



भारतीय प्रौद्योगिकी संस्थान, कानपुर  
INDIAN INSTITUTE OF TECHNOLOGY, KANPUR  
कुलसचिव कार्यालय एवं सचिव शिक्षा-परिषद  
OFFICE OF THE REGISTRAR & SECRETARY SENATE

Phone: 0512-, 2597385(O)  
2598280 (R)

FAX: 0512-2590465 Email: sachan@iitk.ac.in

Acting Registrar & Secretary Senate

No.R/S-MINUTES/IITK/2011-12/160  
May 09, 2012

**To: All Members and Special Invitees of the Senate and also to all faculty who are not members of the Senate.**

**Subject: Minutes of the 2011-12/3<sup>rd</sup> (Special) meeting of the Senate held on 05<sup>th</sup> May 2012 at 1030 hrs in the L-17, Lecture Hall complex of the Institute**

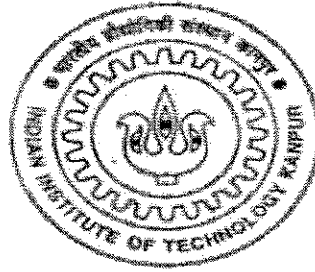
I am forwarding herewith a copy of the Minutes of the 2011-12/3<sup>rd</sup> (Special) meeting of Senate held on 05<sup>th</sup> May 2012 for your information and comments. Comments, if any may please be sent to the undersigned by 16<sup>th</sup> May 2012.

**R K Sachan  
Acting Secretary, Senate**

Prof. \_\_\_\_\_

IIT Kanpur

**INDIAN INSTITUTE OF TECHNOLOGY, KANPUR**



# **SENATE**

## **MINUTES OF THE 2011-12/3<sup>rd</sup> (Special) MEETING**

**DATE : May 05, 2012**  
**TIME : 1030 hrs.**  
**VENUE : L-17, Lecture Hall Complex,  
IIT Kanpur**

---

## INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

Minutes of the 2011-12/3<sup>rd</sup> (Special) meeting of the Senate  
held on Saturday, May 05, 2012 at 1030 hrs.  
in L-17, Lecture Hall Complex, IIT Kanpur.

### CONTENTS

SL. NO.	ITEM NO.	DESCRIPTION OF ITEMS	PAGE NO.
1	1	To confirm the minutes of the – 2011-12/2 <sup>nd</sup> (Special) meeting of the Senate held on 18.4.2012	1
2	2	To finalize the views of the Senate in connection with the proposed common National Test and onward transmission to IIT Council.	1

## INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

### Minutes of the 2011-12/3<sup>rd</sup> (Special) meeting of the Senate held on Saturday, May 05, 2012 at 1030 hrs. in L-17, Lecture Hall Complex, IIT Kanpur.

At the outset, the Chairman, Senate welcomed all the members present and called the meeting to order.

<b>Item No. 1</b>	<b>To confirm the minutes of the – 2011-12/2<sup>nd</sup> (Special) meeting of the Senate held on 18.4.2012</b>
-------------------	-------------------------------------------------------------------------------------------------------------------------

The Senate Confirmed the Minutes of the 2011-12/2<sup>nd</sup> (Special) meeting of the Senate held on April 18, 2012.

<b>Item No.2</b>	<b>To finalize the views of the Senate in connection with the proposed common National Test and onward transmission to IIT Council.</b>
------------------	---------------------------------------------------------------------------------------------------------------------------------------------

Chairman, Senate outlined the views of the previous meetings of the Senate held on February 15, 2012, April 10, 2012 and April 18, 2012 respectively, in regard to the proposed Common National Test.

Chairman, Senate requested the Dean, Academic Affairs to present the Report of the Sanghi Committee and also to present a brief summary of the discussions held on May 02, 2012, during Open House discussion of faculty members.

Prof. Dheeraj Sanghi, Dean, Academic Affairs briefly outlined the two reports (Placed at Appendices 'A' and 'B').

On request of Chairman, Senate Prof. S C Srivastava, Chairperson of the Open House discussion of faculty members meeting, highlighted the important discussions held during the meeting.

