

ASSESSMENT FOR LEARNING

UNIT 1 : TECHNOLOGICAL BASED QUANTITATIVE AND QUALITATIVE ANALYSIS OF LEARNING OUTCOMES

Quantitative and Qualitative- Meaning and difference- Data-Tabulation – measures of central tendency – measures of dispersion – normal distribution – correlation and their interpretation- Graphical representation of data-Exploration of software for assessment of CCE– Managing students Data in computer – inferences, Diagnosis, feedback and remedial learning alternatives – e-portfolio assessment – evaluation Rubrics

10.1 QUANTITATIVE AND QUALITATIVE- MEANING AND DIFFERENCE

(Please check Class notes)

10.2 DATA-TABULATION – MEASURES OF CENTRAL TENDENCY – MEASURES OF DISPERSION – NORMAL DISTRIBUTION – CORRELATION AND THEIR INTERPRETATION- GRAPHICAL REPRESENTATION OF DATA

(Please check Class notes)

10.3 EXPLORATION OF SOFTWARE FOR ASSESSMENT OF CCE

The scientific method tries to determine the strengths and weaknesses of students, improves students' acquisition levels and strengthens school teamwork and societal co-operation. Student's interaction and behaviour are well taken care of along with academics. At the core of the new educational vision, the objective of making the learning process joyful for the child is envisaged. When the child takes greater responsibility for his /her own learning and by giving freedom to the learner to experiment and explore, the learning process can be made exciting and meaningful to each learner. The use of Software in assessment of CC explores various views in scholastic and non-scholastic areas. The preparation of such software depends on the teacher/management personnel.

10.4 MANAGING STUDENTS DATA IN COMPUTER – INFERENCE, DIAGNOSIS, FEEDBACK AND REMEDIAL LEARNING ALTERNATIVES

The school has to maintain the obtained data and utilize them for making inferences, diagnosis, to provide feedback and for finding remedial learning alternatives.

Inferences: Inference means a conclusion made on the basis of evidence or reasoning. Inferences are what we figure out based on an experience. These skills will be needed for all sorts of school

assignments, including reading, science and social studies. Inferential thinking is a complex skill that will develop over time with experience.

Diagnosis: No one source of data can be sufficient to assess what a pupil knows about school-related content. What is called for is a triangulation of several kinds of data drawn from various types of tests: standardized tests of achievement and aptitude, teacher-made quizzes, observations of behavior, and the like. Diagnosis does not necessarily mean prescription unless the data collected have demonstrated high reliability and validity.

Feedback: Good feedback generally focuses on behavior or the outcomes of behavior rather than on the inherent characteristics of the person concerned. It leaves that person feeling positive and able to move forward. The timing of the feedback is important. It needs to be given as soon as possible after the event. The greater the delay, the less likely it is that the student will find it useful or be able or inclined to act on it. Feedback also needs to be clear.

Remedial learning alternatives: The test scores will help the students can know their strengths and weakness in respective subjects. Based on the test scores, teachers may infer about the success of instruction process adopted by them. Also they may provide more appropriate instructional guidance for individual students or the class as a whole.

10.4 E-PORTFOLIO ASSESSMENT

Portfolio is a form of alternative assessment intended to accumulate evidence to measure growth over time of a student's or teacher's performance. It is a purposeful collection of student work that exhibits student's efforts, progress and achievements in one or more areas. Each portfolio might contain a selection of exemplars of the student's work. Portfolio creation is the responsibility of the learner, with teacher guidance and support and often with the involvement of peers and parents.

Portfolios provide teachers with a tool for showing what, how, and how well students learn both intended and incidental outcomes. They provide students and teachers with creative, systematic, and visionary ways to learn, assess, and report skills, processes, and knowledge. The essential elements of a Portfolio are as follows: (i) Cover Letter, (ii) Table of Contents, (iii) Entries, (iv) Dates, (v) Drafts and (vi) Reflections.

E- Portfolio Assessment: E-Portfolio Assessment is the systematic, longitudinal collection of student work created in response to specific, known instructional objectives and evaluated in relation to the same criteria.

10.4.1 CHARACTERISTICS OF E - PORTFOLIO ASSESSMENT

The Characteristics of e-Portfolio Assessment are as follows: (i) It is a form of assessment that students do together with their teachers. (ii) It is not just a collection of student work but a selection. (iii) It provides samples of the student's work which show growth over time. (iv) The criteria for selecting and assessing the portfolio contents must be clear to the teacher and the students at the beginning of the process. (v) The entries in the portfolio can demonstrate learning and growth in all learning competencies.

10.4.2 STRENGTHS OF E - PORTFOLIO ASSESSMENT

The Strengths of e-portfolio Assessment are listed as follows: (i) Measures student's ability over time, (ii) Done by teacher and student: student aware of criteria, (iii) Embedded in instruction, (iv) Involves students in own assessment, (v) Student learns how to take responsibility

10.4.3 ADVANTAGES OF USING E-PORTFOLIO ASSESSMENT

The advantages of using e-portfolio assessment are as follows: (i) Portfolio assessment match with assessment to teaching. (ii) It has very clear goals. (iii) It gives a profile of the learner's abilities. (iv) It is a tool for assessing a variety of skills. (v) It develops awareness among students in their own learning. (vi) It caters to individuals in the heterogeneous class. (vii) It develops social skills. (viii) It develops independent and active learners. (ix) It can improve motivation for learning and achievement. (x) It is an efficient tool for demonstrating learning. (xi) It provides opportunity for teacher-student dialogue. (xii) It serves as a cross-section lens, providing a basis for future analysis and planning. (xiii) It serves as a concrete vehicle for communication, providing on-going communication or exchanges of information among those involved in assessment. (xiv) It promotes a shift in ownership; students take an active role in examining what they have done and what they want to accomplish. (xv) It offers the possibility of assessing the more complex and important aspect of a learning area or subject matter; and (xvi) It covers a broad scope of knowledge and information from many different people involved in the assessment of students' learning and achievement.

10.4.4 DISADVANTAGES OF USING E-PORTFOLIO ASSESSMENT

The disadvantages of using e-portfolio assessment are as follows: (i) Portfolio assessment may be seen as less reliable or fair than more quantitative evaluations. (ii) It can be very time consuming for teachers to organize and evaluate the content of portfolios. (iii) Portfolio can be

just a miscellaneous collection of artifacts that do not show patterns of growth and achievement.
(iv) Data from portfolio assessments can be difficult to analyze or aggregate to show change.

10.5 EVALUATION RUBRIC

Rubric is an authentic assessment tool used to measure students' work. It is a scoring guide used to evaluate a student's performance based on the sum of a full range of criteria rather than a single numerical score. It is a formative type of assessment because it becomes an ongoing part of the whole teaching and learning process.

10.5 ADVANTAGES OF USING EVALUATION RUBRICS

The Advantages of using Evaluation Rubric are as follows: (i) It improves student performance by showing the student how their work will be evaluated and what is expected. (ii) It helps students to become better judges of the quality of their own work. (iii) It promotes student awareness about the criteria to use in assessing peer performance. (iv) It forces the teacher to clarify his/her criteria in specific terms. (v) It provides useful feedback to the teacher regarding the effectiveness of the instruction. (vi) It reduce the amount of time teachers spend evaluating student work. (vii) It allow assessment to be more objective and consistent.

ASSESSMENT FOR LEARNING

UNIT 2: BASICS OF EDUCATIONAL TESTING, MEASUREMENT, ASSESSMENT AND EVALUATION

Meaning of Testing, Measurement, Concept of Assessment and Evaluation in Education – Steps of evaluation process – Characteristics of the evaluation - comprehensive and continuous – Formative and summative evaluation – Norm reference & criterion reference tests – Uses of evaluation

1.1 MEANING OF TESTING

TESTING is a technique of obtaining information needed for evaluation purposes. Test is a most commonly used method of making measurements in education. It is an instrument or systematic procedures for measuring sample of behavior by posing a set of questions in a uniform manner designed to measure any quality, ability, skill or knowledge.

The test is a procedure used in the measurement and assessment framework. (Sudjiono, 2003) Tests serve a variety of functions namely, (1) assessment of the present status of an individual on a particular trait or variable, (2) expressing the probability of future success, (3) diagnosing the causes of lack of expected performance and suggesting remedial measures, (4) providing academic and vocational guidance, (5) classifying (comparing or categorizing) individuals or groups of individuals, (6) undertaking research to answer various questions and (7) formulating generalizations and policy decisions.

Findley (1963) has classified the purposes of testing into three major inter-related categories: (A) instructional, (B) administrative and (C) guidance.

1.2 MEASUREMENT

MEASUREMENT is mainly concerned with collection or gathering of data. Ex.: Students' scores in an examination. It is a process of measuring physical properties of objects such as length and mass. The measurement involves assigning a score on a given task performed by the learner.

Measurement is a process of data collection through empirical observation to gather information relevant to the intended purpose (Cangelosi, 1995). The measurement is the process of giving a

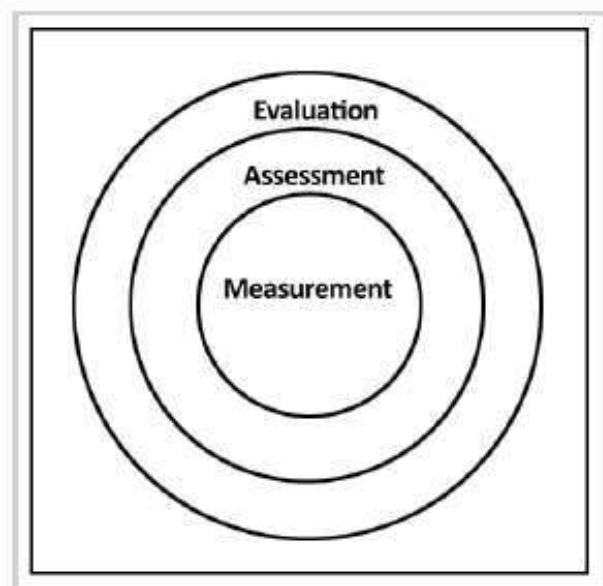
number (score) of the learning process and results based on certain criteria or size that is clear and in accordance with the objectives set in order to give judgment , which is a decision on the process and learning outcomes

1.3 CONCEPT OF ASSESSMENT AND EVALUATION IN EDUCATION

Assessment is the process of collecting information / evidence through measurements, interpret, describe, and interpret the evidence of measurement. (Permendikbud 2014).

Assessment is qualitative. It is a processes and instruments that are designed to measure the learner's achievement, when learners are engaged in an instructional programme of one sort or another. It is concerned with ascertaining the extent to which the objectives of the programme have been met. It is a process of interpreting the data presented to the process and learning outcomes in the form of a score by converting it into a value based on a specific procedure through measurement.

