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The Leaky Conundrum

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The importance of water as a precious resource in our lives can't be overstated. But do we think about how we use it? Even today, large parts of India face the problem of water scarcity. IIT Bombay is blessed in that regard as we have a 24*7 water supply.

In this article, we delve into the matter of water supply and usage on campus. The huge disparity between water consumption levels in insti and the rest of Mumbai shows a callous approach towards water as a resource. We also look into the ways water is being wasted and reasons thereof.

Background

The water supply network of IIT Bombay is very complex, and has degenerated into decrepitude over the years, since its laying down in the 1960s. The primary source of drinking water is the Brihanmumbai Municipal Corporation (BMC) pipeline, which supplies water to the campus 24 hours a day. The Tulsi and Tansa lakes are its primary reservoirs.

The one and only water meter of the campusis installed on this line, and it caters to two main tanks located near Hostel 15. These have capacities of 4 and 6 lakh litres respectively. There are a total of 24 borewells (secondary sources) on campus catering to gardening, flushing and water-intensive laboratories such as the Hydraulics Lab. As estimated from estate office data, the average number of litres of water consumed per person per day (LCPD) in the institute is approximately 358 litres. CPHEEO (Central Public Health and Environmental Engineering Organization) norms recommend the usage of water in residential areas of metropolitan cities such as Mumbai to be 150 lcpd and 45 lcpd for offices. Clearly, IITB's consumption exceeds CPHEEO norms by a jaw-dropping amount. The current infrastructure is getting old and has already outgrown the capacity for which it was designed. The ever-increasing population in the institute has led to increasing pressure on the supply system, which operates pumps for 24 hours - an inefficient modus operandi.

AS PER PREPARATORY STUDIES DONE FOR MUMBAI DEVELOPMENT PLAN FOR 2013-14 (SOURCED FROM MCGM), THE ACTUAL PER CAPITA WATER CONSUMPTION BY AN AVERAGE CITIZEN OF MUMBAI IS **268** LCPD, FAR EXCEEDED BY IITB'S **358** LPCD It has been noticed that the meter on the high pressure BMC pipeline gets damaged every few months due to flowing debris. Given that around 20-25 days are needed to fix it, measurements, and subsequently, water bills, for that period are merely an approximation of previous months' records.

While many recent changes have been made to the pipeline system, necessary documentation which could be used at the time of repairing is still missing. Often, senior officials at the estate office are called to address the problem whenever a complaint is registered, which increases response time.

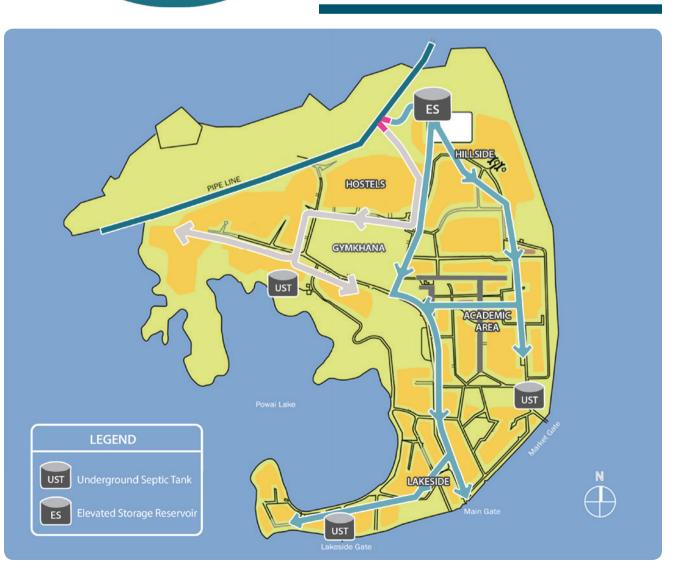
Case studies

Comparing consumption on campus with any established norm is hard because it cannot be put in one category. Also, the absence of meters means that the figure of 358 lcpd cannot be subdivided on types of usage. However, to gather information about consumption patterns across the institute, approximate calculations were made using pipeline diameters and capacities of storage tanks.

Although corrective steps have been taken by introducing wastewater recycling systems in residential complexes, it was discerned that they are only present in recently developed complexes and are not being efficiently used. Office complexes like the Main Building fare better, but still show higher consumption than the norm.

