

# SAURASHTRA UNIVERSITY

## SYLLABUS FOR MASTER OF EDUCATION (M.Ed.) DEGREE

### **OBJECTIVES**

1. To prepare professional personnel required to staff colleges of Education at Pre-Primary, Primary and Secondary levels.
2. To prepare professional administrators and supervisors for positions of responsibility in Educational Institutes, Department of Education and Educational Planning and in supervisory Educational services.
3. To train persons for various psychological services such as Psychological Testing, Guidance and Counseling and Statistical Services with an educational orientation.
4. To train persons for organizing curriculum development and preparation of instructional materials.
5. To train persons for participation in programs of examination reform and educational evaluation.
6. To prepare personnel through systematic study and research that will contribute to the development of educational literature and to the growth of education as a discipline.

### **O.EDU.2**

Any person who has taken the Degree of Bachelor of Education of this University or a degree of another University recognized as equivalent there to with at least Second Class may be admitted to the examination for the Degree of Master of Education, after having fulfilled the requirements as laid by the University.

### **O.EDU.3**

To pass the whole M.Ed. Examination a student should clear both the Semester examination within a period of five years from the date of his/her registration, on expiry of five years he/she shall be required to register himself/herself as a fresh candidate and keep the attendance and appear and pass in both the examination a fresh from first term onward in order to obtain the degree of Master of Education.

Provided however that a candidate who is not able to pass the whole examination within the period of five years from the date of first registration as stipulated above may be given re-registration on payment of prescribed fee.

Provided further that such a candidate passes his remaining semester examination/s within two academic years of re-registration.

Provided further that such a candidate will not be eligible for exemption in individual papers.

However if the examination consists of papers and dissertation the candidate may be allowed to keep exemption in theory papers and/or dissertation if permitted under relevant regulation.

### **EDU.R.9**

A candidate desiring to appear for the M.Ed. Examination shall undergo a regular course of study in an institution recognized for the purpose for one academic year after passing the B. Ed. Examination.

### **EDU.R.10**

The M.Ed. program of Semester I & II will consists of six theory papers of 100 marks each and a dissertation of 200 marks as follows:

## **M.Ed. Semester - I Total 300 Marks**

### **Compulsory Papers (each paper of 50 Marks)**

- Paper - 1: Methodology of Educational Research Section - I
- Paper - 2: Psychology of Instruction Section - I
- Paper - 3: Philosophical and Sociological Foundation of Education Section - I
- Paper - 4: Information Technology in Education Section - I

### **Optional Papers (each paper of 50 marks)**

- Paper - 5: Paper (i) of Selected Optional Group Section - I
- Paper - 6: Paper (ii) of Selected Optional Group Section - I

## **M.Ed. semester - II Total 300 Marks**

### **Compulsory Papers (each paper of 50 Marks)**

- Paper - 1: Methodology of Educational Research Section - II
- Paper - 2: Psychology of Instruction Section - II
- Paper - 3: Philosophical and Sociological Foundation of Education Section - II
- Paper - 4: Information Technology in Education Section - II

### **Optional Papers (each paper of 50 marks)**

- Paper - 5: Paper (i) of Selected Optional Group Section - II
- Paper - 6: Paper (ii) of Selected Optional Group Section - II

**Dissertation: Carrying 200 Marks including 50 Marks for Viva-Voce Examination.**

**Educational Tour is required for studying the important function of various educational institutions**

## **OPTIONAL GROUP**

### **Gr. A. Measurement and Evaluation**

1. Educational Measurement & Evaluation
2. Statistical Method for Analysis of Data

### **Gr. B. Guidance and Counseling**

1. Guidance and Counseling
2. Psychological Testing & Test- Statistics

### **Gr. C. Curriculum Planning and Teacher Education**

1. Curriculum Development
2. Teacher Education

### **Gr. D. History of Education**

1. History of Education in Modern India
2. Problems of Indian Education

### **Gr. E. Educational Management**

1. Management of Education
2. Educational Planning and Finance

### **Gr. F. Comparative Education**

1. Principles and Methods of Comparative Education
2. Development of Educational Thought

## **EDU.R.11**

The dissertation shall pertain to any educational topic preferably of inter disciplinary nature to be approved by the University. The student shall submit to the University the topic on which he proposes to work for the purpose of his dissertation, within one month of the date of

registration. Such approval should normally be communicated to the student within thirty days thereafter. If a subject suggested by any student is not approved, he will be at liberty to suggest another topic provided that in all such cases a topic is got approved latest by the end of the first term.

