

## Options for UG admissions

The committee appointed by Chairman, Senate, to come up with a proposal for JEE reform has met on April 16, 2012, in light of the new developments, whereby each Senate is expected to send a proposal to IIT Council by 10<sup>th</sup> May. Earlier, some email discussions also took place.

The committee notes that the Ramasami Committee Report and other documents available to us provide primarily three prime movers for change:

1. Reduce the impact of coaching on admissions
2. Take the school board performance into account, which will improve the school education in the country.
3. Reduce the number of exams that a student has to take in the country.

The views expressed by Senators in the Special Meeting of Senate held on 15<sup>th</sup> February indicate that the Ramasami Committee proposals are not going to make any significant impact on any of the three goals, and it is debatable whether the 3<sup>rd</sup> should be a goal at all.

Hence, any proposal that Senate considers should have the goal of improving the quality of student intake to the under-graduate programs. Second, we should continue to participate in the joint admissions process, along with other IITs. And hence some coordination should be there with Senates of other IITs. For this purpose the decision of the Senate should provide adequate flexibility to its representatives to the special meeting of IIT Council.

In this document, we wish to outline various options that are available with us. The committee, at this stage, requests Senate for guidance as to what option(s) we may develop further for its consideration.

In this document, ISEET refers to the examination that MHRD has proposed as a single admission test for all engineering and science institutes in the country, and JEE refers to the examination that IITs conduct for their own admission. It may be noted that the immediate concern is that of making use of ISEET in our admission process in some way (or in no way at all). Hence, changes to JEE are not suggested in detail. Also, it may be noted that in view of several unknowns regarding ISEET, and insufficient data, we may propose a limited change for 2013 admissions, and continuously evaluate our options in future.

All the options can be broadly classified into three groups. These three classes are:

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

Below we indicate various options in each of these classes.

**Exclusive use of ISEET for admission:**

Within this class, a large number of options are available based on decisions taken on the following issues:

1. How the three components, that is, marks in 12<sup>th</sup> class boards, morning paper, and afternoon paper, is to be combined.
2. In particular, would 12<sup>th</sup> class board marks be considered for ranking of candidates? Would 12<sup>th</sup> class board marks be considered for eligibility?
3. In either case, what is a good way of normalization of 12<sup>th</sup> class marks across all boards?
4. What would be tested in the morning and evening papers?
5. Should there be an Aptitude test? If yes, what is the nature of that test?
6. What would be the curriculum for Physics, Chemistry and Mathematics in this test?
7. What should be the role of IIT system in academic part of this test?
8. What should be the role of IIT system in conduct and other matters related to this test?

Answers to these and other issues would result in a large number of options in front of us.

**Exclusive use of JEE for admission:**

This class is for maintaining the status quo for the time being, and considers any change only for the 2014 admission and beyond. Within this class, a few options exist:

1. Changes to JEE is a continuous process and a process internal to the IIT system. These are not to be communicated to IIT Council on 10<sup>th</sup> May, and hence not an urgent issue as of now. If this class is adopted by Senate, then the committee will continue its work beyond 10<sup>th</sup> May to make suggestions on the changes that can be incorporated in JEE-2013.
2. One change that we may consider now and communicate to IIT Council is 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. Senate may consider suggesting that the eligibility condition be made higher, and be based on a normalized score (like percentile). To the extent a higher focus on 12<sup>th</sup> class board performance will impact school education, increasing the eligibility condition in this way will have the same impact (though perhaps to a different degree). 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.

### **Combined use of ISEET and JEE for admission:**

Within this class, two orthogonal decisions need to be taken. One is whether to use both ISEET and JEE performance for ranking, or use ISEET as a screening examination only, and use only JEE performance for ranking purposes. The second decision is whether all candidates interested in IITs sit for JEE or only a limited number of candidates are allowed in JEE.

Use of ISEET for admission in any way will require discussion and decision on all the issues mentioned above for the case when only ISEET was to be used for admission. However, if ISEET is to be used only for screening and not for ranking, a lot more flexibility may be there in those decisions.

The options are:

1. Everyone interested in IIT admission gives both ISEET and JEE. The performance in both the exams is combined in some way to come up with the final merit list.
2. Everyone interested in IIT admission gives ISEET. The top 50,000 (or any such number) candidates are allowed in a subsequent JEE. The ranking is based on performance in JEE alone. Note that if JEE is only for a small number of candidates then it opens up a lot of options for improvement, including a long-answer type exam.
3. Everyone interested in IIT admission gives ISEET. The top 50,000 (or any such number) candidates are allowed in a subsequent JEE. The ranking is based on some combination of performance in both the exams.
4. Everyone interested in IIT admission gives both ISEET and JEE. However, ISEET performance is only considered for eligibility, while JEE performance is considered for ranking. The reason for considering this option (as opposed to 2) is because the timelines for various exams and options may leave option 2 as unviable.

If we consider the timeline of ISEET, we find that in 2013, ISEET is tentatively scheduled for 7<sup>th</sup> April, with the result being announced on 2<sup>nd</sup> June. If ISEET is to be considered for screening and only top 50,000 candidates were to give JEE, then the entire admission process gets delayed substantially, and hence it is not a practical option.

However, there are two solutions to this problem.

If we look into the reasons for result declaration on 2<sup>nd</sup> June, it is because ISEET result will contain the percentile score of the candidate in the 12<sup>th</sup> class board exam. Currently, the board results are required to be announced by 30<sup>th</sup> June, but the expectation is that from 2013, all boards will be required to announce their results by 31<sup>st</sup> May. If that happens, then the ISEET result can be announced on 2<sup>nd</sup> June.

One solution to the delay is that we ask the organizers of ISEET that they should announce the results of their exam by 1<sup>st</sup> May, share that result with JEE, and may announce the final result (including board marks) on 2<sup>nd</sup> June. In such a situation, only ISEET exam marks will be used for screening. JEE can be conducted around 15<sup>th</sup> May, and the result can be announced around 5<sup>th</sup> June. The board marks can be considered for eligibility later on (like JEE does currently), and one could consider percentile scores instead of percent marks, as explained in the discussion on “exclusive use of JEE for admission.”

The other solution is to ask everyone interested in IIT admission to sit for JEE. However, copies of only those students will be graded (after 2<sup>nd</sup> June), who are in the top 50,000 in ISEET (including consideration of board marks).

It may be noted that this class of option requires strict adherence of timelines by ISEET. If JEE is to be conducted based on the assumption that ISEET will declare the result of its own test by a certain date in early May, it may be viable based on the track record of AIEEE and other entrance tests conducted by various agencies in the country. However, the assumption that all boards in the country will declare their results by May 31<sup>st</sup>, is an untested assumption. Hence Senate may consider choosing one option for 2013, and express willingness to consider other options for 2014.

Also note that if the Senate decides on option 2 in this class of options, it is possible that the organizers of ISEET may not commit to announcing the results of their exam by 1<sup>st</sup> week of May. To consider that eventuality, Senate should also have an alternate option for 2013 undergraduate admissions.

At the end, we would like to state that many senators may find one or more of the options presented here to be “obviously” wrong, and not worthy of being considered by Senate. Individual members of the committee also have felt the same way. However, collectively, we felt that we should present the whole bouquet of options at this stage, for an open minded discussion. We do have enough time to take into account the views of Senators and other stake holders and present a more concrete proposal in the next Senate meeting.

(Dheeraj Sanghi)