As per preparatory studies done for the Mumbai Development Plan for 2013-14, the actual per capita water consumption by an average citizen of Mumbai is 268 lcpd, far exceeded by IITB's 358 lpcd.

HEAT MAP OF THE IIT-B WATER SUPPLY



	Consumption levels of establishment	Consumption norm set by CPEEHO
ANANTA (RESIDENTIAL)	513	150
MAIN BUILDING	58	45
HOSTEL 12	363	150

PER-CAPITA CONSUMPTION OF WATER IN EACH REPRESENTATIVE BUILDING COVERED IN THE CASE STUDY, VIS-A-VIS SET CPEEHO NORMS

RESULTS	OF THE	SURVE	Y ON
LEAKAGE	OF	OVER	HEAD
TANKS,	CONDL	JCTED	BY
EX-GSHA	ABBAS	ALI B	OHRA

Why do we consume so much?

Here, we highlight two important reasons for such high consumption - first, the institutional wastage of water through overflowing tanks and second, individual wastage of water due to consumer apathy.

A survey conducted by the previous GSHA, Abbas Ali Bohra, brought to notice the fact that nearly all our hostels had overflowing storage tanks for as long as two years (see the accompanying table). This has now been corrected temporarily, albeit in an ad-hoc manner, where valves are changed every three months. The main reason for this provisional arrangement is that the quality of valves being used is poor. These were downgraded after repeated pilfering of good quality valves.

To quote an instance, ex-GS of H1, Ratikanta Nayak, asserts that after he reported the persistent and incessant water leakage in H1 tanks to the concerned authorities, only temporary rectifications were made, and the problem persisted till the end of April 2015. This amounts to a delay of more than one-and-a-half years. Once students declared their intent to take this issue to the State Government, however, it was resolved within a month's time.

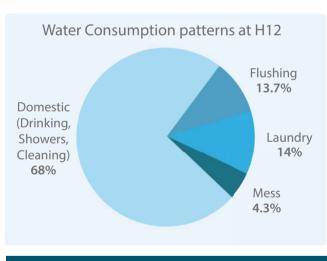
TO PUT THINGS IN PERSPECTIVE, THE 17,000 LITRES OF WATER WASTED EVERY DAY IS ENOUGH TO SATISFY THE DAILY NEEDS OF 17 HOUSEHOLDS OF 4 PEOPLE EACH, OR FOR THE SUSTENANCE OF ONE PERSON FOR ABOUT 24 YEARS

Hostel	Does your hostel face water overflow issues in overhead tank?	Has this problem remained unsolved even after several complaints?	Does the solution done by HMU fail every time?	How long has this problem persisted?
1	1	1	*	More than 1.5 years
2	1	1	1	Almost a year
3	1	1	1	1 year
4	1	1	*	2 years
5	1	1	*	2 years
7	1	1	*	2 years
8	1	1	*	14 months
9	×	×	×	-
11	1	×	×	Not so frequent
10A	1	×	×	5-6 months

*Figures as per data obtained in April 2015

The details about the water supply network and consumption levels across different establishments in the institute were cited from a report published by Ms. Pooja Jain, a research coordinator in CTARA.

ly estimating 2 leaking faucets per hostel, this sums up to a flabbergasting figure of 17,000 litres of water wasted daily, by all hostels together. To put things in perspective, the 17,000 litres of water wasted every day is enough to satisfy the daily needs of 17 households of 4 people each, or for the sustenance of one person for about 24 years.



CONSUMPTION OF AN AVERAGE RESIDENT OF HOSTEL 12 FOR VARI-OUS ACTIVITIES, AS PERCENT OF TOTAL CONSUMPTION

One underlying cause here is that water costs for students are highly subsidised. We pay Rs. 2500 per semester for both water and electricity. Considering our levels of consumption for these two resources, there is not enough monetary incentive for students to conserve water. The culture of wastage prevalent at IIT, which includes other important resources like food, can be ascribed as another reason. The authorities have taken certain measures of late, but these seem too little considering the monstrosity of the problem. Proposals like an institute-wide water audit and use of level sensors in overhead tanks are still in the pipeline, with no specific timeline.

