Students' Gymkhana \*Volume IX Issue I **IIT Bombay** 

The reservation issue raised its head ■ again, in April this year, with the government's proposal to implement 27% reservation for students belonging to Other Backward Castes (OBCs) in institutes of higher education including IITs and IIMs. This issue has received wide coverage in the print media, in the tele media and in the weblogs of people. In this article, we recap the events of the summer and analyse the effect that the proposed reservations will have on IIT Bombay. Is IIT-B capable of handling the swelling numbers of students when there is already a shortage of space in the hostels? Is there enough teaching faculty to cater to the needs of the increased number of students without compromising the quality of education provided?

This summer, IIT Bombay witnessed its own share of drama with both antireservation and pro-reservation protests.

On 19th May, anti-reservation protestors demonstrated outside the IIT Main Gate, forming a human chain, displaying placards and distributing leaflets. On 22<sup>nd</sup> May, over 20 protestors carried out a chain hunger strike in batches of 24 hours. This was covered extensively by news channels like AajTak, NDTV and Sahara. There was also a strong alumni presence in the antireservation camp, with prominent social activists like Mr. Shailesh Gandhi speaking to the students about the issue. In the wake of the government's decision to implement reservations in IITs and IIMs, IIT-B students participated in the 'Maha Rally' organized by the Youth For Equality (YFE) on 28th May in Azad Maidan, which was attended by over 4000 people.

There were also pro-reservation protests organized by a small group of

## The Reservations Saga

Siddarth Madhav and Vikranth Audi analyse the effect that the proposed reservations will have on IIT Bombay.

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are

while

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instructional area and 150,000 sq. ft. of

academic infrastructural area, for labs,

graduate students in Hostel 11 have

nouncing its decision to implement OBC reservations from the next academic year.

We talked to the Deputy Director, Prof. Dipan K. Ghosh and he had this to say about the issue. "The current strength of students, undergraduates as well as postgraduates, in IIT Bombay is approximately 5000, and this number is going to increase every year, until after five years, the strength will even out to 7700. This will lead to serious infrastructure issues."

One important cause for concern is the shortage of faculty. The ideal faculty to student ratio is 1:9, which the institute currently falls well short of. There are, at present, around 400 faculty (a teacher-student ratio of 1:12) against the sanctioned strength of 550. Taking into account the fact that over 50 members of the teaching staff would retire over the next five years, IIT-Bombay

to share their room with two others. Indeed, the current capacity of our 13 hostels is merely 4000, which is short by 1000. "With the extra load of students, we need to build hostels to acwould need a total of 850 faculty memcommodate a further 4000 students, 8

Program	Duration		Proposed		Net addition
		intake	intake	per year	(over 4-5 yrs)
Undergraduate	4-5 yrs	574	884	310	1376
Masters'	2 yrs	774	1197	423	846
Ph.D.	~5 yrs	167	257	90	450

Course-wise break-up of the increase in the strength of students

bers- an increase of 450. To maintain the faculty to non-teaching staff ratio of 1:2, 1000 additional staff members need to be hired.

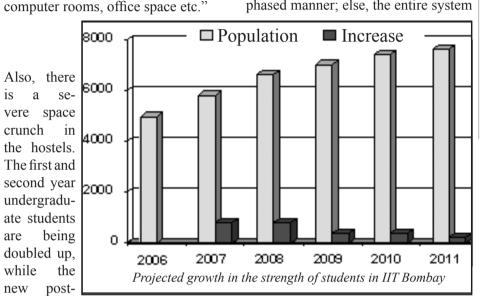
are inadequate," says Prof. Ghosh, "We do not have enough classrooms to

boys' hostels and 1 girls' hostel. And there is absolutely no space on our campus to build them," concludes Prof. Ghosh.

"Even at present, instructional areas How expensive will these additional requirements prove? The extra hostels for students and staff quarters, and their related facilities, the seed grant for the additional faculty, the extra academic instructional area plus the labs, library etc. carry a price tag of Rs. 615 crores, or Rs. 21 lakh for each additional student. Also, there is a projected recurring cost of Rs. 3 lakh per student per year, based on faculty salary and maintenance costs. "But money is not the issue here," Prof. Ghosh maintains, "The central government has promised to allocate enough money to meet the increased expenses."

> And finally, the million dollar question: Is it feasible to implement all this and is it possible to implement it by

the next academic year? Prof. Ghosh offers reasons why it is not. The current campus at Powai cannot expand to accommodate more than a total of 6000 students, due to the lack of free building space. Even this increase would need to be done gradually in a phased manner; else, the entire system



at IIT would collapse. And finding the required faculty to maintain current standards would be extremely challenging.

What are the alternatives? A possible solution would be to build a satellite campus. "We are looking at the option of setting up a campus either in Navi Mumbai or Gujarat or Goa. So far, Gujarat seems to be the most viable option. During our meeting with the Gujarat authorities last month, the Chief Minister, Mr. Narendra Modi expressed keen interest in our plan."

#### The Satellite Campus

A satellite campus of IIT Bombay is all set to come up in Gandhinagar, Gujarat. The campus is expected to come up by July 2007, housed initially either in the LD Engineering College or RC Technical Institute, till the new campus comes up. A high level delegation led by Director Prof. Ashok Misra met the Gujarat authorities this July. IIT Powai had asked for 300 acres of land to start the satellite campus. The Guiarat government will provide the land and infrastructure, while the union HRD ministry is expected to provide construction funding.

When we asked Prof. Dipan Ghosh whether the setting up of the satellite campus was a direct result of the proposed reservation, he said, "Both yes and no! The plan to set up a satellite campus was conceived before the reservation issue came up. But now that it has, the second campus would be

(continued on page 2...)

#### **Reservations Issue: A Timeline**

April'06: HRD minister Arjun Singh announces the proposal to reserve 27% of the seats in all central universities including IITs and IIMs.

April-May'06: Widespread protests across the nation in many colleges and universities including IIT Bombay.

May'06: Govt announces a 13-man oversight committee headed by Veerappa Moily to look into the issue of implementation of 27% reservation for OBCs in higher education institutions.

August'06: Moily committee submits its report. Two draft bills (one for aided and one for unaided universities) have been prepared by the ministry of HRD and are set to be introduced in the ongoing monsoon session of the parliament.

people. But their hunger strike was discontinued with the government an-

handle the additional load. We would need an additional 100,000 sq. ft. of



The very concept of a summer internship can assume two mutually exclusive meanings - a compulsory requirement or an opportunity to gain firsthand experience of how life might be like after you graduate. This article is for those who attach significant importance to the latter. Though most students instinctively choose between an industrial and a research internship fairly early, specific questions on what to expect from either of these choices still rage on. Some of us end up taking 'fundae' from too many seniors and confuse ourselves complete-

ly because frankly speaking, there is no

defined algorithm to go about it. This ar-

ticle endeavours to give a bird's eye yet

#### **Academic Internship -** *Kartik*

holistic view of both the experiences.

