

MASTER OF EDUCATION (M.ED) – THIRD SEMESTER

Third Semester			
S. No.	Name of Subject	Credits	Total Marks
1	Essentials of Educational Technology	4	100
2	Foundations of Educational Research	4	100
3	Comparative Education	4	100
4	Environmental Education	4	100
5	Educational Statistics	4	100
6	Psychological Practical	4	100
Total		24	

Subject Name: ESSENTIALS OF EDUCATIONAL TECHNOLOGY

Objectives of the Subject: On completion of the course, the student will able to-

- Describe the concept, nature and components of Educational Technology
- Distinguish between Educational technology and Instructional Technology
- Apply ICT in teaching learning.
- Describe the concept, components and characteristics of communication.
- Apply Models of teaching, personalized system of instruction, programmed learning in teaching learning.

SubjectContent:

UNIT I: INTRODUCTION TO EDUCATIONAL TECHNOLOGY AND COMMUNICATION

- Concept, Scope and Importance of Educational Technology
- Components of Educational Technology: Hardware and Software
- Role of Technology in Various Educational Practices
- Modern Trends in Educational Communication such as e-mail, Teleconferencing and Interactive Video Conferencing, Wiki, Blogging and Social Networking

UNIT II: LEVELS, STAGES AND MODELS OF TEACHING

- Memory, Understanding and Reflective Levels of Teaching and their Implications.
- Stages of Teaching along with Operations involved in them
- Models of Teaching: Concept and Elements of Teaching Models
- Glaser's Basic Model and Bruner's Concept Attainment Model

UNIT-III:INSTRUCTIONAL STRATEGIES

- Instructional Strategies: Student-Centered & Teacher-Centered Strategies.
- Procedure, Advantages and Limitations of Lecture; Lecture-cum-Demonstration; Group Discussion and Brain Storming Strategies.
- Self-Instructional Strategies: Programmed Instruction and Computer Assisted Instruction.
- Language Laboratory and its use in Development of Linguistic Skills.

UNIT-IV:MODIFICATION OF TEACHING BEHAVIOUR

1. Micro -Teaching: Meaning, Procedure, Merits and Limitations.
2. Components of Skills of Teaching: Probing Questions, Reinforcement and Stimulus Variation.
3. Flander's Interaction Analysis Technique for Modification of Teacher Behaviour.
4. Simulation or Simulated Teaching.

Suggested Readings

1. Agarwal, J.C. (1995) Essential of Educational Technology: Teaching Learning Innovations in Education. Delhi: Vikas Publishing House (P) Ltd.
2. Berge, Z. (1998). Guiding principles in Web-based instructional design. Education Media International, 35(2), 72-76.
3. Chauhan, S.S.: A Text-Book of Programmed Instruction, New Delhi: Sterling Publ. Co. 1978.
4. Collis, B. (2002). Information technologies for education and training. In Adelsberger, H., Collis, B, & Pawlowski, J. (Eds.) Handbook on Technologies for Information and Training. Berlin: Springer Verlag
5. Kulkarni, S.S. (1986) Introduction to Educational Technology, New Delhi: Oxford & IBH.

Subject Name: FOUNDATIONS OF EDUCATIONAL RESEARCH

Objectives of the Subject: On completion of the course, the student will able to-

- Describe the meaning, Characteristics, Significance of Research in Education,
- Define research problem, formulate a hypothesis, select a sample and forward reasons in support of his/her decisions.
- Understand the types and uses of tools and preparation of research proposal and research report.

Subject Content:

UNIT I: INTRODUCTION TO EDUCATIONAL RESEARCH

1. Meaning, Characteristics and Nature of Research.
2. Nature of Educational Research, Significance of Research in Education,
3. Types of Educational Research (Fundamental, Applied and Action Research),
4. Problems relating to Different Stages of Education, Priority Areas in Educational Research.

UNIT II: STEPS OF EDUCATIONAL RESEARCH

1. Review of Literature: Purpose & Sources,
2. Selection and Characteristics of Good Research Problem,
3. Variables: Meaning and Types; Objectives: Primary, Secondary and Concomitant
4. Hypotheses: Meaning, Significance, Types and Formulation.

UNIT III: SAMPLING AND TOOLS OF DATA COLLECTION

1. Concepts of Population and Sample, Sampling, Sampling Unit, Sampling Frame;
2. Methods of Sampling (Non-Probability and Probability).
3. Characteristics of Good Sample; Errors in Sampling and How to Reduce them.
4. Characteristics of Good Research Tools.
5. Types and Uses of Tools (Questionnaire, Rating Scales, Interview, Attitude Scales).

