

**M.Phil - PAPER I**  
**RESEARCH METHODOLOGY & EDUCATIONAL STATISTICS**

**OBJECTIVES**

At the end of the course, the student – teachers will be able to

- to orient students towards research in the field of education.
- to develop in students computational skills in educational statistics.
- to orient students in the application of statistical findings.
- to inculcate in students the skill of construction of tests & tools for data collections.
- to enable the students interpret educational research findings.

**UNIT I - BASICS OF RESEARCH**

Research Problem – Meaning, Identification and Sources, Criteria for Selection of research problem-, Statement of a Research Problem - Hypotheses for Problem Solving -Construction and Confirmation of Hypothesis- Hypothesis Testing - Null Hypothesis and its Significance - Hypotheses testing.

**UNIT II - RESEARCH DESIGNS**

Research Designs - Meaning and Purpose of a Research Design, Characteristics of a Good Design. Experimental Research - Designs with and Without Control - Purpose and Methods of Control - Factors to be Controlled, Designs with Minor, Partial and Rigorous Control - Validity of Designs - Internal and External Validity. Humanistic Research Methods: Case Study Methods - Critical Theory Models - Ethnographic Research Methods - Hermeneutics - Oral History Method.

**UNIT III - RESEARCH TOOLS AND SAMPLING TECHNIQUES**

Research Tools - Definition and Function. Characteristics of a Good Research Tool. Validity – Types - Face, Content, Construct, Concurrent and Predictive. Reliability – Types – Test - Retest, Split - Half, Parallel Forms and K-R Reliability, Evaluating Reliability. Sensitivity and Feasibility of Research Tools. Standardisation of a Research Tool - Meaning, Scope and Purpose - Steps in Standardization - Item Analysis. Sampling Procedures, Probability and Non Probability Based Effective Sample Size - Sampling Errors.

## **UNIT IV - MEASUREMENT AND SCALING TECHNIQUES**

Measurement In Research - Measurement Scale – Nominal Scale, Ordinal Scale, Ratio Scale, Interval Scale – Techniques of Developing Measurements Tools - Important Scaling Techniques – Methods of Paired Comparisons, Method of Rank Order, Scale Construction Techniques – Thurstone Type Scales and Likert Type Scales.

## **UNIT V - MULTI-VARIATE ANALYSIS TECHNIQUE**

Purpose, Characteristics and application of MANOVA-Classification of MANOVA-Important Multivariate techniques-Multiple Regression-Multiple Discriminate Analysis-Multivariate Analysis of Variance-Canonical correlation analysis-Factor Analysis and methods.

## **UNIT VI – NON PARAMERTIC TEST**

Mann–Whitney U test, The Sign Test, The Wilcoxon signed –Ranks Test, Friedman two-way analysis of variance by ranks, Kolmogorov–Smirnov test.

## **UNIT VII – COMPUTER AND DATA ANALYSIS**

i)Performing Simple Statistical Analyses like Measures of Central Tendency, Measures of Variability, Percentiles, Correlation, t – Value etc.

ii) About Statistical Packages – SPSS – STATISTICA – OPENSTAT4 – NCSS – STATPAC – SAS – MINITAB – VISTA – STRATA – R-Statistics, Q-Plusetc.

iii) Review of Packages and their Uses in Educational Research.

## **UNIT VIII - QUALITATIVE ANALYSIS OF DATA**

Data Reduction, Matrix Display Tactics for drawing conclusions confirming Findings, Summarising and Integrating findings.

## **REFERENCES**

- ❖ Adishesiah, W.T.V., & S., Educational and Social Research, Coimbatore, Volume Pathipagam, 1977.
- ❖ Best, John, W. Research in Education, Prentice Hall of India Pvt. Limited, 4<sup>th</sup> Edition, New Delhi, 1982.
- ❖ Devadas, Rajammal, P. & Kulandaivel, K.A., Handbook of Methodology of Research, Coimbatore, Sri R. K. Mission Vidyalaya Teacher’s College, 1976.

- ❖ Fox, D.J., *The Research Process in Education*, New York: Holt, Rinehart and Winston, 1969.
- ❖ Garrett Henry V., *Statistics in Psychology and Education*, Vakils, Feffer & Sons Pvt. Ltd., Bombay.
- ❖ Good, Carter, V. *Methodology of Educational Research*, New York, Appleton – Century Croft, Inc., 1972.
- ❖ Guilford, J.P., *Psychometric Methods*, New York, McGraw Hill Book Co. Inc., 1954.
- ❖ Guilford, J.P., *Fundamental Statistics in Psychology and Education* New York, McGraw Hill Book Co., 1965.
- ❖ Kerlinger, F.N., *Foundation of Behavioral Research*, New York, Holt, Rinehart and Winston, 1973.
- ❖ Lindquist, E.F. *Statistical analysis in Educational Research*, Boston, Houghton Mifflin & Co, 1970
- ❖ Mouly, G.J., *The Science of Educational Research*, New Delhi Eurasia Publishing House Pvt. Ltd., 1964.
- ❖ Shukia, S.P., *Elements of Educational Research*, Bombay, Allied Publishers Pvt. Ltd., Third Edition, 1964.
- ❖ Travers, Robert, M.W., *Introduction to Educational Research*, New York, Macmillan Co., 1964.
- ❖ Van Dalen, D.B. *Understanding Educational Research*, New York, McGraw Hill Co., 1973.
- ❖ Walker, Helen M., & Le. Joseph, *Statistical Inference*, Calcutta, Oxford & IBH publishing Co., 1958.
- ❖ Whitner, F.L., *Elements of Research*, Bombay. Asia Publishing House,,1950.
- ❖ Young, Paulino, V. *Scientific Social Surveys and Research*, Bombay, Asia Publishing House.

