

Percentile Analysis Report

Percentile - finding the value below a given percentile

	sl_no	ssc_p	hsc_p	degree_p	etest_p	mba_p	salary
Mean	108.0	67.303395	66.333163	66.370186	72.100558	62.278186	288655.405405
Median	108.0	67.0	65.0	66.0	71.0	62.0	265000.0
Mode	1	62.0	63.0	65.0	60.0	56.7	300000.0
Q1:25%	54.5	60.6	60.9	61.0	60.0	57.945	240000.0
Q2:50%	108.0	67.0	65.0	66.0	71.0	62.0	265000.0
Q3:75%	161.5	75.7	73.0	72.0	83.5	66.255	300000.0
99%	212.86	87.0	91.86	83.86	97.0	76.1142	NaN
Q4:100%	215.0	89.4	97.7	91.0	98.0	77.89	940000.0

1) For the Secondary School Certificate (ssc_p) scores:

- The bottom 25% of students scored at or below 60.6%.
- The median (50th percentile) score is 67.0%, meaning that half of the students scored at or below 67.0%. This is an increase of 6.4 percentage points from the 25th percentile.
- The 75th percentile is 75.7%, indicating that 75% of students scored at or below 75.7%. This is an 8.7 percentage point increase from the median.
- The 99th percentile is 87.0%, meaning that 99% of students scored at or below 87.0%.

- The maximum score(100%) is 89.4%, which is only 2.4 percentage points above the 99th percentile, indicating very few extremely high performers.

2) For the Higher Secondary Certificate (hsc_p) scores:

- The bottom 25% of students scored at or below 60.9%.
- The median (50th percentile) score is 65.0%, meaning that half of the students scored at or below 65.0%. This is an increase of 4.1 percentage points from the 25th percentile.
- The 75th percentile is 73.0%, indicating that 75% of students scored at or below 73.0%. This is an 8.0 percentage point increase from the median.
- The 99th percentile is 91.8%, meaning that 99% of students scored at or below 91.8%.
- The maximum score(100%) is 97.7%, which is 5.84% percentage points above the 99th percentile, indicating multiple exceptional performers in higher secondary education.
- More score diversity is observed in higher secondary and absolute top performers excel more in higher secondary than secondary school.

3) For the Degree Certificate (degree_p) scores:

- The bottom 25% of students scored at or below 61.0%.
- The median (50th percentile) score is 66.0%, meaning that half of the students scored at or below 66.0%. This is an increase of 5 percentage points from the 25th percentile.
- The 75th percentile is 72.0%, indicating that 75% of students scored at or below 72.0%. This is a 6.0 percentage point increase from the median.
- The 99th percentile is 83.86%, meaning that 99% of students scored at or below 83.86%.

- The maximum score(100%) is 91.0%, which is 7.14% percentage points above the 99th percentile, indicating multiple exceptional performers in degree programs but decreased a considerable amount compared to higher secondary.

4) For the Entrance Exam (etest_p) scores:

Scores range from 60.0% (Q1) to 98.0% (Max) – widest dispersion among all metrics.

- Top 1% scores $\geq 97.0\%$
- Maximum score (98.0%) is only 1.0% higher than 99th percentile → Minimal headroom at the top , but is the highest maximum score when compared with others .

Performance

- Struggling: $\leq 60.0\%$ (bottom 25%)
- Competitive: $> 83.5\%$ (top 25%)
- Exceptional: $> 97.0\%$ (top 1%)

5) For the MBA (mba_p) scores:

Scores range from 57.94% (Q1) to 77.89% (Max)

Top 1% scores $\geq 76.11\%$

- Maximum score (77.89%) is only 1.776% higher than 99th percentile → Minimal headroom at the top , and is the lowest maximum score when compared with others .

Performance

- Struggling: $\leq 57.94\%$ (bottom 25%)
- Competitive: $> 66.255\%$ (top 25%)
- Exceptional: $> 76.11\%$ (top 1%)

6) Salary

Key Statistics:

- 25th Percentile (Q1): ₹240,000
- 50th Percentile(Q2): ₹265,000
- 75th Percentile (Q3): ₹300,000
- 100th Percentile (Max): ₹940,000
- Extreme Outlier: The maximum salary (₹940,000) is 3.13× higher than Q3 (₹300,000), indicating there might be extreme outliers. As there is a
- The Middle 50% (₹240K–₹300K) represents the most stable amount.

Conclusion:

In conclusion the students show stronger pre-MBA academics (higher 99th percentiles) than MBA results.

Moreover scores were consistent overall, with students mostly clustering near the middle(average).In contrast pre-degree metrics (ssc_p, hsc_p, degree_p) show balanced score distribution, scores from MBA/placement tests show compression (mba_p, etest_p) .This indicates that there might be systematic constraints. Either the grading is too rigid or max scores are too low—making it hard to distinguish elite candidates.

