

- **Formula to calculate Discrimination Index:**

Arrange the data in decreasing order as per the students score.

$H = \text{Sum of top 27\% students marks} / \text{Maximum marks}$

$L = \text{Sum of bottom 27\% students marks} / \text{Maximum marks}$

Discrimination Index $DI = (H - L) / \text{Count of how many students comes in 27\%}$

Interpretation of Discrimination Index	
Range	Verbal Description
.40 & above	Very Good Item
.30 - .39	Good Item
.20 - .29	Fair Item
.09 - .19	Poor Item

- **Formula to calculate Attainment Level:**

Calculate **Percentage (x)** of number of students who scored $\geq 50\%$ marks out of relevant maximum marks.

Set range of x using following criteria:

Range 0 : Set Attainment Level =0 to 0.99 if 0% to 59.99% of total students scored $\geq 50\%$ marks out of relevant maximum marks.

Range 1: Set Attainment Level =1 to 1.99 if 60% to 69.99% of total students scored $\geq 50\%$ marks out of relevant maximum marks.

Range 2: Set Attainment Level =2 to 2.99 if 70% to 79.99 % of total students scored $\geq 50\%$ marks out of relevant maximum marks.

Range 3: Set Attainment Level =3 if 80% to 100% of total students scored $\geq 50\%$ marks out of relevant maximum marks.

Look up table for same is as below:

Lookup Table			
% Students Successful	Attainment Level	% Students Successful	Attainment Level
60	1	71	2.1
61	1.1	72	2.2
62	1.2	73	2.3
63	1.3	74	2.4
64	1.4	75	2.5
65	1.5	76	2.6
66	1.6	77	2.7
67	1.7	78	2.8
68	1.8	79	2.9
69	1.9	80	3
70	2		