Thus, we find that evaluation involves assessment and measurement. It is a wider and more inclusive term than assessment and measurement. It can be represented as in the following diagram:



1.3.1 EVALUATION IN EDUCATION

History of Evaluation: Chester W. Harris (1960) traces the history of the concept of the evaluation to the thirties of the twentieth century. It emerged as a reaction against, the relatively narrow information and skill–centered educational measurement. A strong movement developed under the leadership of Alvin C. Eurich, Ralph W. Tyler and J. Wayne Wrightsone to broaden the various areas of appraisal like, attitude, interest, idea, way of thinking, work habit and personal and social responsibility. The American council on education made large scale cooperative effects to improve evaluation procedures in the post war era. Tyler s contribution was his insistence of defining the goals and objectives in behavioral term and making them the basis of instrument developing in education and evaluation. In India, the work related to evaluation began in the year 1960.

Evaluation refer to the act or process to determiniting the value of something. (Edwin Wandt and Gerald W. Brown, 1977)

Evaluation is an activity to gather information about the workings of something, which then the information is used to determine an appropriate alternative in making decisions. (Suharsimi Arikunto, 2004)

Evaluation is to ascertain the growth and changes, taking place in pupils as a result of teaching learning experiences. It characterizes the work or value of something. It is a method of determining the extent to which established goals or objectives have been achieved. It is a process of making an overlay of the outcomes as an educative experience against the background of anticipated or stated objectives. It is not restricted to the result of tests and examination or the teachers 'estimate but includes the learners' own estimates of his/her own ability.

1.3.2 DIFFERENCE BETWEEN MEASUREMENT AND EVALUATION

MEASUREMENT	EVALUATION
It focuses only on single aspect of subject matter achievement.	It emphasizes all aspects of pupil growth.
It is means to an end. Main function is collection of evidence.	It is an end itself. Main function is the appraisement of the value of the evidences.
It may not be an essential part of instruction.	It is an integral part of instruction.

It may be done at anytime.	It has to be done continuously.
Measurement stops at the assignment of numbers.	It goes further passes value judgement on measurement.
It is limited to quantitative description of pupil behaviour.	It includes quantitative and qualitative descriptions plus value judgement.

1.3.3 STEPS OF EVALUATION PROCESS

The steps involved in the Evaluation Process are as follows:

(i) Identifying and Defining General Objectives:

The first step is to determine what to evaluate, that is, to set down educational objectives.

(ii) Identifying and Defining Specific Objectives:

It has been said that learning is a modification of behaviour in a desirable direction. The teacher is more concerned with a student's learning than with anything else. Changes in behaviour are an indication of learning. These changes, arising out of classroom instruction, are known as the learning outcome. What type of learning outcome is expected from a student after he/she has undergone the teaching-learning process is the first and foremost concern of the teacher. This is possible only when the teacher identifies and defines the objectives in terms of behavioural changes, that is, the activities of learning. These are the specific objectives that will provide direction to teaching-learning process. Not only that but it will also be useful in planning and organising the learning activities, and in planning and organising evaluation procedures too. Thus specific objectives determine two things: (i) The various types of learning situations to be provided by the class teacher to his/her students and (ii) The method to be employed to evaluate both the objectives and the learning experiences.

(iii) Selecting Teaching Points

The third step in the process of evaluation is to select teaching points through which the objectives can be realized.

(iv) Planning Suitable Learning Activities:

The teacher will have to plan the learning activities to be provided to the pupils and, at the same time, bear two things in mind — objectives as well as teaching points. The process then becomes three-dimensional, the three co-ordinates being objectives, teaching points and learning activities. The teacher gets the objectives and content readymade. The teacher is completely free to select the type of learning activities to provide to pupils so that the objectives

may be substantially, if not completely attained. The teacher may employ any teaching method to realize the objectives and learning activities, which in turn, helps the teacher to determine the evaluation procedures.

(v) *Evaluating:*

Here, the teacher observes and measures the changes in the behaviour of his/her pupils through testing. This step adds one more dimension to the evaluation process. While testing, he will keep in mind three things — objectives, teaching points and learning activities; but focus will be on the attainment of objectives, enlisting the teaching points and planning learning activities. Learning activities results in the learning experiences of the students.

(vi) *Using the Results as Feedback:*

The last step in the evaluation process is the use of results as feedback. The results of our evaluation provide feedback on the effectiveness of learning experiences and ultimately on the attainability of the objectives themselves for each student.

1.3.4 ROLE OF EVALUATION

To understand the four aspects of evaluation namely, Objectives, Content (Subject matter), Learning Activities and Evaluation procedures, the knowledge on the role of evaluation becomes necessary.

Evaluation plays an enormous role in the teaching-learning process. In learning, it contributes to formulation of objectives, designing of learning experiences and assessment of learner performance. Besides this, it is very useful to bring improvement in teaching and curriculum. It provides accountability to the society, parents, and to the education system. It is discussed as follows:

(i) *Teaching:* Evaluation is concerned with assessing the Effectiveness of Teaching, Teaching strategies, Methods and techniques. It provides feedback to the teachers about their teaching and the learners about their learning.

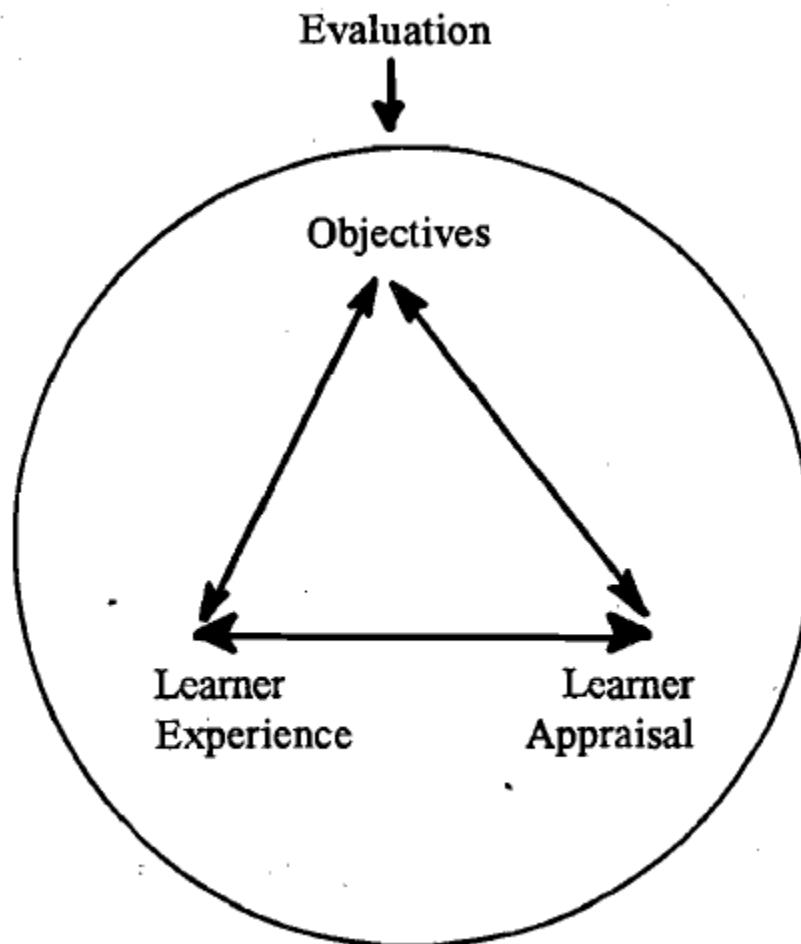
(ii) *Curriculum:* The improvement in courses curricula, texts and teaching materials is brought about with the help of evaluation.

(iii) *Society:* Evaluation provides accountability to society in terms of the demands and requirements of the employment market.

(iv) Parents: Evaluation mainly manifests itself in a perceived need for regular reporting to parents.

In brief, evaluation is a very important requirement for the education system. It fulfills various purposes in systems of education. It also helps one to take decisions about success in specific future activities and provides guidance to further studies. Evaluation has an expanded role in questioning or challenging the objectives and its relationship with the need for which the programme was designed.

Evaluation helps a lot in the design and modification of learning experiences on the basis of feedback received by learner appraisal. A simple representation explaining the role of evaluation in the teaching-learning process is shown below:



Evaluation has as its province four different aspects namely, (i) Objectives, (ii) Learning Experiences, (iii) Learner Appraisal and (iv) Relationship between the three.

1.3.5 NEED AND IMPORTANCE OF EVALUATION

Evaluation is inevitable in teaching-learning process. It is as inevitable in classroom teaching. All of us during the course of a school, teachers, principals and other school personnel make many decisions about students and help them to make many decisions for themselves. Effective decision making process involves evaluation. The need of evaluation is so intrinsic to the teaching-learning situation that even hasty considerations seem to indicate the advantages of a systematic use of planned evaluation. Evaluation helps teachers to make better evaluative judgements in the following aspects of teaching-learning process namely, (i) fulfillment of classroom objectives, (ii) diagnose learning difficulties of students, (iii) determine readiness for new learning experiences, (iv) form students' classroom groups for special activities, (v) assist students in their problems of adjustment and (vi) prepare reports of pupils' progress.

1.3.6 SCOPE OF EVALUATION

Evaluation has the following scopes: (i) Value judgment, (ii) Ascertaining the extent to which the educational objectives have been attained, (iii) Effectiveness of appraisal or methods of instruction, (iv) Identifies pupil's strengths and weakness, difficulties and problems, needs and demands, (v) Provide baseline for guidance and counseling, (vi) Placements and promotions in jobs, (vii) Development of attitudes, interests, capabilities, creativity, originality, knowledge and skills, (viii) Development of tools and techniques, (ix) Development of curriculum and for its revision, (x) Interpretation of results and (xi) Helpful for curriculum planners and administrators to improve the curriculum pattern.

1.3.7 CHARACTERISTICS OF EVALUATION

The Characteristics of Evaluation are as follows:

(i) Validity: A valid evaluation is one which actually tests what sets are out to test, that is, it actually measures that behaviour described by the objective(s), under scrutiny.

(ii) Reliability: The reliability is a measure of the consistency with which the question, test or examination produces the same result under different but comparable conditions. A reliable evaluation item gives reproducible scores with similar populations of students. It is therefore, independent of the characteristics of individual evaluations.

(iii) **Practicability:** Evaluation procedure should be realistic, practical and efficient in terms of their cost, time taken and ease of application. It may be an ideal procedure of evaluation but may not be put into practice.

(iv) **Fairness:** Evaluation must be fair to all students. This can be possible by accurately reflecting a range of expected behaviours as desired by the course objectives. To keep fairness in evaluation, it is also desired that students should know exactly how they are to be evaluated.

(v) **Usefulness:** Evaluation should be useful for students. Feedback from evaluation must be made available to the students and weakness. By knowing their strength and weakness, students can think of further improvement. Evaluation should suggest all the needful requirements for their improvement.

(vi) **Interpretation of Results:** Another factor which must be considered in the choice of a test is the ease of interpretation of test results.