UNIT IV: PREPARATION OF RESEARCH PROPOSAL AND RESEARCH REPORT

1. Ethical Issues in Conducting Educational Research,
2. Skills needed to Design and Conduct Educational Research.
3. Preparation of Research Proposal or Synopsis.
4. Style, Format and Steps of Writing the Research Report; APA Style of Referencing

Suggested Readings:

1. Agarwal. L. P. (2007). Modern Educational Research, Dominant Publishers and Distributors. New Delhi.
2. Best, John, W., & Kahn James V. (2005). Research in Education", Prentice Hall of India Pvt. Limited, 9th Edition, New Delhi.
3. Bhandarkar, P. L., Wilkinson, T.S, & Laldas, D.K. (2004), "Methodology and Techniques of Social Research", Himalaya Publishing House, Mumbai.
4. Cohen, Louis; Manion, Lawrence & Morrison, Keith (2011). Research Methods in Education, 7th Edition. Cambridge University Press, India Private Limited.
5. Creswell, John W. (2014) Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research, Fourth Edition. PHI Learning Private Limited, Delhi.

Subject Name: COMPARATIVE EDUCATION

Objectives of the Subject: On completion of the course, the student will be able to-

- Acquaint the students with the need and importance of comparative education.
- Develop an understanding of the educational system of India and a few other countries
- Understand the existing educational system of developed and developing countries

Subject Content:**Unit – I Comparative Education**

1. Concept, Scope, Purpose, and Need of Comparative Education.
2. History and Development of Comparative Education.
3. Approaches to Comparative Education: Historical, Philosophical, Sociological and Problem Approach.
4. Determinants of national system of education.

Unit – II Modern Trends and U.N.O.

1. Modern Trends in World Education – National and Global,
2. Role of U.N.O. in Improving Educational Opportunities among the Member Countries.
3. Various Official Organs of the U.N.O. and their Educational Activities.

Unit – III Comparative Study

1. Comparative Study of the Education Systems with special reference to:
 - Primary Education: USA, UK and India
 - Secondary Education: USA, UK and India
 - Higher Education: USA, UK and India
 - Teacher education: USA, UK and India

Unit – IV Problems of Education

1. Problems of Education in the field of:
 - Primary Education
 - Secondary Education
 - Higher Education
 - Teacher education
2. Some other Problems-
 - Poverty, Unemployment, Population Explosion, Casteism, Communalism, Illiteracy, Gender Sensitization.

- Economic Under-Development: Their Causes, Effect on Development and Solution through Education.

SUGGESTED READINGS:

1. Aggarwal and Biswas: Comparative Education, Arya Book Depot, Delhi. • Chaube, S. P & Chaube, A. 1993.: Comparative Education, Vikas Publishing House Pvt. Ltd.
2. Beredy, G.Z.F. (1964), Comparative Methods in Education, Oxford & East Publishing Co., New Delhi.
3. Blavic, Emile (1987), Primary Education: Development and Reform, Perspectives In Education, In Education, Vol. 3, 15 3-60.
4. Carlton, R., Colley and Machinnon (1977), Educational Change and Society, Toronto, Gage Educational Publishing.
5. Carnoy, M.H. Levin (1985), Schooling and Work in The Democratic State, Standford University Press, Standford, California.
6. Cantor, Leonard (1989), The Re-Visioning of Vocational Education in American High School, Journal of Comparative Education, Vol. 25, Number 2.
7. Hans, Nicholas: Comparative Education, Routeledge and Kagan Paul, London, 1990. • Sharma, Y.K. 2004. Comparative Education. Kanishka Publishers, Distributors, New Delhi.

Subject Name: ENVIRONMENTAL EDUCATION

Objectives of the Subject: On completion of the course, the student will be able to-

- Understand about the concept, importance, scope and aims of environmental education.
- Acquaint the student with possible environmental hazards enabling them to combat with the negative effects of the programmes of environmental erosion and pollution at various stages of education
- Enable the student teachers to develop various methods and strategies for realizing the objectives of environmental education.
- Enable the student teachers to understand about various projects in the area of environmental studies in different countries.

Subject Content:

UNIT I: ENVIRONMENT AND ENVIRONMENTAL EDUCATION

- Concept, Characteristics and Components of Environment
- Historical Background of Environmental Education
- Concept, Characteristics, Components and Scope of Environmental Education
- Objectives and Guiding Principles of Environmental Education

UNIT II: ENVIRONMENTAL CONSERVATION AND SUSTAINABLE DEVELOPMENT

1. Concept, Characteristics, Objectives and Need of Environmental Conservation.
2. Concept, Characteristics, Objectives and Need of Sustainable Development
3. Concept and Ways of Disaster Management.
4. Role of Education in Environmental Conservation and Sustainable Development.

UNIT III: ENVIRONMENTAL POLLUTION

1. Concept and Types of Environmental Pollution.
2. Air Pollution: Causes, Sources, Effects and Preventive Measures.
3. Water Pollution: Causes, Sources, Effects and Preventive Measures.
4. Soil Pollution: Causes, Sources, Effects and Preventive Measures.
5. Noise Pollution: Causes, Sources, Effects and Preventive Measures.

6. Laws of Conservation and Protection: Environment Protection Act, Wild life Protection Act and Noise Pollution Act.

UNIT IV: ENVIRONMENTAL HAZARDS

1. Concept of Environmental Hazards
2. Environmental Hazards: Causes, Sources, Effects and Measures (Global Warming, Acid Rain, Polar Melting, Raising of Sea Level and Ozone Layer Depletion).
3. Movements and Projects for Environmental Protection / Conservation: Chipko movement, Tiger Project and Ganga Action Plan.