Convener, Students' Senate, also presented the views of the students discussed during the Open House on May 04, 2012. (A report is placed at Appendix 'C'.)

Discussions followed after the presentation of these reports.

After detailed discussions, the Senate expressed that the following views concerning the proposal of a Common National Test and IIT-JEE be forwarded to IIT Council.

1. Admission to IITs, for the year 2013, will be through the IIT-JEE in its current format. Any minor change can be done by the Joint Implementation Committee (JIC) and Joint Admissions Board (JAB), as has been happening from time to time.

2. The eligibility for IIT-JEE-2013 should continue to be 60 percent and 55 percent, depending on the category of the student, for those who gave 12<sup>th</sup> class examination in 2012 so that they are not affected in any way by the change. However, those students who will appear for the Board Examination in 2013, the eligibility for appearing in IIT-JEE may be decided on percentile terms. Final decision about the issue of considering the Board performance in percentile form should be taken by JAB.
3. IIT Kanpur desires to have a two-stage process for admission from 2014. It is agreed that in principle, the first stage (screening) could be the Common National Test, and the second stage should be JEE conducted by IIT system.
  - (i) Chairman, Senate shall appoint a committee which will interface with the group responsible for the Common National Test. The committee shall provide inputs about what may be tested (for example, aptitude, language and verbal abilities, etc., beyond Physics, Chemistry, and Mathematics). This committee shall identify expertise within the Institute and coordinate the contributions of IIT Kanpur towards the Common National Test.
  - (ii) The decision of using the Common National Test as a screening test for JEE conducted by IIT system will be re-affirmed by Senate in July 2013 based on the feedback by this committee.
4. When a two-stage admission process is implemented, JAB should decide the format of the JEE, the number of candidates to be permitted, and other operational details.
5. Even when two-stage admission process is implemented, the ranking for the purpose of admission shall be only based on performance in JEE. No weight is to be given to national test and/or board performance in ranking.
6. IIT Kanpur would be willing to provide necessary help and expertise, primarily in academic matters, to develop a high quality national test in the country.

Further, Senate desired that a committee be appointed that shall interface between the Senate and the Joint Admissions Board. The committee shall seek views of faculty and students on a continuous basis, and provide inputs to Joint Admissions Board through Senate, IIT Kanpur, on improvements to JEE. All recommendations of Sanghi Committee which are meant to be discussed within IIT Kanpur or within JAB, shall be forwarded to this new committee. The tenure of this committee shall be initially for two years, till JEE 2014 has been conducted.

The meeting ended with vote of thanks to the Chair.

**Sd/-**  
**Sanjay G Dhande**  
**Director & Chairman Senate**

**Dated: 09.05.2012**

**Copy to:** 1) All members and Special Invitees of the Senate for their information, record and comment(s), if any.

*R K Sachan* 2) All faculty, who are not members of the Senate, for their information only.

**R K Sachan**

Acting Registrar & Secretary Senate

0

2416

INDIAN INSTITUTE OF TECHNOLOGY KANPUR  
ACADEMIC SECTION

To,  
Chairman, Senate  
IIT Kanpur

Secretary Senate  
Kindly put up for the  
consideration of Senate

Date: - 03-05-2012

Shande  
4-5-12

Dear Sir,

Please find attached the report of the committee that was set up to suggest changes to undergraduate admissions through JEE.

Some of the recommendations, which Senate may consider forwarding to IIT Council, are summarized below:

- Admission in 2013 through Joint Entrance Examination in the current format
- Eligibility with respect to 12<sup>th</sup> class performance to change from percent to percentile, subject to availability of complete data in 2012.
- From 2014, only ISEET test score (without board marks) to be used for screening, subject to availability of results by 30<sup>th</sup> April.
- JEE to be held in May for short-listed candidates, this is 5 to 10 times the number of seats available in IITs.
- Rank of the candidate for admission to IITs to be based solely on the basis of performance in JEE.
- JEE format to be decided by JAB. May include some questions with descriptive answers.
- IIT Kanpur should provide necessary help and expertise to make ISEET a high quality national test.

