



Dated: 04-08-21

## Normalization Formula

### Normalization in Exam

The scores of the candidates will be normalized for the examinations which are conducted in multiple shifts to take account any variation in examination paper across different shifts.

The normalization will be done basis the below mentioned formula.

### Normalization Method

The following data values to be calculated for every shift for all the candidates who have appeared in the exam for the same post:

<b>S2</b>	Standard Deviation of the shift with the Highest Average Score taken as <b>Base</b> for normalization
<b>S1</b>	Standard Deviation for the corresponding shift (to be scaled to S2)
<b>X</b>	Raw score of a candidate
<b>Xav</b>	Simple average of the Shift
<b>Yav</b>	Average corresponding to shift with highest Average (taken as <b>Base</b> for normalization)

**Normalized Score for each candidate (Xn) =  $X_n = (S2 / S1) * (X - X_{av}) + Y_{av}$**

Criteria for choosing the base for normalization will be the shift with 'Highest Average' of raw scores. An exception will be made if this shift (with highest average) has far less number of candidates as compared to other shifts. In that case, the next shift with 'highest Average' will be taken as base for normalization.

70% of the average attendance is the limit. Any value below this will not be considered for the base.

**NOTE:** Treatment to ambiguous/invalid question i.e. Full Marks or Proration is done before Normalization.