DETAILED SYLLABUS FOR THE POST OF LECTURER IN EDUCATIONAL TECHNOLOGY AND MATERIAL DEVELOPMENT (Kerala General Education (DIET)) - Direct Recruitmen - DIRECT RECRUITMENT AND BY TRANSFER RECRUITMENT

(CAT.NOS: 366/2022, 367/2022)

PART I - General Subject (50 Marks)

Module 1 : Community Engagement – Resources & Practices

Total: 10 Marks

Unit 1: Community Resources

Resources that enhance or facilitate the lives of people in a community - examples of community resources are factories, educational institutions, cinema halls, libraries, religious places, hospitals, community centers, parks, etc - make use of these resources in education as it develops a sense of value and belonging among students.

Unit 2: Community Engagement

Community Engagement in Education - and symbiotic relationship that exists between communities and Education Institutions - sustainable networks, partnerships, communication media, and activities - Linking formal learning and the local community

Unit 3: Forms of community engagement

Community-student engagement -Researching with the community, sharing knowledge with the community, Designing new curriculum and courses, Involving local practitioners as trainers, Social Innovation by students and the like

Unit 4: Practices for Community engagement

Engagement practices and activities - formal or informal - include building relationships through collaboration initiatives, community campaigns, Community Survey, Community

services, Excursions, cooperatives, small businesses, consultation meetings & conferences, sports events, cultural events, community development and community research projects.

Unit 5: Rural Community Development

Social, economic, political and cultural framework of the rural society - Rural Resilience - Rural Institutions Close to Community, Participatory Learning - Approaches and Methods, Community Project Proposals and Project Management, Community living camps, Engagement with - School, Street Committee, Health Centre, Panchayat, SHGs - Programmes

Module II : Syllabus for General Subject - ICT in Education

Total: 10 Marks

Unit 1: Potentials of ICT in Education
ICT as a means to connect with the world – Pedagogy and ICT – Potentials and Advantages of Approaches to ICT

Unit 2: ICT integration in Curriculum transaction

Computer based Curricular planning- ICT Based Model of Curriculum Transaction - Considerations for integrating ICT – Innovations in Curriculum Transaction

Unit 3: ICT and Internet Resources for Teaching and Learning
Resources – Access and Creation, resource mobilization – Web-based learning, Social Networking –Virtual learning Environment - Designing e-initiatives

Unit 4: ICT in Classrooms

Creating Personal learning environments - ICT integrated Inclusive education - Assistive and Adaptive technologies

Unit 5: ICT for Assessment and Evaluation
Purposes and Techniques of Evaluation, Scope of ICT for evaluation- Innovative Practices in Assessment & Evaluation

Module 3 : PERSPECTIVES OF EDUCATION (10 Marks)

PHILOSOPHICAL PSYCHOLOGICAL AND SOCIOLOGICAL PERSPECTIVES OF EDUCATION

Philosophical perspectives of Education

Role of education in philosophizing the issues of life –Metaphysics, Epistemology, Logic, Phenomenology, Aesthetics and Axiology. Critical appraisal of schools of philosophy in the context of Twenty First Century – aims, content, methods and ongoing changes.

Focus of education in the 21st century. Building perspectives on educational philosophies, Modern schools of Philosophy-Empiricism, Positivism, Relativism.- Post -structuralist views and eclectic views. Comparative study of philosophies and educational contributions of Indian and western thinkers

Psychological **perspectives** of education

Learning and development- Learner Characteristics and Learning styles with special reference to pre- primary, primary, secondary, higher secondary and adult learners Learning in twenty first century classrooms., Characteristics And types, Development – language development, emotional, moral, motor and identity development. Cognitive Functions-Thinking, Reasoning, Problem Solving and Meta-cognition, Personality- types characteristics and development

Intelligence-different types~ Multiple, Cultural, social and emotional, impact on learners. Mental Health-, Factors affecting Mental Health (parents, family environment, society, school practices) - Strategies for enhancing Mental health

Sociological perspectives of education

Education for social security, wellness and progress, sustenance and transformation in society. Determinants of social change in the context of globalization.-Constraints on social change in India with respect to caste, ethnicity, class, language, religion, gender, regionalism, political interest

Education and Secularism - Role of teacher in inculcating democracy and international values.-Pluralism – Role of education in creating unity in diversity- Nationalism and education.-Role of Education in addressing cultural lag, privatization, globalization and partnership in social progress – Current trends in social development and transformation of values in society.