Though a research internship may as well be done in a good Indian institute like IISc, there seems to be an unstated convention of applying abroad as the default first option. I have classmates who have had an equally rich experience working in Indian labs as I had in the USA. So let me assert that there is no paradigm shift in the value addition on the student's merit while comparing local and foreign internships. On a more personal level, I was excited with the idea of doing an internship in a foreign place from the perspective of experience but had consciously decided to go to NCBS, Bangalore in the event that a good opportunity of my choice did not come through from abroad. At the end, I secured an opportunity to visit Purdue University as a summer intern. My work was to be in an area of "systems biology", which was something I had learnt a little about while working on my B.Tech seminar. Topic area and interest must clearly be the top parameters while choosing an option for the summer.

The second parameter that decides an applicant's fate is the availability of funds. Clearly, a three month stay in Europe or USA cannot be sustained with one's own money and let me go one step ahead and assert that the opportunity is really not worth it if you are contemplating on paying a substantial amount from your own pocket. Fortunately, most of us applying abroad do get sufficient funding. One would also do well to gather information about living cost and travel expenses from immediate seniors who might have been abroad for their summers. Once you receive a mail of acceptance, it is advisable to apply for visa travel expenses.

## Summer Internship

Kartik Shekhar and Sriram Emani share their experiences of their respective practical trainings.

I would now like to share some commonplace notions and experiences. It is very wrong to presume that your supervisor expects an accomplishment of Herculean proportion from you and feel intimidated by the same. In all likelihood, your topic of work will be one where three years wouldn't have sufficiently armed you with a background sufficient to comprehend the intricacies of the project. It is advisable to read up a little on the subject so as to develop a basic understanding. My work involved mathematical modeling and opti

mal control of metabolic networks and their stability analysis. I used to report to my professor twice a week but my immediate instructions were

given to me by a gradu-

http://gymkhana.iitb.ac.in/

ate student of his, whom I was working with. The point I want to drive home is that there would be an initial gestation period in any project where things may seem a little incomprehensible; some may find the work clerical and monotonous. It is important to be patient and work your way through. The atmosphere in most places is very congenial and your hosts would go out of their way to help you settle down. All they expect is that you show the sincerity and integrity from 9 am to 5 pm on something that is certainly accessible to the acumen of a senior undergraduate from an IIT.

The problem of locating the roots of one's desire to go abroad is a toughie good recommendation letters, bullet on the resume or a paid holiday. I would be utterly unequipped to pass a moral judgement on this question but experiences suggest that each of these three can be satisfied if one takes a balanced outlook towards the internship. If one works diligently on weekdays, weekends can be used to visit places around. Almost 80% of students receive an offer for enrollment into the PhD program in the same university. From the point of view of a student who is contemplating on pursuing graduate studies, the internship experience provides a flavour of cohesive research. From the point of view of one who is still weighing myriad options, the and book tickets immediately to save on experience helps him/her burrow a little further down the rabbit-hole.

**Industrial Internship** - Sriram

As the name suggests, these internships are inclined towards application of science in industry and not so much towards fundamental research. Most industrial internships are based in India, the major recruiters being market leaders such as ITC, HLL, P&G, GE, Schlumberger and so on. Many of these come for campus placements from August. They first conduct a PPT (Pre-Placement Talk) where they tell you what their company does, what they expect from the interns and

> what the interns can expect from the internship. Based on the profile, core competency and skill sets they are looking for, the companies shortlist some students who may go through a GD+PI process before the final selection.

I decided to go in for an industrial internship simply because I wanted to experience how working in the industry actually feels like. I had heard about the corporate world and its various aspects from friends, but I wasn't sure if I wanted to believe all that without having seen for it myself. I applied and got into ITC Limited and was placed in their tobacco factory in Bangalore. My project was titled 'Technology Innovation Center Design'. It was a slightly abstract project that involved preparing a conceptual framework for setting up an ideation and innovation center for ITC based on benchmark ideation centers setup by leading companies worldwide. It also involved studying the existing setup of ITC, their current capabilities, future plans and estimating the components required for the innovation center. Each intern is given his own project and other interns working there had projects involving design of layouts of the manufacturing setup, studying alternate methods for processing tobacco and so on. These required knowledge of concepts such as manufacturing principles used worldwide and their analysis, design of experiments, regression techniques and other concepts that we had never heard of. But worry not, it is generally not expected of you to know these concepts beforehand; you can learn them in the initial period of your internship.

Industries and corporate firms generally

employ interns to infuse a fresh perspective into their existing system. Depending on the company, you may get to choose if you want to do a core technical project or a statistics-related project. The former would require application of core engineering concepts whereas the latter would be more inclined towards logical thinking and data analysis; both would have scope for innovation and creativity. You'll be evaluated on your ability to think differently, take independent decisions and put in hard work while also gelling well with your colleagues. In most cases, candidates fulfilling all these criteria are given Pre-Placement Offers.

Most industrial PTs would require you to be formal and professional in all aspects; long-forgotten things like formal clothes, polished shoes, daily baths and shaves, decent vocabulary, waking up early will have to get back into the scene. This sounds scary at first but trust me. you'll start liking it soon; it feels good to not look like a filthy sleep-deprived animal for once.

Industrial PTs are definitely not beds of roses. New concepts will have to be learnt and applied on your own. People at work, including your guide, will always be too busy to give you time, but you will still be held responsible for your project. In short, you will mostly be on your own and will end up learning more through a series of failures rather than any sort of guidance or spoonfeeding. But this very attribute of industrial PTs is what makes them challenging, interesting and an unparalleled learning experience. You will learn to adopt a more organized approach to everything. You will develop a knack for convincing people, thinking logically and covering up glitches effectively. The overall experience can also be amazing fun as most companies would expose you to a luxurious lifestyle. Apart from the recreational facilities, you can unwind after work hours with other interns.

Many of us make statements about taking up a job after graduation, for whatever reason. However, almost all of us have no clue what we are talking about because the experience is completely different from what we have as students right now. If taken seriously, an industrial internship can give you the perfect insight into the corporate world and what it takes to be successful in it.

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#### (Continued from page 1...)

helpful in reducing the load on the Powai campus, due to the expected hike in the number of students."

The Gujarat campus is expected to function as a full-fledged institute with an emphasis on courses specific to the state, like textile engineering and marine engineering. The authorities believe that in a period of 5-7 years, this satellite campus would cater to the needs of nearly 4000-4500 students.

The government's final decision and plan of action in implementing reservations is still awaited. Based on the above stated facts, it is safe to say that the proposed reservations ought to be implemented in a phased manner to ensure against diluting the quality of education in our nation's leading universities.

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#### A Quirky fact!

Consider a group of 100 students. According to the existing reservation norms (15% for SCs and 7.5% for STs) there are 77 students belonging to the general category- which includes students of both forward and the backward castes. Owing to lack of official data, let us assume the percentage of OBC students at 15% of the total. That gives us 62 general category students, 23 SC/ST students and 15 OBC students.

Now, if the reservations are implemented according to the recommendations of the Moily oversight committee (27% reservation for OBCs and a 27% hike in the number of general seats, so as not to affect the general category students) that makes a total strength of 154-42 seats for the OBC, 35 seats for the SC/ST category students and 77 seats for the general category students.

So, there is in effect, an increase in the number of seats for general category students!

insight

Shri Montek Singh Ahluwalia, Deputy Chairman of the Planning Commission was the Chief Guest at the 44<sup>th</sup> Convocation held on August 11, 2006. We had a chance to take a peep into the mind of one of the key figures in India's economic reforms from the early 1980s. Here are the excerpts from the interview.

