

## **B.Ed Semester - III**

### **UNIT-IV**

#### **Achievement Test**

##### **Meaning of Achievement Test**

Achievement tests are used by teachers to measure or test the achievements and success achieved in any particular field by a student. Whatever the student learns in school is called his achievement and examinations conducted to test that achievement are called achievement tests.

##### **Classification of Achievement tests**

**Achievement tests can be prepared on the basis of method like:**

###### **(i) Standardized Test**

Any test in which the same test is given in the same manner to all test takers, and graded in the same manner for everyone, is a standardized test.

###### **(ii) Teacher Made Test**

The type of test that is self made by teachers according to their norms and standards.

##### **Principle of Achievement tests**

- Achievement tests should measure clearly the objectives that have been formulated. In order to construct a good test, every teacher should be able to formulate clear goals especially specific instructional objectives.  
Achievement test should be according to the level of students  
Achievement test should include the types of tests items that are most appropriate for measuring the desired learning outcomes.  
Achievement test should be made as reliable as possible  
Achievement tests should improve students learning.

##### **Characteristics of a Good Achievement Test**

Now, what makes a good achievement test? To shed light on the characteristics of a good achievement test we are going to consider four qualities that make an excellent test.

###### **1. Reliability**

In an achievement test reliability refers to how consistently the test produces the same results when it is measured or evaluated.

For a test to be reliable it means that the outcome of the test is trustworthy.

So for an achievement test to be considered accurate and valid, it must be consistent. It must measure what is intended to measure in its true value.

We can say that the degree to which the test is free from error is one characteristic of an achievement test. When a test is repeated, if the value is close to what was initially obtained, then it is said to be reliable.

Note that different types of reliability are evaluated using different methods.

- The first on the list is how consistent the results of the measurements are over a certain amount of time.
- The second one is how consistent is the result of the measurement when it has been evaluated using different methods and instruments.
- The last way to determine how consistent an achievement test is how consistent it has been with just one instrument or method of testing.

## **2. Validity**

One important thing to consider when conducting an evaluation assessment is how much the results of the test will serve the purpose for which it was intended. Finding an answer to this question is the basis of validity in a test. The primary function of any test is validity because a test has no value if it is not valid hence it won't prove useful.

The validity of a test involves what it is intended to measure and how consistent it measures it.

For instance, an educator might not determine how conversant a student is in a particular knowledge area without conducting an evaluation test.

If the test was conducted and the results did not measure what it was intended to measure, the educator might not accurately determine what the strengths of the students are. Also, the educator might struggle to know whether the student is ready for a higher level of instruction. We can infer that validity is how appropriate the interpretation made from the result of a test is, regarding a specific topic.

## **3. Objectivity**

Objectivity can affect both the reliability and validity of test results. The objectivity of a test refers to the percentage at which different people scoring a test can arrive at the same score. A good test must be free from personal errors and bias.

Achievement tests must have objectivity in the scoring and in interpreting the results. No personal factor should affect the scoring of the test. Also, the interpretation of the test results should be plainly worded and easy to understand.

**Finally, the results of the test should mean the same to all the students that took part in the test. So, there should be no partial confusion and no ambiguity.**

#### **4. Usability**

You cannot neglect the practical value of a test. When deciding on a test, consider the ease of administration, the time required to administer the test, and how easy it is to interpret the result of the test and apply it.

It must also be easy to use by all classroom teachers, so explicit instructions should be given. The test should have a specified time allocated to complete it and scores of the test should be easy to interpret.

#### **Construction of Achievement Test:**

Any test designed to assess the achievement in any subject with regard to a set of predominated objectives

#### **Major steps involved in the construction of achievement test**

Planning of test  
Preparation of a design for the test  
Preparation of the blue print  
Writing of items  
Preparation of the Scoring key and marking scheme  
Preparation of question-wise analysis

#### **Planning of test**

Behavioral Objectives of the test  
Determine the maximum time and maximum marks.

#### **Preparation of a design for the test**

Important factors to be considered in design for the test are

Weightage to objectives  
Weightage to content  
Weightage to form of questions  
Weightage to difficulty level

### **Weightage to objectives**

This indicates what objectives are to be tested and what weightage has to be given to each objective.

