

## **P.G. 2nd Semester**

**Paper: EDN801C (Core)**  
**Educational Technology**  
**Credits: 4 = 3+1+0 (48 Lectures)**

### **Learning Objectives:**

- To understand the meaning, nature, scope and need of educational technology.
- Able to explain different types of technology, approaches of instructional designs and Communication Technology, different Instructional strategies, and Distance Education.
- Understand programmed learning and different emerging trends in educational technology.

### **Unit 1: Concept of Educational Technology**

- Meaning, Nature, Scope & Significance of Educational Technology.
- Development of Educational Technology.
- Approaches to Educational Technology – Hardware and Software.
- Behavioural Technology and Teaching Technology.
- Approaches to Instructional Designs- Task –analysis, Training Psychology and Cybernetics.
- Educational Technology as a System.
- Difference between Educational Technology and Instruction Technology.
- Comparison between Educational Technology, Behavioural Technology and Teaching Technology.

### **Unit 2: Information and Communication Technology.**

- Meaning & Characteristics of Information and Communication Technology.
- Nature of communication: Elements of Communication. Types of Communication- One - Way Communication Model. Two- Way Communication Model. Person -to- Person Communication. Verbal Communication. Non-verbal Communication. Small Group Communication.
- Class-room Communication Model. Factors affecting Class-room Communication.
- Barriers to Communication. Network Communication.
- Role of ICT in Changing Scenario of Education. Advantages and Disadvantages of ICT.

### **Unit 3: Instructional Technology**

- Concept, importance & implication of instructional technology.
- Writing Objectives in Behavioral Terms- Robert Mager's Approach. RCEM Approach.
- Designing Instructional Strategies – Lecture Strategies and Team-Teaching.
- Programmed Learning: Concept, Origin, and Basic Structure Of Linear and Branching Styles of Programming. Steps involved in construction of programs.
- Revised Bloom's Taxonomy of Educational Objectives: Cognitive, Affective and Psychomotor.

### **Unit 4: Educational Technology and Distance Education**

- History and Concept of Distance Education.
- Scope and Need of Distance Education.
- Role of Media in Distance Education.
- Different contemporary system: Correspondence, Distance and Open Learning. Student Support Services and its importance.
- Role of Study Centre in providing Student Support Services.
- Different Media of Student Support Services.

### **Unit 5: Emerging Trends in Educational Technology**

- Learner Controlled Instruction.
- Personalized System of Instruction.
- Computer Assisted Instruction.
- Multi-Media Approach to Teaching- Learning.
- Satellite Communication, Videotape, CCTV, EDUSAT, E- Learning, Virtual Classroom, Tele – Conferencing.
  
- E- Resources, E-Pathshala and Open access resources: Concepts and uses.

### **References:**

- Bloom's, B.S. Taxonomy of Educational Objectives, Handbook 1, Cognitive Domain, London, Longman Group LTD, 1974.
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- Chauhan,S.S. A Text Book of Programmed Instruction, New Delhi. Sterling Publishers, 1978.
- Davis, I.K: The Management of Learning. London. Mc Graw-hill. London. 1971

- Flanders, N.: Analysing Teaching Behaviour London, Addition Wesley Pub Co, 1971.
- Jose, Chanders N: Management of Distance Education, New Delhi, Sterling Publishers, 2001.
- Kumar K.L: Educational Technology, New Delhi, New Age International Publishers, 1996.
- Mohanty,J. - Educational Technology, New Delhi, Deep & Deep Publication, 2001.

**Paper: EDN802C (Core)  
Research Methodology**

**Credits: 4 = 3+1+0 (48 Lectures)**

**Objectives:**

- To enable the students to understand the basic concepts of research in education
- To understand about various methods of educational research
- To enable the students to identify various problems in the field of education
- To develop scientific attitude among students

**Unit 1: Basic Concepts of Research**

- Meaning , nature, characteristics and scope of Research in Education
- Qualitative and Quantitative Research in Education
- Types – Fundamental , Applied and Action Research
- Methods of Educational Research - Historical , Descriptive , Experimental and Ex-Post-Facto research

**Unit 2: Research Problem, Preparing Research Proposal and Hypothesis**

- Identification and selection of a research problem
- Formulation of a research problem
- Review of related literature- Meaning, Need , Importance and Various sources of Review
- Formulating Hypothesis in various types of Research , types of hypothesis.
- Hypothesis testing, Characteristics of good hypothesis.