#### **EDU.R.12**

The student desiring to appear at M. Ed. Examination submits his/her dissertation thirty days prior to the commencement of the written Examination.

#### **EDU.R.13**

Three copies of the dissertation shall submitted in typewritten or printed form. The number of pages ordinarily should not exceed 125. The size of the paper will be 8½ x 11 inches and will be of white bond.

#### **EDU.R.14**

To pass the M. Ed. Examination a candidate must obtain 36 percent of the marks in each section of the paper, 40 percent in the aggregate of the papers and 40 percent in the dissertation.

Those of the successful candidates who obtain 70 percent or more of total marks will be placed in Distinction, 60 percent or more of total marks will be placed in the First Class and those obtaining 48 percent or more of total marks will be placed in the Second Class.

#### **EDU.R.15**

If a candidate passes in the dissertation but fails in the aggregate of papers, the marks obtained by him in the dissertation shall be carried over to the subsequent year or years. If a candidate passes in the aggregate of papers and fails in the dissertation only, the marks obtained by him in the papers shall be carried over to the subsequent year or years. And he shall be at liberty to receive and resubmit the dissertation or to submit another dissertation in the subsequent year or years.

If a candidate fails in the aggregate of papers, he may be exempted from appearing in papers wherein he or she has secured minimum 48 percent marks. Candidates whose marks are carried over under this regulation shall be declared to have passed the Examination in classes earned and shall not be eligible for any University awards.

#### **EDU.R.16**

The following shall be the detailed Syllabus of theory papers.

<b>Compulsory paper 1</b> <b>Methodology of Educational Research</b>
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Objectives: The students will...

1. Understand the concept and place of research in education.
2. Gets acquainted with various reasons as for research.
3. Becomes familiar with various methods of research.
4. Gets conversant with the problems of research design, tools of collecting data and methods and techniques of analysis.
5. Achieves skill in writing and interpreting research reports.
6. Are initiated into research by undertaking a piece of research and preparing a dissertation.

#### **[Section 1]**

#### **1.0 Concept of Research and Researches in Education**

##### **(A) Concept of Research**

- 1.1 Steps in the research process

- 1.2 Meaning of research
- 1.3 Characteristics of the research
- 1.4 Types of research

(B) Researches in Education

- 1.5 Need of educational research
- 1.6 Areas of educational research
- 1.7 Factors hindering educational research
- 1.8 Teachers and research
- 1.9 Role of research in India
- 1.10 Institutions conducting educational research in Gujarat and nature of studies undertaken

**2.0 Resources and Library skills for Research**

(A) Resources for Research

- 2.1 Reference Books: Encyclopedias, Dictionaries, Almanacs and Yearbooks, Directories, Biographical Sources, Bibliographical Sources
- 2.2 Books and Monographs: Card Catalog, Book-lists and Reviews
- 2.3 Periodicals and Pamphlets: News papers, periodicals, Microfilms and other aids
- 2.4 Dissertations, Theses and Research Journals

(B) Library Skills

- 2.5 What to read and how to read
- 2.6 Certain reading skills
- 2.7 How to take notes

**3.0 Selecting the Research Problem**

- 3.1 Basis of Research Problem
- 3.2 Criteria used in selecting a research problem
- 3.3 Narrowing the range of the problem
- 3.4 Drafting a research proposal

