DETAILED SYLLABUS FOR THE POST OF ASSISTANT PROFESSOR IN EDUCATIONAL TECHNOLOGY-(BY TRANSFER) IN COLLEGIATE EDUCATION (TRAINING COLLEGES)

Cat.No: 144/2022

Total 100 Marks

M. Ed. SYLLABUS

UNIT 1: PHILOSOPHY   10 Marks

Philosophy – relevance and meaning. Metaphysics, Epistemology, Phenomenology, Aesthetics and Axiology. Western schools of philosophy based on aims, content, methods and ongoing changes: Idealism, Realism, Pragmatism, Naturalism, Existentialism, Perennialism, Reconstructionism, Positivism and Post positivism, Post modernism, Eclecticism. Indian philosophical schools – Upanishads, Vedanta, Integration and Yoga, Shad Darsanas, Sankhya Nyaya Schools. Philosophical thoughts of western thinkers: Socrates, Plato, Aristotle, John Locke, Rousseau, Pestalozzi, Froebel, Montessori, Immanuel Kant, Stephen Hawking. Philosophical thoughts of Indian thinkers: Mahatma Gandhi, Swami Vivekananda, Rabindranath Tagore, Aurobindo Gosh, Jiddu Krishnamurti, Dr. B. R. Ambedkar, Dr. S. Radhakrishnan, A.P.J. Abdul Kalam, Sree Narayana Guru.

UNIT 2: SOCIOLOGY   10 Marks

Meaning of educational sociology and Sociology of education, social security, wellness and progress. Education, sustenance and transformation in society. Sociological methods, Education related to social equity, social equality. social stratification and social mobility. Social change: Determinants, Constraints, Education as a means of social change. and role of teacher as a change agent. Social ideologies: communism, fascism, Gandhism, socialism, democracy, Secularism, Pluralism, Nationalism. Educational challenges of a multicultural and a multilingual society. Cultural lag, Liberalization, privatization, globalization and partnership in social progress. Human Rights, Rights and Duties. Role of social media and networks in socialisation, media ethics. Self-help groups in Kerala and its impact for improvement educational status and life styles of economically backward society. Kerala Model of Development.

UNIT 3: PSYCHOLOGY   10 Marks

Learner and Learning styles with regard to pre-primary, primary, secondary, higher secondary and adult learners. Learning in twenty first century classrooms. Information processing approach in learning- Atkinson and Shiffrin Model – Sternberg, and Bruner. Metacognition- models: Flavell, Brown, Tobias and Ereson's hierarchical model. Brain based learning

strategies and assessment: mind map, cognitive map, semantic map and concept map. Personality development, new trends in personality development, Theories of personality: Big five theory, personality trait, Personality deviations during childhood and adolescence- causes and remedial measures. Attribution theory, social cognition theory, Positive psychology, Humanistic Psychology. Theories of Intelligence. Mulitiple intelligence and Emotional Intelligence

UNIT 4: RESEARCH   10 Marks

Research, Types of Research. Qualitative and Quantitative Methodologies, How to write objectives. Types of hypotheses. Research Design- meaning, purpose, characteristics, elements, types Experimental designs. Tools and techniques, characteristics, types. Statistical inference, Parametric and Nonparametric Tests, parameter & statistics, sampling error and standard error, degrees of freedom, estimation of parameters, confidence levels and confidence intervals. Levels of Significance, Descriptive Statistics, Inferential Statistics, Correlation coefficient and Percentage, Regression and Prediction, Factor analysis. Analysis and interpretation of Qualitative and Quantitative data. Research writing. Statistical analysis software SPSS.

UNIT 5: TEACHER EDUCATION   10 Marks

Teacher Education curriculum. Reflective practice, learner-activated instruction, constructivist theory and practice, convergent and divergent questioning strategies, Metacognitive strategies. UGC, NCERT, NCTE, NIE, RIE, NIEPA, KSHEC, SCERT, UGC- HRDC, NAAC. Management of staff pattern in Teacher Education-UGC Regulations-qualification and mode of recruitment. Types of assessment-Internal vs external assessment, Rubrics for evidence-based performance assessment, Problems of Assessment, Evaluation Methods, State and National level eligibility Tests for teachers: KTET/SET/NET/SLET/CTET etc. Professional dimensions: Need for Continuous Professional Development CPD, Teacher Competencies-Performance Objectives, Professional organizations: Local, State, National and International level Status of Teacher Educators, Online Professional Development (OPD). Innovations: Clinical Practice, Mindfulness Based Relapse Prevention, Internship programme. Educational Commissions after Independence and NPE 1968 and 1986. NEP 2020.

EDUCATIONAL TECHNOLOGY

UNIT 1   10 Marks

History of educational technology. Revolutions in the history of Education, Educational technology- definition, concept, objectives and scope. Technology in education and technology of education. Approaches of educational technology – Hardware Software and Systems approach.

Resource centres and services in educational technology – CIET, SIET, C-DIT , EDUSAT ,NME-ICT, NPTEL, IT@SCHOOL, VICTERS CHANNEL, INFLIBNET.

UNIT 2   **10 Marks**

Concretization of abstract ideas, A-V aids: definition, types audio aids visual aids A-V aids. Meaning & concept of Multimedia and Multi-sensory approach. Edger Dales cone of experience. Different types of learning aids. Improvised aids. learning supporting gadgets like PPT, Interactive white Board. Hands on experience on the modern learning supporting gadgets. Presentation softwares other than PPT.

UNIT 3   **10 Marks**

Computer Assisted Instruction (CAI), Computer Managed Instruction (CMI), Computer Mediated Communication (CMC) in Education, Computer simulation, Blended learning, Flipped classroom, Educational podcast, m-learning, Web- based learning, Online learning, MOOC, SWAYAM, MOODLE, Cloud computing, Teleconferencing, Networking, E-twinning, Learning management systems. WEB 1.0, 2.0, 3.0, 4.0. AI and robotics in Education, Educational games, educational movies, edtech companies in India. Educational start ups. E-Content Development. E Content Models

UNIT 4   **10 Marks**

Digital resources- Websites, digital text books. E-resources (Web 2.0 tools: - Hot • Potatoes, Teacher Tube, Edublog, Teacher Tube. Web services: e-mail, chat, online forums, blog, wiki, e-library. Academic web resources: e-journals, online dictionary, IT enabled instructional resources: On line resources, videos, YouTube resources, animations, film clippings, LMS virtual library, Virtual library. Today's teacher – a digital migrant – challenges and means of rescue. Augmented Reality in Education

UNIT 5   **10 Marks**

Cyber Crimes, Computer virus- (malwares, spywares, trojan). Preventive measures- (Firewall, antivirus software). Cyber privacy, Password protection. Cyber Ethics, Legal and ethical issues- Copyright, Plagiarism, Hacking, Netiquette, Phishing, Software privacy. Cyber law- IT Act 2000, IT Act 2008. Creative commons, Pornography Child Abuse and the Role of the Teacher

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.