1.4 TYPES OF EVALUATION

There are eight types (four in pairs) of evaluation classified by its nature. The pairs are (i) Continuous and Comprehensive Evaluation, (ii) Formative and Summative Evaluation, (iii) Norm-reference and Criterion-reference Evaluation and (iv) Internal and External Evaluation.

1.4.1 COMPREHENSIVE AND CONTINUOUS EVALUATIONS

Content and Comprehensive Evaluation (otherwise called as **Comprehensive Evaluation**) involves a system of school based evaluation for the all-round development of students and attempt to cover both the scholastic and the co-scholastic aspects of students' growth and development. The term **Content** refers to a system of school-based evaluation of student that covers all aspect of students' development. The term **Comprehensive** refers to cover both the scholastic and the co-scholastic aspects of students' growth and development. This evaluation was made continuously throughout the year and made Continuous Comprehensive Evaluation (CCE). It made a shift from mere testing to holistic learning.

The **Continuous Comprehensive Evaluation (CCE)** aims (i) to create good citizens possessing sound health, appropriate skills and desirable qualities besides academic excellence, (ii) to help develop cognitive, psychomotor and affective skills, (iii) to lay emphasis on thought process and de-emphasize memorization, (iv) to make evaluation an integral part of teacher

learning process, (v) to use evaluation for improvement of students achievement and teaching learning strategies on the basis of regular diagnosis followed by remedial instruction, (vi) to use evaluation as a quality control device to maintain desired standard of performance, (vii) to determine social utility, desirability or effectiveness of a programme and take appropriate decisions about the learning, the process of learning and learning environment and (viii) to make the process of teaching and learning a learner-centered activity.

The *Objectives of Continuous Comprehensive Evaluation (CCE)* are listed below: (i) To develop the Cognitive, Affective and Psychomotor skills, (ii) To evaluation an integral part of Teaching –Learning Process and (iii) To make Teaching –Learning Process as Learner-centred.

The *Functions of Continuous and Comprehensive Evaluation (CCE)* are as follows: (i) Continuous evaluation helps in regular assessment to the extent and degree of students progress (ability and achievement with reference to specific scholastic and non-scholastic areas). (ii) Continuous evaluation serves to diagnose weakness and permit the teacher to ascertain an individual pupil's strengths and weakness and his needs. It provides immediate feedback to the teacher, who can then decide whether a particular unit or concept needs re-teaching into the whole class or whether a few individuals are in need of remedial instruction. (iii) It helps the teacher to organize effective teaching strategies. (iv) The continuous evaluation helps in bringing awareness of the achievement to the child, teachers and parents from time-to-time. They can look into the probable cause of the fall in achievement, if any, and may take remedial measures in time, to help the child overcome it at their own level. (v) By Continuous evaluation, children can know their strength and weakness. It provides the child a realistic self-picture of how he and she studies. (vi) It can motivate children to develop good study habits, to correct errors, and to direct their activities towards the achievement of desired goals. It helps an individual to determine the areas of instruction in which more emphasis is required. (vii) Continuous and Comprehensive Evaluation ascertains areas of aptitude and interest. It helps in identifying changes in attitude, character and value pattern. (viii) It helps in making decisions for the future, regarding choice of subjects, courses and careers. (ix) It provides information/report on the progress of students in scholastic and non-scholastic areas and thus help in predicting the future successes of the learner.

1.4.2 FORMATIVE AND SUMMATIVE EVALUATIONS

The term '*Formative Evaluation*' denotes the on-going of systematic assessment of learners' achievement while the term, course or instructional programme is in progress.

In teaching and instruction, the whole content is presented in parts, in small units. Hence, the learner should be given test at the end of each unit so that learner's strength and weaknesses can be diagnosed. Diagnosis can be followed by remedial teaching. Then formative test is given. In formative test the difficulties of learner's learning are important.

Purposes of Formative Evaluation: The purposes served by Formative Evaluation are as under:

(i) Feedback to the students should be the purpose of making a formative evaluation of affective objectives. (ii) The gathering of data during the time of programme (curriculum evaluation, preparing unit plan, writing items, classroom testing, etc.) is being developed for the purpose of guiding the developmental process in formative evaluation. (iii) Formative evaluation is designed to provide the teacher with continuous and immediate feedback so that he can modify instruction, govern his instructional strategy and prescribe group and individual remedial work. (iv) Formative evaluation is designed to provide the learner with continuous and immediate feedback so that he can get reinforcement in successful learning and can identify the learning errors that need correction.

Characteristics of Formative Evaluation: The following are the characteristics of Formative Evaluation: (i) It relatively focuses on molecular analysis of instructional material for mapping the hierarchical structure of the learning tasks and actual teaching for a certain period. (ii) It is cause-seeking. (iii) It seeks to identify influential variables. (iv) Its design is exploratory and quite flexible. (v) It monitors teaching-learning strategy during instruction.

Advantages of Formative Evaluation: Following are the advantages of Formative Evaluation:

(i) Formative evaluation is concerned with judgements made during the design and development of an instructional programme. These judgements help in forming, modifying and improving the programme before it is completed. The instructional programme also aims at the attainment of certain objectives during the implementation of the programme. (ii) In formative evaluation, teachers test more frequently firm that helps in determining whether learning has taken place as planned. (iii) A person who is continually evaluating his programme will find many things that can be changed for the better during the operation of the programme. Most educators would fool

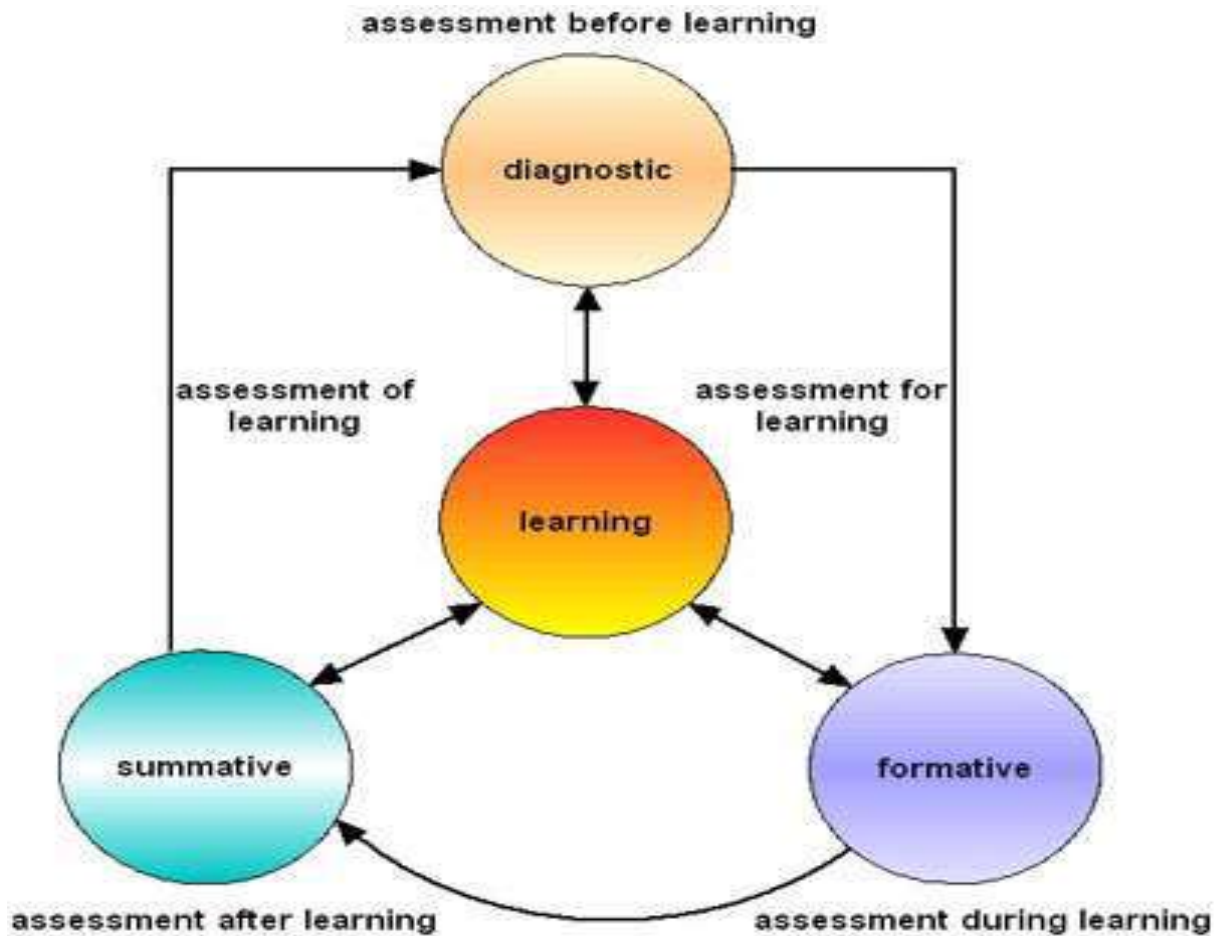
it unprofessional not to make these improvements even though they may upset the research design. (iv) Formative evaluation (informing and feedbacking learners of their progress during the instruction) is most helpful for the immediate decision-making that learners face. (v) It makes teaching more effective. As a result, it helps current learners to learn more effectively. (vi) In formative evaluation, more emphasis is on the achievement rather than objectives. (vii) It also provides ample opportunities to learners to have mastery in content.

The term '*Summative Evaluation*' refers to assigning a grade for learners' achievement at the end of term, semester, course or instructional programme. Making overall assessment or decision with the programme is a summative evaluation. There should be some instructional programme for the attainment of some objectives before the summative evaluation takes place. Summative test is given to the learner after he has passed successfully all the formative tests.

Purposes of Summative Evaluation: Summative Evaluation serves the following purposes: (i) Pupils cannot easily combine all the daily feedback provided and obtain an overall picture of how they are doing. The summative evaluation can provide such overall picture. (ii) From the summative test, the general level of the learner is judged. On the basis of learner's performance, the effectiveness of teaching and instruction is evaluated. (iii) Summative evaluation serves the purposes of assigning grades or certifying learner's mastery of the intended learning outcomes.

Characteristics of Summative Evaluation: Following are the characteristics of Summative Evaluation: (i) It is concerned with broad range of issues and judgements about the merits of an already completed programme, procedure or product. (ii) It comes at the end of a course or unit of instruction. its duration may vary from a semester to whole year. (iii) It is the terminal assessment of the learner's performance at the end of instruction. (iv) Summative evaluation determines (a) the extent to which the objectives have been achieved and (b) whether learning is sufficiently complete so that the learner may qualify himself for the next unit of instruction. (v) Summative evaluation provides (a) descriptive analysis; (b) evidence that the programme is satisfactory and a new programme for the learner is needed; (c) feedback to the classroom teacher for the success or failure of the programme of instruction. (vi) It measures the extent to which the learner has attained the desired outcomes.

Advantages of Summative Evaluation: The advantages of Summative Evaluation are mentioned below: (i) It provides reinforcement to teachers and instruction. (ii) It helps in planning and organizing of further teaching. (iii) It judges to what extent objectives are realized on the basis of learner's performance.



