statements, questions, exclamations, simple compound sentences using and, or, but, yet; simple complex sentences e.g. using who, which, that, because, <u>Verb forms</u>: present and past (simple and continuous); Used to -for description, narration Future time: will & going to; common Modals: can, could, would <i>Use a range of frequently occurring nouns in sentences of their own</i></p> <p><u>Articles</u>; basic <u>determiners</u> (e.g. any, some, a lot of); basic <u>intensifiers</u>: very, really Comparative and Superlative <u>adjectives</u> Simple <u>adverbs</u> of place, manner and time Prepositional phrases</p>	accurate or inaccurate use		
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	(place, time and movement) <i>Items listed below will not be tested in formal terms but only in use.</i>			
Vocabulary	<p>Gather ideas/knowledge of passive vocabulary while they use active vocabulary in every day contexts, classroom situations.</p> <p>Use a range of commonly used words aptly in speech or writing</p> <p>Use dictionary to enhance the knowledge of word meaning and pronunciation</p> <p>Domains and themes: School; home environment; Personal: relationships, feelings, opinions Food: eating and cooking; likes and dislikes</p>	<p>Can</p> <ul style="list-style-type: none"> • Use words presented through texts in various classroom activities including word maze/puzzles/crosswords etc. • Use words through understating and knowledge of forms and families, prefix/suffix, simple idioms, figures of speech like simile and metaphor, collocation as well as meaningful phrases • Consult dictionary to learn and clarify knowledge and use of words 	<p>tasks and word games such as word maze/puzzles/crosswords etc.</p> <p>pair/group activities that reinforce the use of chosen words in appropriate contexts</p> <p>language games to review knowledge of word meaning/word sound and word spelling</p>	Use of words in context

	Sports and entertainment Environment: local; nature: landscape, animals, plants and biodiversity; protection, conservation, Culture: local, national, history, festivals Technology: communication, gadgets Travel			
Literary Appreciation	Reads magazines and books from the school library or outside	Can <ul style="list-style-type: none"> • talk about books with enjoyment and interest • base assembly programs, skits, plays etc. based on books read 	Take part in book clubs in school Talk about books in class, assemblies etc.	
Supplementary Reader	Read supplementary reader silently and with an intention to enjoy the theme	Can <ul style="list-style-type: none"> • speak or write about events, plots and characters in stories read. • convert stories into comic strips, plays etc. • review stories and books suggested for extensive reading 	Group discussions, class discussions Reviews, wall magazine, articles	Maintain a notebook with a variety of responses to the stories in the reader

Syllabus - English - Class - 7

Learners will be able to understand clear, spoken English in everyday conversation, straightforward factual information in talks on common everyday topics, identifying the gist, main points and some details

They understand clearly organized presentations and information content of recorded material about familiar subjects.

They can speak in longer turns with pauses to reformulate or self-correct. They speak more accurately and fluently.

They can give or seek personal views and opinions in informal discussion. They can participate in pair or group work in class. They can link simple sentences together to communicate short messages or talk about people and events.

They understand the organization of texts and read silently for understanding, using a range of strategies.

They summarise, predict, link cause and effect, make inferences, and distinguish between fact and opinion based on their understanding. They recognise different kinds of paragraph structure such as narration, description, discursive and process. They consult a dictionary and other reference books independently. They develop academic study and reference skills.

They read literary texts and poems in class can understand concepts like plots or characters.

They understand and appreciate the use of poetic devices such as imagery, rhyme and rhythm. They read longer texts or stories for pleasure.

They compose and write a variety of short pieces like diary entries, messages and notices and by collecting ideas, drafting, revising etc. using appropriate paragraph structure.

They write three or four paragraph essays using more complex sentence patterns on familiar topics and apply the concepts of paragraph structure.

They punctuate sentences using comma, full stops, question marks, exclamation marks and apostrophes. They use a variety of grammatical structures, sentence patterns and words to express themselves.

Area/ Skills	Objective	Learning Outcome	Materials and classroom transactions	Evaluation
Listening	Learners understand spoken English in a range of familiar contexts with fair degree of	Can <ul style="list-style-type: none"> understand clear spoken English of everyday conversation. 		

	comprehension. .	<ul style="list-style-type: none"> • Comprehend straightforward factual information in talks on common everyday topics • identify the gist, main points and some details of messages over radio,TV,telephone etc. • understand clearly organised presentations and information content of recorded materials about familiar subjects • enjoy mini talks /lecture/speech or AV presentations on topics of academic / general nature 		
Speaking	Learners speak in longer turns with pauses to reformulate or self-correct. They participate in informal discussions fluently and accurately.	<p>Can participate in teacher led or peer group informal discussions in class on ,</p> <ul style="list-style-type: none"> • matters of current/general interest • feelings/experiences and events • several issues using complex structures (give & seek personal views and opinions) 		

	Participate effectively in pair/group work using appropriate pronunciation, intonation	<ul style="list-style-type: none"> Use appropriate word and sentence stress to communicate effectively. 		
Reading	<p>Learners read texts for understanding information using a range of strategies</p> <p>Read short stories for pleasure and poems for enjoyment and appreciation.</p>	<p>Can interact with the text to -</p> <ul style="list-style-type: none"> understand the organisation of texts predict content recount details summarize text make inferences link cause and effect distinguish between fact and opinion <p>Can understand and appreciate</p> <ul style="list-style-type: none"> the theme/emotions in poems the poetic devices used e.g. imagery, rhyme & rhythm <p>Can compose /create short poems on the same theme/sentiment</p> <p>Can understand</p> <ul style="list-style-type: none"> the flow of plot development 	<p>Use of different kinds of activities to engage with a variety of texts. Some examples:</p> <ul style="list-style-type: none"> Rearranging sentences; paragraphs Jigsaw reading KWL Tabulation of content; cause and effect; comparisons Mind maps Framing questions <p>Age appropriate poems and stories for responding and retelling or reciting. Activities to engage with the poems and stories to understand theme, attitude, characters, plot etc.</p>	<p>Predict story end midway while reading and /or suggest an alternate end to the story</p> <p>Use a table or mind map to reconstruct content</p> <p>Identifies and gives a personal response to the emotion and language in the poem</p>

		<p>of character and analyse value/theme in stories</p> <ul style="list-style-type: none"> • predict events • appreciate the use of dialogues and settings in the story • derive pleasure from understanding / associating similarity of the story to real life. <p>Can</p> <ul style="list-style-type: none"> • understand the organisation of elements in a dictionary - words, phrase, sound, meaning, spelling and parts of speech. • refer to a dictionary independently. 	<p>Uses head words to locate items</p> <p>Looks up information about words</p>	
Writing	<p>Compose and write a variety of short pieces as diary entries, messages and notices.</p> <p>Attempt short essays of not more than three to four paragraphs.</p>	<p>Can</p> <ul style="list-style-type: none"> • recognize different kinds of paragraph structures such as narration, description, discursive and process. • plan, collect ideas, draft and finally revise short essays of 3-4 paragraphs using appropriate linking devices. 		

		<ul style="list-style-type: none"> • use more complex sentence patterns and apply the concept of paragraph structure to their writing • use appropriate punctuation devices, as, full stops, commas, question marks exclamation marks, and apostrophes. 		
Grammar	<p>Learners use simple to complex grammatical structures</p> <p>Use a variety of frequently occurring nouns accurately and appropriately</p> <p>In addition to consolidating the items learnt earlier, the following will be introduced and recycled.</p> <ul style="list-style-type: none"> • Advanced determiners • linking words • adverbs (place and types) • tense forms • passivation • adjectives (comparative and 	<p>Can</p> <ul style="list-style-type: none"> • use grammatical structures accurately appropriately in speech and writing • connect grammar forms with meaning and function • recognize and indicate accurate or inaccurate use 	Editing tasks of various types: correction, deletion, omission, transformation etc. based on grammar items highlighted in class or text	Integrated grammar tasks

	<p>superlative forms)</p> <ul style="list-style-type: none"> • reported speech <p><i>grammar items above are to be taught for use and will not be tested in formal terms</i></p>			
Vocabulary	<p>Gather ideas/knowledge of passive vocabulary while using active vocabulary in every day contexts and classroom situations.</p> <p>Use a range of commonly used words aptly in speech or writing</p> <p>Domains and themes: School; home environment; Personal: relationships, feelings, opinions Food: eating and cooking; likes and dislikes Sports and entertainment Environment: local; nature: landscape, animals, plants and biodiversity; protection,</p>	<p>Can</p> <ul style="list-style-type: none"> • use vocabulary and words presented through texts in various classroom activities • Participate in pair/group activities that reinforce the use of chosen words in appropriate contexts. • Use dictionary to enhance the knowledge of word meaning and pronunciation • Participate in language games to review knowledge of word meaning/word sound and word spelling. 	<p>Word forms and families, prefix/suffix, simple idioms, figures of speech like simile and metaphor, collocation as well as meaningful phrases are practised and imbibed through tasks and word games such as word maze/puzzles/crosswords etc.</p>	

	conservation, Culture: local, national, history, festivals Technology: communication, gadgets Travel			
Reading for pleasure	Reads magazines and books from the school library or outside	Can <ul style="list-style-type: none"> • talk about books with enjoyment and interest • base assembly programs, skits, plays etc. based on books read 	Take part in book clubs in school Talk about books in class, assemblies etc.	
Supplementary Reader	Read supplementary reader silently	Can <ul style="list-style-type: none"> • review stories and books suggested for extensive reading • speak or write about events, plots and characters in stories read. • convert stories into comic strips, plays etc. 	Group discussions, class discussions Reviews, wall magazine articles,	Maintain a notebook with a variety of responses to the stories in the reader

Syllabus - English - Class - 8

Learners at this level consolidate their language skills to communicate confidently with fluency and accuracy, in real-life situations. Learners will be able to understand spoken language encountered in different contexts, follow clear speech in everyday conversation. They understand factual information about common topics, identifying the gist, main points and most details. They understand clearly organized, longer presentations and information content of recorded material about familiar and some unfamiliar subjects. They join in informal and formal interactions with spontaneity, expressing themselves fluently. They speak extensively and exploit a wide range of simple language to express much of what they want to communicate and participate effectively in pair or group work. They start, maintain, or end a short conversation on familiar themes, with some pauses to reformulate or self-correct. They link and express a connected, linear sequence of points using common connectors to link simple sentences in order to tell a story or describe an event or a process.