Sincerely,

Dheeraj Sanghi  
Dheeraj Sanghi  
DOAA 4

**Report of the Committee to suggest reforms in UG admissions**  
May 3<sup>rd</sup>, 2012

The committee had submitted its preliminary report on 17<sup>th</sup> April, 2012. The report suggested a large number of options, which were broadly classified into three groups. These three classes were:

1. Exclusive use of ISEET for admission.
2. Exclusive use of JEE for admission.
3. Combined use of ISEET and JEE for admission.

The committee requested Senate to provide guidelines on what options should this committee pursue for its final proposal. During the discussion in the Senate, there were divergent views about these options. However, it appeared that the preference was to continue JEE for UG admissions in 2013, and starting next year (2014), using ISEET as a screening test, followed by a changed format of JEE for a smaller number of candidates.

Since the views were divergent, and also Senate desired to get an input from all faculty members and students, it was decided that two discussions be organized – one with all faculty, and the other with all the students. The first discussion was organized on 2<sup>nd</sup> May, 2012. It was attended by about 30 faculty members, but only about 10 non-Senators attended the same. The views expressed in the meeting have been taken into account while preparing this report. The second discussion is being organized on 4<sup>th</sup> May, 2012, where all students are invited. Since the Senate meeting is on 5<sup>th</sup> May, 2012, the committee felt that feedback from that meeting could be directly presented on the floor of the Senate, instead of delaying this report further.

The committee has had two more meetings since the submission of its preliminary report. They were held on 27<sup>th</sup> April, and 2<sup>nd</sup> May, respectively. The committee notes that its recommendation falls into three categories. The overall structure and a few operational details (without which the structure will not be practical) need to be submitted by Senate to IIT Council. There are some additional operational details which, if Senate agrees, should be suggested to JAB for their consideration and implementation. And lastly, there is one recommendation which committee believes will improve the quality of admissions, but requires wider consultation in a more formal way, both within the institute, and across IITs. We have pointed out these distinctions below while making specific recommendations.

It may be noted that the acronym "ISEET" has been used for the national test as described in the IIT Council document of 4<sup>th</sup> April, 2012, even though that document uses the acronym "JEE" for the national test. This is only to distinguish between the national test and the IIT test. Further, "ISEET" in this document only refers to the performance in the test, without consideration of the board marks. It is also understood that all details of ISEET are not frozen yet, and there may be more changes in the future, not just for the first ISEET exam in 2013, but even beyond that. The committee has only

proposed use of ISEET as a screening test for JEE. The committee has also suggested that IIT Kanpur (and IIT system, in general) remain involved with evolution of ISEET so as to make sure that it remains relevant to us as a screening test. However, if in future, ISEET changes itself in a manner that it seriously impacts the quality of admission in IIT Kanpur, the Senate should relook at the situation at that time.

### JEE 2013

The Joint Entrance Examination should take place in 2013 largely in the same format as has been happening in recent years. Any minor change can and should be done by the Joint Implementation Committee (JIC) and Joint Admissions Board (JAB), as has been happening from time to time.

However, the committee suggests one change regarding the eligibility based on 12<sup>th</sup> class board marks. Currently, that eligibility stands at 60 percent and 55 percent, depending on the category of the student. The eligibility condition should be based on a normalized score (like percentile). Many people hold the view that percentile scores are not comparable across the boards. The committee appreciates that view, but believes that comparing scores in percent terms is worse than comparing scores in percentile terms. A change should not be rejected simply on the basis that the new system is not perfect. What needs to be discussed is not the perfection of the new system, but whether the new system is better than the existing system.

However, this should be considered only if we can get complete data from all boards in 2012, which enables us to study the normalized marks of all JEE selected candidates in 2012. If such data can not be made available in 2012, then this change should not be considered for 2013.

In case complete data can be obtained at least for all selected candidates, JEE could look at the percentile scores of all selected candidates in a particular category. It should then find out the lowest percentile score amongst all selected candidates (only those who had more than 60 percent or 55 percent marks). The eligibility for 2013 should be 60 percent for those who gave 12<sup>th</sup> class examination in 2012 so that they are not affected in any way by the change. For those who give 12<sup>th</sup> class examination in 2013, the eligibility should be in percentile terms, and same percentile score as the lowest percentile score amongst the selected candidates of that category in JEE 2012. It should also be announced that for JEE 2014, this eligibility condition may be increased by JAB. This announcement should be made prior to the 12<sup>th</sup> class examinations in 2013. The implication of this would be that someone not performing too well in the 12<sup>th</sup> class in 2013 may be allowed to give JEE in 2013, but not in 2014.