1.4.2.1 DIFFERENCE BETWEEN FORMATIVE AND SUMMATIVE EVALUATION

	FORMATIVE EVALUATION	SUMMATIVE EVALUATION
What information?	<ul style="list-style-type: none"> • Specific description of daily events • Organizational skills • Needs assessment 	<ul style="list-style-type: none"> • General trends based on specific descriptions • Overall attitude • Comparison with evaluation tool
When to give?	<ul style="list-style-type: none"> • At the time of the incident • End of the day / Weekly • Mid-point in the course 	<ul style="list-style-type: none"> • End of the course
Where? (context)	Primarily prospective	Primarily retrospective
Why?	<ul style="list-style-type: none"> • Analyze strengths and weaknesses towards improving • Develop habits • Shape direction of professional development • Opportunity to reflect on meaning of past achievements • Feedback 	<ul style="list-style-type: none"> • Document achievement • Document habits • Show results of such forays • Evidence of regular formative evaluation • Evidence

1.4.3 NORM REFERENCE & CRITERION REFERENCE TESTS

Norm Referenced Evaluation interprets the performance of an individual in relation to the performance of other individuals in a class. In other words, it compares an individual's score to the group score. In this evaluation, an individual's performance is compared with the performance of his peer group.

Purposes of Norm Referenced Evaluation: The purposes of Norm Referenced Evaluation are listed below: (i) To determine an individual's performance in comparison to others, (ii) To sort students and not to measure achievement towards some criterion of performance and (iii) To differentiate the learners into groups based on their ranks.

Uses of Norm Referenced Evaluation: The uses of Norm referenced evaluation are as follows: (i) Most appropriate when one wishes to make comparisons across large numbers of students. (ii) It is useful to take decisions regarding student placement and advancement. (iii) Norm-referenced measures are designed to classify the learners into different groups based on comparison of their achievements. (iv) It useful to provide attention for individual differences among learners towards the attainment of set goal. (v) This is useful when there is a wide range of acceptable scores that is different for each school. (vi) Many Norm referenced tests yield

standard scores, which allow comparison of the student's scores to other tests. (vii) Norm-referenced evaluation allows us to compare a student's skills to others in his age group. (viii) Educators use norm-reference tests to evaluate the effectiveness of teaching programs. to help determine students' preparedness for programs, (ix) Norm referenced evaluation is used to determine the disabilities of the learners for providing special education programs.

Criterion Referenced Evaluation measure how well a student performs against an objective or criterion rather than another student Criterion referenced test interprets achievement In terms of predetermined standard (Criterion) of performance, without the reference to level of performance of other members of the class. Criterion-referenced assessments are most appropriate for quickly assessing what concepts and skills students have learned from a segment of instruction.

Purposes of Criterion-Referenced Evaluation: The purposes of Criterion Referenced evaluation are listed below: (i) To determine an individual's performance with reference to an objective or a criteria, (ii) To identify the mastery learning of the content and (iii) To interpret the level of achievement in terms of predetermined standard of performance.

Uses of Criterion-Referenced Evaluation: The uses of Criterion-referenced tests are as follows: (i) Criterion Referenced Evaluation is useful for devising an effective instructional sequence to attain the needed competencies of learning, (ii) It helps the process of Curriculum Evaluation, (iii) Criterion-referenced tests are useful to modify the norms of a test, that is, to change the minimum pass marks based on the difficulty level of the performances. (iv) It is used to evaluate the effectiveness of an instruction. (v) It helps to eliminate competition among learners. (vi) It determines the performances in relation to a pre-determined performance level on a specified set of educational goals or outcome included in the school, district, or state curriculum. (vii) It enables partial completion of a task to be recognized wherein students can gain marks in proportion to how much of die task they have completed successfully. (viii) It gives the opportunity to compensate some elements of a task which have been done badly by the learners during learning. (ix) It enables the weightage to be given to different elements of the task and to make it explicit to the students. (x) Educators or policy makers may choose to use a Criterion Referenced Test when they wish to see how well students have learned the knowledge and skills which they are expected to have mastered.

1.4.3.1 DIFFERENCES BETWEEN CRITERION AND NORM REFERENCED TEST

CRITERIAN REFERENCED EVALUATION	NORM REFERENCED EVALUATION
It measures the performance of of an individual against an objective or criterion.	It measures the performance an individual in relation to the performance of other individuals in a class
In Criterion Referenced Evaluation, the evaluation reports are given in terms of percentages	In Norm Referenced Evaluation, the evaluation the reports are given in terms of group averages, grades, rank etc.
In CRE, an individual's scores alone can be interpreted.	In NRE, an individual's score is interpreted in relation to the scores of other individuals
It measures the specific performance.	It makes a comparative decision.
It is not concerned with maximization of variability of test scores.	It is concerned with the maximization of variability of the test scores.
It evaluates the effective of an instruction.	It evaluates the individual differences in student's performance.
Criterion Referenced Tests are constructed on the basis of behavioral objectives.	Norm Reference Tests are constructed on the basis of detailed content specification.
Test scores are interpreted in terms of grades.	Test scores are interpreted in terms of norms.
Test items that represent essential 'Competencies' & 'abilities' are selected for testing.	Test items of moderate difficulty levels are selected for testing.
Tests aim at 'Mastery Learning' and have curricular meaning.	Tests aim at average performance and hence it has statistical meaning.

1.5 USES OF EVALUATION

The uses of Evaluation are as follows: (i) To discover the extend of competence, (ii) To predict the educational practices, (iii) To certify student's degree, proficiency in a particular educational practice, (iv) To appraise the status of and changes in student's behavior, (v) To make provision for guiding the growth of the individual student, (vi) To diagnose the individual students educational weakness and strength, (vii) To assess the student's progress from time to time and discloses student's needs and possibilities, (viii) To predict the student's future

academic success or otherwise, (ix) To provide basis for modification of curriculum and courses, (x) To locate areas where remedial measures are needed, (xi) To provide basis for the introduction of experiences to meet the needs of individuals and group of students, (xii) Motivate students towards better attainment and growth, (xiii) Test the efficiency of teachers, (xiv) Appraise the teachers and supervisors competence, (xv) Improve instructions, measurements and measuring devices, (xvi) Bring out the inherent capabilities of a student, such as attitudes, habits, appreciation and understanding, manipulative skills in addition to conventional acquisition of knowledge, (xvi) Serves as method of self improvement, improving school learning relations and as a guiding principles for the selection of supervisory techniques.

ASSESSMENT FOR LEARNING

UNIT 3: TEACHER MADE ACHIEVEMENT TESTS

Essay and Objective type tests – Improving essay type questions – Different types of objective tests, their characteristics, advantages and disadvantages. – Relating test items and specific behavioural objectives – Preparation of blue print – Characteristics of a good test.

7.1 ESSAY TYPE TESTS

Essay type tests lies in the measurement of certain instructional outcomes those cannot be satisfactorily measured through objective type tests. An Essay type question gives full freedom to students to write any number of pages. The required responses vary in length. Limit can be imposed in restricting the content.

7.1.1 CHARACTERISTICS OF ESSAY TYPE TESTS

The following are the characteristics of Essay Type Tests: (i) The length of the required response may vary from one sentence to a lengthy composition requiring a day or more to complete in a comprehensive examination for some type of professional certification, (ii) Demands a subjective judgment and (iii) Most familiar and widely used.

7.1.2 SUGGESTIONS FOR WRITING ESSAY QUESTIONS OR IMPROVING ESSAY TYPE QUESTIONS

The following are the Suggestions for writing Essay questions or improving Essay type questions:

1. The teacher can gain improved insight into a student's abilities, difficulties and ways of thinking and thus have a basis for guiding his/her learning.
2. The teacher must maintain some balance between openness and structure in essay questions. Choice in essay type questions should be permitted as students can better show their strengths according to their different backgrounds.
3. Questions should be planned in such a way that they are arranged in order of increasing difficulty, that the students can actually give adequate answers to all of them within the allotted time.

7.1.3 DIFFERENT TYPES OF ESSAY TESTS

On the basis of the types of mental activities required of a learner, essay type questions are classified into eleven major categories. Arranged from the simple to higher mental processes,

these categories are (i) What, who, when, which and where, (ii) List, (iii) Outline, (iv) Describe, (v) Contrast, (vi) Compare, (vii) Explain, (viii) Discuss, (ix) Develop, (x) Summarize and (xi) Evaluate. In general Essay Tests are of two types namely, Extended Response type and Restricted Response type.

7.1.3.1 EXTENDED RESPONSE TYPE

In *Extended Response type* questions full freedom to select, organize, integrate, evaluate and express in any way one likes or deems appropriate is given to the student to exercise his/her competence and demonstrates the best he/she possesses, pertaining to the area of the subject. (Example: Describe at length the defects of the present-day examination system in the Union Territory of Pondicherry. Suggest ways and means of improving the examination system.) No restriction is placed on the student as to the points he/she will discuss and the type of organization he will use. He/She may select those points that he/she thinks are most important, pertinent and relevant to his/her argument and he/she may organize the material in whichever way he/she wishes.

7.1.3.1.1 ADVANTAGES OF EXTENDED RESPONSE TYPE

Extended response type of essay question permits a student to demonstrate his ability to (i) Recall factual knowledge, (ii) Evaluate his factual knowledge. (iii) Organize his ideas and (iv) Present his ideas in a logical, coherent fashion. It is at the levels of syntheses and evaluation of writing skills (style, quality) that this type of question makes the greatest contribution.

7.1.3.1.2 DISADVANTAGES OF EXTENDED RESPONSE TYPE

Extended response types of questions help to reduce subjectivity in marking, which is considered to be the major drawback of essay tests.

7.1.3.2 RESTRICTED RESPONSE TYPE

Restricted Response type items are quite useful for testing learning outcomes which require interpretation, application of outcomes which are specific and clearly defined in nature. Here the student is more limited in the form and scope of his answer, because he is told specifically the context in which his answer is to be made. (Example: Explain the chemical changes that take place in our day to day life, in not more than 100 words.)

7.1.3.2.1 ADVANTAGES OF RESTRICTED RESPONSE TYPE

Restricted Response type questions are of greatest value for measuring learning outcomes at the comprehension, application and analysis levels.

7.1.3.2.2 DISADVANTAGES OF RESTRICTED RESPONSE TYPE

Restricted Response type questions, although useful for measuring global type of abilities, are not suitable for measuring specific learning outcomes, besides being difficult to grade.

