Paper I

General Knowledge and Teaching Aptitude

Unit I General Studies

Module 1.

 General Science -Mathematics, Statistics, Physics, Chemistry and Biology (Basics -Class X Level)

Module 2.

 Social Science -Economics, History, Geography and Indian Polity (Basics - Class X Level)

Module 3.

 Humanities- Literature (Classics and Masterpieces of World and Indian Literature), Art (Major art forms of India) and Culture (Life and Society in India)

Module 4.

 Kerala Studies – Social reforms, National Movements, Kerala Model of Development, Literature, Art and Culture

Unit II Language and Reasoning

Module 1.

Comprehension and Vocabulary

Module 2

Basic English Grammar

Module 3.

Logical Reasoning and Analytical Ability

Module 4.

 Numeracy Skills - Pattern Recognition and Orders of Magnitude

Unit III Current Affairs

Module 1.

 Technology –Inventions, Innovations and Discoveries

Module 2.

 Environmental Issues, Movements, Treaties and Legislations -National and International.

Module 3.

UN and Global Affairs

Module 4.

 Institutions of Higher Learning and Research, Scholarships and New Initiatives (National and State level)

Module 5.

 Indian Constitution and Politics and Recent Legislations –Right to Information and Right to Education

Module 6.

Events, Persons and Awards

Module 7.

Sports and Games

Module 8.

• Culture (Films, Literature, Music and Performing Arts)

Unit IV Foundations of education

Module 1. Philosophical Foundations

- Educational Philosophy Relationship between Philosophy and Education - Major Philosophical divisions and its impact on aims, curriculum, and methods of teaching -Concept of teacher, freedom and Discipline
- Major philosophical systems in the East Six Schools of Indian philosophy, Buddhism, Jainism, and Islamic thought
- Major philosophical systems in the West Idealism, Naturalism, Pragmatism, Humanism and Realism, Democracy and Critical Pedagogy

0

LBS Centre for Science & Technology

- Eminent thinkers in Education Gandhiji, Tagore, Vivekananda, Plato, Rousseau, Montessori, Frobel, John Dewey, Paulo Freire
- Value education Classification of values, Significance of value education, Religious and moral education and development of values, Value crisis.

Module 2. Sociological Foundations

- Relation between education and sociology, -Meaning and scope of education and sociology, and sociology of Education, Interactive role of education and society, The relationship between education and culture.
- Social functions of education- Various functions of education in society, functions of society towards education. Functions of education with regard to Culture-Preservation, Transformation and Transmission.
- Education and social institutions Major social institutions, Role of various social institutions to inculcate values connected with Democracy and Secularism, National Integration, Concept of global village
- Education and socialization Factors influencing socialization, education and socialization process, Acculturation, value orientation – Teacher as a Change agent and Nation builder, Cultural lag, cultural inertia, Cultural diffusion

Module 3. Psychological Foundations -

 Educational Psychology- Meaning, scope, fields of psychology- Educational Psychology, School Psychology, Clinical Csychology. Applications of Psychology-

- Guidance and Counselling, life skills education etc.
- Personality- Approaches- Psychoanalytic, Behaviouristic, Humanistic, Trait approaches. Motivation- Intrinsic and extrinsic. Approaches to motivation- behavioral, humanistic, cognitive, and socio-cultural.
- Intelligence- Factor theories, Multiple intelligence. Measurement of intelligence-Binet, Wechsler. Creativity
- Social and Cognitive development- Erikson, Piaget, Vygotsky, Language- structure and development. Memory and forgetting
- Adolescent characteristics- Cognitive, Emotional and Motivational aspects. Peer influence. Parenting difficulties

Module 4. History & policies of Education

- History of Education in Kerala and India. Early education history of India, introduction of modern English Education, Government's role in pre-Independence India, major reports & documents on education. Important personalities in Education in India and Kerala.
- Reports and Policies on Education in post independence period – NPE -first, second & third, BPEGEL, IEDSS
- Acts and Bills Relevant to higher education: Major Bills and Acts on Higher education promulgated by the Parliament of India and the Legislative Assembly of Kerala
- Programmes for Universalisation of Education - Saakshar Bharat, RTE, DPEP, SSA, RMSA, RUSA,
- Institutions of Education at National and state level- MHRD, UGC, NCTE NCERT, NUEPA, SCERT, DIET, CTE, SIET, etc.

Unit V Teaching, Learning and Evaluation

Module 1. Teaching Aptitude

• Teaching aptitude – Teacher characteristics, Teaching as a profession, Skill based

......State Eligibility 7est - Syllabus 2016

- theoretical knowledge, Teacher competency and teacher accountability,
- Administrative aptitude Administrative models, administrative roles of teachers, obligations to students, parents and society
- Reflective practices -components in reflective practice, innovative teaching, mechanisms of feedback to learners, self assessment.
- Professional development Needs for professional development, technological advancement, professional associations, Preservice and in-service training, cluster training, teacher rating & grading
- Teacher Characteristics Essential characters for a quality teacher, professional qualities, teacher as an agent of social reformation.

