

The base of Normalisation is to standardize each shift of exam at one level. The shift of exam that has highest average marks has been taken as standard and the remaining shift of exam marks are brought to its level. For this process, we follow Standard Deviation formula as follows

Formula ---- >

$$\text{Standard Deviation} = \frac{\sqrt{\frac{\sum (X_i - X_{\text{mean}})^2}{N}}}{\hat{u}}$$

X_i = Candidate's Score,
 X_{mean} = Average of all candidate's Scores,
 N = Total Candidates

$$\text{Normalised Marks} = \frac{\text{Standard SD --}}{\text{SD of Shift}} \times X \quad (\text{Candidate's marks} - \text{Average of shift}) + \text{Standard Average}$$

Standard SD = Standard Deviation of highest average marks shift (taken as standard) SD of Shift = Standard Deviation of current shift

Candidate's marks = Candidate's marks or percentage

Average of shift = Average marks of current shift

Standard Average = Standard Average of highest average marks shift (taken as standard)