Teething issues loom for new IIT entrance

BY PRASHANT K. NANDA & JACOB P. KOURY

The government and the Indian Institutes of Technology (IITs) may have agreed to a common admission test for all centrally funded engineering schools, but the inaugural edition of the exercise next year could well turn out to be a logistical nightmare.

With less than a year left for the joint entrance examination (JEE) to take place, procedural issues to be tackled range from preparing a profile of students at the higher secondary level eligible for admission under state-based quotas, to publishing the results of the board exams nation-wide before the second week of June, when engineering schools finalise their selections.

India has 25 school boards that conduct school-leaving examinations for upwards of two million students, about 500,000 appeared for the JEE in the year, which was taken only by students seeking admission to the 15 IITs and the Indian School of Mines, Dhanbad, and the Institute of Technology, Roorkee. This has since been raised to the status of an IIT.

Teething issues loom for IIT test

The absence of clarity on how the procedures issues will be tackled, and the lack of preparedness for conducting an expanded test and dry runs may lead to the chaos reminiscent of the kind that marred the entrance exam for the Indian Institutes of Management in 2009, when the entrance exams were conducted.

"After the compromise reached last month, we feel that 2013 is still too early," said Sanjay Singh, president of the IIT-Delhi faculty forum.

The government and the IITs dissuading over the process of admission to the elite schools agreed to a compromise on 27 June to advance the concept of "one nation, one test," ending a controversy that erupted in late May after human resource development (HRD) minister Kapil Sibal announced a single entrance exam that would give additional weightage to marks students scored at the board level.

Faculty and alumni associations from several IITs had protested the initial proposal, saying that an inordinate weightage for school examinations could dilute the quality of IITs.

Singh said that the proposal to consider only the top 20 percentile of class XII graduates looks tough to implement unless all school Boards cooperate and publish their results before June, requiring several boards to alter their exam schedule.

Preparing the caste profile of students may be an equally daunting task.

"It's a tough task to have authentic caste data on the board level. With lots of confusion floating around, such an exercise, if required, could be a real headache," said Bhargava Shekhar, secretary of the CoA Board of Secondary Education.

School boards may have to prepare their percentile list on quota lines. "If you have to prepare the percentile by categories such as general, backward classes, scheduled castes and tribes, then it could be a time-consuming affair," Shekhar said.

J.P. Sinha, chairman of the Bihar Board Examination Board, is optimistic that if the IITs and the Central Board of Secondary Education put in place a customised software for data tabulation, the task may be easier to handle.

"There will be hurdles, but if right interventions are made by using software, it could be relatively easier," Sinha said.

Even the concept of the top 20 percentile is confusing to some.

"Do they count all those who register for the 12th Class exam? Or do they count only those students who have passed the 12th Class exam?" asked Dharjith Sanghi, dean of IIT-Kharagpur, on his blogsite.

"Do they consider all students, or do they consider only those students who have studied physics, chemistry, and maths in 12th Class (besides other subjects)?" Do they consider the total of five subjects or six subjects (in case of boards that have six subjects) or do they consider only three subjects to rank students for the purpose of computing percentile?" Sanghi wrote. When contacted, an HRD ministry official said the floorplan will emerge soon and the individual IITs will deliberate and present their views to the IIT joint admission board. "We wish to take everybody on board," the official said, requesting anonymity.

Bharat Gulla, a senior manager in the education practice at consulting firm Ernst and Young, said that the intention of the government was good and a change was due. "But considering the long-term preparation for an important examination (like JEE), a well-thought-out transition plan would have been a good course," he said. "A broader consultation would have done away with the opposition."
COMMON ENGG TEST RUNS INTO ROUGH WEATHER

At loggerheads with Sibal, IITs take their fight to PM

Faculty says HRD Ministry trying to undermine autonomy of IITs

NEW DELHI, JUNE 4
The IITs today took their tussle with the HRD Minister Kapil Sibal to the common engineering entrance test to Prime Minister Manmohan Singh's doorstep.

The IIT faculty wants the test - to be conducted from 2013 for admission to all centrally funded technical institutes in India - advanced to 2014 apart from the freedom to determine its structure and schedule.

HRD Minister Kapil Sibal had on May 28 announced that the test would commence in 2013 and both its components (Main and Advanced) would be multiple-choice question based instead of subjective as the IIT faculty had wanted. Sibal's announcement came after the IIT Council met on May 28 and took the decision overruling the majority views of IIT Senates (faculty bodies).