7.1.4 ADVANTAGES OF ESSAY TYPE TESTS

The following are the advantages of Essay Type Tests: (i) It is relatively easier to prepare and administer an extended-response essay test than to prepare and administer a comparable objective test items. (ii) It is the only means that can assess an examinee's ability to organize and presents ideas in a logical and coherent fashion and in effective prose. (iii) It can be successfully employed for practically all the school subjects. (iv) Some of the objectives namely, ability to organize ideas effectively, ability to criticize or justify a statement and ability to interpret can be best measured by this type of test. (v) Logical thinking, critical reasoning and systematic presentation can be best developed by this type of test. (vi) It induces good study habits such as making outlines and summaries, organizing the arguments for and against. (vii) The students can show their initiative, the originality of their thought and the fertility of their imagination as they are permitted freedom of response. (viii) The responses of the students need not be completely right or completely wrong. All degrees of comprehensiveness and accuracy are possible. (ix) It largely eliminates guessing. (x) It can develop and measure divergent thinking of the learner. (xi) It stresses integration and application of thinking and of problem solving skills. (xii) The learners focus on learning broad concepts and articulating relationships, comparing and contrasting. (xiii) It provides less scope for the use of unfair means in the test. (xiv) It requires less time for printing, typing or duplicating. (xv) It is proved more economical than any objective type tests.

7.1.5 DISADVANTAGES OF ESSAY TYPE TESTS

The following the Disadvantages of the Essay type tests: (i) A serious limitation of the essay tests are the poor content sampling. (ii) The test possesses relatively low validity and reliability because of the factors (a) Limited content sampling, (b) Subjectivity of scoring namely, (1) Contaminated by extraneous factors (like spelling, good handwriting, coloured ink, neatness, grammar and length of the answer), (2) Halo effect-biased judgement by previous impressions, (3) Good verbal ability even in the absence of relevant points, (4) Mood of the examiner, (5) First impression and (6) Improper comparison of answers of different students-bright and dull, (7) Ambiguous wording of the questions, for they may be interpreted differently

by various students and results in guessing and bluffing on the part of students. (iii) It requires an excessive time on the part of students to write, very time-consuming and laborious. (iv) It can be assessed only by a teacher or competent professionals. (v) The speed of writing can influence the performance of the learner and results in low scores even if the learner may be know the correct answers of all questions. (v) It may not provide a true picture of the comprehension level of the learner. Thus, the essay tests are (a) Poor predictive validity, (b) Limited content sampling, (c) Scores unreliability and (d) Scoring costs.

7.2 OBJECTIVE TYPE TESTS

Objective type tests objectively evaluate the worth of the individual and are not influenced by the teacher's or examiner's prejudices. They can be modified according to specific local requirements. They are better from the view points of time, value and special goals. The teacher himself/herself devises these tests. The results obtained from these tests form the basis for the teacher's guidance. These tests are valid and objective. They lead to an objective and valuable knowledge of the student's qualities and short-comings.

7.2.1 CHARACTERISTICS OF OBJECTIVE TYPE TESTS

The following are the characteristics of Objective Type Tests: (i) They can be modified according to specific local requirements. (ii) They are better from the view points of time, value and special goals. (iii) The teacher himself devises these tests. (iv) The results accruing from these tests form the basis for the teacher's guidance to his student's personality. (v) These tests are valid and objective. (vi) They lead to an objective and valuable knowledge of the student's qualities and short-comings.

7.2.2 SUGGESTIONS FOR WRITING OBJECTIVE QUESTIONS OR IMPROVING OBJECTIVE TYPE QUESTIONS

The following are the Suggestions for writing Objective questions or improving Objective type questions:

1. These tests should be based upon the teacher's philosophy of education.
2. These tests should examine the main mental functioning.
3. Questions should be straightforward and simple, so that the student may not be confused.
4. Questions should be chosen to confirm to circumstances and time.
5. Questions of the same kind should be placed in the same category.
6. Questions of the same kind should not be constantly repeated.

7. The teacher should himself/herself gauge the difficulty of the questions.
8. Tests should aim at predetermined objectives and desired aims.
9. There should be proper direction to the student in order to facilitate for better answering.

7.2.3 DIFFERENT TYPES OF OBJECTIVE TESTS

Objective type tests are mainly of two types namely,

(I) Recall Type (Supply Type) - The response is to be recalled or supplied by the examinee from his/her past experience rather than recognition. It includes (1) Simple Recall and (2) Completion Type.

(II) Recognition Type (Selected Type) - The examinee has to select the best or right alternate as the response. It includes (1) Alternative response type or T/F, (2) Multiple choice type, (3) Matching type, (4) Classification type, (5) Analogy type, (6) Arrangement type, (7) Number series, (8) Substitution type and (9) Absurdities type.

Each of these types is explained below with examples, its advantages and Limitations:

(I) (1) Recall Type (Supply Type) - Simple Recall type: The simple recall type is defined as one in which each item appears as a direct questions, a stimulus word or phrase or specific direction. The response is to be recalled or supplied by the examinee from his past experience rather than recognition or identification. The simple-recall is differentiated from essay type primarily upon the basis of length of response required. It is sometime called short answer type.

Examples: (1) Who is the father of intelligence? (Alfred Binet) (2) Who has formulated Two factor theory of intelligence? (Charles Spearman)

Advantages: (1) The familiarity of facts and naturalness is measured. (2) There is no scope of guess work for correct response. (3) They have great value for the factual knowledge of Mathematics and Science disciplines. (4) It requires a specific response.

Limitations: (1) It tends to measure highly factual knowledge rather than comprehension or understanding, and bits of information are assessed. (2) 2. Response depends on memory aspects of an examinee.

Suggestions: (1) Direct question should be in statement form. (2) The response should be brief and well worded or definite response. (3) The questions should be so worded that it should require a specific or definite response. (4) The wordings and language should not be ambiguous. (5) It should be simple and easy to understand.

(I) (2) Recall Type (Supply Type) - Completion type: The completion type item may be defined as a series of sentences in which certain important words or phrases have been omitted and blanks are submitted for the examinee to fill in. A sentence may contain one or two blanks. Each blank counts one point or one score.

Example: The concept of structure of mental intellect is given by _____. (I. P. Guilford)

Advantages: (1) It is similar to simple recall type. An examinee has to supply responses on the basis of his memory on mental process. (2) It is popular and widely used in the achievement tests. It is also known as short-answer type items. It is easy to construct. (3) It requires the understanding or comprehension of subject matter while recall type is based on rote memory. (4) It measures the linguistic aptitude and comprehension. (5) There is no scope of guess work for answering the items correctly. (6) It measures the true knowledge and understanding of the content matter.

Limitations: (1) The scoring procedure is time consuming. (2) The responses depend on the memory aspect. (3) It measures more factual knowledge rather than explanation and description of the content. (4) It is not easy tasks to prepare good item and omit the relevant blank related to the objective and purpose of measurement.

Suggestions: (1) The blank should not be provided in the beginning of the statement. It should be given at the end or at the middle of the statement. (2) The key words or hint and phrase should not be used in the statement. (3) The grammatical clues should also be avoided. (4) The statement should be specific and definite. The indefinite statements should also be avoided. (5) The statement should be written that it should require a single response and definite words or phrase. (6) The statements should be brief but should not be lengthy.

(II) (1) Recognition Type (Selected Type) - Alternative response type or T/F: An alternative type test is made up of statement which admits of only two possible responses-right or wrong. The usual form is the familiar true-false test. Other similar forms are: right-wrong, correct-incorrect, yes-no, same-opposite and two option choice items.

Example: The intelligence quotient is fairly constant. T/F (True)

Advantages: (1) It is easy to construct. (2) It can be administered easily and easy to score. (3) A wide awareness and knowledge can be tested. (4) It measures the understanding of the content or concepts.

Limitations: (1) There is greater scope of guessing i.e. 50 percent for guess work for correct responses. (2) The knowledge and understanding are tested in fractions or bits, rather than major concepts.

Suggestions: (1) In scoring correction for guessing formula should be used for the true score. (2) There should be three alternatives: True-False and not known, so that penalty of guessing may be eliminated. It may provide freedom to the examinee of responding. (3) The items should be arranged randomly. There should not be regular arrangement of responses. It may function as elude for correct response. (4) Items should be given in the statement form and proper instruction should be given to the examinees.

(II) (2) Recognition Type (Selected Type) - Multiple choice type: A multiple choice item is made up of stem and solutions which presents more responses only, one of which is best or correct response.

Example: The functions of measurement (A) Prognosis, (B) Diagnosis, (C) Prediction (D) All the above- Answer: (D) All the above

Advantages: (1) It is most valuable and widely used in achievement, intelligence and aptitude tests. (2) Most of the psychometricians consider this test superior than other types of test. (3) It is used for assessing the judgment and discrimination power of the examinees. (4) There is minimum scope for guess work for the correct responses. (5) The administration and scoring is simple and easy of this type test.

Limitations: (1) One item is used for assessing the fraction of a concept or bit of information only. (2) It is difficult to prepare good multiple choice items. (3) There is scope for guess work for responding correctly. (4) It is used for assessing the factual knowledge rather than evaluation and appreciation or criticism.

Suggestions: (1) As a rule, use direct question in the statement form rather than incomplete statements. (2) The alternative should be made grammatically consistent. The size of alternatives should be uniform. Avoid making the correct response longer or shorter than other. (3) There should not be any clue for correct response in the statement or in stem. (4) The correct responses or best responses should be arranged randomly. (5) The alternatives should make plausible. The alternatives should be homogeneous or belong to the same area or field. (6) There should be four or five alternatives but four alternatives are considered most appropriate. (7) The higher level of understanding can be measured by increasing the homogeneity of the alternatives. (8) The

formula correction for guessing should be used to obtain the true score of an examinee. (9) A large number or even hundred percent items should be included in the objective type test. (10) The items should be arranged in groups having equal number of alternatives or same number of choices. (11) The stems of the items should be in statement form. It should not be in question form. The incomplete statement should also be avoided.

(II) (3) Recognition Type (Selected Type) - Matching type: A matching type item typically consists of two columns, each item in the first column to be paired with a word or phrase in the second column upon some basis suggested. In the simplest form of matching test, the number of response is exactly the same as the number of items.

Example: (Please refer class notes given in Unit-5)

Advantages: (1) It has high applicability for assessing events, dates, persons, place, terms, concepts and definitions. (2) It is very convenient form of exercise for measuring such learning of the students. (3) The matching exercises is particularly well adapted to test in who, what, when, and where types of situations or learning and for naming and identifying abilities.

Limitations: (1) It is not well adopted to the measurement of understanding as distinguished from memory. (2) With the exception of true-false test, the matching item is the form most likely to include irrelevant clues for the correct response. (3) It is very time consuming and has limited scope for the usability. (4) It combines several multiple choice items in one item of this type. (5) It is difficult to analyze and evaluate the matching type items.

Suggestions: (1) The homogeneous material should be included in each item. (2) It should be checked that unwarranted clues are not there for matching pairs. (3) The item should not be too easy or too difficult. (4) In the second column correct-responses should be arranged randomly. (5) The basis of pairing and matching should be clearly indicated in the instruction of an item. (6) The number of elements which are to be paired should not be six and less than three. (7) There should be more alternatives in second column than the number of elements in the first column. (8) The formula for correction for guessing should be used with care. (9) The limited number of such items should be included in a test.