Learners at this stage engage with the text to extract meaning. They understand factual / informational, in textbooks on subjects related to their interests/study. They recognize significant points in newspaper articles on familiar subjects and can understand the description of events, feelings and wishes and distinguish fact from opinion. They apply higher order thinking skills like analyzing, inferring, and linking ideas through reading texts of various kinds and understand how texts are structured.

They read literary texts with understanding through the completion of interactive, guided tasks and appreciate the significance of dialogue and setting in stories. They talk or write briefly about characters, enjoy poems and express their personal response to the theme, emotion and appreciate the use of rhyme, rhythm and other poetic devices. They develop study and reference skills like collecting and organizing information by summarizing, recounting, taking/making simple notes while listening or reading.

They write short and longer pieces for a wide range of purposes. They take messages of enquiry or information, write notes or messages or formal letters giving or asking for information and state reasons for action or need. They write personal letters describing experiences, feelings and events in detail. They describe details of anecdotes or events, dreams, hopes and ambitions and write creatively. They describe the plot of a book or film and describe their reactions to it. They use a variety of grammatical structures, sentence patterns and words to express themselves in speech or writing.

Area/ Skills	Objective	Learning Outcome	Materials and classroom transactions	Evaluation
Listening Listening comprehension	<p>Understand spoken language encountered in different real life contexts.</p> <p>Understand factual information about common topics in a simple talk or text read aloud.</p> <p>Understand clearly organized, longer presentations and information content of recorded material about familiar and some unfamiliar subjects.</p>	<p>Can understand</p> <ul style="list-style-type: none"> • Conversation within class groups • Announcements and messages on audio-visual systems or made by teacher. • Short interviews in audio-visual format. • The English news on familiar TV channels <p>Can identify and understand</p> <ul style="list-style-type: none"> • the main idea or gist • the main points • details that support main points <p>Can identify and understand</p> <ul style="list-style-type: none"> • general intent and purpose • the key points important details 	<p>Listen and respond to / take notes /summarize</p> <p>Group discussions</p> <p>Audio announcements</p> <p>Interviews</p> <p>TV/radio news</p> <p>Listen and respond in various ways to short speeches by students, teachers, Audio materials or presentations</p>	<p>Can respond to</p> <p>Class discussion</p> <p>Messages</p> <p>Can summarize and take notes</p>

Reading Reading Comprehension	<p>Engage with the text on familiar subjects to extract meaning.</p> <p>Apply higher order thinking skills like analyzing, inferring, and linking ideas and understand how texts are structured.</p> <p>Develop study and reference skills</p>	<p>Can</p> <ul style="list-style-type: none"> • Understand information in texts on subjects of interest and study • Understand and extract significant points in newspaper articles • Understand description of events, feelings and wishes • Distinguish fact from opinion. <p>Can</p> <ul style="list-style-type: none"> • Perceive and understand the grouping or classification of information or ideas • understand the organization of ideas or information on the basis of classification, chronology, contrast and comparison and cause and effect. <p>Can</p> <ul style="list-style-type: none"> • collect and organize information • summarize and recount • make simple notes while reading. 	<p>Comprehension tasks focusing on extracting significant details, text organization,</p> <p>Reading texts to understand paragraph organization principles like classifying, chronological arrangements, comparing, contrasting etc.</p> <p>Some examples of activities:</p> <ul style="list-style-type: none"> • Rearranging sentences; paragraphs • Jigsaw reading • KWL • Tabulation of content; cause and effect; comparisons • Mind maps <p>Framing questions</p> <p>Read reference books like encyclopedias, material on the Internet to collect information for a project</p>	<p>Reads and demonstrates understanding of gist, details, and organization through various tasks</p>
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		<p>state reasons for action or need</p> <ul style="list-style-type: none"> • Write personal letters describing experiences, feelings and events in detail. • Write descriptive pieces with details of anecdotes or events, dreams, hopes and ambitions. • Write reviews describing their reactions to the plot and characters of a book or film. 	<p>for drafting, editing and writing</p> <p>Creation of a class board magazine or other publishing outlets for giving genuine purpose for the writing</p>	
Grammar	<p>Use a variety of grammatical structures and sentence patterns</p> <p><i>Uses a range of nouns with ease</i></p> <p>In addition to consolidating the items learnt earlier, the following will be introduced and recycled through the upper primary stage.</p> <ul style="list-style-type: none"> • determiners • linking words; • sentence modifiers • adverbs (place and types) • perfect tense forms • clauses • modal auxiliaries • word order in sentence types 	<p>Can</p> <ul style="list-style-type: none"> • use the continuous and perfect tenses appropriately in basic sentence patterns and in the passive and reported speech. • use structure words like pronouns, adverbs and linkers appropriately in various kinds of sentences and in writing to create coherence • use most sentence patterns accurately 	<p>Integrated exercise to practice acquired grammar</p> <p>Using a range of grammar structures accurately and appropriately while speaking or writing</p>	<p>Integrated grammar tasks like editing, transcoding etc.</p>

Vocabulary	<p>Gather ideas/knowledge of passive vocabulary while using active vocabulary in every day contexts and classroom situations.</p> <p>Use a range of commonly used words aptly in speech or writing</p> <p>Domains and themes: School; home environment; Personal: relationships, feelings, opinions Food: eating and cooking; likes and dislikes Sports and entertainment Environment: local; nature: landscape, animals, plants and biodiversity; protection, conservation, Culture: local, national, history, festivals Technology: communication, gadgets Travel</p>	<p>Can</p> <ul style="list-style-type: none"> • use words relating to familiar topics or subjects • make out meaning in context through knowledge of prefixes, suffixes, roots and word forms • spell most common words accurately 	Vocabulary extension activities based on word roots, collocation, prefixes and suffixes	Integrated or context based tasks for use of words
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Reading for pleasure	Reads magazines and books from the school library or outside	Can <ul style="list-style-type: none"> • talk about books with enjoyment and interest • base assembly programs, skits, plays etc. based on books read 	Take part in book clubs in school Talk about books in class, assemblies etc.	
Supplementary Reader	Read supplementary reader silently	Can <ul style="list-style-type: none"> • review stories and books suggested for extensive reading • speak or write about events, plots and characters in stories read. Can convert stories into comic strips, plays etc.	Group discussions, class discussions Reviews, wall magazine articles,	Maintain a notebook with a variety of responses to the stories in the reader

IV. a) Mathematics and Science (Classes 6 - 8)

UPPER PRIMARY MATHS SYLLABUS

TOPIC	CLASS VI	CLASS VII	CLASS VIII
NUMBER SYSTEM – I	<p>Numbers and operations.</p> <ul style="list-style-type: none"> Understand the concepts of numbers using place value (up to 8 digits), number names and numerals Understand Indian and international representation of large numbers Understand estimate large numbers (5 digits and beyond) Identify smaller/larger numbers, compare using $<$, $>$, $=$ symbols, arrange in ascending/ descending order. Perform the four fundamental operations (answers not to exceed six digits) and applies the right operation in word problems. Perform operations in the right order using BIDMAS rule <p>Whole numbers</p> <ul style="list-style-type: none"> Understand the extension of natural numbers to whole numbers To represent whole numbers on number line. Understand the four properties of numbers with emphasis on terminologies (closure, commutative, associative, distributive properties over addition and multiplication identity in whole numbers over addition and multiplication). 	<p>Arithmetic of Integers</p> <ul style="list-style-type: none"> Understand addition and subtraction of integers using number line. Able to add and subtract integers using real life situation. Able to multiply and divide integers by whole numbers. Understand that division by zero is undefined Able to multiply and divide integers by integers. Solve word problems using the four fundamental operations on integers and applies appropriate operations in word problems. <p>Properties of Integers</p> <ul style="list-style-type: none"> Understand closure, commutative, associative, distributive properties (multiplication over addition), additive and multiplicative identities, applied to integers. Understand that all properties do not hold for all operations, and illustrate difference from whole numbers (example: closure property for subtraction) <p>Decimal Numbers</p> <ul style="list-style-type: none"> Recall the notion of decimal point. Understand place value in decimals. Learn the concept of decimals as fractions with denominators of tens and its multiples. Represent decimal Numbers on Number line. 	<p>Rational Numbers</p> <p>Rational Numbers</p> <ul style="list-style-type: none"> Understand the necessity for extending fractions to rational numbers. Represent rational number on number line. Understand that between any two rational numbers there lies another rational number <p>Arithmetic of Rational Numbers</p> <ul style="list-style-type: none"> Learn to perform all four operations on rational numbers. Able to solve word problems on all operations. . <p>Properties of Rational numbers</p> <ul style="list-style-type: none"> Understand the four properties of rational numbers, additive identity and multiplicative identity. <p>Simplify Expression with three brackets</p> <ul style="list-style-type: none"> Able to simplify expressions with utmost three brackets. <p>Powers</p> <ul style="list-style-type: none"> Express numbers in exponential form with integers as exponents. Understand the laws of exponents with integral powers. Able to calculate square and square roots of integers. - Square roots using factor method and division method for numbers containing <ul style="list-style-type: none"> more than 4 digits not more than 2 decimal places (in case of imperfect squares) To recognize cubes and cube roots (only factor method for numbers containing at most 3 digits). Learn to estimate square roots and cube roots (Learning the process of moving nearer to the

	<p>Test of divisibility</p> <ul style="list-style-type: none"> Recall the concepts of factors and multiples with the aid of multiplication tables up to 10. Understand the rules of divisibility test and apply it to numbers 2, 3, 4, 5, 6, 8, 9, 10 and 11. <p>Prime numbers</p> <ul style="list-style-type: none"> Recall the classification of even and odd numbers. Understand the concept of Prime and composite numbers <p>Factorization</p> <ul style="list-style-type: none"> Factorize 2-digit numbers. Learn prime factorization of a given number 	<p>Arithmetic of Decimals</p> <ul style="list-style-type: none"> Add and subtract decimal numbers. Able to apply the appropriate operation in word problems- addition and subtraction of decimals. Multiply and divide decimal numbers. Able to solve word problems based on decimal numbers (all operations). 	<p>required number).</p> <ul style="list-style-type: none"> Able to calculate in easy ways and estimate the answer using all four fundamental operations Able to approximate numbers up to three digits.
NUMBER SYSTEM-II	<p>LCM &HCF</p> <ul style="list-style-type: none"> Understand the concepts of HCF and LCM Understand the concept of co-prime numbers. Calculate HCF and LCM by prime factorization method and division method. Deduce the relationship between LCM and HCF and the product of two numbers. Able to solve word problems involving HCF and LCM <p>Introduction of Integers</p> <ul style="list-style-type: none"> Understand the necessity for extension of whole numbers to negative numbers. Understand that the collection of positive integers, negative integers and zero forms integers. Represent integers on the number line. Compare integers and arrange them in ascending / descending order. 		