Nowhere to go, the All India IIT Faculty Federation has now petitioned the Prime Minister, asking him to protect the autonomy of IITs. In a letter seeking an audience, federation president K Narasimhan and secretary Atul Mittal have warned the PM of "serious consequences if IIT autonomy is compromised".

The federation has referred to how the IIT Council chaired by HRD Minister overruled the majority opinion of institute faculty: "The IIT Act, 1961 says that in academic matters, IIT Senates will be solely responsible. We presented our views to HRD Ministry but these were overruled by the IIT Council which HRD Minister chairs. We want your intervention to protect our autonomy," the federation said.

The faculty recalled in their letter the vision that led to the establishment of IITs. "IITs were conceived as truly autonomous institutions and our autonomy is the legacy of Nehruvian era. If it gets compromised, there will be serious long term repercussions," the federation said to PM.

Meanwhile, IIT Senates have decided to meet again to take a formal view on the IIT Council decision. IIT Delhi Senate will meet on Wednesday and said the option of going to court was open.

As for Sibal, he had, in his meeting with the Federation representatives ahead of IIT Council's May 28 meeting, said there was no scope of negotiations on the decision to hold the test in 2013. As reported by The Tribune, Sibal had told the faculty that IIT Council could "over-rule their majority view".

Excepting IIT Guwahati and IIT Madras, other IITs - Delhi, Bombay, Kharagpur, Roorkee and Kanpur - voted to advance the test to 2014 and wanted it to be a screening test with IITs free to design an advanced subjective type test for final admissions.

IIT Council has decided that IITs would screen 50,000 students from main component of the proposed JEE by factoring in 50% scores each of school board and the main test. Advanced component of JEE would be designed by IITs and would be the admission test for them. It would not factor in school exam scores.
WBJEE to stay till 2013, state to be part of CET from 2014

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KOLKATA: Union human resource development minister Kapil Sibal on Thursday made it clear that Bengal will participate in the Common Entrance Test (CET) for admission in engineering colleges throughout the country from 2014. This means West Bengal Joint Entrance Examination (WBJEE) will be conducted in 2013 for the last time to admit students in the state’s engineering colleges.

After his meeting with chief minister Mamata Banerjee at the Writers’ Building, Sibal said, “The chief minister said that Bengal will join CET from 2014. Maharashtra, Gujarat and Haryana have already given their consent to join CET from 2013.”

On June 27, when the IIT council gave nod to CET and Sibal announced he would be implementing it from 2014, Bengal had objected. As a result, while IIT aspirants knew they would have to prepare for CET in 2013 the fate of WBJEE aspirants was uncertain. With Bengal opposing the HRD ministry’s decision, it was not clear whether WBJEE would be conducted in 2013.

“We are absolutely against it and would be opposing it vehemently. If it starts from 2013 the students of Bengal would lose out. Hence, we would not allow the exam to be held in Bengal next year,” education minister Bratya Basu had told HT on June 27, hours after Sibal announced his programme of launching CET.

Basu had said “During our meeting with the HRD ministry we had clarified that Bengal would not be able to participate in CET before 2014. We need time to implement our updated syllabus or else students from the state will lose out. If the Centre goes ahead and implements it we would not accept (the decision),” Basu said.

Mamata on Thursday once again explained the problems students in Bengal would face if the state has to participate in CET from 2013.

Sibal said, “We have seen there are about 100 competitive exams that a student can take after Class 12. They end up taking 20 such exams. Our idea is to help them and device a way so that they are saved from taking multiple entrance tests.”

“This system would ensure students give importance to school exam and coaching centres lose importance. The exam would be devised in such a way that only those who do well in the school exam and do in-depth study would be able to clear CET,” Sibal said.
IIT-B meeting scheduled for Thursday cancelled

HT Correspondent

Mumbai: The special senate meeting scheduled for Thursday at the Indian Institute of Technology-Bombay (IIT-B), to discuss the latest admission reforms proposal was called off on Thursday morning.

The senate had been called to discuss the proposal of using board marks as an eligibility criteria to admit students to IIT. However, since the minutes of the IIT council meeting have still not reached the IIT-B senate, the meeting could not take place.

The senates of seven of the 15 IITs have approved the proposed changes. No fresh date has been announced. “The director is most likely away until July 16, so we will not be able to hold it until he is back,” said a faculty member.

Faculty members said they were not expecting to get the council minutes for another week. “A date will be announced only after the minutes come,” a faculty member said.
Yahoo! India R&D sets up lab at IIT Madras

Anuj Srivas

CHENNAI: Yahoo! India Research and Development has entered into an agreement with Indian Institute of Technology, Madras, to support its faculty and students in cloud computing research.