(II) (4) Recognition Type (Selected Type) - Classification type: In this type of tests words, terms, names, concepts, facts and objects are given which belong to a class or group but of these does not belong to the class that is to be selected in such items.

The limited number of such items should be included in a test. One item can assess the one specific of the behavior. There is also scope of guess work for correct responses. There is twenty percent probability for correction through guessing. The formula correction for guessing should be used.

(II) (5) Recognition Type (Selected Type) – Analogy type: An analogy type item includes two parallel or similar situations. In the first situation two words are given having same specific relationship, the second situation is given incomplete form only one word is provided. The second word is to be selected or to be recalled for establishing the same relationship by the examinee. The analogy type items are prepared and used in both form, recall type (supply response) and recognition type (select the response) from the given alternatives.

The analogy type items are usually prepared in multiple choice form. Such items are used for assessing verbal reasoning, and ability of relationship. They are used for measuring higher level than the earlier type of items rather than factual knowledge. These are used in the intelligence, achievement and aptitude tests.

There is scope of guess work more for the correct responses. The formula correction for guessing should be used to obtain the actual scores. The limited number of such items should be included in a test.

(II) (6) Recognition Type (Selected Type) - Arrangement type: In the arrangement type items, facts, events, name of persons and steps of a procedure are arranged in some order or system but one word does not fall in that order, it should be identified from the order of the words. Such items are commonly used in historical events and facts. The general awareness is also assessed by this type of items.

These types of items are used for assessing the concept of time sense in historical events and facts. The general knowledge is also assessed by this type of items. It has the limited use in the test. There is also scope of guess work to answer correctly. It can also be used in achievement test of history and factual information of other subjects. It depends on the memory as well as understanding of the examinees.

(II) (7) Recognition Type (Selected Type) - Number series: In this type of items, the numbers are arranged to form a series of numbers. These numbers are related to each other to continue to form series. An examinee has to identify this relationship with help of his number reasoning ability. In the same order, he has to provide the next number in the continuation of the series.

These types of items are prepared in multiple choice type as well as recall type of items. Some examples have been given of multiple choice numbers of service items.

The numbers of series type items are used for measuring number reasoning ability. This type items are included in the verbal test of intelligence, numerical ability test and arithmetic test of achievement. These can be used in the both recall as well as recognition type items. There is scope of guess work for the correct response. The formula correction for guessing should be used to obtain true scores of the examinees. The limited number of items should be included in the test. The computation skill is not assessed by using such items.

(II) (8) Recognition Type (Selected Type) - Substitution type: These types of items are mainly used to assess the perceptual and memory ability. The letters of a word are substituted by numbers. The examinee has to substitute by using the same code for another set of code letters. The same system of code letters can be used for substituting another word.

The substitution type tests are used in mental ability test to assess the perceptual and memory ability. These are also used in mechanical ability test. These are used in the form of multiple choices; therefore, there is scope for guess work for the correct responses. The formula correction for guessing should be used for the actual score of the examinees. The limited number of such items should be included in the mental tests.

(II) (9) Recognition Type (Selected Type) - Absurdities type: In this type of items, some absurd statements are included to assess the attentiveness and alertness of the examinees.

7.4 SIMILARITIES OF ESSAY AND OBJECTIVE TYPE TESTS

The similarities between Essay and Objective type tests are listed below: (1) Both the essay and objective type tests measure almost any important educational achievement that any written test can measure. (2) Both tests encourage students to study the understanding of principles, organization and integration of ideas and application of knowledge to the solution of problems. (3) Both types involve the exercise of subjective judgments. (4) The value of score from either type of test is dependent on their objectivity and reliability.

7.5 DIFFERENCES OF ESSAY AND OBJECTIVE TYPE TESTS

ESSAY TYPE TEST	OBJECTIVE TYPE TEST
It has a small number of questions.	It has a large number of questions/items.
Answers required are large.	Answers can be written in a word or two or in a phrase. Mostly examinees have to select the answers.

Questions are broad, general and indefinite.	Questions are narrow, specific and definite.
Personal factors like examiner's bias, mood, whims, etc. influence marking.	Personal factors do not influence marking.
Answers may be partial right or wrong. There is a scope for partial credit.	Answers must be either right or wrong. No scope and provision for partial credit.
Questions are selected at random. Entire course is not covered.	Items are selected with the help of blueprint. Entire course can be covered.
Framing questions takes a short time.	Framing items requires a long time.
Students hardly find time to think over the questions.	This type of test puts premium on thinking.
Assessment requires a long time.	Assessment requires a short time.
Pupils having linguistic skills are at an advantage.	Intellectually smart pupils are at an advantage.
Suitable for testing skills, composition and knowledge of the subject.	Not suitable for testing skills, composition and knowledge of the subject.
Habit of omitting some portion is encouraged.	It inculcates good study habits as they have to go through the entire course.
Less scope for guessing.	More scope for guessing.
Cost of printing question paper is less.	Printing of question paper is costly.
Answer books cost much.	Answer books, if required, cost less.
Less scope for adopting unfair means by examinees.	Enough scope for adopting unfair means by examinees.

7.6 RELATING TEST ITEMS AND SPECIFIC BEHAVIOURAL OBJECTIVES

OBJECTIVES	SPECIFICATIONS (<i>specific behavioral objectives</i>)	QUESTIONS (<i>relating test items</i>)
<i>Knowledge</i>	Defines	Define the term "Figures of speech".
	Describes	Describe the pattern "SVIO".
	Identifies	Identify each picture by its title and name of the artist.
	Labels	Label the parts of "Nose" and "Teeth".
	Lists	List the muscles involved in Sneezing.
	Matches	Match the adjectives and its types.
	Names	Name some of the Direct Adjective.
	Outlines	Give an outline of the main changes in the Hiccups.
	Reproduces	Reproduce an example of the Question Tag.
	Selects	Select the appropriate meaning for "Marvelous".
States	State what you see as the importance of "The Marvelous Machine"	
	Converts	Convert the following into Active voice.

<i>Understanding</i>	Defends	Do you think the Presidents action was right: why?
	Distinguishes	Can you distinguish between school management and school organization?
	Estimates	How do we estimate the area of the school?
	Explains	Explain the principles of Guidance.
	Extends	How will you extend the word “ASSU...”?
	Generalizes	How will you generalize the story “Visit to Dentist”
	Gives Examples	Give examples for common noun.
	Infers	How to infer that this character is a farmer?
	Paraphrases	Paraphrase the sentence given below:
	Predicts	Predict and write about “India 2020”
	Rewrites	Rewrite the sentence using Past tense.
	Summarizes	Summarize the story “Visit to Dentist”.
<i>Application</i>	Changes	Change the present tense into future tense.
	Computes	Compute the sum of 7 and 4.
	Demonstrates	Which data set demonstrates boundary value analysis?
	Discovers	Which scientist discovered the radioactive element radium?
	Manipulates	Manipulate the term Education.
	Modifies	Modify the direct speech into indirect speech.
	Predicts	Can you predict what will happen in the poem?
	Prepares	Prepare a list of organs involved in sneezing.
	Produces	What tone is used in the word given: some time?
	Relates	Relate the examples with the real situation.
	Shares	Share your feeling about the poem.
	Solves	Solve the problem of 2 X 2.
Uses	Use the word because in the sentence.	
<i>Analysis (Skills)</i>	Break down	Break down the words into different syllable.
	Diagrams	Draw the organs involved in speech.
	Differentiates	Differentiate between direct speech and Indirect speech.
	Distinguishes	Distinguish the transcription of given words:
	Identifies	Identify the vowel sound in the given word: early
	Illustrate	Illustrate the model auxiliary verbs.
	Outlines	Give an outline about the poem.
	Points out	Point out the mistake from the sentences.
<i>Synthesis</i>	Separates	Find and separate the rhyming words.
	Categorizes	Categorize the model auxiliary verbs and auxiliary verbs.
	Combines	Combine the adjectives into adverb.
	Composes	Compose a rhyming words with aa bb aa bb:

<i>(Skills)</i>	Explains	Explain the role of Rani Lakshmi Bai in Independence.
	Generates	What advice would you give to solve the problem?
	Modify	Modify the active voice into passive voice.
	Rearranges	Rearrange the sentence given below:
	Recognizes	Recognize and write the meaning :
	Summarizes	Summarize the topic.
	Tells	Tell me the syllabification for: environment.
	Writes	Write the various types of adjectives.
<i>Evaluation (Skills)</i>	Appraises	What are the appealing lines of the poem?
	Compares	Compare an adjective and adverb.
	Concludes	Give the conclusion of the supplementary.
	Contrasts	Contrast the character of Mr.Franke and Dr. Mary.
	Criticizes	Critically state the mind set of both the friends.
	Describes	Describe the functions of model auxiliary verb.
	Explains	Explain the types of numerical adjective.
	Justifies	Justify the feelings of poet.
	Relates	Relate the action of the poet in the real situation.
	Summarizes	Summarize the prose: “The Marvelous Machine”.
Supports	Give supporting words about the poem.	

7.7 PREPARATION OF BLUEPRINT

Preparation of the blueprint refers to the final stage of the planning of a test. The blueprint is a three dimensional chart showing the weightage given to the objectives, content and the form of questions in terms of marks. It is also called a table of specifications as it relates outcome to the content and indicates the relative weight given to each of the various areas. The units or the content spread along the vertical axis while the objectives are listed on horizontal axis. Each column is further subdivided into columns that indicate the forms of questions. Thus we get a number of cells, each cell having three dimensions, the objective, the contents and the form of question. What is required on the part of the test maker is to fit in all the questions in the different cells in such a way that the blueprint reflects the decisions of the design(er). When this is done, all rows and columns are balanced, and the blueprint is ready. It is illustrated in table.

Format of blue print.

<i>OBJECTIVES</i>	<i>KNOWLEDGE</i>			<i>UNDERSTANDING</i>			<i>APPLICATION</i>			<i>SKILL</i>		
	<i>O</i>	<i>SA</i>	<i>E</i>	<i>O</i>	<i>SA</i>	<i>E</i>	<i>O</i>	<i>SA</i>	<i>E</i>	<i>O</i>	<i>SA</i>	<i>E</i>
<i>Prose</i>												
<i>Poetry</i>												
<i>Grammar</i>												

7.7.1 USES OF BLUEPRINT

The preparation of the blueprint serves the following purposes. The blueprint (i) Helps to improve the content validity of the test, (ii) Defines as clearly as possible the scope and emphasis of the test, (iii) Relates objectives to the content, (iv) Gives greater assurance that the test will measure learning outcomes and course content in a balanced manner and (v) Lays before the tester a complete picture of the test he is going to prepare.

7.8 CHARACTERISTICS OF A GOOD TEST

The characteristics of a Good Test are as follows:

Objectivity: A test should yield the same score who ever valued it. The personal judgment and feeling of examiner should not affect the scoring of the test.