A pro-active approach is needed by both authorities and general residents to curb incessant water wastage. The argument we wish to make, is not to increase fees so that students feel the bite of wastage, but to bring culprits to book and impose monetary fines to reign it in. Many institutes abroad perform surprise inspections to maintain checks on consumption levels. At the hostel level, we believe students must be held culpable. Councils need to ensure that reported cases are catered to within a specified time period and hold the concerned wings responsible for unreported leakages.

Recently, IIT Kanpur managed to bring down the energy consumption levels by 41% and water consumption levels by 70% from benchmarks set by the 'Green Rating for Integrated Habitat Assessment (GRIHA)' body. Here are the few steps taken on campus on a relatively large scale to achieve these inspiring results:

• Existing trees preserved and protected on site.

• 62% reduction in building water consumption by use of low-flow fixtures.

The second issue is the indifference shown by campus residents. All too often, leaky taps in hostels are left unrepaired for weeks, on account of inaction by both general residents and authorities. For example, there exists a tap in H2 which has been slowly leaking for more than two years. A simulation done on a mildly leaking tap gave us wastage of 350 ml per minute, which when extrapolated gives a staggering figure of 500 litres of water wasted per day. Conservative-

 50% reduction in landscape water consumption by minimizing lawn area and planting native species of trees and shrubs.

 Only 17% paved area to promote water percolation and reduce heat island effect.
Rain water harvesting system designed for reuse and recharge.

• Waste water treated and reused for landscape water requirement

"But I always say, one's a company, two's a crowd and three's a GBM." – A. Muk-E-Kar "There are lies, damned lies and

'initiatives' "

– Satish Bhaiyya

With midterm council reviews to be scheduled soon, the GBMs are still reminiscent of a joke that's been played on for too long to be funny anymore. I, for one, would vouch for the fact that we, as a community, don't care. With an attendance of whoever just happened to walk into the venue, the apathy of the student community does make a compelling case against the very need of conducting this exercise.

From the SAC Constitution

Yes, there's a SAC constitution. GBM's were envisioned as a check on the working of elected student representatives by tabling discussions on the work done by them during their tenure and

1 The Chairman (Sports/Cultural) or the concerned Faculty-In-Charge and all the members of the concerned council are members of the General Body. The concerned council student head is the Vice-Chairman of the GBM. The President in consultation with the respective head of the council will appoint an Institute General Secretary as the Moderator for the GBM.

2 In case of the following councils, 6 Nominees from each hostel are also members of the General Body. If a hostel fails to send at least 3 nominees for each GBM, then 5% of maximum attainable points shall be deducted from that hostel's tally in all the Inter Hostel General Championship. [For all councils barring the Academic Council]

3 In case of the Institute Academic Council (UG), 6 Nominees from each UG department are also members of the General Body. It is mandatory for the Department General Secretaries to send at least 3 (1 in case of PG) nominees for the GBM. At the start of each GBM, the Hostel Nominees shall present their credentials to the Chairman of the GBM along with a letter of introduction from their respective Hostel General Secretaries. conveying grievances to be redressed later. So, from the time the tenure of an elected Gymkhana representative begins up to the time of dissolution of the Body, the SAC President (DoSA being the ex-officio SAC President) chairs the General Body. The Director appoints a Chairman (Sports) and a Chairman (Culturals) to preside over the councils. Student bodies like SARC, Insight, Mood Indigo, Techfest, etc. have a Faculty-in-Charge allotted to them to oversee their working.

How rigorously these are followed is a matter of concern, though. With the instance



SHREEYESH MENON

of a quorum being met an exception rather than a norm, one might say biometric attendance for the office bearers and the nominees is probably the way forward. Also, with the number of Hostel and Department General Secretaries who are either unaware of their responsibilities during a GBM or just apathetic and the absence of nominees rampant, the very utility of the half-yearly exercise is debatable.

Impeachment

The bane of all elected representatives is the one thing that can depose them. It is rare for such a motion to be tabled in a GBM, as it should be, but more often the reason being that the final say in such matters lies with an authority who isn't part of the student community - the SAC President. This, coupled with the lack of quora in most cases, makes impeachment extremely difficult, if not impossible. Again, drawing verbatim from the SAC constitution:

Impeachment proceedings can take place in a GBM or in an E-GBM (Emergency GBM) with the following procedure.

