

CHAPTER NINE

**THE UNDERGRADUATE
ADMISSION PROCESS: JEE**

*“If you study to remember,
you will forget,
but if you study to understand,
you will remember”*

Unknown Author

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The Joint Entrance Examination (JEE) conducted jointly by the Indian Institutes of Technology is unarguably the most prestigious competitive science examination in the country. The way, year after year, thousands of final year school children prepare for and take to the test coveting the IIT admission can only be described as a phenomenon. **JEE has thus become the flagship of the IITs.** What are the general perceptions about the JEE? Is there a need for any reforms in this aspect? These issues are discussed in this chapter.

9.1 PERCEPTIONS

The reputation of the JEE is based primarily on the strikingly clean image that JEE has in the public perception. This reputation is fully deserved. In an examination that has currently more than 1,80,000 boys and girls competing for a mere 3,500 or so most sought-after seats for the 4-year engineering degree, there has never been a public scandal. The standards of probity and confidentiality in the conduct of the examination have been impeccable.

However, the nature of the examination is not widely appreciated. In our widespread consultations, the following points emerged:

- (i) The level of the examination is not appropriate for the candidates who are completing the X+2 stage of their education. In fact, the level is so high that most candidates undergo a very strenuous regimen of coaching, which now spans, in some cases, over more than four years. This places undue, and perhaps undesirable, burden on the school-going youngsters.
- (ii) The need for intensive coaching is having a deleterious effect on the education being imparted in senior-secondary schools and junior colleges. It has come to be commonly understood that preparing for the school examinations does not prepare a student for JEE. Therefore, students who are serious about JEE skip regular school to work on the assignments given by the coaching schools. Schooling is not just about learning academic skills. Schooling is for education and education is imbibed as much in the classroom as on the playing fields and through the pursuit of intellectual co-curricular activities. Social interactions, which prepare a person for life, are founded at school. If children do not go to school, or if school ceases to fulfil its historical functions, society loses.
- (iii) Howsoever valid may the reasons for introducing the screening test be, the fact is that it, too, imposes an unacceptable burden on the already hassled candidates aspiring to get into the IITs.

The Committee believes that it should be possible to conduct the entrance test at a level which is suitable for the candidates at the school-leaving stage which, at the same time, will be able to discriminate the deserving from the non-deserving candidates. A very tough examination is probably never a good examination, since it encourages among the candidates a tendency to prepare for strategies to answer tricky problems. It appears that the more such problems that a student knows, the more acceptable he is to JEE. The coaching establishments do not educate; they break up the

material into little modules that consist of various problem types and the student learns to recognize and deal with hundreds of such problems types. Understanding of the concepts, obviously, has nothing to do with it. Consequently, it has been observed that, compared to the earlier years, coached students in recent years seem less motivated to learn.

9.2 SUMMARY OF RECOMMENDATIONS

- (i) **The system that has been put in place for the conduct of the JEE should not be disturbed** as it has evolved, over the years, to be among the best entrance examinations at that level. This is recognised internationally and nothing should be done to interfere with it.
- (ii) Among the most experienced members of the IIT faculty who have been associated with the JEE, a group should be constituted to go into the **following reforms**:
 - **The candidates are admitted on the basis of one examination only**, as was being done for nearly 40 years since inception up to the year 2000 (In the year 1999, 1, 12, 347 candidates took only one admission test. When the screening test was introduced in the year 2000, the number registered for the test was 1, 22, 205).
 - Although about 3500 successful candidates are admitted to the 7 IITs, now-a-days the results of candidates upto the rank of 4600 - 4700 are announced as qualified. This has helped other institutions, namely IIT Allahabad, IIT Gwalior and NIFTT Ranchi, besides IT BHU and ISM Dhanbad, to admit the remaining candidates into their own colleges. Since this has benefited a few other institutions, it may be considered whether even lower ranks upto 8000 may be announced in a similar way, even if more IITs are not set-up. This will facilitate NITs and other engineering colleges to take in students from the JEE list, **since the differences in the secured marks are not very significant even if the rank is as low as 8000**.
 - **The level of the examination is made suitable** for what can reasonably be expected of a bright school-leaving child **without the need for intensive coaching outside of what the school curricula prescribe**. As has been envisaged, the purpose is to screen inherently gifted candidates capable of thinking on their own. Such students can be expected to have the right aptitude for higher levels of education and research.
 - **A standing group be constituted to carry out research into the nature of the examination** to serve the purpose for which the JEE is famed the world over. **This group may also aim at transiting to an electronic web-based examination in a 3-year time frame**.
- (iii) The reservations for SC/ST and the handicapped categories should be honoured. IITs have evolved methodologies to increase the intake of SC/ST category students. This has been done by appropriately lowering the cut-off level for clearing the JEE. The IITs have also introduced a one-year preparatory programme for those unable to clear the JEE even with the reduced cut-off. Those who complete the preparatory programme successfully are admitted to the regular programme without having to appear in the JEE again. If these practices at IITs are supplemented by help to the SC/ST students at their school-stage, the number of SC/ST candidates getting into the IIT system will further improve.