	Arithmetic of Fractions <ul style="list-style-type: none"> • Revise notion of fractions and fraction addition/subtraction • Understand mixed and improper fractions and convert from one to the other • Able to multiply and divide fractions by other fractions • To find the reciprocal of a fraction. • Able to solve word problems that involve fractions (with all four operations). 		
II.Measurement s	Metric Measures <ul style="list-style-type: none"> • Recall the conversion of units of length, weight and volume restricting to the units mentioned below. (km, m, cm, mm and similarly units that are in common use in weight and volume). • Able to understand the use of decimal point to convert smaller to larger units • Able to add and subtract quantities with different unit with appropriate conversion Measures of Time <ul style="list-style-type: none"> • Able to read time on a clock (Eg.1:15 min. as quarter past one) • Use both 12-hour and 24-hour formats to read time and convert from one to another. • Able to find the duration between 2 time instances. • Able to convert from one unit of time to the other – seconds to minutes and hours and vice – versa, days to weeks, years, leap year and vice – versa. Area and Perimeter	Area and Perimeter <ul style="list-style-type: none"> • Revise the concepts of Perimeter and Area of Square, Rectangle, Right triangle and combined shapes. • Determine the area of Parallelogram, Rhombus, and Trapezium. Circle <ul style="list-style-type: none"> • Determine the area and circumference of Circles and its parts. Area of Pathway <ul style="list-style-type: none"> • Calculate the area of Pathway inside and outside the given rectangles and circles applying the concept of area of rectangle and circle respectively. 	Circles <ul style="list-style-type: none"> • To know the parts of a circle and identify and compare the relationship between radius and diameter. • Introduce the concept of segment and chord. • Find the length of arc, area of sector. Area and Perimeter of combined Plane Figures. <ul style="list-style-type: none"> • Recall the concepts of area & perimeter for various quadrilaterals • Calculate the area of simple combined figures (Not more than three figures placed in juxtaposition) 3-Dimensional Shapes <ul style="list-style-type: none"> • Understand representation of 3-dimensional shapes in 2D • Understand representation of 3D objects with Cubes.

	<ul style="list-style-type: none"> Understand the concept of area and perimeter of plane figures. Learn to find the area and perimeter of square, rectangle, right triangle and combined shapes. <p>Conversion of Square units</p> <ul style="list-style-type: none"> Convert Square units (Eg. cm^2 to m^2) 		
III. ALGEBRA	<p>Introduction to Algebra</p> <ul style="list-style-type: none"> Introduction to variable through patterns and through appropriate word problems and generalizations. To generate such patterns with more examples. To solve unknowns through examples with simple contexts (single operations). 	<p>Algebraic Expressions</p> <ul style="list-style-type: none"> Identify constants and variables in a given term of an algebraic expression and coefficients of the terms. Identify like and unlike terms. To learn to write the degree of expressions like x^2y, xyz etc. Able to add and subtract algebraic expressions with integer coefficients Able to form simple expressions with two variables. <p>Solving simple linear equations</p> <ul style="list-style-type: none"> Solve simple linear equations (in contextual problems) (avoid complicated coefficients). Represent inequalities of a single variable graphically. <p>Exponents</p> <ul style="list-style-type: none"> Understand the laws of Exponents (through observing patterns and arrives at generalization.) $a^m a^n = a^{m+n}$ where $m, n \in \mathbb{N}$ $(a^m)^n = a^{mn}$ where $m, n \in \mathbb{N}$ 	<p>Revision</p> <ul style="list-style-type: none"> Recall addition and subtraction of expressions. <p>Algebraic Expressions</p> <ul style="list-style-type: none"> Able to multiply algebraic expressions with integer coefficients Able to divide algebraic expressions by monomial Able to understand and avoid some common errors (e.g. $2xx = x$, $7xxy = 7xy$) ($x+2 = 2x / xy$) (x) = $2xy$) <p>Identities</p> <ul style="list-style-type: none"> To recall the identities for $(a+b)^2$, $(a-b)^2$, $a^2 - b^2$ Able to apply identities in problems Numerical examples and applies it in sums <p>Factorizations</p> <ul style="list-style-type: none"> Able to recognize (simple cases only) expressions that are factorizable of the following types $(a+b)^3$, $(a-b)^3$, $(x+a)(x+b)(x+c)$ <p>Solving linear equations</p> <ul style="list-style-type: none"> Able to solve word problems that involve linear equations (with simple coefficients) <p>Graphs:</p> <ul style="list-style-type: none"> Able to plot the points in the graph. Able to plot graphs of simple linear functions (ex: $y=5x$)

		<ul style="list-style-type: none"> $\frac{a^m}{a^n} = a^{m-n}$ where $m, n \in \mathbb{N}, m > n$. Find units digits of large numbers represented by exponents (ex: 23^{50}) by observing patterns <p>Algebraic identities</p> <ul style="list-style-type: none"> To deduce identities with geometrical proofs, numerical examples and apply it in sums $(a+b)^2 = a^2 + 2ab + b^2, (a-b)^2 = a^2 - 2ab + b^2,$ $a^2 - b^2 = (a+b)(a-b).$ <p>Able to recognize (simple cases only) expressions that are factorizable of the following types</p> $a(x+y), (x \pm y)^2, a^2 - b^2$	
IV. LIFE MATHEMATICS	<p>Ratio and Proportion</p> <ul style="list-style-type: none"> Understand the concept of Ratio Understand that Proportion is same as the ratio of two. Able to calculate the needed quantity using unitary method (with only direct variation implied). <p>Shopping</p> <ul style="list-style-type: none"> Able to prepare a bill. To Verify the bill amount. <p>Profit and loss</p> <ul style="list-style-type: none"> Able to calculate cost price, Selling Price and Profit/Loss. 	<p>Recall: Ratio and Proportion</p> <ul style="list-style-type: none"> To recall the concept of ratio and proportion. <p>Inverse and Direct Proportion</p> <ul style="list-style-type: none"> Understand the concept of inverse proportion Able to differentiate direct and inverse proportion and calculate the needed quantity using direct and inverse proportion. <p>Fraction and decimal into percentage</p> <ul style="list-style-type: none"> Understand percentage as a fraction with denominator 100. Able to convert fractions and decimals into percentages and vice-versa To solve word problems based on percentage. <p>Simple Interest</p> <ul style="list-style-type: none"> Able to calculate simple interest. 	<p>Revision</p> <ul style="list-style-type: none"> Profit, Loss and simple interest. <p>Application of percentage, profit & loss, overhead expenses, Discount, tax.</p> <ul style="list-style-type: none"> Solve problems involving applications of Percentages, Profit & Loss, overhead expenses, Discount, tax. <p>Compound Interest</p> <ul style="list-style-type: none"> Able to find compound interest through patterns and use it in simple problems. (Compounded yearly up to 3 years or half-yearly up to 3 steps only). Able to differentiate between simple and compound interest Find the difference between CI and SI for 2 years and 3 years. <p>(The numbers used for calculation purpose should be easy - otherwise, calculator can be used.)</p> <p>Compound variation</p> <ul style="list-style-type: none"> Do problems on compound variation Solve Time and Work problems— Simple and direct word problems.
V.GEOMETRY	Introduction to point , line, ray , segment and planes	<p>Properties of Parallel lines</p> <ul style="list-style-type: none"> Understand the properties of angles in 	<p>Properties of Triangles</p> <ul style="list-style-type: none"> Recall the properties of triangles.

	<ul style="list-style-type: none"> Understand fundamental geometrical terms -points, lines, rays, segments and planes. Understand collinear points and concurrent lines, point of concurrency Understand parallel and perpendicular lines. <p>Angles and their types</p> <ul style="list-style-type: none"> Understand the concept of angles. Identify vertex, arms and measure of angles. Understand right, acute, obtuse and straight angles. Understand complementary & supplementary angles and find complementary and supplementary angles for the given angles. <p>Types of Triangles</p> <ul style="list-style-type: none"> Able to recognize different kinds of triangles based on (a) length of sides (b) measures of angles. <p>Symmetry</p> <ul style="list-style-type: none"> Able to find symmetrical objects in Surrounding. Learn types of symmetry <p>PRACTICAL GEOMETRY Constructions</p> <ul style="list-style-type: none"> Identify Geometrical instruments. Able to measure and draw line segment. Able to construct parallel and perpendicular lines using set square. Able to draw given angles using protractor. 	<p>intersecting lines, adjacent angles on a straight line, parallel lines and transversal lines.</p> <p>Properties of Triangles</p> <ul style="list-style-type: none"> Able to apply angle sum property of a triangle. <p>Congruence triangles properties</p> <ul style="list-style-type: none"> Know the concept of congruency. Know the criteria for congruency of triangles. (SSS, SAS, ASA, RHS). <p>PATTERNS AND RELATIONS- Symmetry through transformation</p> <ul style="list-style-type: none"> Recall the types of Symmetry through diagram Learn Symmetry through transformations (Translation, reflection, rotation and their combination) <p>PRACTICAL GEOMETRY- Constructions</p> <p>Construction using scale and compass.</p> <ul style="list-style-type: none"> Construct the perpendicular bisector of the given line segment. Construct the angle bisector of the given angle. Construct special angles without protractor - 90°, 60°, 30°, 120°. Construction of triangles: given SSS, SAS, ASA. Construct circles and concentric circles. 	<ul style="list-style-type: none"> Know the concept of similarity of triangles. Know the criteria for similarity of triangles. (SSS, SAS, ASA, RHS). Understand theorems based on properties of triangles and apply them to appropriate problems. Understand Pythagoras theorem and solve problems using it. <p>Concurrent Points of a triangle with definition</p> <ul style="list-style-type: none"> Understand the concurrency of medians, altitudes, angle bisectors and perpendicular bisectors in a triangle. <p>Construction of Quadrilaterals: trapezium, parallelogram, rhombus, rectangle and square</p> <ul style="list-style-type: none"> Able to construct quadrilaterals: trapezium, parallelogram, rhombus, rectangle and square