Suggested Readings:

1. Arjun Dev (Ed.) (2003), A Handbook of Human Rights, Creative Learning Series, NBI, New Delhi.
2. NCERT (1980), Environmental Studies: Teachers Guide, New Delhi.
3. NCERT (1981). Environmental Education at the School Level, NCERT, New Delhi.
4. NCERT (1988), National Curriculum for Elementary and Secondary Education: A Framework (Revised Version), NCERT, New Delhi.
5. NCERT (2000), National Curriculum Framework for School Education, NCERT, New Delhi.
6. NCERT (2001), Guidelines and Syllabi for Primary Stage Upper Primary Stage, Secondary Stage and Higher Secondary Stage, NCERT, New Delhi.

Subject Name: EDUCATIONAL STATISTICS

Objectives of the Subject: On completion of the course, the student will be able to-

- Understand the meaning and importance of statistics.
- Understand the meaning and compute measures of central tendency, measures of variability, measures of relationship.
- Understand the meaning and application of normal probability curve.
- Select and conduct the statistical analysis of data by applying the statistics suitable for the problem.

Subject Content:

Unit – I: THE CUMULATIVE DISTRIBUTIONS AND PERCENTILES

1. Meaning of Cumulative Frequency; Graphical Representation of Cumulative Frequency.
2. Cumulative Percentage Curve (Ogive) and its Construction.; Uses of Ogive.
3. Percentile and Percentile Ranks; Uses of Percentile Ranks.

Unit – II: THE NORMAL PROBABILITY CURVE

1. Meaning and Importance of Normal Probability Curve (NPC),
2. Properties and Applications of NPC.
3. Measuring Divergence of Data from Normality (Skewness and Kurtosis).

Unit – III: CORRELATION METHODS

1. Concept of Correlation, Uses of Correlation and Significance of Correlation Coefficient.
2. Correlation Methods:
 - a. Product Moment,
 - b. Rank Difference Method,
 - c. Contingency Coefficient (C).

Unit – IV: INFERENCE STATISTICS

1. Concept of Inferential Statistics, Parametric and Non-Parametric Statistical Tests. Type-I and Type-II Errors,
2. Meaning of Statistical Significance, Degrees of Freedom. Standard Error of Mean, Standard Error of Difference between Means.
3. Levels of Confidence and Confidence Intervals.

Suggested Readings:

1. Best, John W. Research in Education. New Delhi: Prentice Hall.
2. Cohen, Louis; Manion, Lawrence and Morrison, Keith. Research Methods in Education (7th Ed.). London: Routledge.
3. Cornell. The Essentials of Educational Statistics.
4. Garrette, Henry E., Statistics in Psychology and Education. Bombay: Vakils, Feffer and Simons Ltd.
5. George, Darren and Mallery, Paul, SPSS for Windows: Step by Step. New Delhi: Pearson.
6. Guilford, J. P. Fundamental Statistics in Education and Psychology. McGraw Hill, 1980

Subject Name: PSYCHOLOGICAL PRACTICAL.

Objectives of the Subject: On completion of the course, the student will able to-

- Understand the concept of Experimental Psychology.
- Understand about the methods of conducting various Psychological Experiment and Tests.
- Develop scientific attitude among the Students.

Subject Content:

STUDENTS ARE TO DO AT LEAST 12 PRACTICALS, OUT OF WHICH 5 PRACTICALS MUST BE WITH INSTRUMENTS.

PSYCHOLOGICAL EXPERIMENTS:

- Meaning, nature and scope of experimental psychology.
- Origin of psychological experiment.
- Uses and Application of psychological experiments in the field of education.

Unit 1: Memory:

1.0 Memory span for digits.

1.1 Memory span for letters.

1.2 Memory span for words and Non-sense Syllables on Memory Drum.

Unit 2: Attention:

1.0 Span of Attention.

1.1 Division of Attention.

Unit 3: Learning:

3.0 Human Maze Learning,

3.1 Mirror drawing.

Unit 5: Steadiness:

5.0 Steadiness tester Electrical with input.

Unit6: Intelligence:

6.0 Koh's Block Design Test.

Unit 7: Personality:

7.0 Rorschach Ink-blot Test

7.01 Thematic Apperception Test

PSYCHOLOGICAL TESTS:

Unit 1: Test On Personality

Unit 2: Test On Emotional Intelligence.

Unit 3: Test On Creativity.

Unit 4: Test On General Mental Health.

Unit 5: Test On Anxiety.

Unit 6: Test On Self- Esteem.

PERSONS INVOLVED

- External Examiner
- Internal Examiner

Suggest Readings:

- Meguigam, F.J.: Experimental Psychology. Prentice Hall of India. New Delhi
- Nataraj,P. Manuals Of Experiments In Psychology. Srinivas Publications. Mysore.
- Postman, L, & Egan, J.P.: Experimental Psychology, Kalayani Publishers. Ludhiana.
- Saikia, L.R.: Psychological & Statistical Experiment In Education. Guwahati.
- Woods Worth, R.S & Schlosberg, H: Experimental Psychology, Methune, London.