#### Q: What role have the IITs played in the development of the Indian economy? Do you feel this has been over-hyped?

A: The size of the IITs is comparatively small, so if you take the total numbers the contribution is bound to be small. I wouldn't say, however, that the contribution in terms of quality has been

small. The fact is that IITs produce outstanding young men

"If I had to choose between keeping IITians in India and sending them abroad for 2-3 years, I would choose the latter."

and women - far too many men compared to women, but hopefully we can correct that! Any institute that becomes a brand for quality assurance is supporting a search for excellence which has a much wider impact than the numbers show. If you take all these into account, IIT has a very major role.

# Q: Do you think the 'brain drain' phenomenon is as big an issue in today's scenario?

A: Today the push to go abroad is much less than it was earlier. I personally feel that if we in India run a competitive system, Indians will see that the opportunities in India are no less than those

Tête-à-tête with Montek Singh Ahluwalia

abroad. Competition is also pushing Indian companies to globalize. Many young Indians now feel that working at home is a lot more positive in terms of prospects than working anonymously abroad. If I had to choose between keeping IITians in India and sending them abroad for 2-3 years, I would choose the latter since Indians need to be aware of what is happening in the world.

The fact that a large number of IITians went abroad has given us a very wide diaspora. Many IITians want to get involved in the development process in India, not necessarily to make money,

but out of a genuine desire to help.

IITians have become the face of the professional Indian class.

# Q: What are the major obstacles and challenges the Planning Commission has faced in its work in the field of education?

A: Our job, as I see it, is to ask hard questions and to shake the system out of complacency and lethargy – and this is not easy. It is clear that we're not spending enough money on education. Private sector spending has to increase. However, just pumping in money will not deliver the goods; the system definitely needs to be reformed. The Indian education system is strangled by bureau-

cracy. We need to free up the system so that academics have a greater say. I'm also in favour of increasing the role and freedom of private education, but that in itself is not a solution, because most private education will come in at the upper end of the spectrum.

#### Q: You have talked about the establishment of a Knowledge Commission in 2004. How do you foresee its role in educational reforms?

A: The Knowledge Commission was set up under the guidance of Sam Pitroda, himself an IITian and includes other eminent IIT alumni like Nandan Nilekani. The Government's intention in setting up this Commission was the recognition that, as one moves into the knowledge economy, one has to restructure the entire education system. Its contribution will consist of a report, aimed at suggesting ways to improve the Indian education system.

# Q: What are your personal thoughts on the Reservation issue and its implementation?

A: In every society there is a certain momentum, and certain instruments cannot be established as ways of doing things. We have enshrined reservation as one such instrument. I believe that affirmative action is extremely important. The end result after 60 years of independence clearly shows that we do not have an environment in which meritorious

students from every community have access to higher education, so there's obviously something wrong.

Some people argue that reservation is not the best way; even I can think of better solutions. But in our system, constitutionally and otherwise, reservation has been used. So to my mind, the most important issue is how we can work with reservation in a way that doesn't compromise on quality. Expansion in the total scale of universities is absolutely essential. The infrastructure also has to be improved if the intake is to be increased. According to the Moily Committee, this would be possible, but in a phased manner.

#### Q: These days, many IITians take up jobs which are not technical or engineering-related. Do you think this will have an impact on the technological future of India?

A: Since we're moving to a knowledge economy, the system should value knowledge workers. If knowledge in terms of technology is what the system demands, it will reflect it in terms of pay. My personal feeling however is that it's a pity. We could do with more technical inputs in our production structure. Remaining in the technology space can also be socially more valuable - environmental engineering is just one example.

(The interview was conducted by Nishant Patni and Sarmistha Pal and transcribed by Vaibhav Devanathan. They can be contacted at: nishantpatni@iitb.ac.in, sarmistha@iitb.ac.in and vaibhavdevanathan@iitb.ac.in)

"Politics is tougher than Physics", once remarked Albert Einstein. "If you are not part of the solution, you are part of the problem"; this and other similar sounding proverbs and didactic sayings are generally found to decorate the atmosphere of any discussion involving the rather debatable topic of students in active politics. Post-Rang De Basanti and the rebellious mindset it left with many students, the idea "be a part of the system if you want to change it" has gained special significance. With the emergence of Lok Paritran- the political party founded by four IITians- and its brief stint in Tamil Nadu, it is about time the issue got its dues.

So, what scope does politics hold for an IITian? What possible differences can an IITian make to the politics of the nation? Such are the questions that usually come to mind when connecting the dark world of politics and a relatively innocent (?) IITian. We must bear in mind the fact that given the status of the IITs in India it's easy for an IITian to stick to the current "take degree-get job-earn money" attitude of many an IITian rather than get into public services such as politics. Given the nature of Indian politics the action is, at least career wise, almost on par with being labeled as

### **Politically Incorrect?**

Amrit Jalan & Avtansh Agarwal talk about the latest bug that has bitten IITians- national politics.

"professional suicide". In addition to the career issues comes the neverending string of parent expectations. Getting out of such a "position" into one which promises no steady income, drains one both financially and socially, and often involves tortuous struggle can be daunting to say the least.

The experiences of Tanmay Rajpurohit [B.Tech (Aero. Engg), IIT Bombay], the national president of Lok Paritran, bear testimony to the above stated facts. Echoing him is Ajit Shukla [B.Tech (CSE), IIT Kanpur], the vice president of the party, who states quite unabashedly that their families too have failed to understand their motto but that does not deter them from moving ahead. Shukla also says that it was his "inner voice" that guided him to make the choice of investing his efforts in the country rather than filling his pockets.

Today, society norms dictate that things be viewed "as they occur in reality" rather than "what they ought to be" and as a result things like "inner voice" and related philosophical ideas carry little meaning and significance.

The fact that the actions of these four men have been described by some as foolish, idealistic and publicity seeking is not surprising in India at least. It is perhaps the saddening fact that some people never learn to look beyond their personal comfort zones that efforts such as these largely go wasted. Given the lean political situation today, measures such as these may in some sense be the last ray of hope for the nation.

For some though the IITians' foray into politics marks a breakthrough by "Brand IIT" into yet another non-IIT domain. As for the common man, the situation is yet to register a noticeable change. In an age where votes are bought in exchange for gifts, it can be quite a dilemma for a voter to choose between instant gratification and the promise of a bright future and a political system free of corruption.

A more thorough scrutiny though has led us to doubt if all the fuss is really about IITians entering politics. After all Indian politics has seen other IITians. Take the case of Jairam Ramesh who has made a career by treading in supposedly unknown territory

integrating politics and economics in his various capacities of responsibility. Have our current reactions been the result of a stray occurrence in time or of long drawn expectation and speculation finally coming true? We believe it is more of the latter. Over the course of the last few years it had become increasingly evident that the entry of the youth in the nation's politics was inevitable. What perhaps was not expected was the fact that this entry would be initiated by a class of students as plum and as well placed as the IITians. In line with the institute's reputation, IITians would (initially at least) enjoy public confidence at large. But this initiative could be deemed a successful beginning only if it paves the way for the participation of students from other disciplines.