### **Unit 3: Tools, Population, Sample and Data Collection**

- Tools used in Educational Research – Observation and Interview Schedule, Questionnaire, Psychological Tests, Rating and Attitude Scale
- Concept of Population and Sample - Methods of Sampling, Probability and Non-probability Sample
- Characteristics of good sample, Sampling Error – Type I and Type II Error
- Size of the sample and Importance of Sampling in Drawing Inferences
- Collection of Data – Sources of Data Collection, Primary and Secondary Data

### **Unit 4: Data Analysis and Report Writing**

- Descriptive Data Analysis – Statistical analysis, Normal Distribution, Measures of Relationship, Factorial Studies
- Inferential Data Analysis – Parametric and Non- parametric tests
- Computer Data Analysis – Data Organisation in Computer System and Computer Data Analysis
- Report Writing- Format of the research report , Style of writing, Typing the report, Footnotes, Bibliography, Reference.

#### **References :**

- Best , J. W.(1977). Research in Education , Prentice Hall , New Delhi
- Dalen, Van D. B. : Understanding Educational Research Mc.Grow Hill, New York
- Gay , L. R. : Educational Research Competencies for Analysis and Application, McMillan
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- Kaul, L. (2009).Methodology of Educational Research .New Delhi: Vikas Publishing House Pvt. Ltd.
- Kothari, C.R.(19985). Research Methodology: Methods and Techniques. New Delhi: Wiley Eastern.

**Paper: EDN803C (Core)**  
**Statistics in Education**  
**Credits: 4 = 3+1+0 (48 Lectures)**

**Objectives:**

- To enable the students to illustrate the meaning , significance and application of NPC
- To enable the students to know about significance testing for various statistics.
- To enable the students to understand the meaning , assumptions, computation and uses of Parametric and Non-parametric tests
- To enable the students to know ANOVA and Co-Variance

**Unit 1: Normal Probability curve**

- Meaning Characteristics and Properties of Normal Probability curve.
- Application in solving problems
- Non-Normal Distributions: Kurtosis & Skewness

**Unit 2: Significance Testing**

- Concept of – Large and Small sample, One Tailed and Two Tailed Tests, Setting of Significance Levels and Determining Critical Values for Significance Testing.
- Concept of Dependent and Independent Groups, Single Group and Equivalent Groups Methods. Matching Pair and Matching Group Technique
- Significance Testing – Mean , Median ,Quartile Deviation, Standard Deviation, Percentage and Correlation
- Z – Test and t-Test to test the Reliability or Significance of Dependent and Independent Groups

**Unit 3: Regression and Correlation**

- Regression: Forming Regression Equation, Prediction with Regression Equation.
- Coefficient of Correlation by-Product Moment Method & Interpretation of Result. Scatter diagram. Biserial Correlation and Multiple Correlation

#### **Unit 4: Chi Square Test**

- Parametric and Non-Parametric Tests- Concept, Nature, Differences and Uses
- Chi Square test – Meaning , Nature, Assumptions, Uses and Significance
- Chi Square test as goodness of fit
- Chi Square Test: Test of Equality, Normality & Independence.

#### **Unit 5: ANOVA and Co-Variance**

- Meaning , Nature and Uses of Analysis of Variance
- Assumptions and Limitations of ANOVA
- One way and Two way ANOVA
- Analysis of Covariance.

#### **References:**

- Aggarwal, Y.P. (1989); Statistical Methods. New Delhi: Sterling Publishers.
- Fergusson, G. E. (1989): Statistical Analysis in Psychology and Education. New York:McGraw Hill,
- Garrett, H. E. (1979): Statistics in Education and Psychology. Bombay: Vakils; Feffer& Simons.
- Guilford, J.P. (1973).Fundamental Statistics in Psychology. New Work: McGraw Hill Book Company.

