

**TAMILNADU PUBLIC SERVICE
COMMISSION**

IN THE TAMIL NADU ADMINISTRATIVE TRIBUNAL AT CHENNAI
O.A.Nos.1211, 1282, 1283, 1284, 1285, 1286, 1311, 1312, 1313, 1314, 1315, 1316, 1317,
1318, 1400 & 1401 of 2002

D.D. 13.12.2002

THE HON'BLE MR. JUSTICE I.DAVID CHRISTIAN – VICE CHAIRMAN

A.Durai Arasan & Others ... **Applicants**

Vs.

The Tamil Nadu Public Service Commission & Ors. ... **Respondents**

Scaling technique in valuation:

The applicants who were candidates for selection to Group-I Service for the year 2000-01 challenged their non-selection on several grounds, main ground being adoption of scaling technique in valuation – Tribunal mainly on the ground that the selected candidates have secured more actual marks and not scaled marks than the applicants dismissed all the applications.

ORDER

All these applications have been filed by individuals who have appeared before the Tamil Nadu Public Service Commission for selection to Group I service for the year 2000-01. They have filed these applications praying for direction to the respondent TNPSC to call these applicants for oral test and also direct them to select these applicants for posting in Group-I service.

2. Tamil Nadu Public Service Commission notified about 74 vacancies in Group I service for which applications were called for from eligible candidates. Notification was made in the year 2000. Selection process consisted of a preliminary examination wherein all the eligible candidates will be permitted to participate and write test and those persons who have scored high marks will be called for to write the main examination. From among the persons who write the main examination elimination process will be carried out and ultimately persons who have scored high marks would be called for oral interview after which the selection list will be published by

the TNPSC. Notification was made in 2000 and the preliminary examination was conducted by TNPSC in May 2000. Altogether more than 70,400 persons applied for selection out of which 50,830 actually wrote the preliminary examination. Answer papers were valued and top scores numbering 740 were selected for writing the main examination. Out of 740 persons who wrote the main examination 141 persons were called for interview for Group I posts in the ratio of 1:2. For every two persons who were called for attending oral interview, one will be selected. List of selected candidates was published by the TNPSC on 27.2.2002 and intimations have been sent to candidates who were finally selected for getting postings.

3. All these persons have appeared for the preliminary examination and they qualified themselves to write the main examination and they have also written the main examinations. In the process of elimination or short listing, these persons were not called for oral test or interview because they have not obtained sufficient marks. These persons have filed these Original Applications and interim order was passed by this Tribunal as per which direction was issued to the respondent TNPSC to admit them to the oral test and withhold the publication of results so far as these applicants are concerned. However TNPSC took the matter to High Court and challenged the interim order and the interim order was vacated and the Writ Petition filed by TNPSC was allowed, as a result these persons were not also called for the oral interview in view of their poor performance, compared to others who have been called for attending oral test.

4. All these persons have filed these applications challenging the mode of selection pointing out the alleged discrepancies and defects in the mode of selection adopted by the TNPSC. So far as the applicant Thiru A. Durai Arasan in O.A.No.1211/02 is concerned, he has raised the contention that options given to him in the main examination in respect of Civil Engineering paper was limited and it was not like previous years and he has been discriminated thereby and he has been put in an unequal position with these candidates who have taken other subjects and who have taken their examinations. It is merely pointed out by this applicant that in Civil Engineering Paper I seven questions were given out of which applicant was directed to answer atleast five questions. It is in this respect it is pointed out that on prior occasions eight questions were given and the applicants were requested to choose five out of eight whereas choice has been limited this year when applicant appeared. This objection also is only stated to be rejected.

5. The examination was conducted on post Graduate standard. The applicant is a Graduate in Engineering and the paper chosen is Civil Engineering. There was seven questions in the question paper out of which applicant was requested to answer atleast five and two questions were made compulsory. There is nothing wrong or illegal about it. It cannot be stated that the applicant must be asked to choose five questions out of eight only. The applicant is expected to be thorough in his subject and there fore just because choice was narrowed than the previous examination it cannot be stated that applicant was discriminated.

6. It is also next contended that certain questions found in the question paper were also out of syllabus and the scope of subject and therefore the applicant must be given full marks in respect of these answers. This is a vague allegation made by the applicant and he is not able to point out even single question which is outside the scope or syllabus of the subject which he has chosen. The applicant is not able to point out a single question which according to him was outside the syllbus. In fact syllabus is prepared by the TNPSC with the help of experts on the subject and it is also sent to persons who are asked to set the question papers with a clear direction that there shall not be any question outside the syllabus and this has been adhered to by the persons who were entrusted with the task of setting all question papers. In fact when the applicant has raised the objection by way of representation made to the TNPSC and when he filed a previous original Application and obtained direction from this Tribunal, the matter was referred to experts and the persons who set the question papers and they have all agreed that none of the questions found in the question papers were outside the syllabus prescribed by the TNPSC. The syllabus for each subject is given in the notification and therefore on this contention the applicant cannot succeed and this is only an attempt on the part of the applicant to get his marks boosted which is lower than the obtained by persons who have been finally selected by the TNPSC. So the contention raised by this applicant with regard to the syllabus and question papers have to be rejected and appears to have been made because of frustration due to his non-selection.