Reliability: This means accuracy and consistency on test. A test is highly reliable if it gives same result every time when it is tested.

Validity: The test should full fill the objectives for which is meant. A valid test is one which measure what it intend to measure.

Discrimination: A test has no discriminate value if equal number of intelligent and poor students able to attend the test.

Comprehensiveness: A test should include all topic of the subject to test knowledge, skills, abilities etc and prepared as per blue print.

Diagnostic: A good test diagnoses the strength and weakness of students. So that remedial measures to be taken.

Clarness: The language of questions and directions to answer questions should be simple, direct and definite under stable by the students.

ASSESSMENT FOR LEARNING

UNIT 4: STANDARDIZED TESTS

Concept and characteristics of standardized test – advantage and disadvantage using standardized tests and teacher made tests – standardized tests for measuring intelligence, attitude, aptitudes, interest, values, personality, and achievement.

8.1 STANDARDIZED TESTS

A standardized test is a systematic procedure in which apparatus and scoring have been fixed so that precisely the same test can be given at different times and places.

The process of the Standardization of a test demands a critical analysis of the (i) Subject matter, (ii) Rigorous planning, (iii) More accurate construction of test items and (iv) Analysis and refinement conditions for administration and scoring.

8.1.1 CONCEPT OF STANDARDIZED TESTS

Standardization means uniformity of procedure in scoring, administering and interpreting the results. Standardized tool is one for which norms have been established. A standardized test is prepared after several trials of a test to a large number of students.

8.1.2 CHARACTERISTICS OF STANDARDIZED TESTS

The Characteristics of Standardized tests are as follows: (i) *Content is standardized*: Item-selection done by competent judges, (ii) *Administration is standardized*: Fixing Direction and time limits, (iii) *Scoring has been standardized*: Rules of rules and preparation of scoring key and (iv) *Interpretation has been standardized*: Provision of norms.

8.1.3 IMPORTANCE OF STANDARDIZED TESTS

The Importance of Standardized tests are as follows: (i) Gives impartial information about an individual, (ii) Provides information in much less time than by any other devices, (iii) Tests measures those aspects of behaviors which otherwise could not be obtained and (iv) These tests discover behaviour even in shy children in subjective observations.

8.1.4 STEPS IN PREPARING A STANDARDIZED TEST

The following are the steps in the preparation of Standardized test:

(i) *Planning the Test*: Objective type questions have more weightage and are convenient to analyze statistically and also for refinement. These tests ensure cent per cent objectivity.

(ii) *Writing the test items*: The panel should prepare the test items and it should be through review and scrutiny. Then they should be tried out to overcome the errors.

(iii) *Testing the items*: After the careful construction of the test, it should be administered on a sample of population in order to avoid some of the drawbacks.

(iv) *Preparing the final form*: Items are selected from the refined ones, which are pre-tested.

(v) *Driving norms*: Norms are the tables of information necessary for the interpretation of the test scores and are obtained by giving the particular test to a large and representative sampling of pupils in the same grades and of a type similar to the group with which the teacher will use the test.

(vi) *Establishing final validity and reliability*: When all the care is taken to plan the test and when all items have been refined on the basis of a pre-test, then it is known that the test is valid and reliable.

(vii) *Scoring*: These tests should be manually scored or machine scored. Machine scoring is more accurate but at times expensive.

(viii) *Interpreting and using results*: The scores are interpreted and converted into norms. It is difficult to interpret these tests. It has a variety of purposes. After the interpretation, the results are used for (i) Placement and grouping students, (ii) Diagnosis of learners, (iii) Evaluation of instructional materials and methods, (iv) Appraisal of achievement, (v) In curriculum research and planning and (vi) Motivation.

Preparation of Standardized test is highly a sophisticated process requiring technical competence of high quality, deep understanding of subject matter and an actual experience of teaching. A single person cannot possess the entire thing; so we need a cooperative effort of a panel comprising content specialists, test designers and practicing teachers.

8.1.5 ADVANTAGE OF STANDARDIZED TEST

The Advantages of a Standardized test are as follows: (i) Standardized Tests are used to compare with an outside group. (ii) It helps in quality control, curricular evaluation, counseling, and identification of exceptional students. (iii) It is more reliable and valid. (iv) Standardized Testing can hold schools and teachers accountable. (v) These tests are associated with instructional framework or established standards providing the teachers with assistance for when and what should be taught. (vi) Standardized tests have been naturally objective. (vii) These tests are usually scored by the computers or by persons who are not known by the students. (viii) These tests allow the students in schools and states to get into comparison. (ix) These tests have been giving accurate and reliable comparisons in between sub-groups. Such sub-groups involve data on socio-economic status, ethnicity and special needs. (x) A standardized test is very practical. It is less time consuming and easier to administer. (xi) With standardized testing, the students are challenged to meet a common standard by acquiring skills and content that goes beyond the minimum requirements.

8.1.6 DISADVANTAGE OF STANDARDIZED TEST

The Disadvantages of a Standardized test are as follows: (i) Standardized test items are not parallel with typical classroom skills and behaviors. (ii) Since general knowledge is assessed, educators cannot use standardized test results to inform their individual instruction methods. (iii) Standardized test items do not assess higher-level thinking skills. (iv) Standardized test scores are greatly influenced by non-academic factors, such as fatigue and attention. (v) Standardized testing makes various teachers to “teach to the tests” only. Such practice hinders the overall learning potential of the student. (vi) Standardized

tests can evaluate the student's individual performance than his/her overall growth throughout the year but not the single performance alone. (vii) It makes great stress on both the students and the educators. The best teachers are quitting their profession daily due to the stress of preparing their students to work on standardized testing. (viii) It generally affects the way teachers teach the students. It typically affects the value of learning in the classroom.

8.2 TEACHER MADE TESTS

Teacher made tests are classroom tests and are developed by the teachers. These tests assess students' learning every period of time or after a particular unit of study. Basically teacher made tests are used to evaluate the progress of the students in school. The specific use of these tests varies from school to school and teacher to teacher. Classroom evaluation instruments should not be restricted to the conventional paper and pencil achievement tests. But, some of the more important instructional objectives cannot be evaluated by these tests; hence the researcher should use rating scales, check lists and other observational techniques as well.

8.2.1 ADVANTAGES OF TEACHER MADE TESTS

The Advantages of a Teacher made test are as follows: (i) The test results can be used for students, teachers, and for other administrative purposes. (ii) These tests are very simple to use. (iii) Easy for the students. (iv) Teachers can assess the strengths and weaknesses of students. (v) Tests are conducted continuously and children get immediate feedback. (vi) Teachers can understand the need for re-teaching concepts and can decide remedial instruction. (vii) Teacher made tests devised by the teachers are to meet their various needs and directives. (viii) Provide feedback for teachers as to assess the effectiveness of teaching methods. (ix) Motivate the students. (x) Assess degree of student's progress with reference to classroom activities.

8.2.2 DISADVANTAGES OF TEACHER MADE TESTS

The Disadvantages of a Teacher made test are as follows: (i) Tests are ambiguous and unclear. (ii) Tests are either too short or too lengthy. (iii) Tests do not cover the entire content. (iv) Tests serve limited purpose. (v) Tests are usually speedily conducted. (vi) Many questions have been set from last year's question paper.

8.3 STANDARDIZED TESTS FOR MEASURING INTELLIGENCE

(Please refer Class notes given in Unit 5 for definition of Intelligence, examples of Intelligence tests, classification of Intelligence tests, advantages and disadvantages of Intelligence tests)

First Intelligence test was introduced in 1905 by Alfred Binet. The importance of Intelligent Quotient (IQ) was introduced by William Stern in 1912. Intelligence is the ratio between Mental Age (MA) and Chronological Age (CA). Intelligence Quotient is 100 times of this ratio. $IQ = (MA/CA) \times 100$

(Please check class notes given in Unit -5 for the classification of Intelligence tests, advantages and disadvantages of Intelligence tests)

8.4 STANDARDIZED TESTS FOR MEASURING ATTITUDE

Attitude denotes the sum total of man's inclination and feeling, prejudice, pre-conceived notions, ideas, fears, threats, and convictions about any specific objects. It is a complex mental state involving beliefs, feelings, values, and disposition to act in certain ways. An attitude is an organized response in a favourable or unfavourable manner toward a specific class of object. In simple words attitude means – *What you think. – What you do. – What you feel.*

For example, *Teacher Attitude Inventory* by S.P. Ahluwalia is a test on attitude of Teachers on six dimensions (i) Teaching Profession, (ii) Class-room Teaching, (iii) Child-centered Practices, (iv) Educational Process, (v) Pupils and (vi) Teachers contains a total of 90 items standardized on the teachers. *(Please also refer typed notes given for Unit 3 in Section 3.7 (d) for this Attitude part)*

8.5 STANDARDIZED TESTS FOR MEASURING APTITUDES

(Please refer typed notes and Class notes given for Unit 3 in Section 3.7 (e) for this Aptitude part)

(Please refer Class notes given for Unit 5 for the differences between Aptitude tests and intelligent tests)

8.6 STANDARDIZED TESTS FOR MEASURING INTEREST

Interest is a feeling or emotion that causes attention to focus on an object or an event or a process. Interest is the feeling that prompts us to spontaneous activity. Once an interest is aroused in studies, games, literature and good conduct, the child will consider no sacrifice and effort too great to attain proficiency. Interest as feeling of liking associated with a reaction either actual or imagined, to a specific thing or situation

For example, *Strong Interest Inventory (SVI)* by E.K. Strong is an interest inventory used in career assessment and career opportunities. The test was developed in 1927 to help the people existing the military find suitable jobs. The test will be typically being taken in the 25 minutes after which the result must be scored by the computer. After scoring an individual can then view how their personal interests compare with the interests of people in specific career field. The Result Includes: Scores on the level of the interest on each of six Holland codes or general occupation themes; Scores on 30 basic interest scales (eg; art, science, and public speaking); Scores on 244 occupational scales which indicates the similarity between the respondents and interest and those of people working in 122 occupations; Scores on 5 personal style scales (learning working, leadership, risk taking and team orientation); Scores on 3 administrative scale used to identify a test errors on usually profiles.