The eligibility condition should be considered every year by JAB, and minor changes may happen to it from year to year. The principle should be that the eligibility based on 12<sup>th</sup> class marks should not be so low that every one selected in JEE is above that cutoff.



At the same time, it should not be so high that a good student selected by JEE should fall prey to the poor-quality grading by the boards.

The committee also suggests another significant change in terms of counseling. *At the time of admission, the student should be admitted to the Institute, and not to a specific program.* It has been felt that it is not fair to assign programs based on an exam where 50 to 100 students may get different ranks on the same total score. The "error margin" is too high to justify such fine grained counseling. The Institute should try to convince other IITs through IIT Council, JAB, or any other forum, of not allocating programs at the time of admission. However, if all IITs do not agree to this, IIT Kanpur should still go ahead and do it for students admitted to IIT Kanpur.

The allocation of program should be at the end of first year, and should be based on both the performance in JEE, and the performance in the first year at IIT Kanpur. By giving weight to JEE performance, it will be ensured that higher ranked students will have a higher probability of getting their choice at the end of the first year.

The committee recognizes that if IIT Kanpur were to go alone in this, it will find it difficult to attract students with top ranks in JEE. Perhaps very few students in the top 500 ranks will join the Institute. (But it will depend on the weight that the final proposal gives to JEE performance.) But such a proposal will attract a large number of middle rankers, since they will now have a chance to get a program of their choice, which they cannot get in other IITs. More importantly, the first year students will continue to focus more on academics. Currently, it is felt that the students lose momentum after selection in JEE, and by the time they realize their folly, it is often too late. And, of course, if other IITs also agree to this either jointly or at a later date after looking at our experiment, it will go a long way in reducing stress of JEE amongst the 12<sup>th</sup> class students. It will also focus our attention on how to creatively deal with the common core. The committee believes that the advantages of such a system are far too many and more than adequately compensate for the loss of some students from the top 500 ranks that may happen as a result.

There are many details that will need to be worked out, and if Senate agrees with this idea in principle, then a committee may be formed to frame a specific proposal and seek wider consultation on that proposal from students and faculty in the Institute. The committee hopes that this proposal will finally be approved before September 2012 in order to implement it from JEE 2013 itself.

#### **Combined use of ISEET and JEE from 2014 onwards**

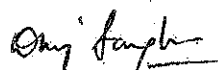
The committee proposes that the following process could be used starting 2014:


1. JEE shall be held around 15<sup>th</sup> May in each year.

2. For JEE 2014, there will be two screening tests: ISEET held in Nov/Dec 2013, and ISEET held in April, 2014.
  - a. However, April, 2014 ISEET will be a screening test, only if the result of this test is guaranteed to be declared by 30<sup>th</sup> April, 2014. JIC and JAB will monitor ISEET in April 2013 to decide whether it can be trusted that the results will indeed be available on 30<sup>th</sup> April. Otherwise, only ISEET of Nov/Dec 2013 should be used as a screening test.
  - b. While in the steady state, the number of candidates allowed to give JEE should be about 5 times the number of seats available in the IIT system, in the first year (2014), the number of candidates should be about 10 times the total number of seats. This is to ensure that we are not missing out on good students due to some issues with ISEET that we cannot predict as of now. Once, ISEET has established itself, and we have studied correlation between ISEET selections and JEE selections, and if we notice that most of our selections are from higher ranks in ISEET, JAB can decide to slowly decrease the number of candidate screened for JEE, and if everything goes smoothly, we shall reach a steady state of JEE candidates being five times the number of seats in the IIT system.
  - c. The number of candidates screened from two ISEETs will be in proportion to the number of candidates sitting for the two exams. However, if ISEET comes up with a standardized score, where by the performance of multiple exams can be compared; a cutoff based on this standardized score may be decided by JAB.
  - d. It is proposed that students selected for KVPY, NTSE, and International Olympiads be allowed to give JEE even if they don't sit for ISEET. JAB can decide on other screening methods.
3. A student is eligible to give JEE twice, once in the year of passing 12<sup>th</sup> class, and second, in the year following the year of passing 12<sup>th</sup> class. A student who is screened by ISEET in the year of passing 12<sup>th</sup> class, will not need to give ISEET the next year, and will still be able to give JEE in that year.
4. **The rank of the candidate will be based solely on the basis of performance in JEE.**
5. As proposed for JEE 2013, the eligibility in terms of board performance should be in terms of normalized score (percentile) and should be kept high enough that the candidates are required to pay some attention to the board exams, but not so high that poor grading practices of the board could cause harm to an otherwise good student. The exact cut-off will have to be determined by starting with a liberal cutoff, studying the data over the first few years, and if data permits, slowly

