# SNDT Women's University, Mumbai Department of Educational Technology 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