Module 2. Teaching Methods

- Teaching skills Essential teaching skills, quality teaching and teaching skills, Microteaching.
- Methods of teaching Analysis of Major methods of teaching.
- Techniques and approaches to teaching Individualized instruction, Group instruction, peer teaching, mentoring, facilitated instruction, Distance and online teaching,
- Instructional models of teaching Significance of Models of teaching – Concept attainment, Advance organizer, cognitive growth, group investigation models of teaching.
- Teaching & Learning resources Classification of Audio-visual aids, Dale's cone of experience, Community resources, Web resources. Improvisation of aids, Effective use of learning resources

Module 3. Learning -

 Learning theories- Behaviorist theories, cognitive learning, Constructivist view.
 Classroom learning. Approaches of Vygotsky, Piaget, Gagne, Bruner, Ausubel, & Bloom

- Applications of learning theories- Mastery learning, reinforcement, situated learning, problem-based learning, Building on students' thinking, activity and constructing knowledge, scaffolding, assisted learning, concept learning, setting learning objectives, etc.
- Learner characteristics- Heredity, personality, intelligence, SES, culture, gender, experience, motivation, goal orientation, cognitive styles, learning styles
- Learning environment- Class room climate, home environment. Teacher's personality. Individual learning and group learning. Group dynamics. Sociometry
- Learners with special needs Students with mental retardation, learning disabilities, learning difficulties, behavioral problems, emotional problems; communication, visual and hearing impairments, under achievers. Strategies- inclusive classroom, strategy training. Gifted students

Module 4. Evaluation

- Tools and techniques for evaluation Paper pencil Tests, Achievement and diagnostic tests, Performance tests, Cumulative records, Rating scale, Observation, Characteristics of a good test
- Continuous Evaluation Measures for continuous evaluation- Unit test, Assignments, Seminar, Collection, Project, Experiments, Portfolio etc.
- Terminal evaluation Teacher made tests and standardized tests, Public examination, Type of test items, Entrance examination, Online tests, Interview
- Grading Principles of grading, types of grading, Absolute grading & relative grading, grading procedure, Merits and demerits of grading
- Feedback and remediation Feedback to students, feedback to teachers, Institutional mechanism for feedback collection, Remedial measures



LBS Centre for Science & Technology

Unit VI

Communication, Technology Research and Educational Administration

Module 1. Communication

- Communication and Education -Meaning, concept & scope, Communication as a major life skill, Effective interaction in classrooms.
- Basic principles of communication Components of communication, Communication cycle, communication process, sources of communication
- Types of communication Oral, written, interpersonal, Non-verbal communication
- Barriers in communication Major barriers,
 Interaction analysis, procedure for analysis
- Classroom application of communication Communication and effective teaching, meaningful learning, and proper application.

Module 2. Computer and ICT

- Basics of Computer Knowledge: Basic parts of a computer - I/O Devices - Memory -Storage Devices - Operating System -Database - FOSS - Common Computer Abbreviations and Terminologies.
- Computer Networks &Internet: Basics of Computer Networks - Types of Networks -Internet - WWW - Browsers - Search Engines - E-mail - Virus - Anti-Virus Software - Cyber Security - Cyber Law -India IT Act 2000.
- Office Tools: Word Processing Editing & Formatting Document Printing Inserting Tables & Pictures Spreadsheet Creating Worksheets Working with Formula Bar PowerPoint Creating & Designing slides Insertion of objects and functions.
- ICT Enabled Learning: e-Learning e-Content Portals – Video Conferencing – Interactive Educational Tools – MOOC – Moodle – Smart Class Room - IT@School Project.
- General Applications: e-Commerce e-Governance e-banking Mobile Apps Social Networking Apps Green Computing Supercomputing Cloud storage.

Module 3. Research in Education -

- Basic aspects of educational research Meaning & Scope of research in education, Steps in educational research, Uses of statistics in educational research
- Types of research- Historical, Descriptive and Experimental, Quantitative and qualitative
- Methods, Tools & techniques of research Surveys, Case study, Experimental, Document analysis, Questionnaire, Scales, Interview, Observation.
- Action research steps in action research, significance of action research at school level
- Reporting of research steps in writing research report, APA style, Plagiarism, ethics in educational research.

Module 4. Educational Administration

- Planning and administration at national level
 National Curriculum Frameworks,
 National policy on education, Planning commission and education, National pattern of Education system. NUEPA
- Organisational structure of education in the state – Structure of School education, Higher secondary level education, Higher education system, Kerala State Higher Education Council, SIEMAT
- School administration Role and functions of Head of the institution, school council, subject councils, school parliament, PTA, MPTA, School management committee
- Management & governance Management of resources at various levels, Provisions for equal educational opportunities (free textbooks, free uniform, mid day meal, etc.), e-governance
- International agencies and education UN and goals of education in India, Programmes for universal education in tune with international developments in the field of education. Privatization and education at various levels.

......State Eligibility Test - Syllabus 2016