making the eligibility condition tighter. As mentioned above, this decision may be taken by JAB from year to year.

6. Since JEE will be held for a smaller number of candidates (maximum 1 lakh as opposed to 5-6 lakhs currently), it will allow IIT system to do it in a very different way. In particular, it would be possible to include questions which require a descriptive answer, as opposed to MCQ based test that we currently have. However committee cautions that the exact nature of test, and in particular, the number of questions with descriptive answers, should be based on the availability of resources within the IIT system for grading of the exam. This decision should be taken by JAB.
7. The committee also recommends that the setting of question papers for JEE may include experts from outside IIT system, and in particular, faculty members from IISERs. If possible from the confidentiality point of view, JIC should consider including one teacher involved with school level teaching (perhaps from NCERT) in the team that prepares the question paper.
8. While IITs should determine the number of candidates based on the intake of IIT system, if others (including other CFTIs) want to admit students from JEE, JIC and JAB may make the results available to them.
9. IIT Kanpur should provide all necessary help and expertise to make ISEET a high-quality national test. It is expected that most of the help is in advising the organizers of the national test. Any major commitment in terms of conduct of the exam should be based on the resources within the Institute that can be made available, without seriously affecting the teaching and research commitments.
10. The committee suggests that IIT Kanpur should impress upon the organizers of ISEET to include a component of Aptitude test, and create a system whereby the national test becomes a standardized test over a period of time.


  
(Dheeraj Sanghi)

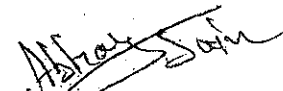
  
(SK Choudhary) 3.5.12

(Sanjay Mittal)

(V Ravishankar)

  
(P K Bhattacharya)

  
(Samir Khandekar)

  
(Abhay Jain)

Dr. Sanjay Mittal and Dr. V Ravishankar are not present in campus today. They have seen the final report, and given their consent on email.

Dheeraj Sanghi,  
3/5/12

**Open House to Discuss JEE Reforms: A Summary of Discussions**  
(May 2<sup>nd</sup>, 2012)

An open discussion session was organized to take the feedback from all faculty members on various options for under-graduate admissions in 2013 and beyond. This was organized in Room Number 101 of H R Kadim Diwan Building on 2<sup>nd</sup> May, 2012 at 11:00 AM. About 30 faculty members attended the session. However, only about 10 faculty members were non-Senators.

The undersigned chaired the meeting. However, since I had to leave after an hour, the summary is prepared based on notes taken by Prof. Sounak Chowdhury, Prof. Chandra Shekhar Upadhyay, and Prof. Dheeraj Sanghi.

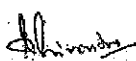
A draft note was circulated the previous evening by Sanghi Committee, which formed the basis for discussion in the open house.