VI. STATISTICS	<p>Introduction</p> <ul style="list-style-type: none"> Understand the necessity to collect data. Organize collected discrete data using tally marks and a table. Able to form a frequency table. <p>Pictograph</p> <ul style="list-style-type: none"> Able to interpret a pictograph and understand the need for scaling. <p>Bar graph</p> <ul style="list-style-type: none"> Able to interpret data from bar graphs. Able to construct bar graphs from the given data. 	<p>Collection and organization of discrete data</p> <ul style="list-style-type: none"> Collect and organize continuous data. <p>Mean, Median, Mode</p> <ul style="list-style-type: none"> Calculate Mean, Median, Mode of ungrouped data and understand what they represent 	<p>Formation of frequency table</p> <ul style="list-style-type: none"> Recall formation of frequency table. <p>Representation</p> <ul style="list-style-type: none"> Draw Histogram, frequency polygon for grouped data Construct simple Pie- charts for the given data.
VII. INFORMATION PROCESSING	<p>Systematic Listing, Completion and Counting,</p> <ul style="list-style-type: none"> Able to order number/colour systematically Able to solve Sudoku & magic triangles by systematic completion Able to count more figures in a figure in a systematic way. <p>Modelling</p> <ul style="list-style-type: none"> Tree diagrams for numerical expressions; what regrouping does to the shape of the tree. <p>Iterative patterns and processes</p> <ul style="list-style-type: none"> Euclid's algorithm, Euclid's game: (Ref: https://en.wikipedia.org/wiki/Euclidean_algorithm) <p>Following and Devising Algorithms</p> <ul style="list-style-type: none"> Sorting given information on different attributes. Disordering given ordered information. 	<p>Systematic Listing, Counting, Reasoning</p> <ul style="list-style-type: none"> Tetraminoes: make all the shapes. (How many up to rotations and flips). <p>Modelling</p> <ul style="list-style-type: none"> Simple road map of town; roads carry costs; cost of routes; minimal cost paths. <p>Iterative patterns and processes</p> <ul style="list-style-type: none"> Given table, find the function. Pascal's triangle. <p>Following and Devising Algorithms</p> <ul style="list-style-type: none"> Making "best" schedules, time-tables, deciding order of tasks under given set of constraints. Creating and using flowcharts. 	<p>Systematic Listing, Counting, Reasoning</p> <ul style="list-style-type: none"> Determine the number of possible orderings of an arbitrary number of objects, describe procedures for listing and counting all such orderings. <p>Modelling</p> <ul style="list-style-type: none"> Games like SETS: https://en.wikipedia.org/wiki/Set_game Map colouring using examples. <p>Iterative patterns and processes</p> <ul style="list-style-type: none"> Given description of simple physical/biological system, predict future behaviour. Devising and breaking simple codes. <p>Following and Devising Algorithms</p> <ul style="list-style-type: none"> Best ways of packing objects into a bag / box. Shopping to a budget, with constraints on money, weight, volume.

SYLLABUS

Subject : Science

Class : VI

Topic	Content -- Physics
Unit–1 Measurement	1.1 Concepts of Measurements; Fundamental units (Length, time and mass) 1.2 Definition 1.3 Methods of Measurement of Length, Mass and Time 1.4 Multiples and sub multiples of units. 1.5 Volume of regular and irregular object. 1.6 SI system 1.7 Beam balance & Electronic balance Numerical problems
Unit–2 Forces and Motion	2.1 Motion and Rest 2.2 Types of Forces 2.3 Effects of Forces 2.4 Types of Motion 2.5 Measuring speed and Units of speed; 2.6 Problems related to Speed 2.7 Distance and Time 2.8 Science today - Robot 2.9 Numerical problems
Unit–3 Heat	3.1 Sources of Heat - Sun, combustion or burning, friction, electrical heat 3.2 Heat Definition 3.3 Hot and cold objects - Temperature 3.4 Flow of Heat (Hot to cold) Thermal Equilibrium Sources of heat 3.5 Expansion in solids 3.6 Cubical and linear 3.7 Uses of Thermal Expansion 3.8 Reasoning questions based on expansion 3.9 Numerical problems
Unit–4 Electricity	4.1 Sources of Electricity 4.2 Primary and Secondary cells 4.3 An electric circuit Symbols of electric components 4.4 Open & Closed Circuits, Series & Parallel Circuits 4.5 Conductors and Insulators.
Unit–5 Magnetism	5.1 Discovery of magnets 5.2 Magnetic and non magnetic materials 5.3 Magnetic poles 5.4 Properties of Magnets 5.5 Storage and Usage of Magnets 5.6 Science today - Flying Trains

	Chemistry
Unit–1 Matter around us	1.1 Classification of matter; Introduction 1.2 Solids, liquids, gases 1.3 Pure substances and mixed substances 1.4 Need for Separation 1.5 Definition of Separation; Separation of substances 1.6 Hand picking 1.7 Winnowing 1.8 Sieving 1.9 Threshing 1.10 Churning 1.11 Magnetic Separation 1.12 Sedimentation 1.13 Decantation 1.14 Filtration 1.15 Food Adulteration
Unit–2 Changes around us	2.1 What is change? 2.2 Change of state 2.3 Classification of changes 2.4 Slow and fast changes 2.5 Reversible and irreversible 2.6 Desirable and undesirable 2.7 Physical and chemical changes 2.8 Natural and man-made 2.9 Solute, solvent, solution
Unit–3 Air	3.1 Atmosphere 3.2 Composition of air 3.3 Importance of air for survival of plants and animals 3.4 Burning and combustion 3.5 Uses of air 3.6 Experimental verification of N ₂ , CO ₂ and O ₂ in Air
Unit–4 Water	4.1 Availability of water 4.2 Sources of water 4.3 Composition of water 4.4 Importance of water 4.5 Water vapour - transpiration 4.6 Water cycle 4.7 Water distribution and treatment systems 4.8 Water conservation

Unit-5 Chemistry in Everyday life	5.1 Fertilizers 5.2 Cements 5.3 Gypsum / Epsom 5.4 Plaster of Paris 5.5 Soaps and Detergents 5.6 Phenols 5.7 Adhesives
	Biology
Unit-1 Living world of Plants	1.1 The habitat of the living plants - Habitat 1.2 Types aquatic, Terrestrial, deserts, mountains 1.3 Plants adaptation and modifications of plants 1.4 Tendrils, Climbers, Thorns 1.5 Plants form and function 1.6 Morphological structure and function of root, stem and leaves
Unit-2 Living World of Animals	2.1 Bio diversity 2.2 Habitat 2.3 Unicellular and multi cellular organisms 2.4 adaptation in Animals E.g. Camel
Unit-3 Health and Hygiene	3.1 Nutrients (carbohydrates, proteins, fats, vitamins and minerals) 3.2 Health and Nutrients 3.3 Balanced diet 3.4 Malnutrition 3.5 Physical exercise and rest 3.6 Personal cleanliness (Introduction for Bacteria and Virus) 3.7 Importance of a Balanced diet 3.8 Deficiency and its diseases
Unit-4 The Cell	4.1 Structural Organization of a Cell 4.2 The cell 4.3 Types of cells
Unit-5 Human Organ System	Organ systems of human body 5.1 Skeletal system 5.2 Skeletal system 5.3 Muscular system 5.4 Circulatory system 5.5 Respiratory system 5.6 Digestive system 5.7 Nervous system 5.8 Excretory system 5.9 Sensory system 5.10 Endocrine system
Unit-6 Our	6.1 The Ecosystem 6.2 Food and Food Web

Environment	6.3 Waste and Management 6.4 Biodegradable and Non- Biodegradable wastes 6.5 Pollution\ 6.6 Types of pollution
Unit-7 Plants in Daily Life	7.1 Plants as Food 7.2 Fibre yielding plants 7.3 Ornamental plants 7.4 Timber yielding plants 7.5 Medicinal plants 7.6 Spices 7.7 Interrelationship between plants and animals

SYLLABUS

Subject: Science

Class: VII

Topic	Content- Physics
Unit–1 Measurement	<ol style="list-style-type: none">1. Idea of derived quantities and Units (Area, Volume, Density of solids and liquids)2. Explanation and Measuring Astronomical distance. 1 AU & 1 light year.3. Numerical problems
Unit–2 Forces and Motion	<ol style="list-style-type: none">1. Distance - Displacement2. Speed - velocity3. Measure and calculate the speed of moving objects4. Acceleration5. Distance -Time Graphs6. Speed -Time Graphs7. Centre of gravity and three states of equilibrium8. Science today - Typical Speeds9. Numerical problems
Unit–3 Heat & Temperature	<ol style="list-style-type: none">1. Units of Temperature2. Measuring temperature: Clinical and Laboratory thermometer3. Thermometric liquids4. Thermodynamic scales Celsius, Fahrenheit, Kelvin and Rankin5. Numerical problems
Unit–4 Electricity	<ol style="list-style-type: none">1. Electric Current - Conventional Current and Electron Flow2. Types of Cell3. Describe simple electric circuit4. Open circuit and Closed circuit5. Explain the classification of materials based on electrical properties

	6. Explains heating effect and magnetic effect of electric current
Unit-5 Light	<ol style="list-style-type: none"> 1. Sources of Light 2. Rectilinear propagation of Light - Pinhole Camera 3. Reflection - Types and Laws of Reflection 4. Shadows 5. Colours in Spectrum 6. Plane Mirror and Reflection 7. Colours - Dispersion of Colours and sunlight 8. Newton's Disc 9. Synthesis of Colours 10. Numerical problems
Unit-6 Universe and Space Science	<ol style="list-style-type: none"> 1. Basic concepts of Universe 2. milky way 3. Evolution of universe of current theory 4. Building blocks of Universe 5. Satellites 6. Natural and Artificial 7. ISRO
	Chemistry
Unit-1 Matter around us	<ol style="list-style-type: none"> 1. Effect of temperature on Solid, liquid and gases 2. Elements and compounds 3. Occurrence of Elements and Compounds in nature 4. Elements in human body 5. Elements in air 6. Atom, Molecules of Elements and Compounds 7. Symbols of some common elements 8. Chemical Formula 9. Atomicity of elements
Unit-2 Changes around us	<ol style="list-style-type: none"> 1. Physical change 2. Crystallization