Yahoo has set up a grid computing lab here on IIT campus, consisting of a cluster of high-end servers running its open source Hadoop software, which will provide the infrastructure necessary to conduct research on big data and cloud computing systems.

“This partnership is beneficial to both of us. Our Indian product offerings generate over 200 terabytes of data every week. The big data research that will be performed at this lab can help us in analysing this data, which in turn, can be used to improve our various products — such as Yahoo front page,” said Hari Vasudev, Vice-President, Yahoo! Inc.

“Areas where we lag in India can be potentially improved through this research. It can help us personalize content, improve our spam detection in Yahoo mail, and even refine our image search,” he said.

Yahoo! India, which recently launched a free online video service, is looking at playing to its own strengths in the Indian market.

“Offerings such as Yahoo! Cricket or providing Bollywood content through our new video service help us leverage our content strength and look at the market through an enhanced portfolio approach,” Mr. Vasudev said.

Student research

The lab, which cost over Rs.50 lakh to build, will be accessible to students who have cloud computing courses and doctoral candidates.

“We are really looking at finding different paradigms in the way cloud computing can be programmed. This is useful for teaching students cloud concepts, and helping our post graduate students with their research. While we have started experimental operations, the students will be able to start using it from next semester,” said Professor D Janakiram, Department of Computer Science, IIT-Madras.
In India, private coaching is a $6.5-billion business

Aesha Datta
New Delhi, July 5
The rising middle class, the desire to stay ahead in the global economy, and the falling quality of mainstream education system mean that examination-oriented coaching classes have taken over the life of most school-going children in India and other countries.

According to the report Shadow Education: Private Supplementary Tutoring and Its Implications for Policy Makers in Asia, released by the Asian Development Bank, in India a whopping 60 per cent of primary school children and up to 83 per cent students in high schools receive private tutoring.

SHADOW EDUCATION
Shadow education is a widely used term for private tutoring, as it mimics the mainstream and modulates itself according to the conventional system.

Talking about the private coaching industry in India, the report said, “Nationally, a 2008 market survey of companies offering coaching estimated the size of the sector at $6.4 billion and predicted an annual growth of 15 per cent over the subsequent four years.”

The report notes that in 2007-08, students living in both rural and urban India paid an average of Rs 1,456-2,349 a year for private coaching classes.

The poverty line in the country is set at Rs 965 for the urban and Rs 781 for the rural citizen.

The report added that according to a study conducted by the Pratichi Trust, established by noted Nobel Economist Amartya Sen, the increasing demand for private coaching is not only because of rising incomes, but also because of the belief that it is “unavoidable.”

The research notes that, “...78 per cent parents now believe it is indeed ‘unavoidable’ – up from 62 per cent. For those who do not have arrangements for private tuition, 54 per cent indicate that they do not go for it mainly – or only – because they cannot afford the costs.”

DIVIDING THE STUDENTS
Noting that perceptions of inadequacies in mainstream schooling, where teachers often do not come for classes or complete the curriculum, are a major reason for the growth of private tutoring, the report added, “Sen noted that most of the content in the private tutorial classes could and should have been taught in the regular classes of the primary schools.

He added that private tutoring divides the student population into haves and have-nots; it makes teachers less responsible; it makes improvements in schooling arrangements more difficult since the more influential and better-placed families have less at stake in the quality of what is done in the schools.”

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What the God Particle means to you

Apart from its theoretical importance, the search for the Higgs has given birth to new technologies like the World Wide Web

With all the media coverage, social network trending and general excitement about CERN's discovery of what could be the Higgs boson, some people must surely be asking what the big deal is, why the Higgs is so important, and how it affects their lives, if at all? In a world where discoveries and inventions gain mass appeal only if they have practical significance, the last of those questions is perhaps the most important for the general population that does not comprise physicists.

But, as with any future predicting answer, the best place to start is in the past, and in the very nature of the particle being discussed. It all starts with the prevailing model of the universe that physicists agree is the closest approximation they have of what's really going on: the Standard Model. Basically, it's a model of the universe that uses the fewest possible particles and forces to create the universe as we know it today. It describes 12 fundamental particles and three fundamental forces (the fourth fundamental force, gravity, hasn't yet fit into the model, but that's a story for another time).