8.7 STANDARDIZED TESTS FOR MEASURING VALUES

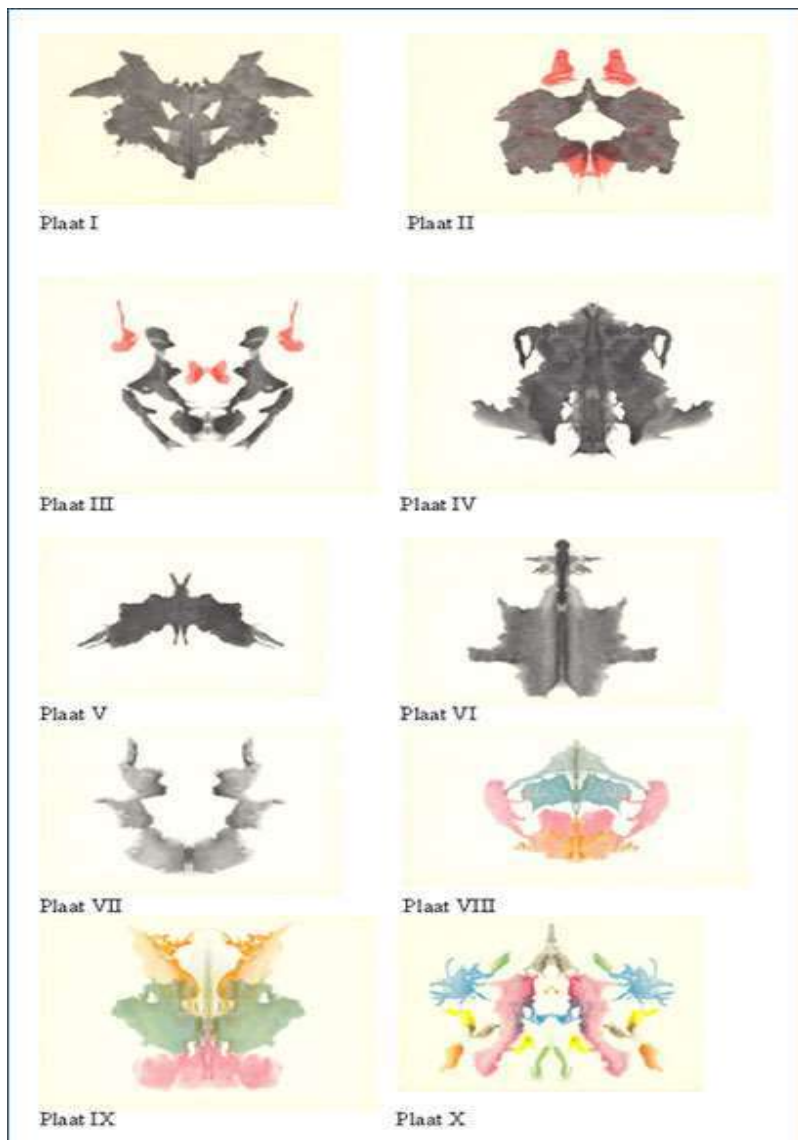
(Please also refer typed notes given for Unit 3 in Section 3.7 (c) for this Values part)

8.8 STANDARDIZED TESTS FOR MEASURING PERSONALITY

Personality is the dynamic organization within the individual of those psycho-physical systems that determine his/her unique adjustment to the environment (Allport, 1948).

For example, *The Minnesota Multiphasic Personality Inventory* (MMPI) is a written psychological assessment, or test, used to diagnose mental disorders. It was developed by J.C. McKinley and S.R. Hathway. It consists of 556 statements. The subject has to classify the statements into 3 categories --YES, NO, CANNOT SAY. It is one of the most frequently used personality tests in mental health.

(Please also refer typed notes given for Unit 5 in last section as Projective Techniques)



8.9 STANDARDIZED TESTS FOR MEASURING ACHIEVEMENT

Achievement tests were of two types namely, (i) Teacher-made and (ii) Standardized. Standardized achievement tests were meant for certain age groups and are standardized for certain disciplines.

For example, *Woodcock-Johnson III Tests of Achievement (WJ)* developed by Woodcock is an Achievement Test. WJ-III standard scores are reported, which are standardized to a representative sample of American youth. Standard scores have a mean of 100 and a standard deviation of 15. A score of 100, therefore, is considered average. Higher scores on the measures reflect better academic performance. An increase in standard scores from fall to spring indicates learning at a faster rate than the children had previously demonstrated. The same subtests were used during each round of assessments.

ASSESSMENT FOR LEARNING UNIT – 5

FOCUS GROUP DISCUSSION

Focus groups are called as a data collection method. The data is obtained through a semi-structured interview process.

Focus groups are moderated by a group leader. Focus group methods emerged in the 1940s with the work of Merton and Fiske who used focus groups to conduct audience studies.

Characteristics of Focus Groups

The Characteristics of Focus Group researches are as follows:

- (i) Standardization of questions: Focus groups can vary in the extent to which they follow a structured protocol or permit discussion to emerge.
- (ii) Stratification in Focus Groups: Sampling in focus Group research depend on the different stratifications (e.g. age, sex, socioeconomic status, health status) that the researcher identifies as important to the research topic
- (iii) Number of participants per group: The rule of thumb has been 6-10 homogeneous strangers.
- (iv) Level of moderator involvement: Level can vary from high to low degree of control exercised during focus groups (e.g. extent to which structured questions are asked and group dynamics are actively managed)

When Focus Groups might be used:

Focus groups might be used (i) To explore new research areas, (ii) To explore a topic that is difficult to observe, (iii) To explore a topic that does not lend itself to observational techniques (e.g. decision-making), (iv) To explore sensitive topics, (v) When you want to collect a concentrated set of observations in a short time span, (vi) To ascertain perspectives and experiences from certain people on a topic, (vii) In combination with other methods, (viii) To gather preliminary data, (ix) In the development of surveys and interview guides and (x) To clarify research findings from another method.

Recording Focus Group data

- (i) One of the challenges in recording focus group data knows who is speaking at any particular time, since often multiple people speak in overlap. Consider audio- or video-recording Focus Group sessions (or even both). Video will be helpful for identifying who is speaking. Recordings also provide access to tones of the discussion and the ability to replay sessions during analysis.
- (ii) Transcribe focus group discussions.
- (iii) Have a least 2-3 researchers (in addition to the moderator) attend the focus group and take notes. The focus of each researcher's note-taking efforts might be different (e.g. nonverbal behavior, group dynamics, emergent themes).
- (iv) Note taking is important to capture nonverbal data. Even if one is video-recording a group, some nonverbal behavior will be lost that might be recorded by a note-taker.

Advantages of Focus Groups

The advantages of Focus Groups are as follows: (i) Ability to produce a large amount of data on a topic in a short time, (ii) Access to topics that might be otherwise unobservable, (iii) Can ensure that data directly targets researcher's topic, (iv) Provide access to comparisons that

focus group participants make between their experiences, (v) This can be very valuable and provide access to consensus/diversity of experiences on a topic, (vi) Captures real life data in a social environment, (vii) Flexible, (viii) High face validity, (ix) Speedy results, (x) Economical and (xi) The Researcher can increase sample size for qualitative research.

Disadvantages of Focus Groups

The Disadvantages of Focus Groups are as follows: (i) Facilitator has less control, (ii) Data more difficult to analyse, (iii) Special skills required, (iv) Nature of group varies, (vii) Groups may be difficult to assemble, (viii) Venue must be conducive

REFLECTION AS ASSESSMENT TECHNIQUE FOR LEARNING–INTERVIEW

The assessment interview is very similar to a regular job interview but focuses more directly on the person's personality. Assessment interview techniques allow an organization to quantitatively determine if an applicant has the necessary skills and knowledge to complete the tasks required for a particular role. This technique is also used in educational settings as well, for certification and promotion purposes by using the Interview Assessment Form.

The Interview Assessment Form incorporates a scoring grid to enable the researcher to assess each candidate as fairly and objectively as possible. It involves five hierarchical steps as follows:

Step 1: List the competencies and criteria from the Person Specification on the interview assessment form and apply a weighting according to how important you consider them to be in fulfilling the duties of the post. The weighting scale is from 1 to 3, with 3 being most important and 1 being less important.

Step 2: Carry out the interview, using questions and, if appropriate, exercises to gain evidence to enable you to make a judgement as to how far the candidate meets each competency and/or criteria. Make notes during the interview.

Step 3: At the end of each interview, agree as a panel how far you consider the candidate met each competency or criteria and apply a rating as follows: ***Zero rating for evidence demonstrated that the candidate did not meet the competency or criteria; One rating for evidence demonstrated that the candidate met the competency or criteria; Two for evidence demonstrated that the candidate exceeded the competency / criteria.***

Record the rating on the Interview Assessment form.

Step 4: Multiply the weighting for each competency or criteria by the rating you have applied and record on the interview assessment form. Add together to arrive at a total score and record on the form. The candidate you appoint should therefore be the person who achieves the highest score.

Step 5: Record any training or support needs you have identified.

PROJECTIVE TECHNIQUES

Projective Techniques refers to the techniques used to reveal (to project) the inner world of repressed feelings, wishes, hopes, fears and ambitions of an individual by going deep in to his/her unconscious. It is called Projective techniques because it projects the inner world of unconscious.

In Projective Techniques indefinite and unstructured stimuli are presented to the subjects and asked them to structure those stimuli or explain them. While structuring or explaining the stimuli the subjects project the repressed feelings, wishes, hopes, fears and ambitions from the unconscious.

□ Some common Projective Techniques are (i) The Rorschach Inkblot Test, (ii) Thematic Apperception Test, (iii) Children Apperception Test, (iv) Word Association Test and (v) Sentence Completion Test.

The Rorschach Inkblot Test was developed by Hermann Rorschach, a Swiss psychiatrist. It consists of ten cards containing inkblots. Five of them are in black and white and five of them are multi-coloured. These are unstructured and do not have any specific meaning. It can be administered on subjects and responses can be scored and interpreted.

Thematic Apperception Test was first introduced by Henry Murray (1943) to measure the need for achievement. Later it was developed for the assessment of personality with the help of C.D.Morgan. It consists of thirty vague and indefinite pictures portraying human beings in a variety of actual life situations. Ten are meant for males, ten for females and ten are common to both sexes. The test is administered in two sessions using ten pictures in each session. The pictures are presented one at a time. The subject has to make up a story for each of the pictures within a fixed period of time. The following aspects are to be considered while the subject is making up the story. (i) What is going on in the picture? (ii) What has lead to this scene? (iii) What would likely happen in such a situation?

□ **Children Apperception Test:** Thematic Apperception Test is not suitable for children. So Dr. Leopold Bellak developed this test for children between three and ten years old. It consists of ten cards having pictures of animals. These are meant for both genders. Children are asked to make up stories as a game.

Word Association Test: Word Association Test includes a number of selected words. The examiner speaks a series of words, one word at a time. The subject should immediately say the first word that comes to his mind. There is no right or wrong answers. Uttering of unusual words, if any and behaviour manifestations are considered for evaluation.

□ **Sentence Completion Test** consists of a list of incomplete sentences, generally open ended. These require completion by the subject in one or more words. The subject has to go through the list of words and answer as quickly as possible

Item Examples: • I am worried over.....

• My hope is

• I feel proud when

• My hero is

Indian Adaptations of Personality Tests are (i) Indian adaptations of senior apperception test developed by Uma Chaudhary, (ii) Indian adaptations of thematic apperception test by Uma Chaudhary, (iii) Indian adaptations of children's apperception test by Uma Chaudhary, (iv) A pragmatic view of Rorschach inkblot technique by B.L Dubey, (v) Sentence Completion test by L.N Dubey and Archana Dubey and (vi) Mosaic test of personality by B.B Chatterjee.