	<ol style="list-style-type: none"> 3. Melting 4. Evaporation 5. Freezing 6. Sublimation 7. Condensation 8. Chemical change 9. Rusting of iron 10. Burning 11. Curdling 12. Chemical reaction of Baking Soda with lemon juice 13. Conditions needed for a chemical change Indicators of a chemical change 14. Periodic and non-periodic change 15. Endothermic and Exothermic change 16. Fermentation
Unit–3 Atomic Structure	<ol style="list-style-type: none"> 1. Structure of an atom 2. Sub-atomic particles and its properties 3. Atomic Number and Atomic mass 4. compounds mixture and its types 5. symbols 6. Valency
Unit–4 Polymer Chemistry	<ol style="list-style-type: none"> 1. Synthetic fibers 2. Types and uses 3. Polymers 4. Plastics 5. Types and uses 6. Hazardness of Plastics 7. PLA Plastics 8. Various methods of disposing Plastics 9. Biodegradable plastics 10. Plastic eating Bacteria 11. Glass - Types and uses

Unit-5 Chemistry in Everyday life	<ol style="list-style-type: none"> 1. Medicines 2. Antibiotics 3. Analgesics 4. Antipyretic 5. Antiseptics 6. Antihistamine 7. Antacids 8. ORS 9. Combustion and its types 10. Flame and its structure 11. Fire control 12. Fire extinguishers
	Biology
Unit-1 Reproduction and Modification in Plants	<ol style="list-style-type: none"> 1. Reproduction in plants 2. Sexual Reproduction 3. Pollination 4. Types of Pollination 5. Pollinators 6. Fertilization 7. Asexual Reproduction 8. Modification of roots, stems, leaves
Unit-2 Health and Hygiene	<ol style="list-style-type: none"> 1. Taking care of our body 2. Taking care of our teeth, our eyes, hair hygienic habits 3. Communicable diseases (Bacteria and Virus) 4. Non Communicable diseases 5. Any 3 safety and first aid (cuts and burns)
Unit-3 Cell Biology	<ol style="list-style-type: none"> 1. Plant and animal cell comparison 2. Cell as a fundamental unit of life (cell to organism) 3. Human cells related to functions Structure and function of all cell organelles (in brief.)

Unit–4 Basis of Classification	<ol style="list-style-type: none"> 1. Need for classification 2. The 5 kingdom classification 3. Binomial Nomenclature (Introduction)
Unit–5 Animals in Daily Life	<ol style="list-style-type: none"> 1. Animal products (Food, Clothing) 2. Animal Fibers (wool, silk) 3. Hazards in silk and wool industries (ANTHRAX) 4. Sericulture and Ahimsha/Peace silk 5. Poultry farming 6. Animal protection and maintenance

SYLLABUS

Class: VIII

Subject: Science

Topic	Content
Physics	
Unit–1 Measurement	1.1 Unit Systems 1.2 Temperature 1.3 Electric current 1.4 Amount of substance 1.5 Luminous intensity, Plane Angle and Solid Angle 1.6 Type of Clocks 1.7 Accuracy in Measurement 1.8 Approximation and Rounding off 1.9 Numerical problems
Unit–2 Force and Pressure	2.1 Forces 2.2 Definition 2.3 Action of force and its effects 2.4 Pressure 2.5 Pressure exerted by liquids and gases 2.6 Pressure exerted by air 2.7 Atmospheric pressure 2.8 Pascal's law, application 2.9 Surface tension & viscosity 2.10 Friction, applications 2.11 Factors affecting Friction 2.12 Friction - necessary 2.13 Increasing and reducing friction 2.14 Numerical problems
Unit–3 Light	3.1 Types of mirror (Spherical and Parabolic mirror) 3.2 Images of spherical mirrors 3.3 Parts of curved mirrors (Centre of curvature, principal focus, pole, principal axis, focal length) 3.4 Application of mirrors 3.5 Laws of reflection 3.6 Regular and Irregular reflections 3.7 Multiple reflections 3.8 Multiple images (Periscope, Kaleidoscope) 3.9 Refraction 3.10 Snell's law 3.11 Dispersion of Light

	3.12 Numerical problems
Unit-4 Heat	4.1 Effects of Heat 4.2 Transfer of Heat 4.3 Conduction, Convection and Radiation 4.4 Calorimetry and Calorimeter 4.5 Thermostat 4.6 Thermos flask
Unit-5 Electricity	5.1 Electric charges at rest 5.2 Types of charges 5.3 Transfer of charges 5.4 Electroscope 5.5 Gold leaf electroscope 5.6 Lightning and Thunder 5.7 Earthing 5.8 Lightning arresters 5.9 Types of circuits – Simple, Series, Parallel 5.10 Effect of electric current 5.11 Chemical effect 5.12 Electro plating 5.13 Heating effect – Electric fuse 5.14 Numerical problems
Unit-6 Magnetism	6.1 Magnets and its types 6.2 Field around a bar magnet 6.3 Tracing magnetic field using compass needle 6.4 Types of magnetic materials 6.5 Magnetic properties 6.6 Earth's magnetism 6.7 Uses of magnets
Unit-7 Sound	7.1 Wave motion 7.2 Medium of Propagation 7.3 Sound produced by vibrating body 7.4 Human ear and hearing 7.5 Larynx, windpipe, vocal cord 7.6 Musical instruments 7.7 Properties of sound (Pitch , frequency and Timbre, Audibility and range) 7.8 Noise and noise pollution 7.9 Numerical problems
Unit-8 Universe and Space Science	8.1 History of Chandrayaan and Mangalyaan probe 8.2 Rocket parts and fuels 8.3 Launching of rockets 8.4 NASA

Chemistry	
Unit-1 Matter around us	1.1 Compounds in solid state 1.2 Compounds in liquid state 1.3 Compounds in gaseous state 1.4 Uses of compounds in day to day life 1.5 Metals, non-metals and metalloids 1.6 Symbols of elements
Unit-2 Changes around us	2.1 Chemical reactions based on – contact, Solution of reactants, Electricity, Heat, Light and Catalyst 2.2 Effects of chemical reactions – biological effects, environmental effects, production of heat, light, sound and pressure
Unit-3 Air	3.1 Oxygen, Carbon dioxide and Nitrogen - Occurrence, Physical and chemical properties 3.2 Nitrogen fixation 3.3 Global warming 3.4 Acid rain
Unit-4 Water	4.1 Composition 4.2 Preparation and Properties 4.3 Universal solvent 4.4 Potable water 4.5 Common pollutants 4.6 Controlling water pollution 4.7 Water treatment methods 4.8 Hardness of water 4.9 Removal of hardness
Unit-5 Atomic Structure	5.1 Laws of chemical combination 5.2 Various views of Atomic structure 5.3 John Dalton 5.4 J.J.Thomson 5.5 Cathode ray experiment 5.6 Limitation of Thomson model 5.7 Valence 5.8 Writing Molecular formula 5.9 Ions, Types of ions 5.10 Different valent ions 5.11 Reactants, products and balancing simple equations 5.12 Information conveyed by chemical equation 5.13 Simple problems
Unit-6 Acids, Bases and Salts	6.1 Definition of acids and bases 6.2 Properties of Acids and Bases

	6.3 Uses of Acids and Bases in daily life 6.4 Neutralization Reaction 6.5 Natural indicators
Unit–7 Chemistry in Everyday life	7.1 Hydrocarbons 7.2 Natural gas 7.3 Producer gas 7.4 Coal gas 7.5 Water gas 7.6 Bio gas 7.7 Coal and its types 7.8 Petroleum 7.9 Refining of petroleum 7.10 Characteristics of ideal fuel 7.11 Specific energy/Calorific value 7.12 Octane number 7.13 Cetane number 7.14 Solar energy as a non–depleting fuel 7.15 Applications of solar energy
Biology	
Unit–1 Plant Kingdom	1.1 Binomial nomenclature 1.2 Bentham and Hooker. system of Classification 1.3 Algae, Fungi 1.4 Bryophytes, Pteridophytes 1.5 Gymnosperms 1.6 Angiosperms 1.7 Monocotyledons 1.8 Dicotyledons 1.9 Medicinal plants
Unit–2 Micro Organisms	2.1 Virus, bacteria, algae, fungi and protozoa 2.2 Uses of microorganisms in medicine, agriculture, industry and daily life 2.3 Harmful microorganisms 2.4 Microbes in food process 2.5 Relationship between man and microbes 2.6 Balances, imbalances and uses 2.7 Effect of Prions and Virions on Human
Unit–3 Reaching the Age of Adolescence	3.1 Adolescence and puberty 3.2 Secondary sexual characters 3.3 Role of hormones in reproduction 3.4 Reproductive phase of life in human 3.5 Menstrual Cycle 3.6 Reproductive Health 3.7 Nutritional needs for Adolescence 3.8 Personal hygiene for Adolescence

Unit–4 Movements in Animals	4.1 Movements of animals (Earthworm, cockroach, birds, fish and snakes) 4.2 Human body and its movements 4.3 Joints and types of joints 4.4 Skeleton 4.5 Muscles movement and types
Unit–5 Organization of Life	5.1 Organization— Cells; Tissues; Organs; Organ system 5.2 Diffusion, Osmosis and Osmoregulation 5.3 Homeostasis 5.4 Design of the body – based on function – some examples 5.5 Cellular respiration 5.6 Metabolism
Unit–6 Conservation of Plants and Animals	6.1 Deforestation, Afforestation and Reforestation 6.2 Endangered species 6.3 Red data book 6.4 Wildlife sanctuary and National parks 6.5 In–situ, Ex–situ Conservation 6.6 PBR (Peoples Bio diversity Register) 6.7 Bio Magnification 6.8 Blue Cross
Unit–7 Crop Protection and Management	7.1 Agricultural practices 7.2 Basic practices of crop protection 7.3 Preparation of soil and sowing 7.4 Irrigation 7.5 Weed Management 7.6 Harvesting equipments 7.7 Storage 7.8 Rotation of crops 7.9 Seed Bank 7.10 Seed Balls 7.11 Preservation of Seeds 7.12 Heirloom Seed 7.13 Bio indicators 7.14 List of agricultural research institutions – IARI, ICAR, KVK 7.15 Foliar Sprays (EM, Vermi wash, Panchgavya) 7.16 Bio Predators /Bio pesticides, Bio repellants and Bio fertilizer