**Paper: EDN804C (Core)**  
**Educational Management**  
**Credits: 4 = 3+1+0 (48 Lectures)**

#### **Objectives:**

- To enable the students to understand the basic concept of management, administration, supervision and institutional planning.
- To provide knowledge on types, principles and functions of educational management.
- To enable students understand importance of management of educational environment.
- To infuse knowledge on importance institutional planning.

## **Unit 1: Concept of Educational Management**

- Educational Management – Meaning, Nature, Scope
- General Principles of Educational Management. Characteristics Educational Management
- Types of Educational Management – Centralized and Decentralized. Autocratic, Democratic And Laissez Faire,
- Role Of Head Of The Institutions And Teachers In Management
- Human Relation Movement In Educational Management, Total Quality Management (TQM)

## **Unit 2: Functions of Educational Management**

- Planning, Organizing, Directing And Controlling
- Management of Resources: Human Resources, Material Resources and Financial Resources.
- Management Of Time Table In Educational Institutions
- Institutional Planning- Meaning, Need and Steps.
- Educational Planning In India After Independence

## **Unit 3: Management of School Environment**

- Factors Affecting School Environment.
- Recruitment And Selection Of Staff For Teaching And Administration
- Privatization Of Higher Education
- Planning, Programming Budgeting System
- Financing In Indian Education System

## **Unit 4: Administrative Structure of Education in India and Assam**

- Role Of Ministry Of Human Resource Delopment In Education
- Central State Relation In Education In India
- Diffects Of Educational Administration In India
- Administration Of School Education In Assam

## **References:**

- Aggarwal J. C.(2009)Educational Technology And Managem,Entagra,Agra, Vinod Pustak Mandir.
- Bhatia, M. (2010),Leadership Behaviour And Educational Administration, New Delhi, Deep And Deep Publications.
- Bhatnagar, R.P. And Aggarwal, V.(2013)Educational Administration, Supervision, Planning And Financing, Meerut, India, Surya Publications
- Mahanty, Jaganath (2012),Educational Management, Supervision And School Organisation, Bhubeneswar.

- Mukherji, S.N (2011), Administration, Planning And Finance, Baroda, Acharya Book Depot .
- Sharma R. N. (2016), Educational Administration, Management And Organisation, New Delhi, Surjeet Publications,

**Paper: EDN805C (Core)**  
**Comparative Education**  
**Credits: 4 = 3+1+0 (48 Lectures)**

**Objectives:**

- To help the students to know the concept and development of Comparative Education.
- To acquaint the students with the concept of cross-disciplinary approach of Comparative Education.
- To introduce the role of International Bodies in Development of Education.

**Unit 1: Introduction to Comparative Education:**

- Meaning and scope of Comparative Education
- Development of Comparative Education
- Cross-disciplinary approach of Comparative Education
- Factors affecting National Systems of Education
- Methods of studying Comparative Education

**Unit- 2: Educational System in India and Japan:**

- Pattern of Administration
- Elementary Education
- Secondary Education
- Higher Education
- Technical and Vocational Education
- Teacher Education

**Unit- 3: Educational System in U.K. and U.S.A.:**

- Pattern of Administration
- Elementary Education



- Secondary Education
- Higher Education
- Technical and Vocational Education
- Teacher Education

**Unit- 4: Role of International Bodies in Development of Education:**

- UNESCO
- ASEAN
- SAARC
- OECD
- Human Right Education
- Effectiveness on mental health

References:

- Bereday, G.Z.F. (1964): Comparative Method of Education., New York; Holt, Rinehart and Winston.
- Biswas, A. & Aggarwal, J.C. (1998): Comparative Education, Arya Book Depot, New Delhi. Prakashan Kendra, Aminabad, Lucknow.
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- Khanna, S.D., Saxena, V.R., Lamba, T.P., & Murthy, V. (1990): Comparative Education, Doaba House Booksellers & Publishers, Delhi.
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