



TAMILNADU COUNCIL FOR OPEN AND DISTANCE LEARNING

Approved by International Council for Open & Distance Education (ICDE), Oslo, Norway

Internationally Recognized Institution Registered under Tamilnadu Govt Act

M.Ed (Magister of Education)

Course Syllabus

SNo	Subject Code	Subject	Max.Marks
01	MED01	Psychology of Learning and Development	100
02	MED02	Advanced Research Methodology in Education	100
03	MED03	Information and Communication Technology	100
04	MED04	Advanced Philosophy and Sociology of Education	100
05	MED05	Teacher Education	100
06	MED06	Educational Planning, Management and Administration	100
07	MED07	Educational Measurement and Evaluation	100
08	MED08	Communication and Soft Skills	100
09	MED09	Elective Subject*	100
10	MED08	Institutional Internship Programme	100
11	MED09	Dissertation and Viva Voce	100
12	MED10	Micro Teaching	100

1. Psychology of Learning and Development

UNIT-I- UNDERSTANDING THE LEARNER

Educational Psychology: Nature, Scope and relationship. Principles and process of growth and human development. Physical, social, emotional and cognitive development. Individual differences-determinants – role of heredity and environment and applications for educational programmes. Personality: Structure and dynamics of personality – Theories of personality – Integrated personality – Measurement of personality.

UNIT-II NURTURING INTELLIGENCE AND COGNITIVE ABILITIES

Intelligence: Nature, Approaches, theories, measurement. Cognitive Development: Piaget's and Bruner's learning strategies. Interest and aptitudes, acquisition of language. Creativity: Identifying creative and talented children- Factors fostering creative thinking abilities and talent development. Concept formation. Logical reasoning, Problem solving: Educational implication.

UNIT-III LEARNING AND MOTIVATION

Learning: Meaning, definition and Nature, Theories of Learning. Behaviourism, Constructivism, Thorndike's connectivism, Pavlov's classical conditioning, Skinner's Operant Conditioning, Kohler's learning by insight, Hull's reinforcement theory, Tolman's Theory of learning Lewis field theory, Gagne's hierarchy of learning and Bruner's theory: Discovery Learning, learning and motivation Atkinson's theory of Achievement motivation- Techniques of enhancing motivation Maslow's self-actualization theory, remembering and forgetting, LTM,STM - transfer of learning and it's theories.

UNIT-IV COGNITIVE PSYCHOLOGY

Cognitive psychology: Meaning, definition, nature, scope, core, concepts, approaches, growth and Fundamental concepts. Central nervous system, Autonomous nervous system, Structure of brain, Role of brain and Neurons in learning, Synapse and Neurotransmitters in learning, Brain Imaging Techniques, Computer Tomography (CT), Positron Emission Tomography (PET), Brain based teaching, Body-brain concept of learning brain plasticity, Lateralization, Left Brain Vs Right Brain

UNIT-V MENTAL HEALTH AND HYGIENE

Mental health: Trades and preservation of mental health. Mental hygiene: Aims, aspects, scope and importance. -Concept of adjustment types, process of adjustment, conflict-types. Defence mechanism and its types.

2. Advanced Research Methodology in Education

UNIT - I RESEARCH IN EDUCATION

Educational Research: Meaning, Definition, Characteristics, Need and Scope. Principles of scientific inquiry and theory development – Interdisciplinary nature of educational research. Taxonomy of Educational research: Basic, Applied and Action research. Educational research in India. Emerging Trends and Challenges in Educational Research. Steps in research: selection and sources of a research problem- Statement of a research problem, variables: definitions and types, operationalization of key terms.-objectives/research questions. – Hypothesis: definition, meaning, role, types, characteristics and functions. Preparation of a research proposal. Review of Related Literature (RRL): - meaning, importance. Sources of RRL: Primary, secondary. – APA style of references, References Vs Bibliography. Preparation of a Research Proposal: Framework of the research proposal and strategies for writing the research proposals.

