Level-III

	Part-I Syllabus for Child Development and Pedagogy
A)	Concept of development and its relationship with learning, Principles of the development of children, Influence of Heredity & Environment.
	Socialization processes: Social world & children (Teacher, Parents, Peers).
	Piaget, Kohlberg and Vygotsky: constructs and critical perspectives.
	Freud's Psychosexual Development Theory, Erikson's Theory of Psychosocial Development.
	Concepts of child-centered and progressive education, Critical perspective of the construct of Intelligence, Multi-Dimensional Intelligence, Language & Thought, Gender as a social construct; gender roles, gender-bias and educational practice, Individual differences among learners, understanding differences based on diversity of language, caste, gender, community, religion etc.
	Distinction between Assessment for learning and assessment of learning; School-Based Assessment.Continuous & Comprehensive Evaluation: perspective and practice.
	Formulating appropriate questions for assessing readiness levels of learners; for enhancing learning and critical thinking in the classroom and for assessing learner achievement.
B)	**Concept of Inclusive education and understanding children with special needs:** Addressing learners from diverse backgrounds including disadvantaged and deprived.
	Addressing the needs of children with learning difficulties, „impairment" etc.
	Addressing the Talented, Creative, Specially abled Learners.
	Learning and Pedagogy : How children think and learn; how and why children "fail" to achieve success in schoolperformance.
	Basic processes of teaching and learning; children's strategies of learning; learning as a socialactivity; social context of learning.
	Child as a problem solver and a "scientific investigator"
	Alternative conceptions of learning in children, understanding children's "errors" as significant steps in the learning process.
	Cognition & Emotions.
	Motivation and learning.
	Factors contributing to learning - personal & environmental.
	Bandura's Social Learning: Constructs and Critical Perspective.

Part-II Syllabus for Language

A)	**Language-I (Hindi)** **Language Comprehension Questions:** **Reading unseen passages -** two passages one prose or drama and one poem with questions on comprehension, inference, grammar and verbal ability (Prose passage may be literary, scientific, narrative or discursive). **Pedagogy of Language Development Questions:** Learning and acquisition, Principles of language Teaching, Role of listening and speaking; function of language and how children use it as a tool, Critical perspective on the role of grammar in learning a language for communicating ideas verbally and in written form, Challenges of teaching language in a diverse classroom; language difficulties, errors anddisorders, Language Skills, **Evaluating language comprehension and proficiency:** speaking, listening, reading and writing. **Teaching-** learning materials: Textbook, multi-media materials, multilingual resource of theclassroom, Remedial Teaching.
B)	**Language – II (English)** **Language Comprehension Questions:** Two unseen prose passages (discursive or literary or narrative or scientific) with question oncomprehension, grammar and verbal ability. **Pedagogy of Language Development:** Learning and acquisition, Principles of language Teaching, Role of listening and speaking; function of language and how children use it as a tool, Critical perspective on the role of grammar in learning a language for communicating ideas verbally and in written form; Challenges of teaching language in a diverse classroom; language difficulties, errors anddisorders, Language Skills. **Evaluating language comprehension and proficiency:** speaking, listening, reading and writing. **Teaching -** learning materials: Textbook, multi-media materials, multilingual resource of the classroom, Remedial Teaching.

Part-III Syllabus for General Studies

A)	Haryana related history, current affairs, literature, Geography, Civics, Environment, Culture, art, traditions, and welfare schemes of Haryana Government.
B)	**General Intelligence & Reasoning:** It would include questions of both verbal and non-verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. **The topics are**: Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Classification, Symbolic/Number Classification, Figural Classification, Semantic Series, Number Series, Figural Series, Problem Solving, Word Building, Coding & de-coding, Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing inferences, Punched hole/ pattern- folding & un-folding, Figural Pattern-folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small & Capital letters/numbers coding, decoding and classification, Embedded Figures, Critical thinking, Emotional Intelligence, Social Intelligence.
C)	**Quantitative Aptitude:** The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be computation of whole numbers, decimals, fractions and relationships between numbers, Percentage. Ratio & Proportion, Square roots, Averages, Interest, Profit and Loss, Discount, Partnership Business, Mixture and Allegation, Time and distance, Time & Work, Basic algebraic identities of School Algebra & Elementary surds, Graphs of Linear Equations, Triangle and its various kinds of centers, Congruence and similarity of triangles, Circle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular or square base, Trigonometric ratio, Degree and Radian Measures, Standard Identities, Complementary angles, Heights and Distances, Histogram, Frequency polygon, Bar diagram & Pie chart.