Now, it's known that the three fundamental forces in the Standard Model result from an exchange of three force carrier particles called bosons (named after Bengali physicist Satyendra Nath Bose, whose pioneering work in the 1920s laid the basis for how particle Physics is studied today). So far, in keeping with the theory, scientists have found 4 bosons responsible for the 3 fundamental forces. But the problems creep in because, for the model to work, they assumed the presence of a fifth boson: the Higgs boson.

Named after Peter Higgs, who was working on how to explain the origin of mass of elementary particles, the Higgs boson is supposed to be the particle behind that phenomenon. But why is the mass of particles so important? Because it was mass that allowed the universe as we know it to exist. When the Big Bang happened, all kinds of particles were shooting around at the speed of light, not stopping for anything. If this had continued, then none of them would have slowed down enough to slowly coalesce into the galaxies, stars and planets we have now. What Higgs postulated and other physicists ran with, was that these particles flowed through what is known as a Higgs field, an invisible energy field that interacts with most particles, slowing them down and allowing them to get heavier. It's like walking through a field of snow; as you walk, snow clings to your clothes, slowing you down. It was this slowing down that allowed for the creation of the observable universe. The Higgs boson is the signature of this field. In short, no Higgs means no mass, which means no us. Hence the name God Particle.

The problem was that the Higgs particle is so small and so fleeting that it is (and is likely to remain for quite some time) impossible to directly see it. All scientists could hope for was to detect traces of its existence and passage. That's what they've been doing at the Large Hadron Collider in CERN: smashing together particles at such speeds and such forces that the impact resembles the Big Bang, and then measuring everything they possibly can to find a phenomenon that matches the criteria the Higgs should obey. CERN's announcement about the new particle that they have found, thus, isn't confirmation of the Higgs yet. It just means that they have found a particle where the Higgs is supposed to be, behaving in the way the Higgs is in theory supposed to. But it could still turn out to be a completely new particle, and that's where things get interesting, and where we can finally approach the "what now?" question.

If the new particle is confirmed to be the Higgs (something that will take months, if not years, of work still), then this goes a long way in confirming the Standard Model, which is a great thing considering the absence of the Higgs would have destroyed the model and most of the theories we have and taken Physics back by more than 50 years. More than that, studying the Higgs could reveal an insight into how gravity can be inducted into the Standard Model, which would be a great victory for Physics—after all, reconciling gravity and the other forces was something even Einstein sought to, but could not, do. Further, if the particle is confirmed to be the Higgs, but something entirely new, then not only does the search for the Higgs go on, but physicists have new particles to play with, which could result in greater understanding of dark energy and dark matter, two key areas woefully unexplained by the Standard Model. Finding this particle, thus, is a win-win.

But what does that mean in practical terms? To be honest, nothing. Everyday life is not going to change regardless of what the new particle turns out to be. But, it must be said, the quest to find this particle has resulted in several new technologies that do have a bearing on our lives. Take the example of the World Wide Web, which was developed at CERN to make it easier for scientists to share information among each other. In addition, the vast computing power needed to analyse the data coming out of the collisions gave birth to cloud computing, which has made its way to the commercial world only recently. Advances in proton therapy, one of the techniques used to fight cancer, have their birth at CERN, as well. The God Particle may not mean anything practically but the search for it has had, and will have, great effects on the technology we use.

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UGC sets standards for tie-ups with foreign varsities

Special Correspondent

NEW DELHI: The University Grants Commission (Promotion and Maintenance of Standards of Academic Collaboration between Indian and Foreign educational Institutions) Regulations, 2012 approved in June will ensure that academic collaboration between Indian and foreign educational institutes followed the highest standards.

The regulations mandate that only institutes graded 'A' by the National Board of Accreditation or the National Assessment and Accreditation Council can collaborate with foreign institutes, which, in turn, must figure in the list of top 500 global educational institutes, as ranked by the Times Higher Education Rankings or the Shanghai Rankings.

Students will not only get a degree from the Indian institute where they are enrolled but also from the collaborating foreign institute, if it is inclined to give one. No programme of study and research shall be offered which is against national security and territorial integrity of India.

The two institutions (Indian and its foreign collaborator) will have to enter into an agreement which will have to be approved by the UGC before it is implemented. The approval will be valid for 5 years and the Commission may review the progress made and periodically inform the agencies concerned about the results of such a review. After the expiry of this period, the UGC may extend or withdraw the approval or impose such other conditions for extension, as may deem fit. The regulations make clear that no franchise arrangement will be allowed.

Existing tie-ups through the Indian institutions will have six months to meet the new eligibility criteria. In case they fail to do so, they will have to terminate the agreements. Institutions that refuse to comply with the new regulations can lose UGC funding, de-recognition in case of a deemed university, and public notices announcing the ineligibility of the institution to enter into collaborations with foreign partners.