(a) A member tables the motion.

(b) The Chair allows the motion to proceed.

GBM: Institute Vs Hostels

Most hostel councils have resorted to following the institute model with regards to the council structure and the conduct of General Body Meetings of their own, albeit following their own constitution, approved by their Warden. As hard an irony as it is, it's seen that the general level of participation and enthusiasm in case of hostel GBMs is actually higher. This can be attributed to the natural human propensity to attend an event taking place in one's own backyard, rather than an ill-publicised one being held outside. Further, the lack of strictness in the implementation of the rule regarding hostels sending their nominees to institute GBMs doesn't help either. Hostel council GBMs, often known for intense criticism of the council's work, with suspensions and impeachments being much more common, are in stark contrast to the Institute level GBMs taking place in empty halls. Though the hostel GBMs sometimes become a forum for frustrated "seniors" to flame sophomores rather than constructive criticism, their effectiveness in instilling an urgency with respect to responsibilities is beyond question.

The students' side of it

With the general sentiment of apathy displayed by the student community towards GBMs, it would be unfair to blame the representatives for not taking the meetings seriously. With elections becoming more competitive by the year and the pressure on candidates to come up with new "initiatives" when the ones in the pipeline are not yet fulfilled, the manifestos, more often than not, include many points they themselves know they couldn't possibly fulfil. There is only so much filtering the "Blackbox" (a group from the Election Committee appointed to check the feasibility of manifestos) can do. This mounting of pressure on candidates has given rise to a rather unfortunate trend of elected representatives demolishing the existing state of affairs and starting from scratch rather than building on the work done by the last holder of office. This, for example, has been the case with the Academic Council's schemes to promote UG research, where, according to a former coordinator, little improvement has been seen. "In 2012, the program ran exceptionally well, under the name SPUR. The next year though, under a different GSAA, the name was changed to EnPOW-ER, which came across as a rather unnecessary move, seeing that what it aimed to accomplish was the same thing. This was probably done so that it would be counted under initiatives. Suffice to say, the program saw a huge decline in quality," he said. Such tussles are common. This backward-forward march has resulted in manifestos being taken for granted and the community losing faith in the office itself. When all's said and done, the fact remains that the newly elected candidates for the year have taken office and begun their tenure. With these representatives, we chose our voices in discussions that matter. Though many would still rather want to stay away from the electoral process, they'd never cease to be involved in the process of living the consequences of a choice they didn't make.

4 Quorum for a GBM is 50% of the total number of members. In the event the quorum being not met, the meeting ceases to have the standing of a General Body Meeting.

5 Any student of IITB can attend a GBM but only a member can vote in case a motion is tabled.

(c) At least 12 members second. These 12 members should be from at least 4 Hostels/Departments (8 for PG Academic Council).(d) The council member is asked to defend himself/herself.

(e) A secret ballot is taken and the motion is passed. For an impeachment, the required majority is two-thirds of the members present and voting, or 50% of the maximum strength, whichever is greater.

The general apathy of the students once the candidates are elected make the powers of these elected representatives virtually absolute.

ISCP & IRSCP: A Review

Postgraduate education is a new chapter in a student's life - socio-economically, culturally and educationally. Adapting to a new lifestyle can be hard and one may face several hurdles in academics and otherwise. This led to the conception of the Institute Research Scholar Companion Programme (IRSCP) and the Institute Students Companion Programme (ISCP), which are programmes for the PhD and the Masters' Community of IIT Bombay respectively, with the primary objective to cater to their needs.

The IRSCP and ISCP teams consist of 2 Overall Coordinators, 1 Department Coordinator for each of the 17 departments and several companions, varying in number across departments depending on strength.

Institute Research Scholar Companion Programme :

The IRSCP's key target is the incoming batch of 250 odd PhD freshmen. Freshmen come in with a lot of hope, several questions and some apprehension. The IRSCP mentors serve as the first point of contact for a PhD student, to life on campus. Student companions clarify several PhD-related queries on selecting their research topic or their guide, the APS (Annual Progress Seminar) and the PhD qualifier exam.