If given the proper support, what may follow has the potential to uproot Indian politics from the shaky grounds it has stood on for decades swaying dangerously this way or the other. Who knows? By the time the nation turns sixty, reading the letters "IIT" on a politician's nameplate might not appear as surprising as it does today.

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Poper House organized by 'The reeling under the load of the 6-course the then prevalent program. What will Biswas Committee' (BC) at the

LT towards the end of the last semester will know it created a real buzz. The BC is headed by Prof. S. Biswas (CSE) and comprises 11 professors

across various departments. Like previous committees of its kind (set up every few years, as part of the regular review process - the last one being the H. Narayanan Committee (HNC) '96), it was also convened to review and revise the UG Academic Curriculum. Most of these committees have in the past, ended up making minor adjustments to the course structure, with the last major change being the reduction of the B.Tech program to 4 years from a 5-year program as it existed several years ago. We spoke to Prof. K. Sudhakar, HoD Aerospace Engg and Prof. Shashikanth Survanarayanan of the Dept of Mechanical Engg on the impending changes in the institute's academic arena. According to them, members of the BC feel that "the time is right to make substantial changes in the course structure." This sentiment is echoed by and large, by both the student community and at least by some quarters of the faculty.

#### **Student concerns**

As was apparent from the Open House, there is disgruntlement over the rigidity of the B.Tech and DD programs among students. For instance, in Aero. and Mech., there are in all 3 department electives till the end of the 7th semester, out of which 2 are in the 7th semester itself. For a B.Tech student who wants to apply abroad for higher studies, only the first 6 semesters matter, during which there might not even be one elective in his field of interest. Such a curriculum leaves the student at a definite disadvantage as compared to students outside who have more choices before applying. One can only ponder about the rationale behind having so many core courses.

Also forthcoming from the Open House

The few readers who attended the was the fact that a lot of students are

course content and adjustment within

revive the flagging enthusiasm towards academics but also improve overall

### academic performance. Even

offering a B.Tech without a specialization is being looked at, though this might be a little far-fetched since department allocation is currently done

jointly by all the IITs.

### **Indergraduate Curriculum Review**

Rohit Hippalgaonkar and Ruchir Goswami revisit the need for flexibility and throw some light on the recent developments in the restructure of the UG Curriculum.

system. Students generally seem to prefer a lesser number of courses but with each course having greater depth, a view endorsed both by Prof. Sudhakar and Prof. Suryanarayanan. A third significant opinion that came from the students' side was that freshmen need to be properly oriented and informed as to what they can expect in their 4-5 year stay at IIT. Many students joining the IITs have a completely different image of the institute – for instance that there will be a great deal of pioneering research that they will be part of, and other notions that might arise because of the glamour quotient attached with the institutes. The academic experience that they finally go through is a complete mismatch with this image and this leads to further disappointment and a lack of motivation towards academics. Hence the need for a proper introduction to the academic curriculum and a clear communication of what exactly is expected of an engineer. Other concerns such as menial (and sometimes irrelevant) lab courses, low faculty-student ratio, and repetitive courses (especially physics and chemistry) in the first year were also voiced by the students present. Note however that the students present at the Open House were not necessarily representative of the entire UG student

#### **Promising signals**

community.

What is encouraging is that members of the BC agree with almost all the above points, and more. Their mandate is to come up with a revised overall model for the UG programs, and thus the power vested in the committee also is far greater than previous committees. The HNC for instance, was only asked to make suggestions regarding

now follow is a formal survey among the students and faculty in mid-Sep-

tember and by October-November; outlines will be sent to all departments to determine whether the changes proposed are feasible. From what we gather, the BCplanning propose aggressive changes in its report to Senate. the The Senate (the all– prevailing body that ratifies

any suggestions made by any institute-level committee) will then act on the BC's final suggestions, either at its next sitting later this semester or early next semester.

#### **Potential developments**

Some of the means being explored to solve the above problems include giving students the option of a minor, floating inter-disciplinary courses and also introducing 'general engineering' type courses in the first year – statistics, data interpretation, experiment design and such courses which every engineer should ideally be exposed to. Members on the BC do think that giving the student more overall academic responsibility, i.e. the right to plan his entire academic curriculum, will not only help

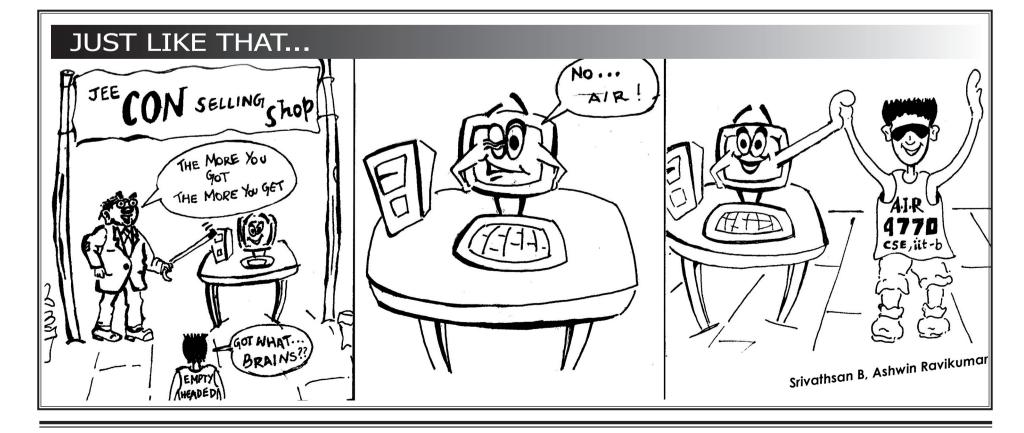
#### Some Early Movers

Independently, the Mechanical Dept has sent a proposal for Senate approval to change the B. Tech program asking for, in Prof. Suryanarayanan's words, "fewer and more intense courses, labs to be held in parallel with related courses, greater freedom and responsibility to the student in choosing courses, improvements in lab quality and allowing for electives outside the department." The changes proposed for the first year curriculum have already been accepted by the Senate, with the Department Introductory Course (2nd semester) having been replaced by a core thermal course.

Meanwhile, there are departments like Aerospace which intend to undergo a major face-lift and are eagerly awaiting the BC report. Besides expressing his concern for decreasing the mandatory credit requirement leading to a B.Tech degree, so as to discourage cramming and laying more stress on fundamentals, what Prof. Sudhakar professes is to look into the key ingredients that mould an aerospace engineer. The most interesting thing on the anvil here is a course on 'the conceptualization of a new aircraft design' in collaboration with IDC and Mech.

> For a majority of UG students today, putting effort into academics is seen as something that is not necessary, as a result of the excellent placement scene, an exciting extra-curricular calendar, and in some cases, quite simply a general apathy. Consequently, faculty commitment and motivation towards UGs has also been adversely affected. Giving a more hands-on experience to students might assuage this problem to an extent; yet it will remain a stern test of the effectiveness of the BC's eventual model.

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"We suspect an unauthorized transaction on your account."

"To ensure that your account is not below and confirm your Avoid identity."

"During our regular verification of accounts, we couldn't verify your information."

