## NORMALISATION SCHEME OF MARKS FOR STAR AGNIVEERVAYU SELECTION

IAF has decided to apply the '**Normalisation of Marks**' on the actual scores of the candidates for the STAR Agniveervayu examinations with effect from STAR-01/2023 which is being conducted in multi-shifts due to large number of candidates, to take into account any variation in the Difficulty Level of the Question Papers across different shifts. The Normalisation is done to give equal platform of the marks scored by various candidates across different shifts/QPs. This will ensure no disadvantage to the candidates writing their examination in different shifts and attempting different QPs. The following statistical formula (Standard Deviation Model) will be used by IAF to calculate the final marks (Normalised marks) of the candidates in the multi-shift examinations:

$$\widehat{M}_{ij} = \frac{\overline{M}_t^g - M_q^g}{\overline{M}_{ti} - M_{iq}} \left( M_{ij} - M_{iq} \right) + M_q^{gm}$$

Where:

 $\widehat{M}_{ij}$  = Normalized marks of j<sup>th</sup> candidate in the i<sup>th</sup> shift.

- $\overline{M}_{t}^{g}$  = is the average marks of the top 0.1% of the candidates considering all shifts (number of candidates will be rounded-up).
- $M_q^g$  = is the sum of mean and standard deviation marks of the candidates in the examination considering all shifts.
- $\overline{M}_{ti}$  = is the average marks of the top 0.1% of the candidates in the i<sup>th</sup> shift (number of candidates will be rounded-up).
- $M_{ig}$  = is the sum of mean marks and standard deviation of the i<sup>th</sup> shift.
- $M_{ij}$  = is the actual marks obtained by the j<sup>th</sup> candidate in i<sup>th</sup> shift.
- $M_q^{gm}$  = is the sum of mean marks of candidates in the shift having maximum mean and standard deviation of marks of candidates in the examination considering all shifts.

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Calculation of normalised marks will be done by rounding-off the marks up to 05 decimal places.

## Note:

1. Candidates are to note that the application of Cut-Off for shortlisting candidates for STAR Phase-II testing and preparation of Final Merit List for final selection will be based on "Normalised Marks" and "Not on" the "Original Marks" scored by the candidate in STAR Phase-I Examination. Further, on Normalisation, marks scored by a candidate in a subject may become more or less than the actual marks scored by him/her. In exceptional cases Normalised marks may become more than the maximum marks of that subject.

2. The normalisation process is completely statistical/mathematical and there is no discretion/human intervention whatsoever.