**4.0 Variables and Hypotheses**

- 4.1 Meaning and types of variables
- 4.2 Meaning and types of hypotheses
- 4.3 Some objections to hypothesis construction
- 4.4 Suggestions for hypothesis construction
- 4.5 Involving variables in hypothesis
- 4.6 Testing a hypothesis

**5.0 Tools of Research**

- 5.1 Psychological Testing: General information about (a) construction and standardization of tests, (b) item analysis for difficulty value, discrimination index and distracter analysis, (c) concept and types of norms, (d) Reliability and types of reliability, and (e) validity, types of validity and cross validation.
- 5.2 Questionnaire: The details regarding (a) forms of questionnaire, (b) types of the items of questionnaire, (c) Basic guidelines for constructing items, (d) format of questionnaire, (e) pre-techniques for usable return, (f) reliability and validity of questionnaire, and (g) advantages and disadvantages of questionnaire.
- 5.3 Interview: (a) Forms of interview, (b) types of interview such as individual and group and structured and unstructured, (c) conduct of interview, (d) reliability, validity and objectivity of interview, (e) effects of interviewer on data collection, and (f) advantages and disadvantages of interview.
- 5.4 Observation: (a) Forms of observation, (b) types of observation, (c) conduct of observation, and (d) advantages and disadvantages of observation.
- 5.5 Rating Scales: (a) Numerical scale, (b) Graphical scale, (c) Descriptive graphic scale, and (d) rules for constructing scales.

- 5.6 Measurement of Attitude: Thurston and Likert technique
- 5.7 Concept of some other tools: (a) Checklist, (b) Scorecard

**[Section 2]**

## **6.0 Sampling Technique**

- 6.1 Meaning of population and sample
- 6.2 Importance of sampling
- 6.3 Characteristics of a good sample
- 6.4 When should be the sample be large
- 6.5 Sampling technique
  - (a) Probability samples: simple random sampling, stratified random sampling, systematic sampling, cluster sampling.
  - (b) Judgement Samples: incidental sampling, purposive sampling, quota sampling.
  - (c) Other Sampling Technique: sampling by pairs, double sampling, sequential sampling.
- 6.6 Determining sample size
- 6.7 Mistakes often made in sampling

## **7.0 Methods of Research**

- 7.1 Historical Method: collection of data, primary and secondary sources, external and internal critics of source materials, interpretations in historical research.
- 7.2 Survey: school surveys, job analysis, documentary analysis, public opinion surveys, community surveys
- 7.3 Method of Content Analysis
- 7.4 Inter Relationship Studies: case study, causal comparative studies, correlation studies
- 7.5 Developmental Studies: longitudinal and cross sectional studies, trend studies
- 7.6 Experimental Studies: (a) meaning and characteristics of experimental research, (b) method of control, criteria for selecting (evaluating) an experimental design-appropriateness, adequacy of control, internal validity and external validity, and (c) various types of experimental designs: pre, true and quasi, experimental design.

## **8.0 Treatment of Data**

- 8.1 Level of measurement of data
- 8.2 Classification of data
- 8.3 Quantification and description of data
- 8.4 Selection of technique for analysis of data
- 8.5 Descriptive statistics and inferential statistics
- 8.6 Conclusions and generalization
- 8.7 Deriving implications

## **9.0 Writing Research Report**

- 9.1 Format, style, typing, quotations, footnotes, bibliography, pagination, tables, figures, and graph
- 9.2 Chapterization/divisions of a report: (a) Introduction section, (b) Review of related Literature, (c) Methodology section, (d) Result section, (e) Summary and discussion section, (f) References, and (g) Abstract.
- 9.3 Mistakes in preparing research report
- 9.4 Criteria for evaluating research report

