

PAPER - 5

"EDUCATIONAL EVALUATION AND STATISTICS "

Objectives :

1. To acquaint the student teacher with the basic scientific concepts and practices in educational evaluation statistics.
2. To enable the student to tabulate and find out some standard meaning from the raw scores by using statistical procedures
3. To develop skills and competencies in the student teacher for the use of techniques in the field.
4. To enable the student teacher to interpret the result of educational evaluation & statistics
5. To enable the student the student to understand about various modes of educational evaluation

Unit - I Measurement & Evaluation

- A. Concept of measurement and evaluation
 - Difference between measurement & evaluation
 - Continuous evaluation
 - Steps of evaluation.
- B. Scale of measurement, Nominal, Ordinal, internal & ratio scale.
- C. Characteristics of evaluation

Unit - II Quality of a Test

- A. Reliability: concept, method test, split - half, parallel & rational method, methods with formula
- B. Validity concept & types (Only Theory)
- C. Item Analysis : Concept & procedure, Facility (Difficulty) value, Discrimination value
- D. Standard Test : Steps, characteristics & uses, diagnosis, Remedial Work

Unit - III

- A. Intelligence: Concept of intelligence & Measurement of intelligence.
 - Concept of IQ
 - Names of intelligence tests with their constructors in Gujarat.
 - Individual & group tests of intelligence
- B. Personality : Concept, methods for assessment of personality :-
 - interview, self-report, inventories, rating scale, projective techniques.
 - Name of test constructors in India & Gujarat.
 - Uses of personality test.

Unit - IV Attitude & Interest

- A. Aptitude test :- Concept & uses
- B. Difference between attitude & aptitude tests.
- C. Name of test constructors in India and Gujarat.
- D. Interest inventories
- E. Concept and uses Names of test constructors in Gujarat.

Unit - V Educational Statistics :

- A. Measures of central tendency from ungrouped and grouped data and its uses.
- B. Measures of Variability : Range, Quartile deviation, Standard deviation, their uses.
- C. Coefficient of variation.

Unit - VI Interpreting Measurement

- A. Normal Probability curve, skewness and kurtosis.
- B. Percentiles and percentile ranks.
- C. Standard Scores.
- D. Co-efficient of correlation by Spearman's method and its interpretation.

Unit – VII Practicum

- 1. Administration and interpretation of the results of one standardized test.
- 2. Draw NPC and interpret the results of raw data.
- 3. Compare the results of two subjects of a class of the secondary / Higher Secondary School and find the correlation and interpret it.

Reference Books :

- 1. Best, John W., "Research in Education", Englewood Cliffs, Prentice-Hall, Inc., 1978.
- 2. Sidhu, Kulbirsing4 (1985), "Methodology of Research in Education", Allied Publishers, New Delhi.
- 3. Shukhia, S.P., (1966), "Elements of Educational Research", Allied Publishers, New Delhi.
- 4. Tuckman (1978), "Conducting Educational Research", Harcourt Bra Jovenovich, New York.
- 5. Garrett, H.E., "Statistics in Psychology and Education", Allied Pacific Pvt. Ltd.
- 6. Guilford, J.P. (1973), "Fundamental Statistics in Psychology and Educational", McGraw-Hill, Tokyo.
- 7. Scheffe, Henry, "Statistical Inference in Non-parametric case", New York.