The major role of the ISCP is during the Department Orientation sessions. A formal presentation of course information and general 'gyaan' by seniors helps students get a hold of how things work in their departments. Then, the mantle is passed on to the Department Coordi-

THEIR ROLES

Settling in: Their role, in helping students get acclimatized to a new lifestyle altogether, is pivotal. The IRSCP companions convey to the freshmen the many, many things every student must and should know before coming to campus for the first time.

Having a companion by your side during the first few weeks can sure be a relief.

Workshops: The teams conduct workshops from time to time, primarily for the PG freshmen, open to all nonetheless. This year, workshops on LaTeX, MATLAB, Dropbox, 'What is Research?', Hindi-English learning pronators, who look into the needs of the students then on. "This year's agenda was to increase focus at the level of the departments," says Rahul Yadav, the overall coordinator for the ISCP programme last year.

STUDENT COMPANIONS CLARIFY SEVERAL PHD-RELATED QUERIES ON SELECTING THEIR RESEARCH TOPIC OR THEIR GUIDE, THE APS AND THE PHD QUALIFIER EXAM

The Negatives:

The communication gap between the students and companions is evident, despite the efforts of the companions. Most students stop interacting with their companions after the first few weeks and some students are even unaware of such a person as a companion there to help them.

They even bring in the TAs' counsel for additional help in doubt-clearing sessions.

Placement Fundae: From the first week of December, begins the first phase of the Placement Team. Sessions with seniors on how placements work, the making of the perfect resume, etc. prove to be of great help for the freshmen.

Apping and Branch Change Fundae: Seniors who have changed their branch from a Masters Programme to a PhD Dual Degree Programme give general pointers to juniors. Sessions in apping are held to help students applying for PhD programmes after their Masters.

PORs : As applications for various institute-wide posts around the beginning of February are called for, POR sessions are held in joint collaboration with the PG Academic Council, in addition to the sessions on other PORs held prior.

Improving interaction: Companions form a focal point of interaction between students and their seniors, professors, guides, etc.

Being a student companion is an arduous task, especially when the companions themselves have to deal with their own research work, meet their deadlines, etc. This rises to a peak during October-November, better known as the Placement season on campus. The amount of time that they can devote to their mentorship duties is drastically cut down then.

A majority of student companions constituting these bodies have just completed one semester of stay at IIT-B. Especially for PhD companions, inexperience factors heavily in the inability to reach out to juniors and address their queries.

Shubham Badjate, GSAA-PG in 2014-15, says, "PG students are often less involved in cult, sport, tech, etc. activities on campus owing to their heavy workload. In particular, the POR sessions conducted have alarmingly low participation by the PGs. In fact, this year, not enough students applied for the posts of Department Placement Coordinator and Company Coordinator for the Placement Cell."

MOST STUDENTS STOP INTER-ACTING WITH THEIR COMPANIONS AFTER THE FIRST FEW WEEKS AND SOME STUDENTS ARE EVEN UNAWARE OF SUCH A PERSON AS A COMPANION THERE TO HELP THEM

Sessions on improving one's time management skills can go a long way in helping students juggle academic work and light extra-curricular activity. With regards to low response to events on campus, Shubham says that companions could work more towards ensuring that their students are well-informed about campus savoir faire.

COMPANIONS COULD WORK MORE TOWARDS ENSURING THAT THEIR STUDENTS ARE WELL-INFORMED ABOUT CAMPUS SAVOIR FAIRE

Counselling and mentor training:

Shivani Manchanda, student counsellor, says, "The involvement of these bodies with the Counselling Centre, to be honest, has been limited. I would welcome the IRSCP and ISCP mentor coordinators to come forward and participate in the professional training programmes we conduct. PhD students have some unique circumstances which require special assistance from the Counselling Care Centre. PG students are often more mature when they come on campus and better able to handle the pressures of life, but they are also under greater pressure from their families to meet their adult milestones like a job, marriage, etc. Some discussions around these topics can take place for better companionship amongst PhD students." The ISCP and the IRSCP are enormous in their strength, in the activities they conduct and in the goals they've set. While the ISCP/ IRSCP have striven to create a happier and more satisfying learning experience for PG students, some overhauls are necessary as with every body.

gramme, etc. were held - some conducted by senior students proficient in the respective subjects, and some even by the faculty.

