Course Code

: EDN 253

Course Title

: Educational Technology

**Total Contact Hours** 

**Total Credits** 

: 4

Total Marks

:100

Course

Objectives The course objectives are to enable students to:

(COs)

- 1. recall and articulate the principles of Educational Technology
- 2. apply technology effectively in the teaching and learning
- 3. analyse various types of communication and the fundamentals of teaching models
- 4. demonstrate and evaluate innovations in educational technology and their relevance to education

(LOs)

Learning Outcomes At the end of the course, the students will be able to:

- 1. indicate the concept of Educational Technology and its application to teaching - learning process
- 2. explain the communication process and the role of Information Communication Technology (ICT) in teachinglearning and instruction to design sound instructional system
- 3. classify the different models of teaching and teaching aids used in teaching - learning
- 4. compare the recent innovations in educational technology and their application

## Unit-I: Understanding Educational Technology

- Educational Technology: Concept, scope and importance of Educational Technology
- Types of Educational Technology: Hardware and Software
- Systems approach to instruction
- Application of technology to teaching learning process

#### **Unit-II: Communication Process**

- Communication: Concept and Process
- Types of Communication
- Barriers of Classroom Communication
- Role of ICT in teaching and learning

### Unit-III: Models of teaching and Teaching Aids

- Models of Teaching: Meaning and characteristics
- · Fundamental elements of teaching models
- Models of Teaching: Information Processing, Computer Based teaching

Teaching aids: Edgar Dale's Cone of experience

# Unit-IV: Innovations in Educational Technology

- Social learning: Social networking sites, blogs, Chats, video conferencing, discussion forum
- Open Education Resources: Creative Commons, Massive Open Online Courses (MOOCs)
- · e- Inclusion: Concept and application
- Ethical issues of e- learner and e-teacher

### Sessional Work

Internal Test/Assignment/Seminar/

25 marks

### Activity (Any one)

- 1. Prepare a Power point presentation on any topic from the syllabus.
- 2. A review of an educational program presented through e-content.
- 3. Visit to any educational technology institute/centre.
- 4. Application and use of a recent technology tool in classroom activities.
- 5. Any other

### SuggestedReading

- 1. Apple, M. (1991): The new technology: Is it part of the solution or part of the problem in education? Computers in the Schools, 8(2), 59-81.
- 2. Cheng, I., Safont, L.V. & Basu, A. (2009). Multimedia in Education: Adaptive Learning and Testing. New Jersey: World Scientific Pub Co Inc.
- 3. Collins, J., Hammond, M. & Wellington, J.J. (1997). Teaching and Learning with Multimedia. London: Routledge.
- 4. Dale, E. (1969). Audiovisual Methods in Teaching, New York: Dryden Press.
- D'Antoni, S. & Savage, C. (2009). Open Educational Resources: Conversations in Cyberspace. New York: United Nations Educational, Scientific and Cultural Organization.
- Jonassen, D.H. (2003). Learning to Solve Problems with Technology: A Constructivist Perspective.
- 7. Mayer, R.E. (2009). Multimedia Learning, New York: Cambridge University Press.
- 8. Mishra, S. & Sharma, R.C. (2005). Interactive Multimedia in Education and Training. London: Idea Group Inc (IGI).

- OET (2000). E-learning: Putting a World-class Education at the Fingertips of all Children: The National Educational Technology Plan. Office of Educational Technology, US Department of Education. New York: DIANE Publishing.
- Roblyer, M.D. (2007). Integrating Educational Technology into Teaching, (Edn 4).
  Delhi: Pearson Education India.
- Solomon, G. & Schrum, L. (2007). Web 2.0: New Tools, New Schools. Washington: International Society for Technology in Education.
- 12. Spencer, K. (1991). The Psychology of Educational Technology and Instructional Media. Liverpool: United Writers Press.
- 13. Timothy J. N., Donald A. S., James D. L., James D. R. (2010). Educational Technology for Teaching and Learning, NOIDA: Pearson Education.