7. All other applicants have raised some objections about the valuation procedure adopted by the TNPSC in short listing the candidates according to their performance and it is alleged that the TNPSC has, adopted a new technique called scaling down technique which has been worked out

in such a manner as to cause prejudice to persons who have really scored high marks in the main examination written by them. The TNPSC in its counter affidavit has admitted that answer papers of these persons who have written the main examination have been valued by two examiners independently and real marks obtained by them were all tabulated first. It is true that TNPSC has adopted a technique called scaling down technique and the principle underlying the technique is by adopting this technique persons who have scored high marks in certain subjects where it is possible to score and bring them down compared with marks which could not be so high in certain subjects like History, Politics etc. It is also stated by the TNPSC that scaling down technique was adopted by Union Public Service Commission and this has been also studied and for certain reasons they have given in the counter this system was not adopted fully by the TNPSC but they went in for adopting the system that was being followed by the Rajasthan State Public Service Commission and this was found suitable to the candidates who have appeared for examination held by TNPSC.

8. The case of the applicants is that they also scored very high marks in the subjects which they have chosen for main examination but because of the adoption of the scaling down techniques their marks have been reduced very much and this has really affected their chances of being selected finally. The claim made by the applicants is to be verified with regard to the factual situation and therefore TNPSC was directed to produce tabulation sheet showing the actual marks scored by these applicants and the marks allotted to them after applying scaling down technique. Tamil Nadu Public Service Commission was directed to produce tabulation list for all the selected candidates. In pursuance of the direction issued by me the TNPSC has produced the list of Raw Marks and scaled down Marks of fifteen candidates who have filed applications before this Tribunal and TNPSC also produced list of Raw Marks and Scaled Marks obtained by 74 selected candidates. The list contains Serial Number, Roll Number, Community to which they belong, subject chosen by the candidates. Raw Marks awarded and scaled marks finally arrived at by applying the technique. The actual marks scored by the candidates evaluated by the examiners is called Raw Marks and the scaled marks that were arrived at by the TNPSC after applying scale down technique with the help of experts.

9. It is also to be remembered that evaluation of answer papers is done by eminently qualified

persons and the papers are valued by two examiners independently of each other. In case there is variations in the valuation done by these two examiners to a considerable extent, paper is referred to a third examiner. Therefore the method adopted by the TNPSC for evaluation of the answer papers of the candidates cannot be faulted.

10. The list of Raw Marks and Scaled Marks of fifteen persons who have filed these applications are furnished and they shows that the actual or Raw Marks obtained by them is are very much low in all cases. Only in case of about four or five applicants the scaled down marks are less than the marks actually scored by them. Actual marks scored by these candidates are found in the list and all the candidates have scored less marks actually than the actual marks scored by 75 candidates who have been selected. To cite few examples among the backward class candidates who have written main examination and who have taken Geography and Tamil Language & Literature, one of the candidates who have been selected has scored total of 1070-50 whereas the applicant who belongs to same backward class community who has taken the same subjects has scored only 914 marks. In fact after applying the scaling down technique total marks awarded to the selectee is 1090-50 and total marks awarded to the applicant who belongs to same category is 922.47 only.

11. It can be seen from this example that scaled marks are in fact higher than the actual marks scored by them. Any how after going through the list and after comparing the performance of the applicants who have not been called for interview with the marks scored by the persons who have been selected, I am able to find out that these applicants have scored very much less marks in actual valuation before applying the technique. Therefore the comment made by these applicants that because of the application of scale down technique their marks have come down considerably and thereby they are deprived of their chances of selection is not borne out by factual position. Even raw marks obtained by these applicants are very much less than raw marks obtained by 74 selected candidates and therefore it has been proved that the applicants' performance has not been prejudicially affected by applying the scale down technique. Therefore it is not correct to state that application of scale down technique has caused prejudice or has affected the chances of these applicants with reference to their actual performance in the examination. The applicants

have not substantiated that the new technique adopted by the TNPSC has resulted in arbitrary taking away their chances of being selected.

12. All these applicants are proved to have been not selected only because of their poor performance compared to the performance of selected candidates. I am only saying that the performance of the applicants is poor compared to the performance made by selected candidates. Only persons who have scored marks higher than these applicants have been selected. The cut of marks have been fixed with reference to principles of reservation which have been also adopted by TNPSC. Therefore there is absolutely no basis for the complaints raised by these applicants. They have only tried desperately to discredit the system adopted by TNPSC only because they have not fared well. The applicants have not been called for oral test rightly because the list of candidates who wrote main examination are short listed and only top performers were called for oral test and selection chances was 1:2. Therefore I do not find any reason or justification to interfere with selection done by TNPSC for Group I service. The applicants have failed to make out a case that they have been treated discriminately or their chances have been prejudicially affected by the system of evaluation adopted by TNPSC. It has to be also remembered that TNPSC is a constitutional body and has conducted examination with the help of experts in the subjects and in the technique. No malafide is even alleged against the persons who are responsible for final selection. Therefore all the applications are liable to be dismissed.

13. In the result the applications fail and they are all dismissed.

and of MR.N.PAUL VASANTHA KUMAR Advocate taking notice the court made the following order:-

In all these W. P. M. Ps., the main grievance of the petitioners is that the scaling technique is not adopted properly. According to the learned Counsel, who appear for the various petitioners, the applicants were not informed in the Notification that the scaling technique will be adopted. The manner in which the scaling technique adopted is not specific.

2. In U.P PUBLIC SERVICE EXAMINATION V.SUBHASH CHANDRA DIXIT (A. I.R.2004 S.C. 163), the Supreme Court has approved the scaling technique as the same eliminates variation in making standards of different examiners.

3. In the counter filed by the respondent, the respondent has explained the manner in which they are adopting the scaling technique. The scaling technique adopted by the respondent has been explained in paragraph 25, which is extracted as follows:-

The following is the scaling formula (Generally) (If total marks 100 for subject)

$$X_s = 50\% + 10\% \frac{\{X - \bar{X}\}}{\sigma} = 50 + 10 \frac{\{X - \bar{X}\}}{\sigma}$$

X_s = the scaled mark (in percentage)

X = Raw Mark obtained by the candidate in the subject

\bar{X} = Mean marks obtained by the candidates in the subject

σ = Standard Deviation

as the optional subject contains two papers each of 300 marks and totally 600 marks, the Commission has adopted the following formula

$$X_{\bar{o}} = A + B \frac{X - X}{X - X}$$

Where

$X_{\bar{o}}$ = Scaled mark of the candidate in the subject

X = Raw mark of the candidate in the subject

\bar{X} = Mean marks of all candidates in the subject

σ = Standard Deviation of the marks in the subject

Optional Subject 2 :-

Sl. No.	RAW MARKS	DIFFERENCE	SEALED MARKS
1.	525	-128.91	396.09
2.	510	-120.98	389.02
3.	497	-114.12	382.88
4.	465	- 97.22	367.78
5.	442	- 85.07	356.93
6.	417	- 71.87	345.13
7.	403	- 64.47	338.53
8.	379	- 51.80	327.2
9.	330	- 25.92	304.08
10.	301	- 10.61	290.39
11.	277	+ 2.070	279.07
12.	275	+ 3.12	278.12
13.	240	+ 21.61	261.61
14.	212	+ 36.39	248.39
15.	198	+ 43.79	241.79
16.	178	+ 54.35	232.35
17.	165	+ 61.22	226.22
18.	151	+ 68.61	219.61
19.	141	+ 73.89	214.89

6. The TNPSC does not resort to scaling technique where the students, who have appeared for the particular subject are less than 5, for those students, raw marks are awarded. Learned counseling the petitioners pointed out in Option no.1, the students, who have obtained 442 marks, will get scaled mark of 364.15. In option no.2, the students who have obtained 442 marks will get the scaled mark of 356.93, where as if the students who have written the examination is only four, he will get his raw marks of 442. According to the petitioners this will cause injustice, because the students who have obtained higher marks as in Options 1 & 2, will have all their marks scaled down. The students who have appeared in certain subjects, for which there are not many students will get the advantage of raw marks. Totally the aggregate marks will be higher than others.

7. Learned counsel for the petitioners also submitted that he reliably understands that the persons, who have taken Mathematics as their option, for which there are not more than five students, have been selected, because they had the advantage of having their raw marks included in their aggregate marks.

ACTUAL MARK	DEVIATION FROM MEAN	SQUARE OF DEVIATION
20	-4	16
25	1	1
32	8	64
15	-9	81
28	4	16
		= 178
		Standard Deviation (8)=
		= 178/5
		= 35.6
		= 6.96.

8. The manner of ##### the scaling technique is done is explained in S.C. Dixit v. U.P. Public Service Commissioner (2003(9) AIC 191) by the Allahabad High Court. It is against this judgment that the Service Commission went on appeal which resulted in the decision reported in AIR 2004 S.C. 163 this is extracted below: -

“6. In the supplementary counter- affidavit, it is averred that the formula applied for scaling the marks is that given in the book SCALING TECHNIQUE S written by V.Natarajan and K.Gnanasekaran. The precise formula used is as under: -

$$Z = \text{Assumed Mean} + \frac{(X-M)}{SD} \times \text{Assumed S.D.}$$

Z is the Scaled Score

X is the raw mark or actual marks awarded by examiner

M is the Mean of Raw Marks of the group/subject (as the case maybe)

S.D. is the Standard Deviation of Raw Marks of the group/subject (as the case may be)

Assumed Mean will be taken as half of the maximum marks of the group/subject.

Assumed S.D. will be taken as $1/5^{\text{th}}$ of the assumed mean.

If after scaling the scaled marks are less than zero, the candidate will be given zero mark in that subject.

If after scaling the scaled marks exceed the maximum mark, the candidate will be given the maximum marks in that subject.

In the preliminary examination scaling will be done at the stage of optional paper and in the mains examination scaling will be done of all the papers at examiner's level.

The merit will be determined after adding the scaled marks in each subject.

If the scaled score is in decimal, the same will be converted into whole number according to practice.

The standard deviation is calculated in the following manner:

If five candidates secure 20,25,32,15 and 28 marks:

Mean marks of the group = $\frac{20+25+32+15+28}{5}$

$$= \frac{120}{5} = 24$$

ACTUAL MARK	DEVIATION FROM MEAN	SQUARE OF DEVIATION
X	S = X - M	
20	#####	#####3
25	#####	#####3
32	#####	#####
15	#####	#####
28	#####	#####

9. Even in this formula it is seen that the mean of the raw marks for each group subject could be taken. The mean marks cannot be arrived at by taking all the marks in all the subjects. Further, if the number of students, who have appeared for a particular paper are less than 5 and the mean

mark is calculated, there is a likelihood of there being higher deviation than in other cases. It is for this reason, wherever number of students, who have appeared, are less than 5, this scaling technique is not adopted. As observed by the Supreme Court in A.I.R. 2004 S.C. 163, the scaling technique is devised by an expert and unless it is shown that it is arbitrary and totally unreasonable, this Court cannot interfere with the same.

10. In fact, in the counter filed by the Public Service Commission, the details are given regarding the manner in which the scaling technique is adopted. It is explained that the technique adopted by U.P. P.S.C. cannot be adopted in toto by TNPSC. The U.P.P.S.C conducts examination nationwide and the scaling is being done taking into account the various factors such as zone, region etc. Hence the scaling technique followed by the Rajasthan Public Service Commission was studied in detail and experts from various fields viz. Mathematics, Statistics, Economics, Computer Science etc., were invited to analyse the formula followed by the Rajasthan Public Service Commission and after detailed discussions with them, the Commission came to the conclusion to adopt the formula followed by the Rajasthan Public Service Commission with some slight modifications to suit the requirements of the Tamil Nadu Public Service Commission.

11. It is admitted that after adopting scaling technique, the individual marks are scaled up or scaled down using the formula with reference to the number of candidates in the particular subject. The subject bias is minimized and a fair chance is given to every subject, so that there is due representation for candidates choosing any optional subject.

12. It is the grievance of the petitioners that a person, who writes a paper on which there are not many students, is likely to have an advantage of raw marks. This is also answered by the respondent who explains the reason why the individual marks are not scaled top or scaled down where there are 3 or 4 students for a particular paper.

13. The other complaint raised by the learned counsel for the petitioner is that there was no disclosure of the manner in which the scaling technique has been adopted. If the petitioners had any grievance they ought to have voiced it earlier. In *UNION OF INDIA V*

CHANDRASEKARAN (A.I.R 1998 S.C. 795), the Supreme Court has held that a candidate, who had appeared for written test and the department promotion Committee, cannot subsequently raise a plea challenging the validity of the process adopted.

14. Learned counsel for the petitioners further pointed out to the instructions given to the candidates, who have written the examination, which required the candidate to provide their own pens, ink, blotting papers and instrument boxes and forbids to use of colour pens, sketch pens, pencils etc. Learned counsel submitted that these instructions were given in order to avoid identification of the candidates by the examiners. According to the learned counsel for the petitioners, at least 20 persons had committed this malpractice. Even if this is accepted, the ground raised by the petitioners cannot be decided one way or other in the absence of the so-called 20 persons, who are alleged to have committed malpractice. If the petitioners are really aggrieved, it is open to the petitioners to obtain orders after identifying such persons, so that they can also be heard.

15. For the above reasons, the interim orders cannot be continued, nor can a direction be given not to publish the results.

16. Therefore, W.P.M.P Nos.28603 to 28606, 19520, 19522, 21370, 28607, 28608, 23877 and 23878 of 2004 are dismissed. Consequently, the connected W.V.M.P No. 1162, 1172, 1288, 1289 and 1351 of 2004 are ordered.
