1. **Scoring and Distractor Analysis**

- Distractor should get at least 10% of responses to be values as attractive.

- Point-biserial (r(pb)) – for each option on an item (Ex. If 4 options to select, then treat each as a correct one and calculate r(pb) for the selected option – 4 times in the end).

* r(pb) < 0 – the best. It is doing its job.
* 0 <= r(pb) <= 0.10 - it is not helping attract low-scoring test takers than high-scoring ones, and it might need revision.
* r(pb) >= 0.10 – problematic. It attracts high-scoring test takers. So, it needs to be reviewed for being too deceptive, correct, ambiguous, confusing etc.

- Mean z score – calculate for all students taking the distractor option or correct option.

* Mean z score > 0 for distractor – problematic, since above average students tended to select distractor.
* Mean z score < 0 for correct option – problematic, since below average students tended to select correct option