UNIT – II RESEARCH PARADIGMS AND DESIGN

Quantitative, Qualitative and Mixed methods: meaning, definition, steps and characteristics. Quantitative Methods of Research: Experimental Research - Meaning, characteristics, Nature, Variables in experimental research, purpose and external and internal validity. - Quasi-Experimental Designs: Non-equivalent Comparison Group Design, and Time-Series Design.

- Simple cases of Casual-Comparative and Correlational research; - Classification by Time: Cross- sectional, Longitudinal (Trend and Panel studies), and Retrospective; - Classification by research objectives: Descriptive, Predictive and Explanatory.

UNIT - III QUALITATIVE METHODS OF RESEARCH

Qualitative Research: meaning, steps and characteristics. - Qualitative research approaches: Phenomenology, Ethnography, Case studies, Triangulation and Grounded theory - characteristics, types, data collection, analysis and report writing. - Historical Research: meaning, significance, steps, primary and secondary sources of information, external and internal criticism of the source. -Mixed Research: meaning, fundamental principles, strength and weaknesses, types and limitations.

UNIT - IV SAMPLING DESIGN AND TECHNIQUES

Population and Sample: Concept of population and sample, sampling unit, sampling frame, sample size and sampling error. Sampling Techniques: Random Sampling and Non-random sampling. Random Sampling Techniques: simple random, systematic, stratified random, cluster, and multi-stage. Non- Random Sampling Techniques: convenient, purposive, judgment, quota and snowball. - Sampling in qualitative and mixed research.

UNIT - V METHODS OF DATA COLLECTION

Tests, Inventories and scales: Definition, meaning, types, construction and uses. - Questionnaire: forms, principles of construction and uses in educational research. Interview: types, characteristics and applicability, guidelines for conducting interviews. Qualitative and quantitative observation: use of the checklist and schedules, time sampling, field notes, role of researcher during observation, focus group discussion. - Primary and Secondary data: sources, online tools. Standardization of a research tool: Reliability, Validity, Item analysis and Objectivity.

3. Information and Communication Technology

UNIT - I EDUCATIONAL TECHNOLOGY AND INFORMATION TECHNOLOGY

Educational Technology: Definition, Meaning, scope and relevance to modern education - Technology of Education and Technology in Education - Need for educational Technology in Schools - Education Technology in present scenario. Information Technology: Concept, Definition, Meaning and Educational Significance.

UNIT - II INFORMATION AND COMMUNICATION TECHNOLOGY

ICT: Definition, Meaning, Significance, Importance and Uses- Origin and Growth - Traditional and Modern ICT – ICT and lifelong learning-Challenges in ICT – ICT related Teacher competencies. Role of UNESCO in promotion of ICT.

UNIT - III INTEGRATING ICT IN THE CURRICULUM

Integrating ICT in the Curriculum: Meaning, Significance - Theories and Models - ICT integration in India Foreign Countries – On Line Learning – On Line Exams - Virtual learning - Smart class room Multimedia - Barriers in ICT integration.

UNIT - IV WEB TOOLS

Web 1.0 to Web 4.0 tools: Blogs – Avatar – Markers - E-book – Tutorials - Book Mark Online - Comic Creator - Graphic Organizers - Image Sharing Online - Digital Stories - Websites - E-mail - News Letters - Wikis Social Networking. Treasure Hunt - Cyber guides - Scrap books - Subject sampler. Education Software and APPS. MOOCS, MOODLES, OPAC - Animation Software.

UNIT - V TEACHING LEARNING WITH ICT

Web-based Instruction: Meaning, significance and scope - Web-based Instructional Design: Guiding principles - Development of web-based instruction - CML, CAI, CAL, CALL: Internet, telnet, e-mail, voicemail, Chat, Open Educational Resources & Net forum - Online Discussion -Mobile learning – Video Conferencing - Digital resources - Techno pedagogy for teaching and learning.