IV. b) Social Science (Classes 6 - 8)

SYLLABUS

Social Science

Class: VI

Title	Sub Title
HISTORY	
What is History?	<ul style="list-style-type: none">- Some Major Indian Excavated Sites- Sources of History- A Mighty Emperor Ashoka
Human Evolution	<ul style="list-style-type: none">- Stages of Human Evolution- Migration of Homo sapiens from east Africa to other parts of the world.- Hunting and Food Gathering- Stone Tools and Weapons- Invention of the Wheel- Pot Making- Ancient Rock Paintings- From Nomadic to Settled Life : The World's Earliest Farmers- Pre-Historic Rock Art of Tamilnadu
Indus Civilisation	<ul style="list-style-type: none">- Discovery of a lost city – Harappa- Sites in Indian borders- Time Span of Indus Civilisation- Unique Features of Harappan Civilisation- Streets and Houses- Drainage System- The Great Bath (Mohenjo-daro)- The Great Granary (Harappa)- The Assembly Hall- Trade and Transport- Dockyard at Lothal- Leader in Mohenjo-Daro- Technology- Apparel- Love and peace- Ornaments- Occupation- Pottery- Religious Belief- Toy Culture- General Facts about Indus Civilisation
Ancient Cities of Tamilagam	<ul style="list-style-type: none">- Poompuhar- Poompuhar Port- Madurai- Kanchi

Vedic Culture in North India and Megalithic Culture in South India	<ul style="list-style-type: none"> - Vedic Age - Who were the Aryans? - Aryans and their Home in India - Sources – Vedic Literature - Archaeological Sources - Vedic Culture – Polity and Society - King - Social Organization - Status of Women - Economic life - Religion - Education – Gurukula System of Education - Age – based Ashramas - Contemporary culture in South India and Tamil Nadu - Megalithic / Iron Age in Tamil Nadu - Some of the Megalithic / Iron Age Archaeological Sites in Tamil Nadu -Adichanallur – Thoothukudi District - Keezhadi – Sivagangai District - Porunthal – Dindigul District - Paiyampalli – Vellore District - Kodumanal – Erode District
Great Thinkers and New Faiths	<ul style="list-style-type: none"> - Intellectual Awakening - Sources - Literary Sources - Causes for the Rise of Intellectual Awakening and the Birth of Buddhism and Jainism - Origin of Jainism - Mahavira (The Great Hero) - Unique Teachings of Jainism - Tri – rathnas or Three Jewels - Jain Code of Conduct - Digambaras and Svetambaras - Digambaras - Svetambaras - Reasons for the Spread of Jainism - Influence of Jainism (Samanam) in Tamil Nadu - Buddhism – Gautama Buddha - Four Great Sights - Enlightenment - Buddha’s four Noble Truths - Eight fold path - Teachings of Buddha - Buddhist Sangha - Buddhist Sects - Causes for the Spread of Buddhism - Jainism & Buddhism - Similarities and disimilarities - Influence of Buddhism in Tamilnadu - The Woodpecker and the lion (A Jataka Story)

From Chiefdoms to Empires	<ul style="list-style-type: none"> - Importance of Sixth century BC (BCE) - Role of iron in a changing society - Gana – Sanghas and Kingdoms - Janapadas and Mahajanapadas - Sixteen Mahajanapadas – (“Great Countries”) - The Causes for the Rise of Magadha - Dynasties of Ancient Magadha - Haryanka Dynasty - Shishunaga Dynasty - Nanda Dynasty - Mauryan Empire – Sources - Mauryan Empire – India’s First Empire - Chandragupta Maurya - Bindusara - Ashoka - Chandasoka (Ashoka, the wicked) to Dhammasoka (Ashoka the righteous) - Edicts of Ashoka - Mauryan Administration – Centralized administration – King - Revenue system - Judicial System - Military Administration - Municipal Administration (Cities and Towns) - Currency - Trade and Urbanization - Stupas - Monolithic Pillar – Sarnath - Beginning of Rock cut Architecture - Reasons for the Decline of the Mauryan Empire - Elsewhere in the World
Society and Culture in Ancient Tamizhagam: The Sangam Age	<ul style="list-style-type: none"> - The Sangam Age - Sources – Inscriptions - Cheras <ul style="list-style-type: none"> -Prominent Chera Rulers - Cholas <ul style="list-style-type: none"> -Kallanai - Pandyas <ul style="list-style-type: none"> -Prominent Pandya Rulers - Royal Insignia - Minor Chieftains – Ay, Velir and Kizhar - Sangam Polity – Kingship - The Court - Army - Law and Justice - Local Administration - Important Towns - Thina (tract)-based Sangam Society

	<ul style="list-style-type: none"> - Status of Women <ul style="list-style-type: none"> -Women Poets of Sangam Age - Religious Beliefs and Social Divisions <ul style="list-style-type: none"> -Veerakkal/Natukkal - Dress and Ornaments - Arts - Occupation - Festivals and Entertainments - Trade <ul style="list-style-type: none"> -Malabar Black Pepper - Major Ports - Main Exports - Main Imports <ul style="list-style-type: none"> -Muziris – First Emporium - Trade Contact with Overseas Countries - Kalabhras
The Post-Mauryan India	<ul style="list-style-type: none"> - Introduction - Sources Archaeological Sources Inscriptions / Copper Plates - Coins - Literary Sources - Foreign Notice - The Sungas and Kanvas in the North - The Sungas - Importance of the Sunga Period - The Kanvas - The Kanva rulers were - Satavahanas in the South - Contributions of Satavahanas Literature - Art and Architecture - Indo-Greeks, Indo-Parthians, Sakas and Kushanas <ul style="list-style-type: none"> Indo-Greeks and Indo-Parthians <ul style="list-style-type: none"> -Rulers of Indo Greeks - Contributions of Indo-Greeks <ul style="list-style-type: none"> -Rulers of Indo-Parthians (Pahlavas) - Sakas - Kushanas - The Kushana Kings Kanishka - Conquests - Religious Policy - Art and Literature
The Age of Empires: Guptas and Vardhanas	<p>Introduction</p> <ul style="list-style-type: none"> - Sources - Archaeological Sources - Literary Sources - Foundation of the Gupta Dynasty - Chandragupta I (319–335 AD(CE) - Samudragupta (335–380 AD(CE) <ul style="list-style-type: none"> -Prashasti - Consolidation of Gupta Dynasty - Chandragupta II (380 - 415AD(CE) <ul style="list-style-type: none"> -Fahien - Gupta Polity

	<ul style="list-style-type: none"> - Society and Economy - Land and Peasants - Trade and Commerce -Nalanda University - Metallurgy - Society - Slavery - Religion - Art and Architecture - Literature - Mathematics, Astronomy and Medicine - Vardhana Dynasty - Conquest of Harshavardhana - Administration - Religious Policy - Art and Literature
South Indian Kingdoms	<ul style="list-style-type: none"> - South Indian Kingdoms - The Pallavas - Pallava Genealogy (Prominent Kings) - Pallava's Contribution to Architecture - Mahendra Style - Mamalla Style - Rajasimha Style - Nandivarma Style - Society and Culture - Education and Literature - Pallava Art - The Chalukyas - Sources - The Chalukyas of Vatapi - Western Chalukyas of Kalyani - Contributions to Art and Architecture - The Rashtrakutas - Rashtrakuta Kings - Contribution of Rashtrakutas to literature, art and architecture Literature - Art and architecture - Kailasanatha Temple – Ellora (near Aurangabad, Maharashtra) - Elephanta Island - Pattadakal

Title	Sub Title
Geography	
The Universe and Solar System	<ol style="list-style-type: none"> 1. Universe 2. The Solar System <ul style="list-style-type: none"> The Sun Planets <ul style="list-style-type: none"> - Mercury (The Nearest Planet) - Venus (The Hottest Planet) - Earth (The Living Planet) - Mars (The Red Planet) - Jupiter (the Largest Planet) - Saturn (The Ringed Planet) - Uranus (The Somersaulting Planet) - Neptune (The Coldest Planet) - The Dwarf Planets - The Moon - Earth's Satellite - Asteroids - Comets - Meteors and Meteorites 3. Motions of the Earth <ul style="list-style-type: none"> - Shape and Inclination of the Earth - Rotation - Revolution 4. Spheres of the Earth <ul style="list-style-type: none"> - Lithosphere - Hydrosphere - Atmosphere - Biosphere -
Land and Oceans	<ol style="list-style-type: none"> 1. First order landforms 2. Second order landforms <ol style="list-style-type: none"> 2.1 Mountains 2.2 Plateaus 2.3 Plains 3. Third order landforms 4. Oceans <ol style="list-style-type: none"> 4.1 The Pacific Ocean 4.2 The Atlantic Ocean 4.3 The Indian Ocean 4.4 The Southern Ocean 4.5 The Arctic Ocean

Resources	<ol style="list-style-type: none"> 1. Natural Resources <ul style="list-style-type: none"> Classification of Natural Resources A. On the Basis of Origin <ol style="list-style-type: none"> I. Biotic Resources II. Abiotic Resources B. On the Basis of Development C. On the Basis of Exhaustibility D. On the Basis of Distribution E. On the Basis of Ownership <ol style="list-style-type: none"> I. Individual Resources II. Community – Owned Resources III. National resources IV. International resources 1. Man- Made Resources 3. Human Resource <ul style="list-style-type: none"> - Gandhian thought on Resources - Resource planning / Management Conservation of resources
Asia and Europe	<p>Asia</p> <ul style="list-style-type: none"> - Location and Area - Boundaries - Political Divisions - Physiographic Divisions 1. The Northern lowlands 2. The Central High Lands 3. The Southern Plateaus 4. The Great Plains 5. The Island Groups - Drainage - Climate - Natural Vegetation - The Natural Regions (Flora & Fauna) <ul style="list-style-type: none"> -Fact: Desert - Resource Base and Economic Activities of Asia Mineral Resources - Agriculture - Fishing - Industrial Regions - Trasport - Roadways - Railways - Waterways

	<ul style="list-style-type: none"> - Cultural Mosaic Of Asia - Population - Religion & Language - Art and Architecture - Food - Dance and Music - Festivals: - Land of contrasts - Location and size - Fact - The Netherlands - Fact - Fiord - Physical Divisions 1. The North Western highlands 2. The Central Plateaus 3. The Alpine Mountain System: 4. The North European plain - Drainage - The Important Rivers in Europe - Climate - Natural vegetation - Resources Base and Economic Activities of Europe - Industries - Cultural Mosaic of Europe - Religion & Language - Art and Architecture - Food and Festivals - A Comparison of Asia and Europe -
Globe	<ul style="list-style-type: none"> - Directions - Globe - Lines on the Globe - Latitudes - Northern Hemisphere & Southern Hemisphere - Important lines of latitude - Torrid Zone - Temperate Zone - Frigid Zone - Longitudes - Eastern Hemisphere - Western Hemisphere - Significant Lines of Longitude Greenwich Meridian - International Date Line - Longitude and Time - Earth Grid - Local Time - Indian Standard Time - Standard Time - Time Zones