Study Groups : The purpose of the Study Group at the departmental level is to discuss about department activities, research facilities, to exchange ideas amongst the research scholars and to improve presentation skills by conducting weekly presentations on various topics.

Exam help: Before the midsems and endsems, a couple of sessions are held to cover nitty-gritties of exam prep. Old question papers, the paper pattern and how to approach questions are discussed. **GBMs:** The IRSCP and the ISCP have their general body meets along with the PG Academic Council to discuss the challenges, the future course of action to undertake and to summarise what they've achieved so far.

Recognition: Since last year (and continuing to this year), the best student companion and the best Department Coordinator have been rewarded for their efforts through certification.

Feedbacks: Feedback forms are circulated from time to time to track their progress in helping students. Most students were happy with the IRSCP although a 10% did not even know of the IRSCP.

FAST-TRACKING OF DEGREES

At IIT Kharagpur, in keeping with the best academic practices across the top universities in the world, a new pre-specified credit-based system has been devised. This allows a student the flexibility to complete his course at his own pace, thus accrediting a B.Tech. and a Dual Degree student to complete their degree in a minimum of 3.5 and 4.5 years respectively. "A student who finishes eight semesters in three-and-a-half years will have the scope for enriching his academic career by doing something on his own in the last six months. It could be an entrepreneurial venture or a start-up. While IIT will award him the degree at the convocation, the student will get a provisional marksheet at the end of three-and-a-half years to take up a job," PP Chakrabarti, the IIT-KGP Director said.

Back home at IIT Bombay, Prof. Rangaraj (Dean AP), expressed his keenness on incorporating such a facility for our students. He said that the likelihood of such a development is not very far-fetched technically. The option of fast-tracking one's degree does indeed seem alluring for promising students by providing a major head start in their careers.

In a survey conducted at IIT Bombay, nearly 30% of the students felt that they would have fast-tracked their degrees, if given the opportunity. Nearly 33% of the students said that they might have considered the possibility of fast-tracking, had there been an opportunity. Another 17% students felt that the option should be available to students to ensure flexibility and scope for growth in the system, irrespective of whether they would avail it or not. However, 7% felt that students should not have the opportunity to fasttrack their degrees. Fast-tracking, in some cases, does encourage students to overload themselves and prevents them from exploring other areas.

A STUDENT WHO FINISHES EIGHT SEMESTERS IN THREE-AND-A-HALFYEARSWILL HAVE THE SCOPE FOR ENRICHING HIS ACADEMIC CAREER BY DO-ING SOMETHING ON HIS OWN IN THE LAST SIX MONTHS



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EXAM ACAD REFC

ALL ABOUT FAST-TRA INTER-IIT SEMES AND DOUB

> ■ ANISH GUPTA, A KSHITIJ JAYAKRISHN SAYESHA ARAVAPAL

The recent past has witnessed some across IITs. How well IIT Bombay has I by broadening the opportunities th various academic avenues, is questi for fast-tracking the B.Tech. degree ir 9 semesters are underway, for its imp At IIT Kanpur, students can opt to m

IIT Bombay, too, has seen change, re Examples include the revision in the few years and the changes in the Degrees from the JEE itself to volu In this article, we look at some of t how these can translate to the we should pave way to acc We also address upcoming

INTER-IIT SEMESTER EXCHANGE

IIT Kharagpur is also mulling inter-IIT mobility and exchange programmes with foreign universities once the uniform credit code is introduced across institutes. According to Prof. Chakrabarti, the IIT-KGP director, "Every IIT has its own centres of excellence. A student should be allowed to go and spend a semester or two at one of his preferred IITs. The credits earned by him during his stay will be exchanged.

EVERY IIT HAS ITS OWN CEN-

than ready to facilitate this."

In the survey we conducted, 43% of the students said they would have opted to go for a semester exchange in another IIT if the option had been available. 28% said that they would like to have this option, irrespective of whether they opted for it or not. 16% said they would like to have this option, even though they would not have opted for it.