4.Advanced Philosophy and Sociology of Education

UNIT - I INTRODUCTION TO PHILOSOPHY OF EDUCATION

Philosophy - Meaning, Scope. Educational philosophy - Functions. Relation between Education and Philosophy. Relationship Between Education and Philosophy - Meaning, Nature and Scope of Philosophy of Education - Functions of Philosophy of Education - Aims of Education in Relation to Philosophy of Life.

UNIT - II CONTRIBUTION OF INDIAN SCHOOLS OF PHILOSOPHY

Indian Schools of Philosophy - Sankhya, Vedanta, Buddhism, Jainism, Islamism, Christianity with special reference to the concept of knowledge, reality and values and their educational implications. Educational Thoughts of Vivekananda, Tagore, Gandhi, Abdulkalam Azad, Aurobindo, Dr.Radhakrishnan, J.Krishnamurthi, A.P.J.Abdul Kalam. Educational Thoughts of prophet Mohamed and Jesus Christ.

UNIT - III CONTRIBUTION OF WESTERN SCHOOLS OF PHILOSOPHY

Western Schools of Philosophy - Idealism, Realism, Naturalism, Pragmatism, Existentialism, Marxism with special reference to educational theory and practice. Modern concept of Philosophy - Logical Analysis - Empiricism and Positive Relativism – Maria Montessori, Ivan Illich, Paulo Ferrare, Emerson, Massey Thong, Fedric Nitzche.

UNIT - IV SOCIOLOGY OF EDUCATION

Sociology - Meaning, Definition. Relationship between Education and Sociology. Educational Sociology - Meaning, Definition, Relevance, Scope. Socialization - Meaning, Definition. Agencies of socialization - Family, School, Peer, Community, State. Social Change – Nature, Meaning, Factors and Causes. Social Mobility - Meaning, Types. Social Stratification - Meaning, Importance. Theories - Vygotsky , Bandura, Zimmerman .

UNIT - V EDUCATION AND THE SOCIAL SYSTEM

Education as a social sub-system – Education as a factor of social stratification and social mobility. Equity in education: Education Guarantee Scheme, Education for social justice and peace- Community schools and colleges, Education as an instrument of social change: Westernization, Urbanization, Industrialization, Modernization, Liberalization , Privatization and Globalization and their impact on Education - Role of Education in attaining Millennium Development Goals – Education for social, cultural and emotional integration.

5. Teacher Education

UNIT - I TEACHERS AND TEACHING

Teachers in India: The changing profile, changing roles and responsibilities of teachers. - Concept of Profession: Teaching as a profession, Professional ethics for teachers. - Social status of teachers. - International Labour Organization (ILO) version of the status of teachers. –Teacher Appraisal and accountability. Teacher Educators: Who is a Teacher educator? - Roles and responsibilities of teacher educators. - Preparation of teacher educators. - Continuing education of teacher educators: Institutional mechanism and provisions for the continuing education of teacher educators.

UNIT - II TEACHER EDUCATION

Teacher education: Need and Relevance – Historical perspectives - Teacher education in the contemporary and changing society. A critical appraisal of the present system of teacher education in India. Recommendations of Commissions and Committees on Teacher Education – National policy of Education and Programme of Action on Teacher Education. Teacher Education system in India: Types of Teacher Education Institutions. - Levels of teacher preparation: ECE, Elementary and Secondary. - Preparation of Teachers for specific areas: work education and Vocational education, HPE, Art education.

UNIT - III PRE-SERVICE TEACHER EDUCATION IN INDIA

Pre-Service Teacher Education: concept, nature, aims, objectives and scope. Reconstructing and Strengthening of Teacher Education: Roles and functions of IASEs, CTE, DIETs'. - Roles, functions and networking of institutions: UGC, NCERT. NCTE. NUEPA, SCERTs. - Issues, concerns and problems of pre-service teacher education-explanation and commercialization. Aims and objectives and Teacher education curriculum at different stages: primary, secondary, higher secondary. - Approaches to teacher education: Teaching as

a Profession - Qualities of a good teacher – Competency Based Teacher Education. - TQM in Teacher Education. Quality assurance in teacher education.