Disputes arising in relation to collaboration will be settled as per Indian laws.

As per a 2006 study by the Association of Indian Universities, over 340 institutes were offering courses in collaboration with foreign institutes. The UGC regulations seek to bring some order in area to protect students by ensuring that only genuine academic collaborations are encouraged.
Maharashtra has most number of colleges in country: UGC report

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MUMBAI: Maharashtra has the enviable distinction of having the highest number of colleges in the country, according to a report on higher education compiled by the University Grants Commission last month.

With 4,631 colleges affiliated to 44 universities as of 2011, the state is way ahead of Andhra Pradesh, next in line with 4,066 colleges. The report, Higher Education in India at a Glance, looks at the number of educational institutions, teachers and student enrolment in the country.

“Educational institutions flourish in states such as Maharashtra where industrial and infrastructure growth is high,” said Stephen D’Silva, head of Jamnalal Bajaj Institute of Management, Churchgate.

Despite having the most colleges, the state does not boast of the highest student enrolment figures. In 2010-2011, 19.55 lakh students were enrolled in state’s colleges while Uttar Pradesh enrolled more than 25 lakh students.

“UP has higher enrolments because it has a larger population. The living conditions and job opportunities in Maharashtra are far better than the rest of the country and our educational institutions are some of the oldest in the country,” said Snehalata Deshmukh, former vice chancellor of the Mumbai University.

The flipside to this trend is that every year there are several vacancies in colleges, especially in professional and management colleges. “Having many colleges is not enough. Students look at the faculty, management and other factors before deciding on a college. Quality plays an important role,” said Manju Nichani, principal, KC College, Churchgate.
Students in the special class XI batch undergo IIT coaching. 

School that helps students crack IIT

VINOD NEDUMUDY | DC
KOCHI, JULY 4

The suspense over the process of admission to the IITs may have ended now with a two-test formula in place for gaining admission to them, but even before the decision was taken a Kochi school quietly tied up with a premier institute to prepare its students to join the premier league.

Under the new format students will have to first appear for the Joint Entrance Examination (JEE)-Main and only the top 1,50,000 will be eligible to take the JEE-Advanced exam.

The final selection will be based on JEE-Advanced scores and board exam performances.

But, even as the two tier formula was being worked out, Saraswathy Vidyanikethan, a CBSE school in Elamakkara, decided not to waste any time and tied up with FIITJEE to train its students for the IIT entrance along with their regular classes.

“The students will be trained for the IIT entrance tests along with their regular studies. We are selecting students from Class XI for the special batch through an entrance test of our own. This year’s batch has 20 students,” reveals G. Devan, the principal.

“A majority of these students have secured A+ in all subjects. We plan to increase the number of students to 200 in the next two years,” he added.

Mr Aravind Kant Gupta, who heads the FIIT-JEE in Kochi, feels that while many Kerala students have the potential to gain admission to IITs, they don’t receive proper guidance.

“This partnership will ease the burden on students as they will not have to shuttle between the school and a coaching institute. Our aim is to help the students and give them in-depth knowledge of subjects,” he added. FIIT-JEE has successfully experimented with this model of coaching in major cities like Chennai, Coimbatore and Hyderabad.
No scope for new engineering colleges

Most colleges lack sufficient qualified faculty

Case for upping minimum marks for admission

results of students in the last three years. The quality of education in 11 engineering colleges in the Cochin University is poor. The colleges cannot improve, the government should close down the same to prevent their disservice to the student community, it said. The universities should keep the poorly performing colleges on the watch list and if they do not have the required facilities, it would be better to discontinue their affiliation at the earliest after conducting enquiries. There is no justification for the government to run these colleges in the present condition. The colleges, with around 80 per cent failure rates, were doing disservice to the students, it said.

‘Ensure facilities’

If the government proposes to issue/consider NOC for any new engineering colleges, it should permit it only after confirming that buildings, laboratory and teaching staff are provided in advance. The government should insist that the management should produce bonds from qualified teaching staff to serve the college in the event, no objection certificates, recognition and affiliation are granted by the universities and the All India Council for Technical Education (AICTE), the order said.

Even while criticising the poorly performing colleges, the court observed that the colleges under Kannur University were doing fairly well if the final exam results were true indications of educational standards of the colleges. In Calicut University, most of the colleges have produced good results while in some colleges, the results in some subjects were not good, it pointed out.