"Please click here to update and verify your information."

Tave you ever recieved such an Plemail? It's an attempt to extract your personal information, like credit card numbers, bank account information, passwords and other important or sensitive information. That's what 'Phishing' is - a form of criminal activity on the internet, and it's becoming ever more popular as the number of naive people who have access to the internet increases. We'll tell you how to Spot such an attempt and how to stay safe.

Most methods of phishing use some form of technical deception designed to make a link in an email appear as if it is authentic. For instance, the From field of the email may say "help@gpo. iitb.ac.in". And it'll ask you to click on a link. But remember that it's very easy to fake the "From" address.

When you click on the link, it will take you to a page that looks exactly like a page you've visited a thousand times.

So, you have no cause for complaint and you enter your username and password. But what actually happened is compromised, please click the link that the link you clicked on took you

bottom left of the screen shows the real Web site address to which you will go. The link does NOT point to the legitimate website.

Getting 'Phished

3. Use anti-virus software and a firewall - some phishing emails contain software that can harm your computer

for personal information.

or keep a track of your web history without your knowledge.

4. Don't email personal or financial information - email

is not a secure method of communica-

5. Be cautious of opening any attachment or downloading files from emails.

### Saurabh Das describes what Phishing is and how it can be avoided. to some other website which looks like

the front page of gpo. And now, since you entered your password, the scammer (whichever one of your friends it is) knows your password!

#### So then:

#### How do you spot a Phishing attempt?

1. The "From Field" appears to be from the legitimate company mentioned

in the e-mail. It is important note, however, that it is very simple to change the "from" information in any e-mail client. While we're not going to tell you how, rest assured it can be done in a matter of seconds!

- 2. The e-mail will usually contain logos or images that have been taken from the Web site of the company mentioned in the scam e-mail.
- **3.** The e-mail will contain a clickable link with text suggesting you use the inserted link to validate your information. In the image you will see that

Remember that a legitimate company will never ask you to verify your details in such a manner via email. So, if you ever do recieve such mails, be suspicious of it immediately.

#### Who is behind this?

The people behind phishing scams are scam artists. They send out millions of such emails in the hope that a few will fall for it and

provide their personal information. Anyone with an email address can be phished. Any email address that has been made public (like posting in public forums, newsgroups or websites) are more susceptible to phishing as this email address can be saved by spiders that comb the web and save as many email addresses as they can.

#### How can I avoid getting phished?

**1.** The golden rule is: Never click on links within the body of unknown email messages.

once the hyperlink is highlighted, the 2. Never reply to an email which asks

#### Did You Know...

The word 'phishing' comes from the analogy that Internet scammers are using e-mail lures to fish for passwords and financial data from the sea of Internet users. The term was coined in 1996 by hackers who were stealing AOL Internet accounts by scamming passwords from unsuspecting AOL users. Since hackers have a tendency to replacing "f" with "ph" the term phishing was derived!

Now, don't get scared and refuse to use email because you are afraid of phishing scams! Just be careful. Keep the above in mind and you should be safe from such scams.

(Saurabh Das is a fourth year undergraduate student of the Physics Dept and can be contacted at sdonline@iitb.ac.in)

The all know the drill. It's the end of the semester. You're waiting for the final round of sleep, umm lecture to end, when another prof walks in with a bundle of course evaluation forms. Yaay, the lecture ended five mins early!

While I'm sure not everyone takes course evaluation this seriously, one must admit that course evaluation at times becomes a lackadaisical affair, with both students and professors feeling, and not wrongly, that the other party isn't taking matters too seriously.

Let's look at the procedure as it stands today. A printed form is handed out to students, usually 10 to 15 minutes before the end of a lecture. This form consists of many objective questions about teaching style, material, course etc., with options ranging from 'Strongly Agree' to 'Strongly Disagree'. There is a small space left at the end of the form for students to fill in their personal comments. These forms are taken to the Academic Office, where all the data is compiled and a score is assigned based on the options chosen by the students. Personal comments are stored as well. After the course is complete, with exams, grading et al., the score is sent to individual professors. In the case that the score is alarmingly low or below a certain cut off, an alarm is sent to the Dean AP and the Director, who take further constructive action.

The problems with such a system are manifold. Firstly, the form itself is

### On Course?

#### Pranav and Rajlakshmi analyse the current Course Evaluation structure and suggest improvements.

ambiguous. There are many questions which can be interpreted in different ways. Some of the questions are either overlapping or plain redundant. Secondly, the manner in which the forms are filled out isn't very conducive to an objective evaluation. To pass judgement on an entire course in the space of 10 minutes isn't an easy task, and sometimes leads to students either ticking options based on personal opinions about the professor or just filling in the same options as their neighbours. While some students do fill in the forms diligently, every once in a while one comes across a student who gets extremely nasty in the personal comments section, leaving the professor annoyed to say the least.

Further, many students feel that the process is not transparent enough. No one is quite sure how seriously the comments are taken, and the procedure is such that the onus lies entirely on the professors to take note of criticism and act on it. Perhaps the system is too negative, with fault-finding rather than any positive feedback reaching either side, or perhaps we have a tendency to be too subjective.

It's high time this procedure is updated. With some professors relying on feedback from students to improve

their courses and teaching methods, perhaps it is time we formalised this procedure. A good example of this is the procedure in place at the Massachusetts Institute of Technology (MIT). A comprehensive voluntary course evaluation is carried out with all aspects of the course including TAs being examined. Interested students fill up this form, and while the number may be around 30 students from a class of 110, at least one is sure of the seriousness of the answers. After this, one responsible student takes it upon himself/herself to compile all the data and then submits a report that covers all aspects of the course, both good and bad. More importantly, this information is made available to both the students and the concerned professor. This is especially useful to students choosing their courses for the coming semester, as they are then able to make a judgement based on the previous evaluation.

While this may seem unfair to professors who face genuine problems whilst teaching, it also puts pressure on them to review their performance on a more regular basis. The main point of this form of evaluation is a self-moderation by students, which helps eliminate the rogue elements that sometimes hamper the process. It ensures that both groups

take the process seriously and makes the process more interactive and productive.

Some professors we spoke to also believe that rather than a course evaluation at the end of the course, a more useful evaluation would be one carried out during the semester itself. While some do actually carry this out on a regular basis, by just talking to students, this process could be formalised by making an online form available. This form could be issued at any time, and for any number of times during the semester, and should be modified by the professor with respect to the specific course. This would translate into immediate short-term benefits for the students of the course, and a general improvement of the overall learning process.

A course evaluation thus is a very important and vital part of the teaching process, as it aids both current and future students. As a parting note, perhaps it is time that students took matters more seriously by compiling their own reports and submitting them to their professors. Learning is after all a two-way process; it is only when one side opens up that the other can truly gain anything.