Computer Science

A)	**Computer System:** History, Generations, Characteristics, Advantages and Limitations, Applications and Types of a Computer System CPU, ALU & CU, Input/output Devices. **Memory :** Units of Memory, Types of Memory. **Classification of Programming Language:** High level language, Machinelevel language. History, Architecture and Characteristics of Microprocessor. **Encoding Schemes and Number System:** ASCII, UNICODE, Number system and conversions. **Computer Software:-** System software (Operating system: its need and functions, Compiler, Interpreter, Assembler), Application Software, Utility Software, Device Drivers, MS Window: Desktop, Taskbar, Icons, This PC, Recycle Bin, File Explorer, Edge Browser, Cut, Copy, Paste, Theme and background. **Word Processor (MS Word):** Components, Formatting, Alignment, Indents , Borders and Shading ,Symbols, Shapes, ClipArt, Word Art, Headers and Footers, Tables,Page Setup, Printing. **Spreadsheet (MS Excel):** Components, Workbook, Worksheet, Formatting, Cell Address, Cell pointer, Active cell, range of cells, Text, formulas, Date/Time, Charts, Types of charts, Components of chart,creating chart in MS Excel, Printing worksheet/Charts. Functions: Sum(),Average(),Max(),Min(), Count( ) **Presentation Software (MS Power-Point):** Components, Elements of a slide, Creating and saving a Presentation, Slide layouts, Slide Views, Formatting, ClipArt, Pictures, Shapes, Headers/Footers and slide numbers. Animation Schemes, Sound effects, Slideshow.
B)	**Problem Solving and Software Engineering (SDLC and Testing):** Problem Solving Cycle: Analyze, Design, Coding, Implementation andTesting. Algorithm: Need of algorithm, Design Algorithm using Flow chart. Programming: Concept and need of programming. Program Constructs: Sequence, Selection and recurrence. Major stages in SDLC- Requirement gathering and analysis (Survey), Investigation and fact recording (Feasibility study), Software design, Development (Coding), Testing, Implementation, Maintenance. Testing- Black box and White box testing, Levels of testing- Unit testing, Integration testing, System testing and Acceptance testing. **Getting Started with Python:** Features of Python, working with Python interpreter in interactive and script mode, structure of a program, identifiers, keywords, constants, variables, types of operators, precedence of operators, data types, statements, expressions, evaluation and comments, input and output statements, data type conversion, debugging. **Control Structures:** Sequence, Selection (decision) and repetition (iteration). **Function:** Need of functions, user defined functions, built-in functions. **Strings:** Initializing and accessing strings, string operations. **List:** List operations

