

PhD in Educational Technology

Entrance Test

100 marks

Course Contents

(Based on MET-CA and Educational Technology elective of MEd)

1 Educational Technology and Instructional Technology

Concept of Educational Technology:

Meaning, Definition, and Approaches to ET

Systems Approach to Education:

Concept and characteristics.

Stages of Development of a System

Application of Systems Approach to Education

Process of Communication:

Concept and Characteristics

Models of Communication:

Models of Communication:

Simple, Osgood and Schram, Shanon-Weaver, Gerbner, Westley and MacLean

Concepts of Noise and Distortion

Instructional Strategies and Instructional Media for ILT:

Instructional Material

Media for Classroom teaching

Print-based material (Text book, ODL material)

Manual, Student Workbook, Handouts

2 Learner and the Process of Learning

Learner Characteristics

Process of Learning

Individual Differences in learning

Intelligence

Multiple Intelligences

Emotional Intelligence

Creativity

Processes and Factors Associated with Learning

Attention

Perception

Memory

Learning styles

Theories of Learning

Behaviourism

Learning as Conditioning (Pavlov)

Operant Conditioning (Skinner)

Cognitivism

Information Processing Model

Bruner's theory

Constructivism

Principles of Constructivism

Piaget, Vygotsky

Humanism

Need Hierarch: Maslow

Carl Rogers

Erickson

3 Instructional Design for Instructor Led Training (ILT)

Instructional Design:

Concept and Characteristics

ADDIE Approach for ILT

Steps in the ADDIE and their relationship with each other

Goal Analysis and Objectives

Goals, Educational Objectives, Instructional Objectives,
Taxonomies

Evaluation Strategies

Formative and Summative evaluation strategies

Overview of Theories and Models of ISD

Dick and Carrey, Gagne, Kirk and Guftason

Preparation and Implementation of session Plan

4 Computer in Education

Information Technology:

Application Software: Office

Internet and web-based Tools

Computer Assisted Instruction

CAI/CBT: Concept, Characteristics and Modes

CAI: Process of development

Online Learning

Nature of Online Course Environment

Synchronous and Asynchronous Tools of Communication

Building Online Courses: planning and building interactivity

5 Research in Education

Research Methodology

Types of Research (Pure, Applied, Evaluation, Action Research)

Steps in conducting research

Methodology of Research

Methods of Research

Sampling

Tools of Data Collection

Techniques of data collection

Tools of data Collection

Administration of tools for data collection

Procedure for data collection

Scoring Procedure

Statistical Tools for Data Analysis