UNIT - IV TEACHER EDUCATION CURRICULUM

Renewal of Teacher education curriculum: Pre-service and In-service teacher education- Professional Identity of teachers: Role of professional organizations of teachers, Faculty improvement programme for teacher educators. - In-service teacher education: Orientation, Refresher courses and summer Institutes. Curriculum transaction in Pre-service Teacher Education: Concept and importance. - Methods and Techniques: Lecture-cum-Discussion, Demonstration, Group Discussion, Brain storming seminar, Workshops, Team Teaching, Use of ICT, Case analysis, reading and review of original texts, projects and assignments.

UNIT – V SCHOOL EXPERIENCE PROGRAMMES/INTERNSHIP (SEP)

Concept of School Experience Programme (SEP). – Planning, organization, Monitoring and supervision of SEP. - Internship: concept; planning and organization. Organization of practice teaching for developing an effective teacher: Traditional practices – Gurukula system, Teacher Preparation Practices in Pre-independent India, Post Independent India – Teacher education and practicing schools - Preparing teachers for rural and special schools, teaching competency for single stream and multigrade teaching.

6. Educational Planning, Management and Administration

UNIT - I EDUCATIONAL PLANNING

Educational Planning: Meaning, Definition, Nature, Need, Characteristics, Objectives, Principles and Approaches. - Education in Five year plan - Different levels of Educational Planning: Long term plan, Short term plan. – Institutional Planning: Meaning, Definition, Scope, Need and Characteristics. Educational Finance: Meaning, importance and principles. Cost of education: Social and individual cost, Recurring and non-recurring. National and international funding agencies.

UNIT - II EDUCATIONAL ADMINISTRATION

Educational Administration: Meaning, Definition, Nature, Elements, Scope and Principles. – Agencies and Organizations of Educational Administration: Central Government, State Government, Local Authorities and their roles. National level Advisory Bodies: Central Advisory Board of Education (CABE). National Council of Educational Research and Training (NCERT), University Grants Commission (UGC), National University of Educational Planning and Administration (NUEPA).

UNIT – III EDUCATIONAL MANAGEMENT

Educational Management: Meaning, Definition, Objectives, Administration Vs Management. - Functions of Management: Planning, Organization, Direction, Staffing, Co-ordination, Reporting, Budgeting (PODSCORB). Theories of Management: Taylor's Scientific Management, Max Weber's Beaucocratic model and Henry Fayol's administrative management. Educational Supervision: Meaning, definition, need and importance – Role of supervisor. Inspection: Meaning, definition, types, principles and characteristics. – Supervision Vs inspection.

UNIT - IV HUMAN RESOURCE DEVELOPMENT

Human Resource Development: Meaning, definition, characteristics and importance. – Aspects of HRD : – Recruitment and Placement, Performance and Potential Appraisal, Reward and Incentive Management, Punishment and Disincentive Management, In-service Education, Communication, Storage and retrieval of data. Decision Making: Meaning, Definition, Importance and Role of teachers. Styles of Decision Making: Command, Consensus, Consultation, and Convenience.

UNIT - V QUALITY IN EDUCATION

Quality in education: Meaning, Definition, indicators and importance. Quality improvement: Meaning, need, importance and programmes. - Premises of Quality Improvement: Organisational mission, Continuous improvement, student orientation, leadership commitment, empowerment, collaboration, Data and Statistical thinking. - Adam's model of Quality Improvement. - Total Quality Management in Education (TQM): Process and Arcaro's Model TQM. - Measuring Quality of Education: Assessment and benefits.