Understanding Disaster	<ul style="list-style-type: none"> - Disaster - Natural Disasters – Earthquake <ul style="list-style-type: none"> -Volcanoes -Tsunami -Cyclones -Floods Landslide -Avalanche -Thunder and lightning - Man-made disasters – Fire <ul style="list-style-type: none"> -Destruction of buildings -Accidents in industries -Accidents in Transport -Terrorism -Stampede - Tsunami and floods - Tsunami - Do's and Don'ts - Floods - Types of floods - Causes of floods - Effects of floods - Do's & Dont's - During floods - Disaster Risk Reduction (DRR) - Case Study -Chennai flood – 2015 - Forecasting and Early Warning
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Title	Sub Title
Understanding Diversity	<ol style="list-style-type: none">1. Understanding diversity2. Diversity in India<ol style="list-style-type: none">2.1 Land Forms and Lifestyle Diversity2.2 Social Diversity<ol style="list-style-type: none">2.2.1 Interdependence and Co-existence2.2.2 Family and Society2.3 Religious Diversity2.4 Linguistic Diversity2.5 Cultural Diversity<ol style="list-style-type: none">2.5.1 Popular Dances and Music of India3. Unity in Diversity
Achieving Equality	<ol style="list-style-type: none">1. Prejudice<ol style="list-style-type: none">1.1 Causes for Prejudice2. Stereotypes3. Inequality and Discrimination<ol style="list-style-type: none">3.1 Caste Discrimination3.2 Gender Discrimination3.3 Religious Discrimination3.4 Socio-Economic Inequality3.5 Remedial Measures for Abolishing Inequality and Discrimination3.6 Constitution of India and Equality
National Symbols	<ul style="list-style-type: none">- Other Symbols of our Country National flag- National Emblem- National Anthem- The rules to be observed while singing the Anthem- National song- National pledge- National Micro organism- Currency of India (INR)- National calendar- National Holidays Independence Day- Republic Day- Gandhi Jayanthi
The Constitution of India	<p>Fundamental Rights and Duties Members in constituent Assembly Objectives of constitution Drafting Committee</p>

Democracy	<ul style="list-style-type: none"> - Democracy - Representative Democracy - Aims of Democracy - Oldest Democracies in the World - World Democracy
Local Bodies – Rural and Urban	<ul style="list-style-type: none"> - The List of corporations in Tamil Nadu - The Elected Representatives - Panchayat Union - District Panchayat - Functions of the village Panchayat- Obligatory Functions - Discretionary Functions - Functions of the City Municipal - Corporation - Revenue of the Village Panchayat - Revenue of the City Municipal Corporation - Role of women in the Local Self Government - Local Body Election -Local Bodies of Tamil Nadu (At present) - Works carried out by local bodies durings natural disasters and outbreak of diseases.
Road Safety	<ul style="list-style-type: none"> - Caution and care, make accident rare - Three types of traffic signs – Mandatory, Cautionary and Informatory - Cross roads and pedestrian crossing - Always use pavements - Pedestrian Do's & Don't s - Staying safe on a bicycle - While commuting in School transportation Dos - As pillion rider/co-passengers - Play at safe places

Subject: ECONOMICS

Class: VI

Title	Sub Title
Economics – An Introduction	<ul style="list-style-type: none">- Sandhai, Barter system- Consumer Goods- Villages are the backbone of our country- Primary activities- Secondary activities- Tertiary activities

Syllabus

VII – History

Sources of medieval India	<ul style="list-style-type: none"> - Sources - Primary sources - Secondary sources - Inscriptions - Coins - Religious Literature - Secular Literature - Travellers Travelogues
Emergence of new kingdoms-North India	<ul style="list-style-type: none"> - Origin of the Rajputs - Pratiharas - Palas - Dharmapala (A.D. (CE) 770-810) - Mahipala I (988-1038) - The Chauhans - Contribution of Rajputs to Art and Architecture - Contribution of Palas to Culture - Advent of Islam - Mahmud of Ghazni - Muhammad of Ghor - The Battle of Tarain
Emergence of new kingdoms-South India	<ul style="list-style-type: none"> - 1. The Later Cholas - Revival of the Chola Rule - Decline of the Chola Empire - Administration - Local Governance - Uttiramerur Inscriptions - Revenue - Social structure based on Land relations - Irrigation - Religion - Temples - Cholas as patrons of Learning - Trade - II. The Later pandyas - Revival of Pandya Kingdom (A.D. (CE) 600-920) - Rise of later Pandyas (1190-1310) - Sadaiyavarman Sundarapandyan

	<ul style="list-style-type: none"> - Polity and Society - State - Royal officials - Administrative divisions - Village Administrations - Irrigation - Religion - Temples - Trade
Delhi Sultanate	<ul style="list-style-type: none"> - Slave Dynasty - Qutb-ud-din-Aibak (1206-1210) - Iltutmish (1210-1236) - Razia (1236-1240) - Ghiyas-ud-din Balban (1266-1287) - Khalji Dynasty (1290-1320) - Jalal-ud-din Khalji (1290-1296) - Ala-ud-din Khalji (1296-1316) - Tughluq Dynasty (1320-1414) - Ghiyas-Ud-din (1320-1324) - Muhammad-bin-Tughlaq (1325-1351) - Firoz shah Tughlaq (1351-1388) - Timur's Invasion (1398) - Sayyid Dynasty (1414-1451) - Lodi Dynasty (1451-1526)
Vijayanagar and Bahmani Kingdoms	<ul style="list-style-type: none"> - Foundation of Vijayanagar Empire - End of Sangama Dynasty - Rise of Saluva Dynasty - Krishnadevaraya - A great Builder - Patron of Literature, art and Architecture - Battle of Talikota and the Decline of Vijayanagar - Aravidu Dynasty - Vijayanagar Adminsitration - Structure of Governance - Economic Condition - Agriculture - Cottage Industries - Trade - Contribution to Literature - Contribution to Architecture - Bahmani Kingdom - Foundation and Consolidation of the Bahmani Kingdom - Ala –ud-din Hasan Bahman Shan (1347-1358) - Muhammad shah I (1358 – 1375) - Successors of Muhammad Shah I - Mahmud Gawan - Decline of Bahmani Kingdom - Contribution of Bahmani Sultans - Education

The Mughal Empire	<ul style="list-style-type: none"> - Babur (1526-1530) - Ancestry and His early Career - Foundation of the Mughal Empire - Humayun (1530-1540 and 1555-1556) - Sher Shah (1540-1545) - Akbar (1556-1605) - Accession to Throne - Conquests of Woman rulers - Battle of Haldighati - Commercial access to Arabia, Southeast Asia and China - Military Campaigns in the North – West (1585-1605) - Akbar’s Religious Policy - Contributions to Culture - Jahangir (1605-1627) - Shah Jahan (1627-1658) - Aurangzeb (1658-1707) - Relationship with Rajputs and Marathas - The Mughal Administration - Central Administration - Provincial Administration - Local Administration - Army - Mansabdari System - Land Revenue Administration - Religious Policy - Art and Architecture
Rise of Marathas and Peshwas	<ul style="list-style-type: none"> - Factors responsible for the rise of Marathas - Geographical Features - Bhakti Movement and the Marathas - Literature and Language of the Marathas - Shivaji - Shivaji’s Confrontation with sultan of Bijpur - Consolidation of Maratha Power - Shivaji and Aurangzeb - Maratha Administration under Shivaji - Army - Ashtapradhan - Shambhuji - Shahu Maharaja Peshwas - Bajirao (1720-1740) - The Prominent Maratha Families - Balaji Bajirao (1740-1761) - Maratha administration under Peshwas The Fall of Marathas

New Religious Ideas and Movements	<ul style="list-style-type: none"> - Bhakti Movement: The Beginnings - 1. Devotional Movement in Tamizhakam - (Azhwars and Nayanmars) - (a) Adi Shankara - (b) Ramanuja - 2. Bhakti Movement in North India - (a) Exponents of Bhakti Movement - 3. Sufism in India - 4. (a) Kabir - (b) Guru Nanak - Guru Nanak's Teachings: - 5. Impact of the Religious/ Bhakti Movement
Art and Architecture of Tamil Nadu	<ul style="list-style-type: none"> - Pallava Epoch - Pandya Temples in the Pallava Epoch - Sculptures - Paintings - The Early Chola Epoch - Later Chola Epoch - Thanjavur Big Temple - Dharasuram - Gangaikonda Cholapuram - Later Pandyas - Vijayanagara Epoch - Modern Period (After A.D. 1600)
Jainism, Buddhism and Ajivika Philosophy in Tamil Nadu	<ul style="list-style-type: none"> - Sources and Literature: Jainism - Jain Literature - 1. Agama Sutras - 2. Non-Agama Literature - Jains in Tamil Nadu - The Sittanavasal Cave Temple - Jains in Kanchipuram - (Tiruparuttikunram) - Kazhugumalai Jain Rock-Cut Temple - Jain Temples in other parts of Tamil Nadu - Contribution to Education - Buddhism - Buddhist Literature - Buddhism in Tamizhakam - Viharas - Ajivika Philosophy

Geography	
Interior of the Earth	<ul style="list-style-type: none"> - Interior of the Earth - 1. The Crust - 2. The Mantle - 3. The Core - The Earth Movements - Cause of Earthquake - Effects of Earthquake - Distribution of Earthquakes - Volcanoes - Causes of Volcanic Activity - Nature of Volcanic eruptions - Types of Volcanoes - 1. Active Volcano - 2. Dormant Volcano - 3. Extinct Volcano - Distribution of Volcanoes in the world - 1. Circum Pacific Belt - 2. Mid Continental belt - 3. Mid Atlantic Belt.
Landforms	<ul style="list-style-type: none"> (i) The Endogenic Process (ii) The Exogenic Process - Landforms - River - Glacier - Continental Glacier - Mountain or Valley Glacier - U Shaped Valley - Wind - Sea waves

Population and Settlement	<ul style="list-style-type: none"> - The Races - Caucasoid - Negroid - Mongoloids - Australoids - Races of India - Religion - Classification of Religion - Language - Languages of India - Settlement - Old House Types - Patterns of settlements - Compact settlements - Dispersed Settlements - Rural settlement - Factors Influencing Rural Settlement - Pattern of Rural Settlement - Wet Point Settlement - Dry Point Settlement - Urban Settlements - Classification of Urban Settlements - Town - City - Mega City - Megalopolis - Conurbation - Satellite Town - Smart City
Resources	<ul style="list-style-type: none"> - Importance of resource - 1. Biotic resources - 2. Abiotic resources - 3. Renewable resources - Solar energy - Wind Energy - Hydropower - Non-renewable resources - Metallic resources - Iron - Copper - Gold - Bauxite - Silver - Manganese - Non-Metallic resources - Mica - Limestone - Fossil Fuel resources - Coal - Petroleum - Natural gas

