

Testing and Measurement in Education.

OBJECTIVES:

Knowledge and Comprehension :-

The Learner : States about the concept of testing measurement, and evaluation.
States the development of testing with Indian context.
Explains the terms validity, Reliability, & interpretability.
Explains general principles of test constructions.
Interpretes the data, i.e. test scores
Describes and process of standardisation of a test
Describes the process of constructing a test-
States the uses of different tests.
Differentiates and standardised test and classroom test.
Explains the different factors influencing test and testing.

Application:

The Learner: Administers different tests in the class.
Prepares classroom tests.
Interpretes the data: changes teaching methods accordingly.

Unit 1: Origin and development of Testing in Education.

- 1.1 Origin and development.
- 1.2 Indian contribution.
- 1.3 Meaning and concept
- 1.4 Need and uses with special references to social consequences.

Unit 2: Theory and Practice of Psy. Testing.

- 2.1 Planning a test.
- 2.2 Construction and use of a test.
- 2.3 Different types of tests.
- 2.4 Criteria of a good test.

<u>Practical</u>	<u>Technical</u>
Purposiveness	Standardised
Comprehensiveness	Objective.
Economical.	Discriminative
Easiness	Reliable.
Acceptability	Valid.
Representativeness.	Norms.

Unit-3 : Statistical concepts in test preparation.

- 3.1 Test scores and their transformation - scores, T scores Percentage, Stanine Scores, Percentiles, I Q.Deviation scores.
- 3.2 Test standardisation --Norms.
- 3.3 Concept of factor analysis.
- 3.4

Unit-4: Measurement :

- 4.1 Concept of measurement and evaluation with reference to educational process..
- 4.2 Functions of measurement in Education.
- 4.3 Scaling methods:- Ordinal scales, Equal Interval and ratio scales, Rating scales.

Unit-5: Measurement of different aspects of an individual.

- 5.1 Attitude.
- 5.2 Intelligence
- 5.3 Achievement
- 5.4 Interest
- 5.5 Aptitude.
- 5.6 Motivation.
- 5.7 Personality
- 5.8 Values.

Unit-5: Classroom Test Construction.

- 6.1 Types of classroom tests.
- 6.2 Planning, administration and execution.
- 6.3 Assessment, Interpretation and improvement.
- 6.4 Item analysis.

Unit-7 : Factors influencing test-scores.

- 7.1 Nature of the test.
- 7.2 Psychological factors.
- 7.3 Environmental factors.

Unit-8 : Tests relating to Teacher Behaviour and teaching situations.

8.1 Testing in Teacher effectiveness. (aptitude/attitude)

8.2 Testing teaching process.

8.3 Testing for Educational environment.

Unit-9 : Practical Work.

Preparation, Administration and reporting a classroom test.

Books Recommended :

- 1) Measuring Learning Out-comes.
-By-Bruce W. Turkman.
Publisher-Harcourt, Brace, Jovanovich.
- 2) Educational and Psychological measurement and evaluation.
By-Julian C Stanley, Kenneth D. Hopkins.
Publisher-Prentice Hall of India.
- 3) Educational Measurement:- Editor-Lindquist.
Publisher-American council on Education Washington
- 4) Theory and Practice of Psychological testing.
By-Frank S. Freeman.
Publisher- Holt, Rinehart & Winston, New York.
- 5) Educational and Psychological measurement.
By- Payne & Mc. Morris.
Publisher- Oxford and IBH.
- 6) Classroom Test Construction - (1971)-By-Marshall & Hales.
Publisher- Addison, Wesley publishing company, London.
- 7) A Survey of Research in Psychology-1972, Bombay.
- 8) A Survey of Research in Education - M.B. Bach.
- 9) Educational Psychology of the ancient Hindus (1949)
By - D.C. Dasgupta - Calcutta.
- 10) Measurement and Evaluation in Psychology and Education.
By- Thorndiko and Hegen.
Publisher-John Wiley & Sons, London, New York
- 11) Measurement and Evaluation in Education and Psychology
By Mehrens-Lohmann,
Publisher- Holt Rinehart & Winston, New York.
- 12) An Introduction to Psychological Testing and Statistics
By Prof. Dandekar and Prof, Rajguru Sheth Publishers:
Bombay-4

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