### Reference Books

- Best, John W., Research in Education. Englewood Cliff: N .J. Prentice Hall, Inc., 1978.
- Borg, W. R. & Gall, M. D., Educational Research: An Introduction. (3<sup>rd</sup> Ed.). New York: Longman, Inc., 1979.
- Burroughs, G. E. F., Design and Analysis in Educational Research. (2<sup>nd</sup> Ed.). Oxford: Alden & Mowbray, Ltd., 1975.
- Desai, H. G., Style Manual for Dissertation/Theses. Rajkot: Saurashtra University, 1979.
- Gephart, S., Foundations of Educational Research. (Selected Readings). Ohio: C. E. Merrill Publishing Co., 1969.
- Gilbert, S., Foundations of Educational Research. Englewood Cliff: N. J. Prentice Hall, Inc., 1979.
- Bruce, W., Conducting Educational Research. (2<sup>nd</sup> Ed.). New York: Harccunt Brace Jovenovich, Inc., 1978.
- Good, Carter V. & Scates, Douglas, E., Methods of Research: Educational, Psychological, Sociological. New York: Appleton Century Crofts, Inc., 1954
- Goode, W. J. & Halt, P. K., Methods in Social Research. New York: Mc-Graw Hill Book Co., 1952.
- Hyman, H. H., Survey: Design and Analysis, Principles, Cases, Procedures. New York: The Free Press, 1955.
- Kerlinger, F. N., Foundations of Behavioral Research: Educational and Psychological Inquiry. New York: Holt and Rinehast and Winson, Inc., 1983.
- Koul, Lokesh, Methodology of Educational Research. New Delhi: Vanib Educational Books, 1984.
- Levin, J., Elementary Statistics in Social Research. (2<sup>nd</sup> Ed.). New York: Harpre & Row Publishing Co., 1977.
- Lynch, M. D. & Huntsberger, D. V., Elements of Statistical Inference for Education and Psychology. New York: Alen and Bacon. Inc., 1976.
- Rummel, J. f., An Introduction to Research Procedure. (2<sup>nd</sup>. Ed.). New York : harper & Row Publishers, 1964
- Sukhia, S. P., Mehrotra, P. A. & Mehrotra, R. N., Elements of Educational Research. (2<sup>nd</sup> Ed.). New Delhi: Allied Publishers, 1966.
- Travers, R. M. V., An Introduction to Educational Research. (3<sup>rd</sup> Ed.). London: The MacMillan Co., 1969.
- Tuckman, B. W., Conducting Educational Research. (2<sup>nd</sup> Ed.). New York: Harcourt Brace Jovenovich, Inc., 1978.
- Van Dalen, D. W. & Meyer, W. J., Understanding Educational Research: An Introduction. New York: Mc-Graw hill Book Co., 1979.

<b>Compulsory Paper 3</b> <b>Philosophical and Sociological Foundations of Education</b>
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Objectives: The Students will...

1. Acquaint him with the philosophical and sociological theories underlying educational principles and practices.
2. Understands the relationship between education on the one hand and social, political and economic systems on the other.
3. Attempts to reconcile and synthesize the claims of individual and society in education.
4. Prepare himself for his role in directing the future development of education.

**[Section 1]**

**1.0 Philosophy and Education**

1.1 Nature, Definition, Content and Functions of Philosophy

1.1 Branches of Philosophy: General introduction, content and usefulness to teachers of (i) Metaphysics, (ii) Epistemology, (iii) Axiology - Ethics and Aesthetics

1.2 Relation between Philosophy and Education

1.3 Nature, Scope and Functions of Educational Philosophy

**2.0 Schools of Philosophy**

Contribution of the five schools of philosophy (2.1) Idealism, (2.2) Naturalism, (2.3) Pragmatism, (2.4) Realism, and (2.5) Existentialism to education keeping in view of the following points: belief about the (a) nature of ultimate reality, (b) nature of knowledge and ways of knowing, (c) morality and values, (d) aims of education, (e) curriculum, (f) teaching method, (g) discipline, (h) teacher-pupil relationship, and (I) the place of teacher in the process of education.