(Pranav Chowdhary is an alumnus of the batch of 2006, Dept of Chemical Engg. Rajlakshmi Purkayastha is a third year undergraduate student of the Dept of MEMS. They can be contacted at pranav@gmail. com and rajlakshmi@iitb.ac.in)





### rkut - The New Obsession

You stay here? Then you know what Orkut (Ongoing Rage: (S)krap Uttering Terrain) is, maybe even have blogged about it some rainy afternoon some hours before your XY230 midsem. Also you know what a blog (Big Logs Of Gibberish/Gyan) is, perhaps have even referred to it in your 400th scrap to some chap you believe is a mathematician in Nebraska who you knew in your 6th standard. If you also know what Xorpia, Hi-5, Yahoo 360 and blah-di-dah are and understand them, then boy do you really need to get out of your room more and see the real world, its quite pretty. Especially when it rains, there are bathed trees looking lush and heavenly, little froggies, gentle breeze and different aromas ... ahem, but I digress. I was talking about the various causes of digression in our lives.

The fact that you are hooked to Orkut is because you can't help being human. People love talking about themselves.

- People love knowing other people.
- People love a good digression every now and then.

Now a certain Mr. Orkut Buyukkokten, a Google software engineer, for some reason didn't really like the devil very much (notice how the colour of the site is an angelic blue) plus he had read in some blog that man is a social animal. So he said to himself "How the devil do I displace the devil from idle minds and make money while at it? Hmm, I wonder. How about I bring all the idle minds together and they can figure it out?" And Orkut was born. "Orkut is an online community that connects people through

a network of trusted friends. We are committed to providing an online meeting place where people can socialize, make new acquaintances and find others who share their interests.

Join orkut to expand the circumference of your social circle."

Somewhere something went terribly wrong. The trusted friends turn out to be people you want to disown. Ain't it fun when your scrap book becomes a chat board; you're forced to be in the friends list of owners of embarrassing communities related to things like pigeon poo; you're unknowingly connected to people who join communities like 'I love my husband'; the little box on the top right has friends who due to a sudden loss of mind decide to call themselves 'go Czech go' (I mean while Germany, Brazil, England exist, why Czech?!). You get reunited with some folks you never thought you would come across again (actually this is an advantage). Socializing takes on a whole new dimen-

sion and pick up lines undergo redefinition. "Will you do frandship with me?" "Hey there...nice pic. Never knew there were pretty gals in IIT...would've strived harder to get in" "Hi..felt like adding u, but the no. of ur frens makes me sad"). You succumb to temptation and before you know it you graduate from playing peeping tom to online stalker who has to Orkut an hour before an 8-credit endsem with 70% weightage.

A brilliant concept to begin with, but what the guy with the weird name didn't take into account was the strange ways

of the idle mind. What began as a perfectly productive venture by and by got reduced to a mere mockery of its founding principles - a propaganda spreading ground, a random picking up joint!

Second law of humandynamics- the total amount of idleness in the universe only increases!

(Tannishtha Sanyal is a third year student of the Dept of Aerospace Engg. She can be contacted at tannishtha@iitb.ac.in)

#### Making connections where none previously existed!

Trust the math geeks to find an 'intriguing problem' in the most unlikely of places. What could possibly be mathematically intriguing in "Orkut"? Read on.

- 1. A graph is a set of vertices connected together by paths.
- 2. Every user of Orkut is a vertex.
- 3. Every friend of yours (assuming you are a user) is joined to you by a path.
- 4. While visiting a profile, it shows you a link between you and the new person as a chain of intermediate friends.

Conclusion: Orkut can be modelled as a graph.

**Connected nature:** Since Orkut is an invite-only feature, it implies that if there was only one user to begin with, every user should be linked to every other user. But if you navigate through Orkut clicking on profiles of random people, you will notice that for some, a connection is not shown. This can mean two things,

- a. You have reached a fully unconnected subgraph, which in turn implies that there was more than one user to begin with.
- b. The link that existed between your subgraph and the new one must have been broken when a user deleted his/her account and the subgraphs once connected became

**Dense nature:** A graph with a large number of paths as compared to vertices is called dense. Some claim that orkut is a very very dense graph. The evidence is in the fact that if you try clicking on random profiles, it would be difficult to reach someone who is separated from you by more than 5 friends in between. The maximum reported is 7 provided a link exists. Compare this to the number of registered users currently showing - 25,050,669. Even with these many nodes, one doesn't find a chain longer than 7!

#### Some open questions:

- How many cycles of length 'n' are there per 100 people?
- Do chains of length greater than 7 really not exist?
- How does Orkut decide what chain to show if there are more than 1 possible?

Crazy you think?

- Fundae by Vivek Upadhyay (vivek\_u@iitb.ac.in)

# Questech

#### **Dots and Circle**

You are given 5 dots arranged on a circle, and told to draw segments between pairs of the points to connect all the dots. It is always possible to do this with 4 segments. However, suppose you are required to use 5 segments, that is, the dots should not all be connected until you draw your fifth segment. For instance, if the dots are numbered 1,2,3,4,5, one way to do this is to draw the following sequence of segments: 12, 34, 24, 13, 35. Another sequence would be 34, 13, 12, 24, 35; it uses the same segments but in a different order. (But careful: some other orders of these 5 segments don't count; why not?). Another sequence, using some different edges, is 23, 24, 25, 34, 15. Note that you may not draw the same segment twice. In other words, 12, 23, 23, 34, 45 uses only 4 segments, not 5. How many sequences are there which take 5 segments to connect all 5 dots?

#### Five men, a monkey, and some coconuts

Five men crash-land their airplane on a deserted island in the South Pacific. On their first day they gather as many coconuts as they can find into one big pile. They decide that, since it is getting dark, they will wait until the next day to divide the coconuts.

That night each man took a turn watching for rescue searchers while the others slept. The first watcher got bored so he decided to divide the coconuts into five equal piles. When he did this, he found he had one remaining coconut. He gave this coconut to a monkey, took one of the piles, and hid it for himself. Then he jumbled up the four other piles into one big pile again.

To cut a long story short, each of the five men ended up doing exactly the same thing. They each divided the coconuts into five equal piles and had one extra coconut left over, which they gave to the monkey. They each took one of the five piles and hid those coconuts. They each came back and jumbled up the remaining four piles into one big pile.

What is the smallest number of coconuts there could have been in the original pile?

#### Tic-Tac-Toe?

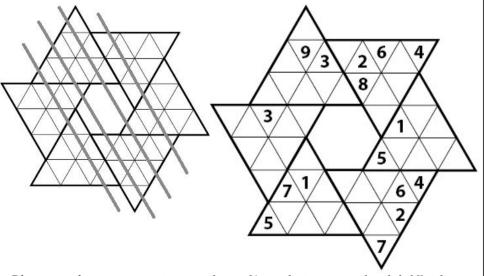
Two players take turns choosing one number at a time (without replacement) from the set {-4, -3, -2, -1, 0, 1, 2, 3, 4}. The first player to obtain three numbers (out of three, four, or five) which sum to 0 wins.

Does either player have a forced win?

Hint: The title has something to do with the solution!

#### Star Sudoku

This is a new sudoku where you have to arrange the numbers 1-9 in each bold triangle such that each of the diagonals also has the numbers 1-9 exactly once. (A diagonal is a set of adjoining triangles, as shown by the gray lines in the figure. Note that there are 3 such directions, 4 diagonals in each direction. The diagonals of only one direction are shown.)