The following points emerged:

1. In 2013, JEE should be conducted in the same way as it has been happening in recent years.
2. The majority view was that even the eligibility condition based on 12<sup>th</sup> class performance should stay at 60 percent in 2013, and percentile scores should be considered only in later years.
3. The suggestion to admit students to the Institute and not to a particular program (and assign programs after one year) should not be considered in isolation at IIT Kanpur. If other IITs agree to the same, then it may be considered. Some faculty members, who were willing to consider it suggested that a separate committee should be formed to first propose a specific method to assign program after one year, before any meaningful discussion can take place. A decision on this should be taken only after wider consultation has happened in the Institute.
4. While there was general agreement on a two-stage process for admission, but some concerns were raised:
  - a. It should be mentioned that only after ISEET in April 2013 has taken place, we will know what kind of exam it will be.
  - b. It was also suggested that we should have a significant say in ISEET if IITs were going to use it for screening.
  - c. On the other hand, it was pointed out that the faculty time at IIT Kanpur is precious, and to have a significant say would also mean asking faculty members to spend a lot of time for ISEET.
5. The timeline was a concern. It was pointed out that the two-stage process requires the ISEET result to be declared by 30<sup>th</sup> April. There is a lack of clarity on who is going to conduct this exam, and give the commitment of the timeline.
6. It was pointed out that holding 3 separate 2-hour exams in Physics, Chemistry, and Mathematics, with all questions requiring descriptive answers may not be

practical in today's context. Faculty members in these three departments may no longer be interested in spending 2-3 weeks in just grading JEE answer-books. And hence a mixed mode of exam will have to be thought of.

7. IISER faculty could be involved in setting up question papers for JEE. And we could make this suggestion to ISEET organizers also to involve IISERs.
8. If IITs will have a two-stage process for UG admissions, candidates who are selected in KVPY, NTSE, and International Olympiads, may also be considered eligible to write JEE, and need not go through ISEET. JAB may consider additional such qualifications for screening purposes.
9. It should be made clear to every one involved that ranking will be strictly based on JEE alone. It was stated that GATE has become an exam where MHRD has asked all Institutes to give at least 70 percent weight for PG admissions. There should not be any such directive in future to consider ISEET performance or board performance in ranking for admission to IITs.
10. Help to ISEET should mostly be in terms of advice. IIT Kanpur (and IIT system in general) can share the processes of JEE and give other advice to ensure that ISEET comes up as a fine national test, but should not have so much involvement with it that it starts affecting teaching and research of faculty members here.
11. There should be a group at inter-IIT level (perhaps reporting to JAB) which should, on an ongoing basis, keep making suggestions to improve JEE and the UG admission process.

  
(S C Srivastava)

Secretary Serate

Kindly put up for the consideration  
of Serate.

Shande

4-5-12

**Report based on the Students' Open House for Discussion on UG  
Admissions to IITs**

A discussion session was organized which was attended by some students and:

1. The Director, IIT Kanpur
2. The Dean, Students' Affairs
3. The Dean, Academic Affairs
4. JEE Chairman

The issue of JEE was discussed at length by the students and the faculty members present. With regard to the report from the committee setup under the chairmanship of Professor Sanghi, the following comments were made:

1. The students seconded the proposal that the eligibility criteria for JEE in terms of Board marks should be based on a percentile score rather than a fixed percentage, which is same across all boards.
2. Regarding no branch allocation during counseling, the idea was welcomed by the students that branch allocation could be done after the 1<sup>st</sup> year considering both the JEE rank as well as the performance of students in 1<sup>st</sup> year. However, a few concerns were raised regarding its consequences in terms of the extended stress period on students. An alternative suggestion was also made at this point that branch change criteria in the existing system can be made comparatively liberal to encourage students to study well in their 1<sup>st</sup> year, and also provide more flexibility in terms of the choice of branch.
3. The students agreed to the idea that JEE 2013 should be conducted as it is conducted nowadays with the only change that eligibility criteria should be in terms of a percentile score and not a percentage score from the Board exams.
4. For 2014, and onwards, the students in principle agreed to the idea of having ISEET as the screening exam for selecting candidates eligible to appear for main exam and then, a subjective mains exam should be held on this smaller set of students. The ranking should be solely based on the mains exam. This was agreed based on the assumption that ISEET would be more or less similar to the AIEEE exam as it is conducted now.
5. It was suggested that the mains paper should be a good mix of different types of questions testing different abilities of the students.

Regards,

*ABhntani*

AnkitBhutani

Convener, Students' Senate

Secretary Senate

Kindly put up for the  
consideration of Senate.

Shandhi

4-5-12.