**3.0 Values in Life and Education**

3.1 Concept of Value: Meaning, Characteristics, and types of values

3.2 Individual, Social and Global values and their inter-relationship

3.3 Concept and Approaches of Values Education

3.4 Educational Implications of Values Education

**4.0 Indian Philosophies and Education**

The study of Indian Philosophies (4.1) Upanishad, (4.2) Bhagavad-Gita, (4.3) Jainism, and (4.4) Buddhism keeping in view of following points: (a) Thematic content, (b) Aims of Education, (c) Curriculum, (d) Teaching method, and (e) Discipline.

**5.0 Contribution of Indian Philosophers**

Indian philosophers (5.1) Sri Aurobindo and (5.2) J. Krishnamurthy's philosophical contribution in view of following points: (a) Autobiography (b) Contribution in the field of Metaphysics, Epistemology and Axiology, (c) Specific contribution to education in contemporary educational practices.

**[Section 2]**

**6.0 Educational Sociology**

6.1 Concept of Educational Sociology: Meaning, Content and Functions

6.2 Education and Society

6.3 Education and Culture

6.4 Education and Social Group

- 6.5 Education and Social Classes
- 6.6 Education and Social Participation
- 6.7 Education and Social Mobility

### **7.0 Education and Eco-Political System**

- 7.1 Agriculture and Industrial Economic System and Education,
- 7.2 Economically Developed, Developing and Underdeveloped Society and Education,
- 7.3 Education in Autocratic and Socialist Society, and
- 7.4 Democracy and Education: Keeping in view aims of education, form and Programs of education.

### **8.0 Religion and Education**

- 8.1 Concept of Religion: Narrow, Functional and Broad meaning
- 8.2 Arguments against and for Religious education
- 8.3 Non-secularism and Religious Education
- 8.4 Moral and Spiritual Education as Religious Education

### **9.0 Internationalism and Education**

- 9.1 Concept of Internationalism: Meaning and Need
- 9.2 Nationalism as a bases of Internationalism
- 9.3 Education for Internationalism: Aims, Curriculum, Teaching Method and Teachers' Activities
- 9.4 Agencies (other than school) and their importance for Education for Internationalism

### **10.0 Contribution of Indian Sociologist and Social Agency**

Socio-Educational Contribution of (5.1) Mahatma Gandhi, (5.2) Sri Pandurang Shastri, and Social Agency (5.3) Ramkrishna Mission in view of the following points: (a) Specific Contribution to the Community (b) Educational Activities for the upliftment of the society, (c) Supplementary role for social Change and (d) Functions for Values Education

## **Group A Paper 1**

### **Educational Measurement and Evaluation**

Objectives: The Students gain ability to...

1. Prepare and use tests of different kinds.
2. Handle data and interpret test results.
3. Participate in examination reform.
4. Carry on examination and evaluation work.

#### **[Section 1]**

### **1.0 The Essentials of Evaluation**

- 1.1 Concept of Measurement
- 1.2 Concept of Evaluation
- 1.3 Difference between Evaluation and Measurement
- 1.4 Types of Evaluation: (I) Maximum performance v/s Minimum performance, (ii) Formative, Summative and Diagnostic Evaluation (iii) Criterion v/s Norm referenced Evaluation
- 1.5 Role of Evaluation: Diagnosis, prognosis, Survey, Guidance, Placement, Improvement of Teaching, Learning and Testing
- 1.6 Characteristics of Evaluation
- 1.7 Steps in the process of Evaluation

### **2.0 Defining Instructional Objectives**

- 2.1 Concept of Instructional Objectives
- 2.2 Method for stating instructional objectives
- 2.3 Need for defining instructional Objectives
- 2.4 Taxonomy of Instructional objectives

- 2.5 Classification of Objectives of Cognitive Domain: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation (meaning, specific objectives and expected behavioural changes)
- 2.6 Classification of Objectives of affective Domain: Attending, Responding, Valuing, Organization, Characterization (meaning, specific objectives and expected behavioral changes)
- 2.7 Classification of objectives of Psychomotor Domain: Visualization, Concentration, Response under Guidance, Learning of Working, Mastery ( Meaning, Specific objectives and expected behavioral changes)