	Tuples: Creating, initializing, accessing elements, operations on Tuples. **Dictionary:** Concept of key-value pair, mutability, creating, initializing,dictionary operations. **Emerging Trends, Cyber Security and Societal Impacts:** Artificial Intelligence, Machine Learning, Natural Language Processing,Robotics, Big Data, Data Science, Internet of Things, Sensor, Smart cities, Cloud computing, Grid Computing, Block chain technology, 5G network, E-commerce. **Cyber Security:** Computer virus, Malware, Adware, worms, Trojan,Ransom ware, spyware, hackers and crackers, Safety measures, identity protection, proper usage of passwords, confidentiality of information. **Digital footprints:** Etiquettes of net surfing and for communication through social media, intellectual property rights (IPR), Cybercrime and Cyber laws, Hacking, Phishing, Cyber Bullying, Indian IT Act, Cyber Crime Prevention. Impact on Health, Health Problems related to use of Technology such as impact on Eyes, Awareness about physical problems. **Web Designing using HTML:** History of HTML, Text editor, Basic structure of HTML web page, creating and saving an HTML document, accessing a web page using web browser, container and empty elements. HTML elements, Text formatting elements, Lists, Inserting images, tables and links.
C)	Database, MS Access and SQL Database: Need, Advantages, Concept of files, fields & records, Need of normalization, Normal forms. **MS Access:** Features, Components, Data Types, Elements of MS Access Database, Creating/Opening a Database, Primary Key, Setting Primary Key, Creating Table in Datasheet view & Design View, Viewing, editingand printing Tables. **SQL:** Advantages, Data types, Commands, Clauses, Functions. Communication Technology and Computer Network : Transmission media (guided and unguided), Wired/wireless communication, Wi-Fi, Bluetooth, Cloud Computing (Public and Private) Computer Network, Networking and its need, Types of computer Networks, Network Models and their protocols. **Internet :** Internet, History of internet, Working of internet, Internet requirements, Firewalls, World Wide Web, Web Browsers, Web Servers, Web Portal, Web Site, Search Engines, Web address/URL, Web Page, Concept of Email, Blogs, News Groups, E-mail, Video conferencing. Internet Protocols: TCP/IP, FTP, TELNET, SMTP, HTTP, HTTPS, POP3. Programming in C++ and Data structure through C++ : OOP Concepts: Object, Class, Encapsulation, Data Hiding / Abstraction, Inheritance / Reusability, Polymorphism / Overloading. Data types, Operators & Expressions, Control Statements & Loops. Array (1D & 2 D) & Structure: Creating structure variables, Array of structure, Passing structure members to function. Class & Object in C++, Class declaration, Data members & member functions, Private & public members, Function defined inside & outside the class, Nesting member functions, Accessing class member functions, Use of scope resolution (::) operator. Array used in class, Friend Function, Constructor & Destructor.

	Inheritance : Base class, Derived class, Visibility modes, Types of Inheritance. Data Structure (through C++): Data, Data item, Data Structure, Stack, Push and Pop operation on stack, Linear Queue, Insertion & Deletion in Linear Queue, Array Sorting. Subject related Pedagogy.

Commerce

A)	**Business, Trade and Commerce**: Business an introduction, Classification of Business activities, Business Risk: Nature and causes. **Forms of Business organisation**: Sole Proprietorship, Joint Hindu family business, partnership organisation, co-operative society, company organisation, choice of form of business organisation. **Private, Public and Global Enterprise**: Departmental undertaking, Statutory Corporation, Government company, Global enterprise/Multi National company, public private partnership (PPP). **Business Services**: Banking, Insurance, postal and telecom services. **Emerging modes of Business**: E-commerce, E-Business. **Social Responsibility of Business**: Social responsibility, Business Ethics. **Nature and Significance of Management**: Management an introduction, Nature of management, levels of management, functions of management, Co-ordination. **Principles of Management**: Principles of Scientific management by Taylor, General Principles of Management by Fayol. **Business Environment**: Concept of Business Environment, Dimensions of Business Environment, Concept of Demonetisation. **Planning:** Concept of planning, Types of plans. **Organising**: Organising as a process, Organisational structure, Delegation and decentralisation. **Staffing**: Meaning and importance, Recruitment, Selection, Training and Development. **Directing**: Importance and Principles, Supervision, Motivation, Leadership, Communication. **Controlling**: Concept of controlling, Controlling process, Controlling techniques. **Business Finance**: Financial management, Financial decision, Financial planning, capital structure, fixed and working capital. **Marketing and Marketing Mix**: Marketing, Elements of Marketing Mix.
B)	**Introduction to Accounting**: Concept of Accounting, Basic Accounting terms, **Theory Base of Accounting**: Fundamental Accounting assumptions: GAAP, Basic accounting concepts, Systems of accounting, Basis of Accounting, Accounting standards, Goods and service tax. **Recording of Transactions-I**: Business transactions and source Documents, Accounting Equation, Double entry system, Journal, Ledger. **Recording of Transactions-II** : Cash Book, Subsidiary Books. **Bank Reconciliation Statement**: Preparation of Bank Reconciliation statement as per cash book, Preparation of Bank Reconciliation statement as per pass book.