**M.Phil - PAPER II**  
**MANAGEMENT OF EDUCATION**

**OBJECTIVES**

At the end of the course, the subject will be able to

- ◆ comprehend the concept and principles of management, difference between management and administration.
- ◆ understand the various approaches to management theory.
- ◆ acquire the requisite knowledge and skill for educational planning and institutional systems, supervision, role of state and centre in educational planning.
- ◆ understand the functions of leadership in relation to motivation and participation of individuals in organizational and decisional changes.
- ◆ acquire the ability to apply the modern management techniques in the framework of existing educational system.
- ◆ acquire the ability to optimize student participation in curricular and co-curricular activities.
- ◆ acquire the ability to maintain the morale and motivation of the staff to minimize and resolve conflicts among the school personnel.
- ◆ acquire the ability to manage the institution towards the attainment of the functional objectives.

**UNIT I – CONCEPT OF EDUCATIONAL MANAGEMENT**

Educational Management: Definition, Concept, Meaning, Aims, Functions, Principles and Type. The need to Modernize Education Administration Taylorism: Practical Measures for Democratic Educational Management, Characteristics of Successful Educational Management. Management and Decision Making - Difference between Management and Administration.

**UNIT II – APPROACHES TO MANAGEMENT THEORY**

Major Approaches to Management Theory: Behavioral Approach, McGregor's Theory X and Theory Y, Quantitative Approach. Contemporary Management

Perspectives: Systems Approach, the Contingency Approach, Social System Approach, The Computer Approach. Modern Trends in Education Management.

### **UNIT III – EDUCATIONAL PLANNING AND PROCESS**

Educational Planning: Concept, a Brief Historical Review, Basic Approaches, Budgeting and Control. Educational Supervision. Institutional Planning: Objectives, Need and Basic Characteristics, Steps Involved in the Preparation, Implementation and Evaluation; Educational Administration in the Central Government: Role of MHRD - Statutory/Autonomous Organisations, Center-State Relations in Management of Education in India.

### **UNIT IV – DECISION MAKING AND RESOURCE MANAGEMENT**

Decision Making Process: Decision Making and Problem Solving, Problems in Decision Making. Educational Manager as a Change Agent - Teacher as a Leader - Management as Communication System. Resource Management: Human, Material, Financial and Time. Principles and Procedures of Acquiring, Organising and Utilizing Resources.

### **UNIT V – MANAGEMENT IN EDUCATIONAL SETTINGS**

Management of Personnel: Teaching and Non-Teaching in Organization. Institutional Climate: Group Dynamics, Management of Students, Admission, Participation in Curricular and Co-Curricular Activities, Management of Student Conflicts, Disciplinary Problems, Management of Learning Process. Time Table - Classroom Management - Classroom Climate, Management of Examination - Organisational Commitment - Academic Freedom.

### **REFERENCES**

- ❖ Babu Muthuja, R.Usharani, Pratiksha Jugran , ‘Educational Innovations and Management’, New Delhi, Centum Press,2009.
- ❖ Chand Tara, Ravi Prakash, Advanced Educational Administration, New Delhi, Kanishka Publishers, 1997.

- ❖ Choudhery, Namita Roy, Management in Education, New Delhi, A.P.H. Publishing Corporation, 2001.
- ❖ Kaustik, Vijaya kumari, Sharma S.R., School Administration Organisation, New Delhi, Anmol Publication Private Limited, 1997.
- ❖ Kiranmayi, Y.S., Management of Higher Education in India, New Delhi, Crown Publications, 1989.
- ❖ Krishnamacharyulu. V. 'School Management and Systems of Education' , New Delhi, Neelkamal Publications Pvt. Ltd., 2008.
- ❖ Prasad, Manmohan, Management Concepts and Practices, New Delhi, Himalaya Publishing House, 1998.
- ❖ Sharma.S.R., School Education Management, New Delhi, Anmol Publications Private Limited, 2000.
- ❖ Trivedi. P.R, Sudharshan. K.N., Management Education, New Delhi, Discovery Publishing House, 1996.
- ❖ Venkataiah.S, Management and Quality Education, New Delhi, Anmol Publications Limited, 2000.
- ❖ Verma, Yoginder. S, University Management and Administration, New Delhi, Deep-Deep Publication, 1990.
- ❖ Vohra, Amrit Lal, The Management of Higher Education, New Delhi, Anmol Publishers, 1990.

### **M.Phil - PAPER III**

#### **INTERNAL PAPER**

The Syllabus has to be framed internal with the research topic selected by the M.Phil students with the help of the respective guide. The syllabus should have five units carefully incorporating the variables selected from the Research study.