### **3.0 Qualities desired in Measurement Procedure**

- 3.1 Validity: Nature, types and problems of validity measures
- 3.2 Reliability: Nature, types and problems of validity measures
- 3.3 Usability: Factors affecting the usability of measurement procedure

### **4.0 Test Construction**

- 4.1 Standardized Achievement Test: (1) Pre-study for the test (2) Construction of Items (3) Pilot study of the Test (4) Finalization of the test (5) Test administration for standardization (6) Manual of the test
- 4.2 Performance Test: (1) Performance and it's Measurement (2) Types of Performance Test (3) construction of Performance Test (4) Uses of Performance Test
- 4.3 Diagnostic Test: (1) Achievement Test v/s Diagnostic Test (2) Characteristic of Diagnosis and Remedial Program (3) Steps for the construction of Diagnosis Test (4) Scoring of Diagnosis Test (5) Uses of Diagnosis Testing
- 4.4 Scholastic Aptitude Test: (1) Nature of the test (2) Characteristic of the test (3)Steps of construction of the test (4) Uses of scholastic test

### **5.0 Criterion-Reference Testing**

- 10.1 Classical Test Theory and Item Response Theory
- 10.2 Concept of Criterion-reference test
- 10.3 Difference between Criterion-Reference Test and Norm-Reference Test
- 10.4 Steps for construction of CR test: Instructional Intent, Specifying the domain, Item Development, Item Review, and Test Development
- 10.5 Introduction of Technology for Test-Item Writing: Item Form, Item for Prose learning and Concept Testing
- 10.6 Uses of CR tests

## **[Section 2]**

### **1.0 Standardized Test**

- 1.1 Nature and Use of Standardized test
- 1.2 Types of standardized test
- 1.3 Administration of Standardized test
- 1.4 Sources of Information about Standardized test
- 1.5 Choosing a Standardized test
- 1.6 Scoring a Standardized test
- 1.7 Interpretation of Standardized test score: Concept of Norms, Type of norms
- 1.8 Introductory notes for standardized tests

### **2.0 Planning a Testing Program**

- 2.1 Concept of Testing Program
- 2.2 Functions of a Testing Program
- 2.3 Qualities desired in a testing Program
- 2.4 Planning a testing Program
- 2.5 Testing Program for primary, Secondary, Higher secondary and College levels
- 2.6 Presenting Result to the Clientele

### **3.0 Trait Measurement Devices**

- 3.1 Meaning of interest, Measurement of Interest: Expressed, Manifested, Inventoried and Tested approaches
- 3.2 Meaning of Intelligence, Measurement of Intelligence: Individual and Group test, Verbal and non-verbal test of Intelligence
- 3.3 Meaning of Personality, Measurement of Personality: Self-reporting technique, Projective technique
- 3.4 Meaning of Aptitude, Measurement of Aptitude: Unitary and global approaches
- 3.5 Introduction of Interest, Intelligence, Personality and Aptitude test available in Gujarati

### **4.0 Evaluation Result**

- 4.1 Marks and Marking system: Need, Problem and Quality control
- 4.2 Marking System: Absolute v/s Relative Marking: Traditional v/s Grading
- 4.3 Grading: Concept and process of Grading
- 4.4 Question bank: Meaning, Steps for construction, Importance
- 4.5 Progress Report: Nature and uses

### **5.0 Test Statistics**

- 5.1 Item Analysis for Norm-referenced test: Statistics of Facility Value and Discriminative Indices of Objective type test item and Essay Question, Relationship between FV and DI, Appropriateness of Distracters
- 5.2 Item Analysis for Criterion -referenced test: Statistics of Item Objective Congruence (IOC) and Pre-test Post-test Difference Index (PPDI)
- 5.3 Formulas for Reliability
- 5.4 Conversion of Raw score into Standard score: Concept of the Comparison with an absolute standard score, Inter-individual Comparison, Intra-individual comparison and Types of standard score
- 5.5 Presenting test result through Graph: Profile for Individual,