Module 4 : Teaching aptitude (10 Marks)

Teaching aptitude.

- Teaching -characteristics, levels, phases and maxims
- teaching methods, techniques and strategies
- modern trends in professional development and ethics

- technology integration in education

- Research, evaluation and innovations in classroom teaching, -

Module 5 : Research Aptitude (10 Marks)

- Research Meaning, Characteristics and Types

- Steps to Research

- Methods of Research

- Aims of Educational Research

- Research Ethics

- Research paper, Article, Workshop, Seminar, Conference and Symposium

- Thesis writings – its characteristics and Format

PART II (50 Marks)

Unit 1: CONCEPTUAL UNDERSTANDING OF EDUCATIONAL TECHNOLOGY

Concept, objective and scope of Educational Technology - Historical development of ET: Programmed Learning Stage, Media Application Stage and Computer Application Stage - Difference between technology in education (Instructional technology) and technology of education (teaching technology) - Emergence of educational technology as a discipline, Definitions, scope, functions/objectives of educational technology – Resource centres and services in educational technology - Transactional usage of ET: integrated complementary, supplementary and standalone   **(10 marks)**

Unit 2: APPROACHES TO EDUCATIONAL TECHNOLOGY

Educational Technology: Hardware, Software and Systems approach - Physical science (media approach), Communication (audio visual approach) – development of communication theory, convergence of communication and educational technology - Cybernetics (system approach) - origin of system concept, characteristics and stages of instructional system, general and instructional system theory - Behavioural science (behaviourist approach) – taxonomic and performance approach to objectives, mastery learning, programmed instruction and teaching machines, individualized approach to instruction – Keller plan   **(8 marks)**

Unit 3: SYSTEMS APPROACH TO EDUCATION AND COMMUNICATION

System Approach: Meaning and its Components- Goal Setting, Task Analysis, Content Analysis, Context Analysis and Evaluation Strategies - Instructional Design and Instructional strategies - Effectiveness of Communication in Instructional System- Communication: Modes - communication models, mass communication - Barriers and process of Communication - Interpersonal Communication Skills: Face-to-Face, Distance and other Alternative Modes -Factors affecting classroom communication - forms of teacher-pupil interaction - observation schedules of interaction - OSCAR, Bale's, FIACS and VICS interaction matrix analysis - modification of teacher behaviour.   **(12 marks)**

Unit 4: MEDIA IN EDUCATION

Dale's Cone of Experience, Finn's categorization: low technology medium and High technology medium - A-V media – Historical perspective from Chalk board to Computer Assisted Instruction - Audio Media –Educational Podcast-script writing ; Audio production stage- preproduction, post-production and practices ; Audio conferencing/Teleconferencing and Interactive Radio conferencing - Video – Educational television; Video conferencing, Video script writing - Simulations, games, animated films- uses and advantages - Media selection criteria- factors in selecting media   **(8 marks)**

Unit 5: INSTRUCTIONAL DESIGN AND E-RESOURCES

Instructional design approach – task analysis, instructional design theories – Gagne, Bruner, constructivist approach, discovery, inquiry - Instructional Design Process - Analysis- need, target, task, and topic/content, Design- define objectives, sequencing, instructional methods, delivery strategies, evaluation strategies - Develop- content, story board, courseware, authoring tools and interactivity, and interface - Implement – installation, deliver and distribution, managing learner activities - Evaluation – purpose, models of evaluation, evaluating reaction, learning, behaviour, result - E–Content Development : Stages of e- Content Development and Steps involved – Scripting for e- Content – Standards and Benchmarking for Quality in e- Content. - Creation of Blogs, Creation of tests using online platform - E-learning competencies of a teacher
                                                           (12 marks)

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper