# IN THE SUPREME COURT OF INDIA CIVIL APPELLATE JURISDICTION

CIVIL APPEAL NO. 8520 OF 2011 [Arising out of SLP [C] No.13495 of 2010]

Sanchit Bansal & Anr.

... Appellants

Vs.

The Joint Admission Board (JAB) & Ors.

... Respondents

# **JUDGMENT**

# R. V. Raveendran, J.

Heard. Leave granted.

2. The first appellant is the son of second appellant who is a Professor in the Indian Institute of Technology (IIT for short), Kharagpur. Admission to undergraduate courses in fifteen IITs as also IT--BHU and ISM, Dhanbad is

through the Common Entrance Examination known as the Joint Entrance Examination (for short IIT-JEE). The said examination is considered to be the toughest entrance examination in India, with more than 50 candidates vying for each seat in the said examination. IIT-JEE is conducted every year by a different IIT on a rotation basis and is supervised by the Joint Admission Board (JAB or the 'Board'), the first respondent herein. The first appellant appeared in the IIT-JEE 2006, as a general category candidate. He secured 75 marks in Methamatics, 104 marks in Physics and 52 marks in Chemistry, aggregating to 231. The Board had fixed the cut off marks for admission as 37 for Maths, 48 for Physics and 55 for Chemistry and the aggregate cut off marks as 154. As first appellant did not secure the minimum of 55 marks in chemistry he was not qualified, even though his aggregate in the three subjects was very high.

3. The second appellant wrote a letter dated 5.9.2006 to all the IIT Chairmen/Directors alleging anomalies and inherent contradictions in the selection process. He alleged that the cut off marks were fixed arbitrarily and with malafides in a manner that a student such as the first appellant with 231 marks was found to be not qualified whereas a student who got aggregate marks of 154 was found to have qualified. The appellants also filed several

applications under the Right to Information Act 2005 and collected considerable data. The appellants claim that when they sought information about the procedure for computation of cut off marks for JEE 2006 the organising Chairman, JEE 2006 gave two different versions at different points of time.

4. The first response given by the Organizing Chairman, JEE 2006 on 14.5.2007 read as follows:

# "Procedure for computation of cut-off marks etc. for JEE 2006

- 1. "Consistent with announced criteria of "Ranking" and "Tie-breaking" given in Section 11.1 and 11.2 of the Information Brochure of JEE 2006 the different cut-offs were decided.
- 2. On the basis of overall performance of candidates who appeared in all the three subjects (Mathematics, Physics & Chemistry), mean marks of each of the three subjects along with standard deviation was determined. The cut-off in each subject was decided as mean marks *minus* one standard deviation. Further depending on the number of candidates required to be qualified on All India basis, the aggregate marks cut-off was obtained. The cut-off marks of individual subject and aggregate are given below for GE category candidates:-

Mathematics 37
Physics 48
Chemistry 55
Aggregate 154"

The second response given by the organizing Chairman, JEE 2006 on 12.7.2007 was as under:

#### "Procedure for cut-off determination in JEE-2006:

- (i) For each subject, mean and standard deviation of the marks obtained are computed. For this computation only scores of those candidates who have secured minimum 1 (one) mark in each of the three subjects have been considered.
- (ii) The cut-off marks of an individual subject is calculated as Cut-off mark of a subject = Mean of the marks for the subject
   Standard deviation of the marks for the subject
   The result has been rounded to the nearest integer.
- (iii) The mean and standard deviation of the aggregate marks are calculated for those candidates who score at least one mark in each subject
- (iv) The aggregate cut-off mark is calculated as

Aggregate cut-off = (Mean of aggregate marks
- Standard deviation of aggregate marks)
rounded to nearest integer
+ a positive number

The number selected for counseling (i.e. qualified in JEE-2006 for counseling) is 1.3 X the number of seats available in all participating Institutions. Each time 1(one) mark is added to the mean-standard deviation of the aggregate marks and the number obtained is compared with the desired number. This process is continued until one arrives at the desired number to be called for counseling."

5. Feeling aggrieved by his non-selection, which according to appellants was due to a defective, erroneous and malafide process adopted for cut-off determination, the appellants filed a writ petition (WP 11434 (W) of 2007) claiming the following reliefs, apart from several consequential reliefs:

- (a) To quash the selection and merit list of admissions to IIT/ITBHU/ISM on the basis of JEE 2006 as it was prepared on the basis of imposition of illogical and cut off marks in three subjects without any rational basis;
- (b) to prepare and publish fresh chemistry marks for admissions to IITs in regard to JEE 2006 after making appropriate corrections in evaluation by adjusting the wrong evaluation and on that basis prepare and publish fresh merit list for admission to IITs/ITBHU/ISM in regard to JEE 2006.
- 6. A learned Single Judge dismissed the said writ petition holding as follows:
- (a) The appellants could not challenge the procedure for determination of cut off in JEE 2006 as they had given a signed declaration that the decision of JAB regarding the admission to be final and they would abide by the said decision.
- (b) The respondents had justified as to the manner of arriving at the cut off marks for Chemistry in JEE 2006 and it was within the domain of the Joint Admission Board to decide upon the procedure for determining such cut off and there was no material to show that the procedure adopted was flawed or arbitrary.
- 7. Feeling aggrieved, the appellants filed an appeal. A division bench by an interim order dated 7.7.2009 directed the Chairman of the first respondent Board to cause any of the Directors of the IITs in India to prepare and

submit a report regarding the working out of cut off marks of Chemistry based on formula and/or norms on the basis of information disclosed under the RTI Act and also disclosed in the affidavit in opposition. The division bench also permitted the appellants to procure any expert's report in regard to working out of cut off marks in regard to Chemistry by following the aforesaid two norms and submit the report.

8. In pursuance of it, the appellants secured the two reports both dated 17.7.2009 from T.A.Abinandanan, Professor, Department of Materials Engineering, Indian Institute of Science, Bangalore. The first report was on the calculation of the cut off marks in Chemistry. The concluding portion of the said opinion is extracted below:

"Therefore, the cut-off marks of Chemistry as per the formula provided in the affidavit-in-opposition comes out to be Six (6). This cannot be 55.

Conclusions: Cut-off marks in Chemistry were calculated in two different methods; in both the methods, the formula is the same: "Mean minus Standard Deviation"; however, the methods differ in the candidate populations used for computing the Mean and Standard Deviation. The calculated value of the Mean and Standard Deviation will depend on the candidate population used in arriving at these two quantities.

The cut-off marks in Chemistry, comes out, correctly and precisely, to be MINUS SIX and SIX, respectively, based on the formula and/or norms on the basis of information disclosed under the Right to Information Act, and disclosed in the affidavit in opposition.

The Chemistry cut-off marks cannot be 55 by any of the disclosed formulas."

The second report dated 17.7.2009 of Prof. T.A. Abinandanan was on the analysis of candidates' performance in JEE 2006. We extract below the conclusion in the said report:

"A comparison between my findings and the data provided by IIT-Kharagpur reveals the following:

1. Number of candidates in the two categories:

Category A: I found 145,439 candidates in this category, in perfect agreement with the data provided by IIT- Kharagpur.

Category B: I found 287,564 candidates in this category, in perfect agreement with the data provided by IIT- Kharagpur

2. Cut-off marks in Mathematics, Physics, and Chemistry:

	Mathematics	Physics	Chemistry
IIT-Kharagpur data	37	48	55
Category A of this study	7	4	6
Category B of this study, provided for the sake of completeness	-3	8	-6

In terms of cut-off marks, my findings do not agree at all with the data provided by IIT-Kharagpur. Since the procedure used by IIT-Kharagpur for the determination of the cut-off is the same as the computation I performed for candidates in Category A, a direct comparison is valid.

3. For the subject of Chemistry, following the formula provided by IIT-Kharagpur, the cut-off marks determined by my analysis is only 6, whereas it is 55 in the data provided by IIT-Kharagpur."

9. The JAB appointed a two member committee of IIT Directors (Mr. Gautam Barua, Director, IIT, Guwahati and Mr. Dewang Khakhar, Director, IIT, Bombay) to work out the cut-off marks for chemistry. They gave the following report dated 19.7.2009:

"The committee first of all noted that the issue of cut-off marks in each of the subjects of the examination, namely, Physics, Chemistry and Mathematics has been present in the JEE system for a number of years. The principle behind having cut-off marks is to ensure that a candidate qualifying the JEE examination satisfies a minimum proficiency level in each of the subjects. As the difficulty level of the question papers vary from year to year, no absolute pass mark can be set as is normally done in examinations. Thus the pass mark has to be relative to the performance of the candidates of that particular year.

The committee examined the procedure for subject cut-off marks in JEE 2006 as submitted in an affidavit to the Calcutta High Court and the procedure given against an RTI application. The committee noted that the procedures given in these document did not contain sufficient details to calculate the cut offs.

A presentation was made before the committee by officials of IIT Kharagpur, including the Chairman JEE 2006, to explain in detail the procedure used in determining the cut-off marks in JEE 2006. The procedure was also given in writing along with sample calculations based on the actual data of JEE 2006 (attached as Annexures B-G). A demonstration of the computer program implementing the above procedure and using the actual JEE 2006 data, was made before the committee. The results obtained from this demonstration were found to be the same as reported in the Annexures. The committee also examined the computer program used in the demonstration and found that it was as per the procedures reported in the Annexures. The committee was satisfied that the procedures outlined in the Annexures are systematic and complete. The committee also verified that these procedures give the actual cut offs in JEE 2006 for all the subjects, including Chemistry, and also the aggregate cut offs, as reported in the RTI disclosure."

- 10. The division bench considered the said reports and the contentions of the parties and by impugned order dated 6.1.2010 held that it was unable to grant any relief to the first appellant as it was not inclined to sit over the wisdom of the body of experts and the appellants had not made out any malafides. It also noted that the procedure adopted in 2007 and 2008 was more transparent and simple than the selection process of 2006 and the JAB had made an effort after JEE 2006 to ensure that the candidates get a clearer picture, demonstrating that there were no possibilities of any unfair means in the process of selection. The said judgment is challenged in this appeal by special leave.
- 11. The question for consideration is whether the procedure adopted by the Board to arrive at the cut off marks for JEE 2006 is arbitrary and mala fide and whether the High Court ought to have interfered in the matter.
- 12. Learned counsel for the appellants submitted that the minutes of the meeting of JAB 2006 held on 17.9.2005 which laid down the procedure for holding the JEE 2006, furnished by the respondents, did not contain the cut off procedure for JEE 2006. It was submitted that the cut off procedure which was fixed before the examination was repeatedly changed after the

examination and that the two different versions given by the Board at different points of time demonstrated that none of the procedures showed 55% as the chemistry cut off marks; that the procedure adopted was full of errors and defects; and that if the iterative procedure explained by the Board was implemented correctly, the effect would be to increasing the Maths cut off marks from 37 to 42 and decreasing Physics cut off marks from 48 to 44 and Chemistry cut off marks from 55 to 51. It was also contended that the Chemistry cut off marks were probably manipulated to exclude appellant No.1 from the JEE merit list as Prof. S.K. Dube, Chairman, Joint Admission Board 2006 (then Director, IIT, Karagpur) and Prof. V.K.Tiwari, organizing Chairman, JEE 2006 had a personal grudge against the second appellant who was a Professor of Computer Science and Engineering at IIT, Kharagpur.

13. On the other hand the respondents submitted that the IIT-JEE examination is time tested and world renowned and has produced some of the brightest brains of India who have excelled in fields even apart from engineering and technology such as civil services, management etc; and entrance examination is held in high regard for its transparency and objectivity. It was submitted that the JAB and the organizing Institute had ensured that all steps were taken to maintain the confidentiality of the

process as well as the identity of the candidates and for that purpose used a bar code on the left and right hand side of each OMR sheet and it was not possible to prejudice a particular candidate by any manual process. It was further submitted that the calculation of the cut off marks had been done on the basis of the procedure adopted by the Board in a completely transparent and objective manner; and there was no possibility of any manual intervention in either the calculation of cut off marks or in calculation of marks of any individual student.

14. It is no doubt true that the simplest and most straight forward method of selecting the candidates to be called for counseling would be to take the candidates in the order of merit (with reference to actual marks) subject to their possessing a pre-declared minimum marks in each subject. For example the Board can decide beforehand that the aggregate cut off marks for eligibility would be 150, that is 50 in each of the three subjects and prepare a merit list of the candidates who fulfil the said criteria and then call the first 5500 students in the merit list, in the order of merit for counseling. This would be the traditional method.

15. But the Board wants to select candidates with consistent performance in all three subjects. To achieve this result and shortlist about 5500 candidates from out of 287564 candidates, the above mentioned traditional procedures will not be of assistance. Therefore, a rather complicated but scientific procedure has been followed. We may at this juncture set out the *Evaluation procedure* for JEE 2006 and the *Procedure for cut-off determination in JEE 2006* done by iterative process, followed by the Board.

## "Evaluation Procedure for JEE 2006

Joint Entrance Examination (JEE) conducted by the IITs for admission to the Under-graduate course in all the seven IITs, IT-BHU and ISM Dhanbad is considered to be the best and the toughest admission test in the world. This is primarily intended to attract the brightest of the young minds for education and research in engineering and technology in India.

Joint Entrance Examination (JEE)-2006 was conducted on 9<sup>th</sup> April 2006 was one stage of examination as approved by the Joint Admission Board (JAB). In this examination, there were three question papers namely Mathematics, Physics and Chemistry. Each question paper was objective type in nature to test the aptitude and comprehension ability of the candidates. Each question paper is a question-cum-answer book named as Question Paper Booklet (QPB). This question paper booklet has questions with a space for rough work and the answer sheet which is a machine gradable bar coded OMR sheet attached to the question paper at the end.

This OMR has two parts i.e. Left Hand Side and Right Hand Side with codes on both the side.

After the examination, the question paper booklets are collected from the candidates and submitted to the respective Institutes by the representatives of that Institute. The evaluation procedure is as follows:

 This question paper booklet centre wise is given to different Professors who are named as Chief Coder/coders. For each subject one Chief coder along with 10-12 coders are involved. Depending upon the number of candidates the total numbers of coders vary from Institute to Institute.

- Under the strict supervision of all the Chief coders, the coders separate the OMR Sheet from each of the question paper booklets and arranged them in the prescribed manner.
- These sheets are then separated into two parts i.e. Right Hand Side and Left Hand Side and arranged in prescribed manner.
- Left Hand Side contains the personal data of the candidates including the Centre of Examination and his Registration No.
- Right Hand Side contains the response of the candidates which he has answered in response to each of the question. This response is given by bubbling the appropriate answer circle as specified.
- RHS and LHS of these OMR answer sheet are separately scanned for all the candidates. Accuracy and consistency in this process of scanning are verified with sufficient number of data points for each subject and at each IIT with the same machine and its setting. While compiling these marks, full secrecy about the identity of the candidates is maintained by the Bar Code already present in the RHS and LHS."

It may be mentioned that in order to maintain quality of the candidates getting admission in IITs/IT-BHU and ISM Dhanbad, the consistent performance in all three subjects is required. The candidates having marks equal to zero or negative in any one of the subjects are notconsidered for determining subject cut-off and ranking. Candidates having marks equal to one (1) or more in all three subjects are considered for determining cut-off and ranking.

# "PROCEDURE FOR CUT-OFF DETERMINATION IN JEE-2006:

- (i) For each subject, mean and standard deviation of the marks obtained are computed. For this computation only scores of those candidates who have secured minimum of 1 (one) mark in each of the three subjects have been considered.
- (ii) The cut-off marks of an individual subject is calculated as Cut-off mark of a subject =

Mean of the marks for the subject – Standard deviation of the marks for the subject.

The result has been rounded to the nearest integer.

(iii) The mean and standard deviation of the aggregate marks are calculated for those candidates who score at least one mark in each subject.

(iv) The aggregate cut-off mark is calculated as

Aggregate cut-off = marks – Standard

(Mean of aggregate

marks – Standard

deviation of

Aggregate marks)

rounded to

nearest integer

-- a

positive number.

The number selected for counseling (i.e. qualified in JEE-2006 for counseling) is 1.3 x the number of seats available in all participating Institutions. Each time 1 (one) mark is added to the mean-standard deviation of the aggregate marks and the number obtained is compared with the desired number. This process is continued until one arrives at the desired number to be called for counseling.

### PROCEDURE FOR RANKING:

Based on the cut-off marks in the individual subjects as well as aggregate marks in the Examination, a common merit list will be prepared without any relaxed criteria. In addition, separate merit lists of candidates belonging to SC, ST and PD categories will be prepared with different relaxed norms relevant to their categories. While preparing these merit lists, if a candidate belongs to more than one category of relaxed norms, he/she shall be considered only in the category in which he/she gets the maximum benefit. There will not be any separate list of wait listed candidates.

## PROCEDURE FOR THE BREAKING:

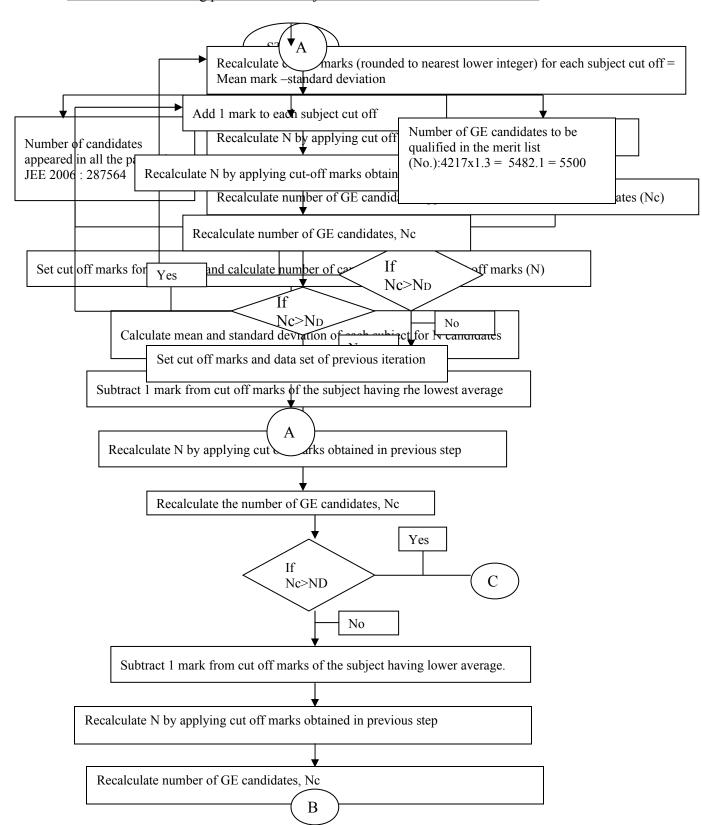
Tie-breaking criterion adopted for awarding ranks to the candidates who have scored same aggregate marks is as follows:

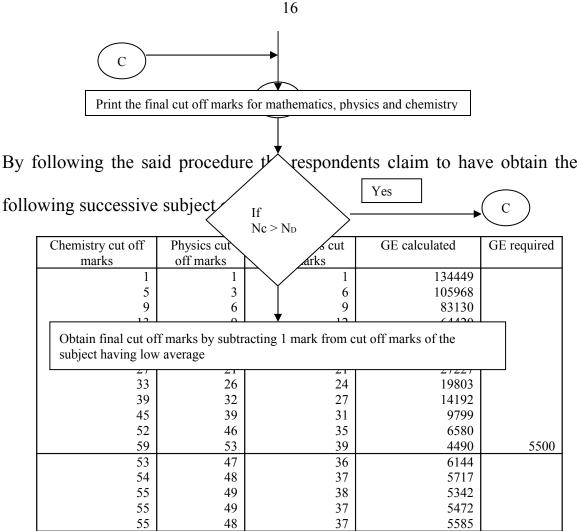
For each subject, the mean mark will be calculated on the basis of marks obtained by those candidates who have appeared in all three subjects. A candidate will be ranked higher, if he/she has scored higher marks in the subject having the lowest mean marks. If two or more candidate scored the same marks in the above mentioned subject, then the marks of the subject



with second lowest mean marks will be used for breaking the tie. Candidates scoring the same marks in all three subjects will be given the same rank."

"Flow Chart illustrating procedure for subject cut off determination of JEE 2006





Thereafter taking the data set of the 5585 candidates shortlisted as per the subject cut off process, the aggregate cut off is determined by the following iterative process:

"Initially the cut off mark is taken as 1 and on that basis calculate the number of candidates satisfying the cut off marks. As against the total of the candidates who had secured one mark each in each of the 3 subjects the candidates were found to be 134449. Thereafter the mean in regard to each subject is calculated by dividing total number of marks secured by each candidate in a particular paper and then dividing the number of candidates who appeared for the paper. This gives the mean. Then the standard deviation is arrived at by adopting the formula

$$\mathbf{S} = \begin{bmatrix} \frac{\sum (X - M)^2}{n-1} \end{bmatrix}$$
 Standard Deviation = s, Mean = X, Individual marks = M, Number of Student = n.

Then the idea is to reduce the number from 134449 to around 5500. The cut off marks were recalculated for each subject by adopting the formula of cut off marks being mean marks less standard deviation of the marks and rounding it off to the lowest integer. Then if the number is still more, again calculate by applying the cut off marks procedure with reference to the reduced number. By this process the cut off marks have been arrived at in regard to each subject for 5585 which was nearest to 5500. Thereafter taking the data set of the said 5585 shortlisted the aggregate cut off was determined by following iterative process:

- "Step 1 Total desired number of candidates to be called for counseling (including SC,ST and PD candidates)  $\geq$  6307 (NTD). This number is disclosed in the Counseling Brochure sent to all the qualified candidates
- <u>Step 2</u> Take dataset (N) obtained after arriving at the final subject cutoff marks.
- Step 3 Calculate Mean and Standard Deviation of the aggregate marks for dataset N.
- Step 4 Calculate aggregate cut-off of GE candidates by the formula: Aggregate cut-off (171) = mean of aggregate marks (212.555) – standard deviation of aggregate marks (41.30975).

(Note: The value was rounded off to the nearest lower integer)

Step 5 Calculate cut-off marks of SC/ST, PD by the formula:
Subject cut-off of SC/ST = 0.3 x subject cut-off of GE candidates
Aggregate cut-off of SC/ST = 0.6 x aggregate cut-off of GE candidates
Subject cut-off of PD = 0.8 x subject cut-off of GE candidates
Aggregate cut-off of PD = 0.9 x aggregate cut-off GE candidates

- <u>Step 6</u> Use subject cut-off and aggregate cut-offs for all categories to obtain the total desired number, NTD.
- Step 7 Calculate total numbers of candidates, NT.
- Step 8 If NT < NTD, decrease GE aggregate cut-off by 1 mark and go to step 4.
- Step 9 If  $NT \ge NTD$ , Print NT with all categories. The calculation is stopped."
- 16. For a layman, the above procedure may appear to be highly cumbersome and complicated. But the object of the aforesaid procedure for arriving at the cut-off marks is to select candidates well equipped in all the three subjects, with reference to their merit, weighed against the average merit of all the candidates who appeared in the examination. The fact that the procedure was complicated would not make it arbitrary or unreasonable or discriminatory.
- 17. There are several statistical methods of preparing the ranking for purpose of selecting the best candidates for admission to a course, some simple and some complex. Each method or system has its merits and demerits and can be adopted only under certain conditions or by making certain assumptions. Any such statistical techniques should be under continuous review and evaluation to achieve improvement, in the light of

experience gained over the years and new developments, if it is a reliable tool in the selection process.

18. In Maharashtra State Board of Secondary and Higher Secondary Education v. Paritosh Bhupeshkumar Sheth [1984 (4) SCC 27] it was observed thus:

"...the Court should be extremely reluctant to substitute its own views as to what is wise, prudent and proper in relation to academic matters in preference to those formulated by professional men possessing technical expertise and rich experience of actual day-to-day working of educational institutions and the departments controlling them."

In *All India Council for Technical Education v. Surinder Kumar Dhawan* [2009 (11) SCC 726] this court held:

"The courts are neither equipped nor have the academic or technical background to substitute themselves in place of statutory professional technical bodies and take decisions in academic matters involving standards and quality of technical education. If the courts start entertaining petitions from individual institutions or students to permit courses of their choice, either for their convenience or to alleviate hardship or to provide better opportunities, or because they think that one course is equal to another, without realizing the repercussions on the field of technical education in general, it will lead to chaos in education and deterioration in standards of education. ..... The role of statutory expert bodies on education and role of courts are well defined by a simple rule. If it is a question of educational policy or an issue involving academic matter, the courts keep their hands off. If any provision of law or principle of law has to be interpreted, applied or enforced, with reference to or connected with education, the courts will step in."

(emphasis supplied)

This Court also repeatedly held that courts are not concerned with the practicality or wisdom of the policies but only illegality. In *Directorate of Film Festivals v. Gaurav Ashwin Jain* [2007 (4) SCC 737] this court held:

"....Courts do not and cannot act as appellate authorities examining the correctness, suitability and appropriateness of a policy, nor are courts advisors to the executive on matters of policy which the executive is entitled to formulate. The scope of judicial review when examining a policy of the Government is to check whether it violates the fundamental rights of the citizens or is opposed to the provisions of the Constitution, or opposed to any statutory provision or manifestly arbitrary. Courts cannot interfere with policy either on the ground that it is erroneous or on the ground that a better, fairer or wiser alternative is available. Legality of the policy, and not the wisdom or soundness of the policy, is the subject of judicial review..."

(emphasis supplied)

19. Thus, the process of evaluation, the process of ranking and selection of candidates for admission with reference to their performance, the process of achieving the objective of selecting candidates who will be better equipped to suit the specialized courses, are all technical matters in academic field and courts will not interfere in such processes. Courts will interfere only if they find all or any of the following: (i) violation of any enactment, statutory Rules and Regulations; (ii) mala fides or ulterior motives to assist or enable private gain to someone or cause prejudice to anyone; or where the procedure adopted is arbitrary and capricious. An

action is said to be arbitrary and capricious, where a person, in particular, a person in authority does any action based on individual discretion by ignoring prescribed rules, procedure or law and the action or decision is founded on prejudice or preference rather than reason or fact. To be termed as arbitrary and capricious, the action must be illogical and whimsical, something without any reasonable explanation. When an action or procedure seeks to achieve a specific objective in furtherance of education in a bona fide manner, by adopting a process which is uniform and non-discriminatory, it cannot be described as arbitrary or capricious or mala fide.

20. The appellants in this case have alleged mala fides on the part of Chairman of the Board and Chairman of the Organising Committee. The allegation is that on account of personal enmity, rivalry and hostility harboured by them towards the second appellant, who happens to be a professor at IIT, Kharagpur, they manipulated the ranking and selection process and deliberately set cut-off marks to deny admission to second appellants' son, a seat in an IIT. The appellants have not made out, even remotely, any such motive, in regard to the procedure for arriving at the cut-off marks. The claim that to deny admission to one student from among more than 2,87,000 students, they manipulated the process of fixing cut-off

marks is too far fetched and difficult to accept, apart from the fact that there is no iota of material to support such a claim. It is too much to assume that where nearly three lakhs candidates appeared, a particular procedure was adopted to ensure that a particular candidate failed. It would appear that somewhat similar procedure was adopted in the year 2000 and 2001. The iterative procedure involving mean and standard deviation of the scores, similar to JEE 2006 was followed in JEE 2001. The object of the entire exercise was to ensure a balanced selection among the candidates who participated in the examination. IIT-JEE is a renowned examination trusted by the entire student world. It is not only a difficult examination to pass, but a difficult examination to rank and select the best of candidates having good knowledge in all three subjects.

21. The appellants next contended that the first appellant had obtained 231 marks and he had been found to be unsuitable whereas candidates who got 154 were found suitable, this was absurd and illogical. There is nothing illogical about the process. The minimum aggregate cut off was 154. The minimum cut off for individual subjects was 37, 48 and 55 for Maths, Physics and Chemistry. If a candidate had secured the minimum in three subjects and had also secured the minimum of the aggregate which was only 154, he becomes eligible; whereas a candidate who got 231 in the

aggregate but does not get the minimum cut off marks in one of the subjects (as for example the first appellant who got only 52 which is less than the cut off of 55), naturally cannot be qualified. Even in standard traditional examinations, if total maximum marks was 600 (in six subjects) and minimum marks in each of the six subjects was 35 out of 100, a candidate who may secure 482 marks (that 90% in five subjects, but secures only 32 marks in one subject, will be considered as failed, whereas a person who secures only 210 marks (that is 35 marks in all the six subjects) will be considered as passed. Where minimum performance in all the subjects is also relevant, a person who fails to get the minimum cut off marks in one subject, cannot contend that he had secured very high marks in other two subjects and therefore injustice has been done. All procedures when standardized, result in some kind of injustice to some or the others. That cannot be helped.

22. The next complaint was about the procedure adopted based on variable cut-offs instead of pre-declared fixed cut-offs. Where a huge number of candidates (more than 287,000) have participated in an examination, for filling about 5500 seats, and it becomes necessary to select candidates possessing comparatively better proficiency in all three subjects, the traditional methods of short-listing may not be of assistance. The

traditional methods would result in the candidates who have done extremely well in one subject or two subjects but have little or no proficiency in the third subject to steal a march over candidates who have done uniformly well in all the three subjects. For example, in the traditional method where 40% are the minimum marks required to be scored in each subject, a candidate who just gets 40% in Maths and 40% in Physics and 91% in Chemistry, would be eligible and as his total marks are 171, will get admitted in preference to a candidate who did uniformly well and secured 52 marks in Maths, 53 marks in Physics and 65 marks in Chemistry whose total is 170 marks. The result is that a candidate who is comparatively poor in Maths and Physics, secures a seat by virtue of his good performance in Chemistry, in preference to a candidate who has done uniformly well in all subjects. The traditional procedure may not therefore help in securing candidates who do well in all subjects. If one has to choose the candidates with good performances in all subjects, with the average of the performance of all the candidates who participated in a given examination as the benchmark, it is necessary to apply the more complicated mean and standard deviation methods.

Let us take another illustration. Assume that Maths was a very tough subject and many would have failed if 40% was to be the minimum marks to pass in the

examination. Candidates who secured 38% or 39% in Maths will fail, though their performance in Maths was reasonable and even if they had secured 70% in both Physics and Chemistry. By adopting mean and standard deviation methods, the Board does not start with a set of uniform minimum passing marks but arrives at different minimum marks for different subjects, depending upon the overall performance of all candidates in a given subject, and enables selection of those who have done comparatively and uniformly well in all subjects. That is how, for example, JEE-2006, the cut-off marks were arrived at 37, 48 and 55 for Maths, Physics and Chemistry. This method ensured that those who have done reasonably well in Maths, when compared with the overall majority, got selected in spite of the fact that if the minimum marks had been prescribed as 40%, they would have failed. It enabled candidates who got good marks in Physics and Chemistry (Say 80%) but got only 38% or 39% in Maths, to get selected, in preference to a candidate who secured a mere 40% in all three subjects. In the traditional method, the candidate with 39%, 80% and 90% would have been unsuccessful and person with 40%, 40% and 40% would have been successful. The cut-off marks in Maths being fixed at 37% (instead of the traditional minimum of 40%) enabled the students who have done better in other streams to have a reasonable chance of getting admitted. The procedure though complicated, sought to achieve a more balanced selection when compared to the traditional methods. It was neither arbitrary nor capricious.

- 23. The appellants next contended that different versions of the procedure adopted for arriving at the cut-off marks was given at different stages, and this made the entire exercise doubtful. On a careful examination we find that what were given were not different versions, but better or more detailed disclosure of the same process or procedure. Apparently the Board was not initially willing to disclose the entire process. The RTI Act had just come into force and the apparent tendency initially was to give the minimum information. Subsequently when pressed, the Board has come out with complete disclosure of the process adopted.
- 24. It is true that the procedure for ranking by IIT-JEE has not been uniform. Some years, variable cut-off marks were adopted and some years fixed minimum marks were adopted. In JEE 2000 and JEE 2001, there was independent cut off for each subject and also for the aggregate, as in JEE 2006. In JEE 2004, the qualifying criteria and the ranks in the screening tests were based on the total marks scored and there were no individual subject cut off marks. A common merit list was prepared based on the performance in individual subjects as well as aggregate in the main examination. In JEE 2005, the qualifying criteria and the ranks in the screening tests were based on the total marks scored and there were no individual subject cut off marks. In JEE 2006 there were independent cut off marks for each subject and also

for the aggregate, and the cut off procedure was not disclosed before the JEE examination. However in JEE 2007 and JEE 2008 subject cut off procedure was made available to the public through the JEE website before the JEE examination. During JEE 2007, the subjects cut off were determined on the basis that top 80% candidates qualified in each subject (that is 1, 4 and 3 in Mathematics, Physics and Chemistry and aggregate cut off was 206). During JEE 2008, the subject cut off was 5, 0 and 3 in Mathematics, Physics and Chemistry and aggregate cut off for common merit list was 172. The subject cut off procedure ensured the number of candidates above each subject cut off were exactly the same. In the year 2009 the subject cut off for General category was 11, 8 and 11 for Mathematics, Physics and Chemistry (out of 160 each) and the aggregate cut off was 178. The cut off marks (that is the minimum qualifying marks for ranking (MQMR) is arrived at by computing the average of the marks secured by all the candidates for each of the three subjects. In the year 2010 also the subject cut off were based on the average of the marks secured by all candidates in each subject. This would show that there is a gradual evolution in the process of standardizing ranking, leading to improvement and stabilization of the procedure.

- We may note that even now many feel that the current pattern of IIT-25. Joint Entrance Examination, has failed to ensure the selection of best among the aspirants. They feel that that coaching classes have given several candidates of limited ability an edge over others, by training them to answer the multiple choice questions and get through, thereby blocking the chances of better candidates with deeper understanding of concepts and analytical skills required for a course of study at IITs. They also suggest that weightage should be given to class XII marks, in selection to IITs, so that the coaching class culture is discouraged. On the other hand coaching centres contend that the improve the skills of the candidates and make them ready for the undergoing the tough course. There are those who are satisfied with the existing system and those who find several faults with it. All that can be said is that the selection process requires to be upgraded and fine tuned year after year with periodic changes in the process, so that the selection process and examination remain relevant and meaningful. But all aspects connected with the process are technical falling within the purview of the professional experts in charge and the role of the courts is very limited.
- 26. The procedure adopted in JEE 2006 may not be the best of procedures, nor as sound and effective as the present procedures. In fact the

action taken by the appellants in challenging the procedure for JEE 2006, their attempts to bring in transparency in the procedure by various RTI applications, and the debate generated by the several views of experts during the course of the writ proceedings, have helped in making the merit ranking process more transparent and accurate. IITs and the candidates who now participate in the examinations must, to a certain extent, thank the appellants for their effort in bringing such transparency and accuracy in the ranking procedure. But there is no ground for that Courts to interfere with the procedure, even if it was not accurate or efficient, in the absence of malafides or arbitrariness or violation of law. It is true that if in JEE 2006, a different or better process had been adopted, or the process now in vogue had been adopted, the results would have been different and the first appellant might have obtained a seat. But on that ground it is not possible to impute malafides or arbitrariness, or grant any relief to the first appellant. Therefore, the appellant will have to be satisfied in being one of the many unsung heroes who helped in improving the system.

27. We find no reason for interfering with the order of the High Court. The appeal is dismissed.

	(D. V. Payaandran)	
	(R V Raveendran)	
New Delhi;	J.	
October 11, 2011.	(A K Patnaik)	