PAPER -V: INFORMATION COMMUNICATION AND EDUCATIONAL TECHNOLOGY

Time: 3.00 Hours **Max. Marks: 80**

NOTE FOR PAPER SETTERS:

i) Paper setters will set 5 questions in all, out of which students will be required to attempt 3 questions.

ii) Q. No. 1 will be compulsory and carries 16 marks. It will be comprised of 4short-answer type notes of 4 marks.
each to be selected from the entire syllabus.

iii) Four long-answer type questions will be set from each of the four units, out of which the students will be required to attempt one question from each unit.

OBJECTIVES:

Pupil-teachers would be able to-

(i) Define the scope and importance of educational technology in contemporary society

(ii) Explain emerging technologies exhibiting proper perspective and attitudes.

(iii) Acquire theoretical bases of educational technology and to develop awareness about recent development in the area of Educational Technology.

(iv) Get awareness of computer usage and its importance in education.

(v) Understand computer network and use of internet in teaching.

(vi) Understand the role of information communication Technology in present and future.

(vii) Understand computer networks and use of internet in teaching and learning

COURSE CONTENTS

UNIT-1

1) Information & Communication Technology
   - Concept and meaning
   - Models of Communication
   - Concept of tele-communication and
   - Satellite-communication.
2) Introduction to computers
   - Input and output devices
   - CPU, Memory, and storage units of computers
   - System and Application Software

UNIT – II

3) MS Office-2003 onwards (Word, Excel, MS Access, PowerPoint, Paint)
   - Uses and applications of computer

4). Computer and networking
   - WWW
   - Educational website
   - E-mail

- E-school
- E-learning
- Multimedia-meaning, required Software, and use in education
- Tele-conferencing and Video-conferencing;
- Computer care- viruses, Security & Maintenance.

UNIT-III

5. Educational Technology
    - Meaning and Concept
    - Scope & Significance
6. Programmed Learning, Simulation and Brain-Storming.
7. Skill developing technologies:
    - Micro-teaching-Meaning, importance, limitations and organizational Patten.

UNIT-IV

1) Fundamentals of Action Research
    - Concept, Need and Importance of Action Research
    - Difference between Action Research and Traditional research i.e. Fundamental and Applied research Paradigm
    - Uses and Limitations of Action Research

2) Dynamics of Action Research in educational contexts
    - The Action Research process- Identifying problem in school contexts, Formulation action hypotheses, Implementing and evaluating the Action Research hypotheses, Findings, results and Implementation
    - Developing Action Research design
    - Identifying the areas of Action Research

Practical/sessional **Total Marks: 20**

Development of programmed learning material (try out validation)

Development of Action Research Project in any of the following areas-

- Classroom teaching contexts
- Classroom and school management
- Improvement of learning levels and Cognitive learning

SUGGESTED READINGS

Jenkins, J. (1998). Distance Education, The Internet and the Learning Culture, A paper presented in International Conference on Collaborative Networked Learning, New Delhi: IGNOU.

Kasturiranjan, K. (1995). Valedictory address in the seminar on Technologies for Education Networking, New Delhi: IGNOU.

Kulkarni, S.S. (1986). Introduction to Education Technology, New Delhi: Oxford & IBH Publishing Co.

Kumar, K.L. (1996). Educational Technology and Communication Media, Cuttack: Nalanda.

Mehra Vandana (2004) Educational Technology, New Delhi : S S Publishers.

Mohanty, J. (1992). Educational Technology, New Delhi: Deep and Deep Publication.

Mukhopadhaya, M. (ed.) (1990). Education Technology Challenging Issues, New Delhi: Sterrling Publishers.

Richmond W. R. (ed.) (1900). The Concept of Education Technology: A Dialogue with Yourself, London: Weidenfield and Nicolson.

Sachdeva, M. S., Sharma, K. K. and Kumar, S. (2007). Educational Technology, Patiala: Twenty First Century Publications

Sampath, K., Pannirselvam, A. &Santhanam, S. (1990). Introduction to Educational Technology, New Delhi: Sterling Publishers Private Limited.

Takewale, R. G. (1995). Technologies for Educational Network, Presidential address in the seminar on Technologies for Educational Networking, New Delhi: IGNOU.