Please mail your suggestions, cribs and/or solutions to onkardalal@iitb.ac.in and/or shweta@iitb.ac.in. You may also drop your solutions with the tech-secys of your hostel. Please mention your email id and the time and date of completing the solution on the handwritten solutions. The early bird gets a treat at Coffee Shack:)

insight

If you ever tried doing a Charles Lindbergh, with an old 1920's air-

# Inversion of Earth's Magnetic Field!

craft and a magnetic compass in your hand, travelling eastwards, where

would you end up? Unlike Lindbergh who landed in Paris, you'll have to be content with the sound of bagpipes in Scotland. The reason behind this is the simple, well-known fact that the earth's magnetic and geographic axes do not coincide. But have you ever wondered about this mysterious angle between the earth's geographic and magnetic axes? The fact of the matter is that this angle is increasing ever so steadily, at an average rate of about 0.2 degrees/year. What's more precarious though, as we shall realise

Before we delve into the relevance of this phenomenon, let us try and understand the mechanism behind this apparently insignificant magnetic field of ours. At the heart of our planet lies a solid iron ball, about as hot as the surface of the sun, called the inner core, spinning at about 0.2 degrees of longitude faster than the earth above it. Surrounding this is a deep ocean of molten iron called the outer core. There are whirlpools and convectional currents

in a short while, is the fact that accom-

panying this shift in direction is a sig-

nificant attenuation in its magnitude.

generated in the outer core, powered by the Coriolis forces of earth's rotation, which generate our magnetic field. If you put down the Navier Stokes and Maxwell's equations that govern this process, you will end up realising the fact that this field is bound to flip and do lots of other crazy

things.

Simulation tells you that there have been and there will be times when the earth will have several North and

South Poles simultaneously. At the current

rate, the North Pole might exit North America and reach Siberia in just a few decades. And if your children are fortunate enough, they may even have the opportunity of enjoying the sights of the Northern Lights (the aurorae) in southern Asia.

Moving onto the more serious aspects of this, scientists associated with the field of paleomagnetism have come up with some interesting observations. These scientists study the magnetic stripes around mid-ocean ridges that reveal the history of the earth's mag-

netic field over millions of years. They have figured out that one of these inversions had taken place roughly at the same time when dinosaurs had become extinct. Hence parallel to the meteorite theory, a hypothesis involving these inversions to account for the extinction of dinosaurs has been floating around

in life science circles. It is be-

lieved, though not proved, that

all living cells need the stimu-

lation of a magnetic field to perform their functions. As already mentioned, the strength of the magnetic field can dwindle by a factor as high as 10 during an inversion. Could this be the cause for their tion? extinc

If the attenuation of the magnetic field can cause the demise of dinosaurs, why would humanity be spared if there were to be an inversion somewhere in the near future? This leaves us with the pivotal question: When will the next inversion occur? This is by no means a straight-forward question. Scientists are cautious. No inversion has occurred in about 780,000 years,

while paleomagnetic studies indicate that in the past 10 million years, inversions have happened about every 200,000 years. Scientists believe that in a way our current era is unusually stable, and an inversion would by no means be strange.

The magnetic field of earth also performs the important function of shielding our planet from space radiation and solar storms. You never know what cosmic dangers we may be exposed to, if our natural armour was to weaken. Further, we cannot restrict ourselves to the analysis of only the earth's magnetic field. This is a universal phenomenon, originating from the laws of physics. Such inversions have also been observed in Mars, Venus and most prominently in the sun, where some of the inversions have been separated by a time gap of only 11 years. Scientists in several laboratories around the world are trying to mimic earth's outer core by spinning molten iron at 6000 Kelvin and observing its effects. This phenomenon is certainly calling out for more awareness and attention from the scientific community.

(Ashish Goel is a sophomore of the Physics Dept and can be contacted at ashishgoel@iitb.ac.in)

### Unnati - more than just an organiza-

According to the formal description accepted by the 1st Advisory Committee Meeting of the National Service Scheme (NSS), "Unnati" is the name given to a collective consciousness in the student community, to extend the philosophy of the National Service Scheme to the entire student community - and to encourage activities aimed at social welfare and consequent personal growth to flourish. Unnati (meaning progress) emphasizes the idea that personal progress and social progress are related.

Unnati primarily focuses on the proper coordination between NSS and all the independent socially active bodies functioning inside IIT, like the Group for Rural Activities (GRA), Centre for Technological Alternatives for Rural Areas (CTARA), Vidya, Navchetna Shivirs and Vidya Sanganak Kendra.

It brings together all these bodies under one banner. Besides this, Unnati aims to encourage and recognize the participation of students in NS101 and NS102 as well as the joint activities of NSS and all the other aforementioned bodies. It also encourages the personal development of students through methods like Yoga, meditation, Pranayama etc. Thus, it developed as an activity conglomerate aimed at the greater good.

#### Growth of Unnati over the years

The foundations of Unnati were laid in 2004 with the full support of the Direc-

### **Unnati - A Consciousness**

tor of IIT Bombay. Prof. V.M. Gadre (Electrical Engg) and Prof. Prasanna Gandhi (Mechanical Engg) became the first Coordinators, NSS. There was no hierarchy as far as the student teams were concerned. There were independent teams to look after the interaction between NSS and other bodies as well as for other reasons:

- 1. Team for joint help activities of NSS and Vidya
- 2. Team for special educational programmes between NSS and Vidya
- 3. Team for NSS-Vidya Sanganak Kendra for computer literacy programmes
- 4. Student Mentor Programme5. Team for GRA-NSS joint activities
- 6. Team for Navchetna Shivirs and youth programmes for a myriad of activities like meditation camps, donation of old clothes etc.
- 7. Publicity/Marketing/Interface/Organizational Team for organizing functions, workshops etc.

All these teams directly reported to the Coordinators, NSS and thus to the Dean, SA and Dean, AA. The founders always wanted to maintain a minimal amount of hierarchy in the structure so as not to dilute the aim of Unnati.

During the last general elections in the institute, the election officers planned to make Unnati an Independent Body (along the lines of MI, TF etc.) and thus make it open to elections to decide the student heads. This was done purely with the belief that it would further increase the stature of Unnati and

thus help in its further growth. However, when the idea was discussed with the Coordinators, NSS, they stepped in to stall the entire election process.

Prof. Gadre explains that Unnati was never meant to be people-centric and that it was against the philosophy of Unnati to force a hierarchy. He agreed with the motive behind wanting to make it an IB but he stresses on the fact that in the case of Unnati, the hierarchy should be built bottoms up, allowing Unnati to grow in the process. As a result, the Faculty Advisor Committee was convened and the committee came up with a definite structure to meet all the goals while retaining "work" as the prime focus. The committee too believed that some positions of leadership and responsibility were needed. It was decided to form a Team of Student Coordinators (or the TSC) within the following constraints:

- 1. The students constituting the TSC would be chosen by the members of the FAC, from amongst those who have significantly contributed to one or more of the various teams listed above.
- 2. The size of the TSC should not exceed 10 members.
- 3. Its composition and size should be based on dynamic need and subject to review by the FAC year to year.
- 4. Its members would be given due appreciation at the end of the year.

Thus, a form of hierarchy and leader-

ship would emerge from within the members of Unnati itself. Besides this, there would be no other student body. Additionally, Unnati would like to invite all those who would like to volunteer for any kind of help and later recognize the efforts of such people too. Currently, the TSC consists of 7 members, one or two each from GRA, Vidya, CTARA and so on.