<b>Sl.No</b>	<b>Objectives</b>	<b>Marks</b>	<b>Percentage</b>
1	Knowledge	3	12
2	Understanding	2	8
3	Application	6	24
4	Analysis	8	32
5	Synthesis	4	16
6	Evaluation	2	8
<b>Total</b>		<b>25</b>	<b>100</b>

### **Weightage of Content**

This indicates the various aspects of the content to be tested and to be given to these different aspects

<b>Sl.No</b>	<b>Content</b>	<b>Marks</b>	<b>Percentage</b>
1	Sub topic - 1	15	60
2	Sub topic - 2	10	40
<b>Total</b>		<b>25</b>	<b>100</b>

**Weightage to form of Questions:** This indicates the form of questions to be included in the test and the weightage to be given for each form of the questions

Sl.No	Form of questions	No. of Questions	Marks	Percentage
1	Objective type	14	7	28
2	Short answer type	7	14	56
3	Essay type	1	4	16
<b>Total</b>		<b>22</b>	<b>25</b>	<b>100</b>

**Weightage to difficulty level**

This indicates the total mark and weightage to be given to different level of questions.

Sl.No	Form of questions	Marks	Percentage
1	Easy	5	20
2	Average	15	60
3	Difficult	5	20
<b>Total</b>		<b>25</b>	<b>100</b>

## Preparation of the Blue Print

Blue Print is a three dimensional chart giving the placement of the objectives, content and form of the questions.

Objectives Form of Qtn Content	Knowledge			Under- standing			Application			Analysis			Synthesis			Evaluation			Grant Total	
	O	SA	E	O	SA	E	O	SE	E	O	SA	E	O	SA	E	O	SA	E		
Sub Topic- 1	2 (4)			1 (2)			2 (4)	2 (1)				4 (1)	2 (1)				2 (1)			15
Sub Topic – 2	1 (2)			1 (2)				2 (1)				4 (2)	2 (1)							10
<b>Total Marks</b>	3	0	0	2	0	0	2	4	0	0	4	4	0	4	0	0	0	2	0	25
<b>Grand Total</b>	<b>3</b>			<b>2</b>			<b>6</b>			<b>8</b>			<b>4</b>			<b>2</b>				

Note: O- Objective type, SA- short answer type, E- Essay type

The numbers inside the bracket indicate question number and outside bracket indicate marks.

## Writing of Items

### Preparation of the scoring key and marking scheme

In the case of Objective type items where the answers are in the form of one word or symbol a scoring key and marking scheme is prepared.

Q.No	Answer	Marks
1	A	½
2	C	½
3	A	½
4	D	½
5	B	½

In preparing marking scheme the examiner has to list out the value points to be credited and fix up the mark to be given to each value point.

Q.No	Value points	Marks	Total Marks
1	Value Point – 1	$\frac{1}{2}$	<b>2</b>
	Value point – 2	$\frac{1}{2}$	
	Value point – 3	$\frac{1}{2}$	
	Value point – 4	$\frac{1}{2}$	
2	Value Point – 1	$\frac{1}{2}$	<b>2</b>
	Value point – 2	$\frac{1}{2}$	
	Value point – 3	$\frac{1}{2}$	
	Value point – 4	$\frac{1}{2}$	

**Preparation of Question-wise analysis:**

Q.No	Content	Objectives	Form of Questions	Difficulty Level	Marks	Estimated Time ( In Mints )
1	Sub topic – 1	Knowledge	Objective Type	Easy	$\frac{1}{2}$	1
2	Sub Topic – 2	Understanding	Objective Type	Average	$\frac{1}{2}$	1
3	Sub Topic – 2	Application	Objective Type	Easy	$\frac{1}{2}$	1
4	Sub Topic – 1	Knowledge	Objective Type	Easy	$\frac{1}{2}$	1
5	Sub Topic – 2	Understanding	Objective type	Average	$\frac{1}{2}$	1

5	Sub Topic – 1	Analysis	Short answer	Average	2	3
6	Sub Topic – 1	Synthesis	Short Answer	Difficult	2	3
7	Sub topic – 2	Application	Short answer	Easy	2	3
8	Subtopic – 1	Analysis	Essay	Average	4	10