7. EDUCATIONAL MEASUREMENT AND EVALUATION

UNIT I EDUCATIONAL MEASUREMENT

Educational Measurement: Meaning, Definition, properties, purpose, importance, steps and types. Scales of measurement: Nominal, ordinal, Interval and Ratio scale with merits and demerits. – Standard Scores: 'T' Scores, 'Z' Scores, 'C' Scores. –Frequency Distributions - Graphical representations, -Measures of Central tendency – Measures of Variation. – Limitations of Measurement.

UNIT II EDUCATIONAL EVALUATION

Educational Evaluation: Meaning, Definition, Objectives, Characteristics, types and techniques. – Role of Evaluation in Teaching - Learning Measurement. Function, Purpose, Steps, Process. – Evaluation Vs Measurement

UNIT III TYPES OF EVALUATION

Formative and Summative evaluation: Meaning, Definition, Characteristics. – Formative Vs summative evaluation. - External and Internal Evaluation: advantages and limitations. - Criterion Referenced and Norm Referenced Evaluation: Meaning, definition and

characteristics. – Criterion Referenced Vs Norm-Referenced evaluation. – Diagnostic evaluation. - Prognostic evaluation – Continuous evaluation - Comprehensive Evaluation.

UNIT IV TOOLS AND TECHNIQUES OF EVALUATION AND MEASUREMENT

Tests: Meaning, definition, importance and characteristics. Types of tests: Teacher made test, standardized test, oral tests, written test, Essay type, short Answer, objective type, its merits and demerits. - Techniques of Evaluation: Anecdotal Records, Sociometric methods, Case study, Cumulative Record. Standardization of a test: Reliability and its types, Validity and its types - item analysis.

UNIT I EDUCATIONAL MEASUREMENT

Educational Measurement: Meaning, Definition, properties, purpose, importance, steps and types. Scales of measurement: Nominal, ordinal, Interval and Ratio scale with merits and demerits. – Standard Scores: ‘T’ Scores, ‘Z’ Scores, ‘C’ Scores. –Frequency Distributions - Graphical representations, -Measures of Central tendency – Measures of Variation. – Limitations of Measurement.

UNIT II EDUCATIONAL EVALUATION

Educational Evaluation: Meaning, Definition, Objectives, Characteristics, types and techniques. – Role of Evaluation in Teaching - Learning Measurement. Function, Purpose, Steps, Process – Evaluation Vs Measurement

UNIT III TYPES OF EVALUATION

Formative and Summative evaluation: Meaning, Definition, Characteristics. – Formative Vs summative evaluation. - External and Internal Evaluation: advantages and limitations. - Criterion Referenced and Norm Referenced Evaluation: Meaning, definition and characteristics. – Criterion Referenced Vs Norm Referenced evaluation. – Diagnostic evaluation. - Prognostic evaluation – Continuous evaluation - Comprehensive Evaluation.

UNIT IV TOOLS AND TECHNIQUES OF EVALUATION AND MEASUREMENT

Tests: Meaning, definition, importance and characteristics. Types of tests: Teacher made test, standardized test, oral tests, written test, Essay type, short Answer, objective type, its merits and demerits. - Techniques of Evaluation: Anecdotal Records, Sociometric methods, Case study, Cumulative Record. Standardization of a test: Reliability and its types, Validity and its types - item analysis.

UNIT V MODERN TRENDS IN MEASUREMENT AND EVALUATION

Grading System: Meaning, concept, importance and merits. Methods of Grading: Direct grading, Grading by score conversion. – Practical problems of Grading System. -Semester System: Meaning, need, importance and Limitations. Continuous Internal Assessment (CIA) and its advantages - Question Bank system and its advantages – Choice Based Credit System – Projects and Assignments.- Role of Computers in Examination. Grading System: Meaning, concept, importance and merits. Methods of Grading: Direct grading, Grading by

score conversion. – Practical problems of Grading System. -Semester System: Meaning, need, importance and Limitations. Continuous Internal Assessment (CIA) and its advantages - Question Bank system and its advantages – Choice Based Credit System – Projects and Assignments.- Role of Computers in Examination.