#### Future aims and plans of expansion

Prof. K. Narayanan (HSS Dept), who took over from Prof. Gadre as Coordinator, NSS in June 2006, describes Unnati to be an umbrella organization to tie all the social activities together. He looks upon Unnati as a medium, an opportunity for people to gain personal satisfaction through social work. He is glad of the fact that Unnati is a very open organization where volunteers can get through to anyone without talking to lots of people.

The professors extend a warm invitation to the entire student body of the institute to devote any time they can to any form of social work. Unnati adds a new dimension to student activities and should be a part of a student's profile. If you go to the MB in the evenings and see children being taught, you will be touched for sure. You don't need a Bombay blast to make people come out and help others.

(Gautam Salhotra is a second year student of the Mech. Dept while Vivek Upadhyay is a third year student of the CSE Dept. They can be contacted at gautam.salhotra@iitb. ac.in and vivek\_u@iitb.ac.in)



DISCLAIMER: All statements in quotes have been honestly and directly repro-

### NEW HIDS ON THE BLOCK?

duced from a survey Aakash, Abhinav and Tarun try to find out the aspirations of the new entrants of the insti. didates, when asked, conducted by IIT

Bombay Sophomores, interviewing scores of JEE '06 aspirants, giving the exam at the on-campus centre in April '06, as well as some of their parents.

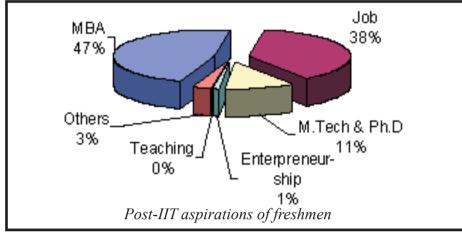
Amidst some lost, some still searching anxious human facades, waiting to give the examination of their lives, we tread on a walk engulfed with nostalgia, with a we've-been-through-this gleam on ours. "Engineering" a survey of JEE aspirants is not, by the way, a difficult task. Their eager, rehearsed and sometimes nearly recorded replies reminded us of the trains of thought we got off from, moments before becoming a part of this wonderful Institute of ours.

What evidently directed their aspirations, as the eager young minds of tomorrow, was the neon-lit "brand name" IIT has to offer. They even have their fundamentals in place. "Placements, reputation abroad and how its alumni shape the world" being valid arguments in favour. However, the Indian mentality hasn't changed much over the decades of educational reform in the country. The common perception

disdainful "nerds". Seemingly highly academically oriented, a vast chunk of aspirants have righteously sidelined a major fraction of their daily hour allowance, as is evident from the graphic adjoining. They also have telling facts on their tips about the faculty on campus, of them being "Highly qualified from abroad and actively participat-

football. The "All-round development" programmes in IIT are craved at par with the B.Tech and Dual Degree Programmes. An interesting observation was that girls, when juxtaposed with boys were numerically far more interested in extra-curricular activities.

Other factors that attract aspirants to-



ing in research." Adding to that, "They are among the best professors of the world."

What is sad for us to note, however, is that hardly any of them had actually

wards IIT include the "independence" here, owing to the all-students-on-campus policy; the "sprawling campus", heaven as a to-be haven; and the location, being "in one of the most happening cities", with lots to offer outside the campus as well.

As for their aspirations post-engineering, the myth that most IITians aspire for an MBA degree rather than further technical or scientific studies has been verified yet again. With regard to the graphic shown, CAT and MBA degrees from abroad take the cake when it comes to what goes on in freshmen minds as regards postgraduate degree options. A minority, though, has firm grips on higher degrees from abroad topping it up with research in their favourite scientific arenas. A comparably small section aspires for entrepreneurship and start-ups from campus. Interestingly, not one has set sights on teaching as a profession. As and if the dreadful event of not qualifying arises, however, hardly any believe forsaking another college to prepare for JEE again, even if it were allowed, to be a viable option.

Unanimous against the reservation

Activities of freshmen other than academics Sports Nothing in 23% particular (just studies) 30% Others 2% Sitting on the Lit & Debating computer 5% Dramatics Music & Dance 19% 8% 13%

of engineering and medicine being the core professions still very much exists. IIT being "undoubtedly the best engineering institute in the country" attracts a sea of big-buck-aspirants.

And what's to say about what they think IIT is like. Alas, we are termed a distinctive, apparently concise and a I I - encompassing and even mildly

visited the IIT Bombay website to find out what all does happen on campus, outside of academics. Those who had knowledge of the cultural and sports backgrounds of the institute, had other opinions, of course. A surprisingly large, as always, section of the so-called "cream of the nation" was genuinely interested in as varied interests as classical dance, to debating, to

12.30: Coffee Shack

Deepti and Rutika go behind the scenes to uncover the story of the man-in-charge, Mr. Vijay.

Q: How long have you been working at Coffee Shack?

A: I've been here ever since it started 18 years ago when I had joined as a helper at the counter. Back then, we sold Maggi for 2 Rs and coffee for 1!

Q: Was Shack as crowded when it started as it is today?

A: Definitely, if not more. Back then, we had 80 chairs and 15 tables as against 30 and 6 now. There were no hostel canteens in those days,

so people used to flock here all the time. In fact, during Mood Indigo, we used to be open 24/7!

Q: Has Shack always been a regular venue for 'meetings'?

A: Yes yes. In fact earlier, there were lectures held here almost every Saturday. It used to be a lively discussion between the profs and their students, followed by a coffee treat sponsored by the prof!

Q: Would you ever consider leaving the city or switching jobs?

A: No way! A few years back, I went to work in Abu Dhabi for 2 years but that experiment ended soon enough. It was no match for Mumbai. There's nothing like Mumbai city during Ganpati!

Q: Any interesting incidents you remember?

A: During the '93 bomb blasts, there was a bomb alert right outside Main Gate and we had to evacuate! And of course during the July 26th rains last year, I had to walk through waist high water to Ghatkopar like many others.

Q: Any plans for expansion for the Shack?

A: We have already submitted an application for the expansion of shack. Once it is approved, we intend to add sandwiches and colas to the menu!

quota hike, the aspirants could barely make any sense of the Government move. Reserved candidates, when asked, too believed it to be

"an injustice to the general category aspirants", although they did acknowledge that they would "benefit a great deal" from the move. One sagacious parent remarked, "The reservation issue is like a Banyan tree. Nothing can grow underneath it. Nothing progressive can be achieved from its roots. And it keeps on growing incessantly by itself". There were also suggestions of "Creating separate institutions for reserved category students" as well as "Introducing appeasements at primary or schooling level, but not with respect to higher technical education."

Last week, we interviewed the freshmen on their first impressions of the institute and the activities that they plan on pursuing in their first year (see graphic).

A majority of freshmen, who had intended to bring in personal computers have decided against it, on realizing that they wouldn't be allowed access to the institute network. Keeping in mind how many students actually procure one, branch change or "BC" is surprisingly right up there among the freshly understood popular IIT terminology. But of course, after joining the institute, once the apprehensions and uncertainties are passe, their opinions are bound to change. As ours did.

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