

**Faculty of Interdisciplinary Studies**

**PhD in Educational Technology**

**PhD Entrance Test (PET)**

**100 marks**

**Course II**

**Course Content**

**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

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
- CDT Matrix
- 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. New Trends in eLearning**

- eLearning
- Blended learning
- MOOCs and its Deviated formats
- mLearning
- Web 2.0, 3.0

LMS  
CLS  
OER  
OFDL  
Micro learning