Tourism	<ul style="list-style-type: none"> - The Basic components of Tourism - Attractions - Accessibility - Amenities - Type of Tourism - Religious Tourism - Historical Tourism - Eco-Tourism - Adventure Tourism - Recreational Tourism - International Tourism - Basic elements of Tourism attractions - Geographical Components of Tourism - Tourism attractions in India - Religious Tourism - Hill stations in India - Water falls in India - Wild life and Bird sanctuaries - Beaches - Tourist Attraction in Tamil Nadu - Religious Tourism - Hill Stations in Tamil Nadu - Water falls in Tamil Nadu - Wild life and Bird Sanctuaries in Tamil Nadu - Wildlife Sanctuaries - Bird Sanctuaries in Tamil Nadu - National Parks In Tamil Nadu - Beaches in Tamil Nadu - Environmental Impact of Tourism - Positive Impacts - Negative Impacts
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<p>Exploring Continents – North America and South America</p>	<ul style="list-style-type: none"> - A. North America - Location and Area - Boundaries - Political Division - Physiography - 1. The rocky Mountains - The Great Plains - The Appalachian Highlands - The Coastal Plains - Drainage - Climate - Natural vegetation - Agriculture - Wheat - Maize - Barley and Oats - Cotton - Sugarcane - Soyabeans - Potatoes and Sugar beet - Fruits - Cattle rearing - Dairy farming - Fisheries - Minerals - Industries - Major Industries in North America - 1. Iron and Steel Industry - 2. Heavy Engineering Industries - 3. Wood pulp and paper Industry - 4. Textile Industry - 5. The Meat- Packing Industry - Population - Population distribution - Transport - Trade - B. South America - Location - Physiography - The Andes Mountains - The River Basins (or) the central Plains - The Eastern Highlands - Climate - Drainage - Natural Vegetation - Wildlife - Agriculture - Wheat - Sugarcane - Maize - Coffee and Cocoa - Cotton - Barley, Rye and Oats
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	<ul style="list-style-type: none"> - Animal rearing - Fisheries - Minerals - Iron Ore - Manganese - Petroleum - Copper - Bauxite - Industries - Trade - Transport - Roadways - Railways - Waterways - Airways - Population - Population distribution
Map Reading	<ul style="list-style-type: none"> - Maps - Types of Maps - Maps on the basis of scale - Types of Atlas - Maps on the basis of content - Element of Maps - Title - Direction - Scale - Legend (or) key - Conventional signs and symbols - Uses of Maps - Comparison of Map and Globe
Natural Hazards- Understanding of disaster Management in Practice	<ul style="list-style-type: none"> - Hazard - Disaster - Types of Disasters - Natural Disasters - Tsunami - Effects - Flood - Effects - Cyclone - Effects of Cyclone - Man –made Disasters - Pre-Disaster Phase - During Disaster Phase - The Post – Disaster Phase - Warning system in India - Disaster Management in India - Disaster Management in TamilNadu - State Disaster Management Plan - General Survival Techniques

(Civics)	
Equality	<ul style="list-style-type: none"> - What is Equality? - Importance of Equality - Kinds of Equality - Social Equality - Civil Equality - Political Equality - Gender Equality - Human Dignity - Equality of Opportunity and Education - Equality in Indian constitution
Political Parties	<ul style="list-style-type: none"> - What are Political Parties? - Importance of Political Parties - Characteristics of Political Parties - Types of Party System - Party System in India - Criteria for Recognition - Majority Party - Minority Party - Opposition Party - Coalition Government - Electoral symbols and its importance
State Government	<ul style="list-style-type: none"> - Difference between Parliament and State Legislature - Election Procedures - Powers and functions of Governor and Chief Minister - Three main organs of the government – the legislative, executive and Judiciary
Media and Democracy	<ul style="list-style-type: none"> - What is Media? - Personal Communication - Mass Communication - Importance of the Media - Media and Public Opinion - Ethic and Responsibility - Role of Media in Democracy - Local Media
Women Empowerment	<ul style="list-style-type: none"> - Social Aspects of Gender - Woman's Education - The Unmatched Importance of Female Education - Role of woman in the economic development - Benefits of Economic Empowerment of Woman - The need for Economic Empowerment of woman

Market and Consumer Protection	<ul style="list-style-type: none"> - Features of Market - Classification of Markets - I. On the Basis of Geographical Location - II. On the basis of Time - III. On the Basis of Nature of Transaction - IV. On the basis of Regulation - V. On the basis of nature of competition - Monopoly - Monopolistic Competition - Oligopoly - 1. Who is a consumer? - 2. Who is not a consumer? - 3. What is Unfair Trade Practice? - Consumer Protection - The Consumer Protection Act, 1986(COPRA) - Consumer protection Act of 2019 - Highlights of the New Act - Consumer courts in India
Road Safety	<ul style="list-style-type: none"> - Road safety - Need for safety on Roads - Causes for Road Accidents - Distracted driving - Reckless driving - Night driving - Tailgating - Heavy Traffic - Avoidance of safety gears - Impatience of Pedestrians - Other causes - Road safety rules - Preventive Measures - Individuals - Parents and Teachers - Media - Traffic signs - Road safety week

STD – 8 SOCIAL SCIENCE

HISTORY	
UNIT	CONTENTS
1	ADVENT OF THE EUROPEANS Introduction – Sources of Modern India – Advent of the Europeans
2	FROM TRADE TO TERRITORY Introduction – Establishment of Political Power by the English East India Company – Carnatic wars – Mysore and its Resistance to British Expansion – Anglo – Maratha Wars – The British Administrative Organization in India – The Subsidiary Alliance – Doctrine of Lapse
3	RURAL LIFE AND SOCIETY Introduction – The Land Revenue Policy under the British – Peasants Revolts
4	PEOPLE’S REVOLT Introduction – Origin of Palayam – Early revolts of South India – Vellore Revolt (1806) – The Revolt of 1857
5	EDUCATIONAL DEVELOPMENT IN INDIA Introduction – Education in Ancient India – Education in Medieval India – Modern System of Education – Educational Development of Independent India – National Policy on Education – Sarva Shiksha Abhiyan (SSA) and Rastriya Madhyamik Shiksha Abhiyan (RMSA) – Educational Development in Tamil Nadu
6	DEVELOPMENT OF INDUSTRIES IN INDIA Introduction – Traditional Crafts of India – Decline of Indian Industries – Beginning of Modern Industries – Industrial Growth in India – Phase of Industrial Development in India – Modernisation
7	URBAN CHANGES DURING THE BRITISH PERIOD Introduction – Ancient Towns – Medieval towns – Modern towns – Unique features of urbanization under the British – Creation of Municipalities and Corporation – Administration of the Presidency Towns – Origin and Growth of Madras – Madrasapatnam – Making of Chennai – Bombay – Calcutta
8	STATUS OF WOMEN IN INDIA THROUGH THE AGES Introduction – The position of women – Major Social Evils – Role of Social Reformers – Women in the freedom movement – Impact of reform movement – Women in Independent India

GEOGRAPHY	
UNIT	CONTENTS
1	ROCKS AND SOILS Introduction – Rocks – Rock Cycle – Soil and its Formation
2	WEATHER AND CLIMATE Introduction – Weather – Climate – Elements of weather and climate – Rainfall – Humidity – Wind
3	HYDROLOGIC CYCLE Introduction – Water on the Earth – Components of Hydrologic Cycle – Precipitation
4	MIGRATION AND URBANISATION Introduction – Migration – Urbanisation
5	HAZARDS Introduction – Hazards – Major Hazards in India – Need for Prevention Measures
6	INDUSTRIES Introduction – Industry – Economic Activity – Factors responsible for location of Industries – Classification of Industries – On the basis of Size and Capital – On the basis of Ownership
7	EXPLORING CONTINENTS AFRICA, AUSTRALIA AND ANTARTICA Introduction – Africa – Australlia – Antarctica
8	MAP READING Introduction – Components of map-Types of Maps

CIVICS	
UNIT	CONTENTS
1	HOW THE STATE GOVERNMENT WORKS Introduction – The State Executive – The Legislature – Judiciary of State
2	CITIZENS AND CITIZENSHIP Introduction – Citizen and Citizenship – Acquisition of Indian citizenship – Loss of Indian Citizenship – Single citizenship – Rights and Duties of Citizen – Qualities of good citizen – Global citizenship
3	UNDERSTANDING SECULARISM Introduction – Objectives of Secularism – The Characteristic Features of a Secular State – Importance of Secularism – Constitution and Secularism

4	HUMAN RIGHTS AND UNO Introduction – Where do Human Rights come from – Basic Characteristics of Human Rights – Kinds of Human Rights – Human Rights Commission – Human Rights Organisation – Child Rights
5	ROAD SAFETY RULES AND REGULATIONS Introduction – Importance of Road Safety – Reason for the Road Accidents – Safety Measures – Traffic Signs – Traffic Rules in India – Steps taken by the Government to prevent Road Accidents – Decade of Action for Road Safety 2011 – 2020
6	DEFENCE AND FOREIGN POLICY Introduction – Indian Defence Services – Indian Armed Forces – Paramilitary Defence Forces – Central Armed Police Forces – Foreign Policy of India – Panchsheel – Non-Alignment – India's Relation with Neighbouring Countries – SAARC – BCIM – BIMSTEC - BBIN
7	THE JUDICIARY Introduction – Evolution of Indian Judiciary – Judiciary and Constitution – Structure of courts in India – Role of the Judiciary – Supreme Court of India – High Court – Independent and impartial function of Judiciary – The Litigation Process

ECONOMICS	
UNIT	CONTENTS
1	MONEY, SAVINGS AND INVESTMENTS Introduction – Evolution of Money – Major stages of Evolution of Money – Value of Money – Nature of Money – Functions of Money – Savings in Banks and Investments – Black Money
2	PUBLIC AND PRIVATE SECTORS Introduction – Public and Private Sector – History of Public Sector - Indicators of Socio-Economic Development – Definition of Private Sector – Functions of Private Sector