7. Communication and Soft skills

UNIT I – LISTENING AND READING

Ability to Listen and Document what you have heard Listening - Barriers to Listening – Documenting Reading and Comprehension Reading skills - Local comprehension - Global comprehension

UNIT II – INSTRUCTIONS AND TRANSCODING

Ability to Read and Follow Instructions - Language of Instructions - Writing instructions Ability to interpret and transcode information Graphic communication – Interpretation - Transcoding

UNIT III – INTERPERSONAL COMMUNICATION

Asking for and responding to information-Informational Communication - Encoding and decoding strategies - Principles of communication-Communication skill with public, fellow employees, supervisors and customers Relational communication – Perception - Emotional Intelligence

UNIT IV – EMPLOYMENT COMMUNICATION

Spelling and Grammar-Written communication – Spelling – Grammar Ability to fill out a job application-Employment communication - Covering Letter - Résumé

UNIT V – COURTESY AND EYE COMMUNICATION

Expressing Courtesy-Politeness strategies - Five Magic words in English - Courteous expressions Communication through eye contact-Non-verbal communication - Body language - Eye Contact

8. Institutional Internship Programme

- ★ Book reviews and content analysis. Review of records in the institution.
- ★ Study of Annual Budget of the institution. Preparation of institutional plan.
- ★ Administering Psychological Tests/and Experiment.
- ★ Preparing of Abstracts for any 5 Educational Research – Articles.
- ★ Report writing on various innovative methods of teaching.
- ★ Preparation of Innovative Lesson Plan.
- ★ Any other activities suggested from time to time.

Note: The Enrolled Students need to submit a report on Institutional Internship programme for which separate guidelines have been given which has been uploaded in our website.

9.Dissertation and viva voce

Submission of research report on a topic of student's choice.

Note: The Enrolled Students need to submit a dissertation for which separate guidelines have been given which has been uploaded in our website.

10.Micro Teaching

Micro-Teaching shall be done on the chosen elective subject.

Elective Subject (Choose any one Subject)

SNo	Elective Subject
01	Comparative Education
02	Educational Guidance and Counselling
03	Environmental Concerns and Education
04	Exploring Library and other Learning Resources

1. Comparative Education

UNIT - I COMPARATIVE EDUCATION AND DEVELOPMENT

Comparative Education: Meaning, Definition, Aims, Purpose. History and Development. Methods in Comparative Education: Statistical, Descriptive, Sociological, Historical, Analytical, Synthetical. – Research in Comparative Education.

UNIT - II FACTORS IN COMPARATIVE EDUCATION

Factors of Comparative Education- Geographical, Economical, Racial, Linguistic, Philosophical, Moral, Religious, Sociological, Humanism, Nationalism and Democracy. Factors in National system of education: Cultural, Economical, Political, National system and unity, Internationalism, Languages.

UNIT - III COMPARISON OF GLOBAL EDUCATION

Educational Structure and System in various countries: U.K, U.S.A, China, Japan, Finland, Brazil, Russia and India. Educational Administration and Teacher Education in U.K, U.S.A., China Finland and India. Secondary Education and Vocalization of Secondary Education in U.K, U.S.A, China, Brazil and India.

UNIT - IV MODERN TRENDS UNESCO

Modern trends in Global education. Role of UNESCO in improving educational opportunities among the member countries, various official organs of the UNESCO and their educational activities. Distance Education: Concept, Need, Higher Education, Adult Education – Role of OECD.

UNIT - V PROBLEMS OF COMPARATIVE EDUCATION

Global Educational Problems, causes and Remedies: Unemployment, Poverty, Terrorism, Population Explosion, Illiteracy, Equalization of Educational Opportunities, Women Education - Education of Exceptional Children, Technical and Vocational Education.

2. Educational Guidance and Counselling

UNIT I INTRODUCTION

Educational Guidance – concept and meaning, definitions - scope and significance of educational guidance, Types of guidance – Educational, Vocational, Personal, Group guidance – Direct, Indirect and Eclectic guidance-Guidance and its relation with education. Career guidance – nature of work – various motives associated with work – career development – Super’s theory – approaches to career guidance, career talks, and career information services.

