

Given a group of 21 students. Using 33% of them to constitute a high group of 7 and a low group of 7 (33% of 21), the following table shows the answers given by those two groups (high and low) to 10 multiple-choice questions (numbered from 1 to 10 in the first column). The correct answer for each of those ten questions is given in the second column. In the 14 consecutive columns are shown the answers given by each student to each question

		Ranking in order of merit																			
Question No.	Correct Answer	Patrick	Frank	Ann	Emily	Jennifer	Christine	Andrew	Frances	John	Alfred	Harriet	Michael	Albert	Peter	H	L	H+L	H-L	DIFF. IND.	DIS. IND.
1	B	B	B	B	B	B	B	B	B	B	B	B	E	E	E	7	4	11	3	79	0.43
2	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	7	7	14	0	100	0
3	A	B	A	B	A	B	B	A	B	B	A	B	A	A	A	3	4	7	-1	50	-0.14
4	E	E	E	E	C	E	E	C	E	C	C	A	E	-	C	5	2	7	3	50	0.46
5	B	B	C	B	B	C	E	C	C	C	E	E	E	E	E	3	0	3	3	21	0.43
6	D	D	D	D	C	D	D	D	E	D	E	E	D	E	E	6	2	8	4	57	0.57
7	A	C	C	C	C	C	C	C	C	C	C	C	C	C	C	0	0	0	0	0	0
8	C	B	B	B	C	B	C	B	B	B	B	B	B	C	C	2	2	4	0	28	0
9	E	E	E	E	E	E	E	E	C	E	E	E	C	B	A	7	3	10	4	71	0.57
10	C	C	C	C	C	C	A	C	C	B	-	C	D	B	A	6	2	8	4	57	0.62
33%									33%												
High group									Low group												

1. Calculate the *difficulty index* and the *discrimination Power* for questions 1 to 5.
2. Calculate H - L for questions 6 to 10.
3. Based on the *Difficulty Index* and *Discrimination Power*, give your interpretation for each of the TEN items.
4. Calculate the Distracter Power for the efficiency of the distracters of items 2 and 3 with its interpretation.

Organize your answers using the tables below:

Table 1: Difficulty Index and Discrimination Index

Item/ Question No.	Group	Size of group	Chosen answers					Corr ect Ans wer	H	L	H+L	H-L	Difficulty index	Discriminat ion index	Interpreta tion
			A	B	C	D	E								
1	High	7	0	7	0	0	0	B	7	4	11	3	79	0.43	Revise
	Low	7	0	4	0	0	3								
2	High	7	0	0	7	0	0	C	7	7	14	0	100	0	Discard
	Low	7	0	0	7	0	0								
3	High	7	3	4	0	0	0	A	3	4	7	-1	50	-0.14	Discard
	Low	7	4	3	0	0	0								
4	High	7	0	0	2	0	5	E	5	2	7	3	50	0.46	Retain
	Low	7	1	1	3	0	2								
5	High	7	0	3	3	0	1	B	3	0	3	3	21	0.43	Discard
	Low	7	0	0	2	0	5								
6	High	7	0	0	1	6	0	D	6	2	8	4	57	0.57	Retain
	Low	7	0	0	0	2	5								
7	High	7	0	0	7	0	0	A	0	0	0	0	0	0	Discard
	Low	7	0	0	7	0	0								
8	High	7	0	5	2	0	0	C	2	2	4	0	28	0	Revise
	Low	7	0	5	2	0	0								
9	High	7	0	0	0	0	7	E	7	3	10	4	71	0.57	Retain
	Low	7	1	1	2	0	3								
10	High	7	1	0	6	0	0	C	6	2	8	4	57	0.62	Retain
	Low	7	1	2	2	1	0								

Table 2: Effectiveness of Distracters

Item/ Question No.	Nature of test	Group	Size of group	Chosen answers					Cor rect Ans wer	: Effectiveness of Distracters				
				A	B	C	D	E		Do = (L – H) / n				
				A	B	C	D	E		A	B	C	D	E
1	MCQ	High	7	0	7	0	0	0	B	0	-0.43	0	0	0.43
		Low	7	0	4	0	0	3		Revise/ Change	Revise/ Change	Revise/ Change	Revise/ Change	Retain
2	MCQ	High	7	0	0	7	0	0	C	0	0	0	0	0
		Low	7	0	0	7	0	0		Revise/ Change	Revise/ Change	Revise/ Change	Revise/ Change	Revise/ Change
3	MCQ	High	7	3	4	0	0	0	A	0.14	-0.14	0	0	0
		Low	7	4	3	0	0	0		Retain	Revise/ Change	Revise/ Change	Revise/ Change	Revise/ Change
4	MCQ	High	7	0	0	2	0	5	E	0.14	0.14	0.14	0	-0.43
		Low	7	1	1	3	0	2		Retain	Retain	Retain	Revise/ Change	Revise/ Change
5	MCQ	High	7	0	3	3	0	1	B	0	-0.43	-0.14	0	0.57
		Low	7	0	0	2	0	5		Revise/ Change	Revise/ Change	Revise/ Change	Revise/ Change	Retain