

**M.A. Education Part II**  
**Measurement and Evaluation Code: MAED-207**  
**(Optional Paper)**

**Objectives :** To enable the learners to understand the process of measurement and evaluation in teaching learning process, to know the procedure of test construction, to measure and understand the psychological and educational variables to acquaint with the intelligence testing and personality measurement techniques.

**BLOCK1- ELEMENTRY STATISTICS**

**Unit 1- Measures Of Central Tendency**

Understanding the nature of distribution of scores, Location of Points on Graph , Frequency Polygon , Histogram , Percentiles and Ogive, Line Drawing of Curves , Bar Diagram , Pie Diagram

Concept of Mean, Median, and Mode, Uses of Mean, Median, and Mode, Methods of Calculating Mean, Median, and Mode

**Unit 2-Measures Of Variability**

Concept of Range , Quartile Deviation (Q.D.) , Average Deviation , Standard Deviation(S.D.), and Variance, Methods of Estimating Measures of Variability

**BLOCK 2-NORMAL CURVE & CORRELATION METHODS**

**Unit 3- Normal Probability Curve**

Definition of Normal Curve (NPC) , Characteristics of NPC, Application of NPC

**Unit 4-Correlation Methods**

Meaning of Correlation, Spearman's Correlation of Ranks Difference, Pearson's Correlation Method, and Contingency Coefficient

**BLOCK 3-TECHNIQUES OF CONDUCTING TEST**

**Unit 5- Psychological Testing-Procedures, uses and interpretations of Test Scores**

Meaning of Psychological Tests , Characteristics and Need of Psychological Test, Major Classification of Psychological Tests, Uses of Tests , Testing Procedure , Interpretation of Test Scores

**BLOCK 4- MEASUREMENT AND EVALUATION**

**Unit 6- Measurement and Evaluation**

Concept of Measurement, Characteristics, Functions, Various Types of Variables, Scales of Measurement, Method of Measurements, Concept of Evaluation, Purposes and Functions, Techniques,

**Unit 7- Construction of Achievement Test**

Oral examination, Construction of Objective Type Test, Recognition Type Items, Recall Type items, Evaluation of Learning Objectives, Comparison Between Essay and Objective Tests , Criterion – Referenced and Norm Referenced Tests  
Process of the Development of Achievement Test, Various Types of Tests: Teacher Made and Standardized Tests.

**Unit 8- Item Analysis – Meaning, Procedures and Techniques**

**Items Analysis-** Meaning and Objectives , Procedure of item Analysis, Criteria for Selection and Rejection of items, Item Analysis of Diagnostic Test Item.

**Unit 9- Concept of Reliability**

Meaning and Definition of Reliability, Characteristics , Computation of Various Reliability Coefficients viz. Test-Retest Reliability, Split-halves Reliability, Kuder Richardson Reliability, Reliability Index, Standard Error of Measurement, Estimation of the Reliability of Criterion – Referenced Test

**Unit 10- Concept of Validity**

Meaning and definition of Validity, Characteristics , types of Validity- Content Validity, Criterion Related Validity, Construct Validity Methods of Estimating Validity, Cross-Validation technique, Relation between Validity and Reliability

**Unit 11- Development of Test Norms**

Meaning of Norms or Standard Scores, Definition of Norms, Need of Norms , Percentile Norms or Percentile – Rank Norms, Standard Score Norms ( Z-scores Norms) , T-Scores Norms , Deviation I.Q. Norms , Stanine Norms, Age Norms , and Grade Norms

**BLOCK 5: EDUCATIONAL & PSYCHOLOGICAL TESTS****Unit 12- Measurement Of Achievement**

Achievement Tests or Performance Tests , Diagnostic Tests , Process of the Development of Achievement Test , Educative Values of Examinations, Various Types of Tests: Teacher Made and Standardized Tests, Summative and Formative Tests , Easy and Objective Type Tests

**Unit 13- Measurement Of Intelligence**

Definitions of Intelligence, Characteristics of Intelligence, Types of Intelligence,

Measurement of Intelligence, Binet Tests , Wechsler Scale WAIS (1955) , Thurston's Tests of Primary Mental Abilities (PMA) , Non-Verbal Test of Intelligence- Bhatia Battery, Cultural –Fair Intelligence Test- SPM, Performance Test- Koh block Design Test , Uses of Mental Ability Tests

#### **Unit 14- Measurement of Personality**

Definitions of Personality , Characteristics , Personality Measurement , Personality Inventories, Preference Schedule (EPPS),Allport Vernon Study of Value (1931), Projective Techniques-TAT and Rorschach INK Blot Test,

#### **Suggested Readings:**

1. A.Anastasi: Psychological Testing, The Mc Millan Company, New York
2. H.E. Garret: Statistics in Pschology and Education, Vakils, Feffer and Simons Pvt.Ltd. Mumbai
3. S.P.Gupta: Adhunik Mapan Avam Moolyankan, Sharada Publication, Allahabad
4. J.C.Nunally: Psychometric Theory, McGraw Hill Company, New York
5. R.L.Ebel : Measuring Educational Achievements, Prentice Hall Inc. EngleWood Cliffs
6. N.E.Gronlund: Measure and Evaluation in Teaching,Mc Millan Company, New York