UNIT II TECHNIQUES OF GUIDANCE

Group guidance – concept, concern and principles – Procedure and techniques of group guidance, guidance programme-various guidance services-Organization of a guidance programme- Pre-requisites of a guidance programme –Planning of a Guidance programme- Guidance activities- Evaluation of guidance programme-Teacher’s role in career planning, Employment Bureau and campus interviews.

UNIT III TESTING IN GUIDANCE

Testing in guidance service: intelligence, aptitude, interest, attitude and personality –Administering, scoring and interpretation of test scores- Non-testing techniques – Communication of test results- Application and use of testing service for placement, placement services.

UNIT-IV TECHNIQUES OF COUNSELLING

Counselling services-concept, nature and principles - Approaches- and scope of counselling in education –counselling techniques-Characteristics of effective counsellor- Group counselling techniques -Counselling for adjustment-specialized areas in counseling-Counseling for Professional courses.

UNIT V GUIDANCE AND COUNSELING FOR SPECIAL NEEDS POPULATION

Guidance of children with special needs – problems and needs – guidance of the gifted and creative students – guidance of under achievers, slow learners and first generation learners – guidance for learning disabled, Drug addicts and alcoholics-De addiction centres, Career resource centre, Evaluation of counselling, need for research and reforms in guidance and counselling service.

3. Environmental Concerns and Education

UNIT I

Environmental Education - Characteristic and principles - Nature and scope of Environmental Education, Aims and objectives of Environmental Education, Environmental Awareness, Important issues in Environmental Education.

UNIT II

Man and his relationship with environment, Environmental hazards and pollution - soil, air, noise, water, chemical and thermal, extinction of flora and fauna, need for conservation, preservation and protection of rich environmental heritage, Programme of environmental education for primary, secondary and higher education institutions – Biodiversity and conservation - Global warming, ozone depletion, acid rain, population explosion, urbanization, poverty and deforestation.

UNIT III

Environmental education, Role and Responsibilities of teachers, Competencies of environmental education teacher, Specific approaches to teaching environmental education, Problems of Environmental education. Nature study and Eco-clubs. Role of Government and Non-government Agencies for environmental protection.

UNIT IV

Features of Curriculum for Environmental Education, Nature of Curriculum on Environmental education, Concept of environment and ecosystem, Natural system, Natural Resources, Human Systems – Technological System, Remote sensing - Steps in preparation for Environmental curriculum at different levels of education.

UNIT V

Strategies and Methods of Environmental Education, approaches - treating environmental issues as a separate subject, integrated approach, Discussion, seminar, workshop, dialogue, problem solving, field trips, projects, exhibition, role of media, films and television, Study of environmental projects, National organizations for Environmental Protection, National Policy on Environment and Environmental laws.

4. Exploring Library and other Learning Resources

UNIT –I ELECTRONIC AND ONLINE RESOURCES

Internet - OPAC/WEBOPAC- Online data Base - E-Books- E-Journals- Web Portals- Subject Gateway- Specialized Collection -Social Network-Blogs-wikis-Research Gate- Others - E-Encyclopedia-Full text database-E-thesis/Dissertation- E-Questions Bank- Online lecture note/Video Courses- Research Reports and Manuals- Others.

UNIT-II USING SEARCH ENGINE

Google – Yahoo- Alta vista-MSN- Rediff- Ask.Com- Alexa- Free Book Search.net- AskMeNow- E-Encyclopedia-Full text database-E-thesis/Dissertation- E-Questions Bank-Online lecture note/Video Courses- Research Reports and Manuals- Others.

UNIT-III PRINTED RESOURCES

Text Books – Reference Books – Dictionaries – Thesaurus – Encyclopedias - Magazines News Papers – Journals - Reports – Back Copies – Thesis – Dissertation.