

# Achievement test

- With the help of achievement test we can measure the amount of success of an individual in a specific field.
- Achievement test is a tool for teachers for evaluation of students in school situation.
- In school environment it is used as an instrument to measure success of an individual in a particular subject or group of subjects.
- It gives the knowledge about an individual by testing his abilities.

# Questions

For constructing an achievement test in any school subject following two questions gives the way;

- What to measure?

It involves certain objectives in view that enable to bring out accepted changes in the students' behavior when we teach.

- How to measure?

It involves how to construct an instrument that measures the abilities of students

## General steps for constructing an Achievement Test:

1. Planning the test----- a) Designing the test b) Preparation of the Blueprint
2. Preparing Preliminary Draft-----a) Item writing b) Item editing c)Pre-tryout
3. The tryout
4. Item Analysis
5. Preparing the Final Draft
6. Establishment of----- a) Reliability b) Validity c) Norms
7. Construction of the Scoring Key



# Planning the test

## a) Designing the test

- **Weightage to the objectives**
- **Weightage to the content**
- **Weightage to the form of questions**
- **Weightage to difficulty level**

## b) Preparation of the Blueprint

## Format of a blueprint

Objective Form of Qns.	Knowledge			Understanding			Application			Skill			Total
	E	S	O	E	S	O	E	S	O	E	S	O	
Sub Unit1	0	2(2)	1(2)										6
Sub Unit2				5(1)	2(1)			2(1)		1(1)			10
Sub Unit3				5(1)	2(1)						2(1)		9
Total	0	4	2	10	4	0	0	2	0	1	2	0	25

Note: Figures within the brackets indicates the number of questions and figures outside the brackets indicates marks.

# Preparing Preliminary Draft

## **a. Item writing**

- i. Each item contains single idea.
- ii. Questions should be clear.
- iii. Simple and easy to understand.
- iv. Double barreled question should be avoided.
- v. Arrangement of items should be from simple to complex.
- vi. Subjective question should also be avoided.

## **b. Item editing**

## **c. Pre try out**

# The try out

- I. Proper sitting arrangements.
- II. Time of administrating the test.
- III. Total time required for test.
- IV. Proper motivation with the pupil.



# Item analysis

## 1. Estimating Item Difficulty:

$$\text{Difficulty} = R/N \times 100$$

R – Number of pupils who answered the item correctly

N – Total number of pupils who attempted the item.

	Item 1	Item 2	Item 3	Item 4	Item 5
D. index	0.375	0.75	0.50	0.15	0.60

## 2. Estimating Discrimination Index:

$$\text{Discriminating power} = RU - RL / N / 2$$

RU – Number of correct responses from upper group.

RL – Number of correct responses from lower group.

N – Total number of pupils who attempted the item.

## 5. Final draft

## 6. Establishment of Reliability, Validity and Norms

**a. Reliability:** The reliability of a test measures whatever it measure.

**b. Validity:** It is very important aspect of test and it can be determined as the degree which is capable of measuring achievements and it is design to do so. Valid test is highly reliable

**c. Norms:** age norms, grade norms, percentile norms and standard scores.

## 7. The Scoring Key

# BLUE PRINT

A test blueprint is a list of key components defining our test. including:-

- The purpose of the test
- The content framework
- The testing time
- The content weigh
- The item formats (e.g., MCQ, essay question)

**Class: VI**  
**Subject: Science**

# **BLUEPRINT**

**Time: 80 min**  
**M.M: 40**

<b>Objectives</b>  <b>Contents</b>	<b>Knowledge</b> <b>(10%)</b>			<b>Understanding</b> <b>(52.5%)</b>			<b>Application</b> <b>(37.5%)</b>			<b>Total</b>
	VSA	SA	LA	VSA	SA	LA	VSA	SA	LA	
<b>Structure of plants</b>					3(2)	5(2)	1(4)			<b>20(8)</b>
<b>The Leaf</b>		3(1)					1(2)	3(1)		<b>8(4)</b>
<b>The Flower</b>	1(1)					5(1)		3(2)		<b>12(4)</b>
<b>TOTAL</b>	<b>4(2)</b>			<b>21 (5)</b>			<b>15(9)</b>			<b>40(16)</b>

**VSA: Very Short Answers**  
**Questions**  
**SA: Short Answer Questions**  
**LA: Long Answer Questions**

**Number in bracket shows number of**  
**questions.**  
**Number outside the bracket shows marks**  
**given to each questions.**

**Blueprint of Question Paper**  
**Class – X ; Subject - HINDI [E]; Sub Code-24; 2020-21**

Time = 3 Hours  
Max. Marks = 100

Unit	Sub-Unit / Lesson	Knowledge				Understanding				Expression				Total
		LA	SA	VSA	OT	LA	SA	VSA	OT	LA	SA	VSA	OT	
1.	<b>Group - A [50 Marks]</b> नीव को ईट छोटा जादूगर	4(1)	2(2)		---			1(2)	---				---	<b>10</b>
2.	भोलाराम का जीव		2(2)		---				---		2(2)		---	<b>08</b>
3.	साखी पद-त्रय	4(1)	2(2)	1(1)	---				---	4(1)	2(1)	1(1)	---	<b>16</b>
4.	<b>व्याकरण :</b> All the grammar portion of class IX and the following :- लिंग/वचन, कारक, संधि/समास, पर्यायवाची/विलोम शब्द, अनेक शब्दों के लिए एक शब्द, उपसर्ग / प्रत्यय, मुहावरे एवं लोकोक्तियाँ, वाक्य शुद्धिकरण / वाक्य परिवर्तन			1(2)	---		1(2) 1(2) 1(2)	1(2)	---		1(2) 1(2)		---	<b>16</b>
5.	<b>Group - B [50 Marks]</b> नीलकंठ		2(2)	1(2)	---	5(1)			---		2(1)	1(1)	---	<b>14</b>
6.	जो बीत गई			1(1)	---		2(4)	1(1)	---		1(2)		---	<b>12</b>
7.	<b>रचना ( Composition )</b> निबंध लेखन (08) पत्र-लेखन (05) अपठित गद्यांश (06) अनुवाद (05)				---	5(1)	2(2)		---	8(1)	2(1)		---	<b>24</b>
<b>Total =</b>		<b>08</b>	<b>16</b>	<b>06</b>	<b>---</b>	<b>10</b>	<b>18</b>	<b>07</b>	<b>---</b>	<b>12</b>	<b>16</b>	<b>07</b>	<b>---</b>	<b>100</b>

**1. Weightage to Objectives :**  
Knowledge = 30  
Understanding = 35  
Expression = 35  
**Total = 100**

**2. Weightage to Forms of Questions :**  
Essay/LA = 30  
Short Answer Type = 50  
Very Short Answer Type = 20  
Objective Type Questions = 00  
**Total = 100**

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**Notes :** Figures within brackets indicate the number of questions and figures outside the brackets indicate marks.  
\* Denotes that marks have been combined to form one question.

Name & Signature  
of the Paper Setter