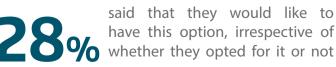
In short, a large chunk of students were enthusiastic to have the option of a



TRES OF EXCELLENCE. A STU-DENT SHOULD BE ALLOWED TO GO AND SPEND A SEMESTER OR TWO AT ONE OF HIS PRE-FERRED IITS

Though he will get the degree from the IIT where he is enrolled, the credits earned in any other IIT will be added to his marksheet." Shubham Goyal, GSAA(UG), says, "This is a point on my agenda as well. Discussions are on. The matter was discussed with the Director as well. He has asked for students' opinion on this. I have also talked to student representatives at IITD and IITK, and they are more semester exchange programme with the other IITs.

43% students said they would have opted to go for a semester exchange in another IIT





said they would like to have this option, even though they would not have opted for it a bird's eye view into the a reform m

INING **EMIC** JRMS

ACKING OF DEGREES, STER EXCHANGE **LE MAJORS**

YUSH KANODIA, AN, KUSH MOTWANI, LI, SHREYA SRIDHAR

sea changes in the academic system kept pace with these changes, theree students here have to explore the onable. At IIT Kharagpur, blueprints n 7 semesters and the Dual Degree in elementation from the batch of 2016. najor in two degrees of their choice.

eplacing obsolete academic policies. basic science courses over the past admission procedure to the Dual untary conversion after third year. he impelling changes in other IITs, environ at IIT Bombay, and why ommodate these changes. g reforms, and try and give

DOUBLE MAJORING

The double major is an academic plan wherein a student can simultaneously obtain two undergraduate degrees in two different departments. IIT Kanpur implemented this plan to become the first engineering institute in the country to offer a double major to its students. There, the option of availing a double major is open at the end of the fifth semester and has an additional minimum CPI requirement of 8. A Bachelor's degree with a double major in this system usually requires 5 years to complete. The double major requires the completion of the core curricula of both the degrees and the electives of either one.

THE IIT KANPUR MANAGE-MENT SEES THAT FOR SOME STUDENTS, THEIR MULTIDISCI-PLINARY INTERESTS ARE BEST SERVED THROUGH A DOUBLE MAJOR

Although there are no restrictions as such on choosing the departments in which one can double major, students may be screened on some basis; for example, on basis of academic performance, if a disproportionate number of students opt

50%

25%

students who took the survey said they would have opted for a double major

felt they might have opted for a double major

WINDS OF CHANGE

Sadly, 70% of students had no idea of how an academic reform is brought in at IITB. 22% said that they had some idea.

According to Shubham, "Any change is possible. You need student reviews and support on paper. Signing petitions, etc. can go a long way in getting major proposals which may be bottlenecked to be passed." The push for academic reforms by the student body can be brought about by insisting for Open Houses to be held. These Open Houses facilitate student-faculty interaction. The preliminary stage involves the proposal of a policy/ reform. Policy decisions involve debates at the level of the DUGC and the UGPC of which student representatives constitute a fair proportion. Following this, discussions at the level of individual departments happen in the DUGC meets, comprising the General Secretaries and students belonging to that department, and faculty meetings.

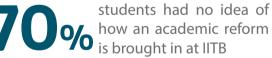
for the same department for their second major. Further, only around 10% of the sanctioned strength of the department is open for candidates for double majoring in any combination.

Students who are double majoring can also opt for a minor, but will have to ensure that the chosen minor is in neither of the departments the students will be majoring in. Students availing of this provision have to deal with more loaded semesters, but they may drop their second major anytime.

The IIT Kanpur management sees that for some students, their multidisciplinary interests are best served through a double major. For others, a single major with a minor will be ideal. And for some others, pursuing research projects, internships, semester exchange programmes or participation in student clubs will give them the opportunity to gain knowledge in another field. The key is that there is no single path for everyone. Keeping every door open helps one capitalise on the ones that suit them best.

An overwhelming 50% of students who took the survey said they would have opted for a double major, if the option was available. 25% felt they might have opted for a double major, had it been available. 17% felt that the option should be made available, even though they would not opt for it.

felt that the option should be made available





said that they had some

Lastly, the decision to implement the policy moves to the omnipotent Senate. The Senate is often merely an approval body favouring pre-established consensus on policy implementation, unless in case of normative or otherwise serious conflict. External councils including the MHRD, advisory committees, alumni committees, etc. provide aid in deciding the best policy stratagem, but the decision to implement ultimately lies with the faculty and students at IIT Bombay.



process involved before aterialises.

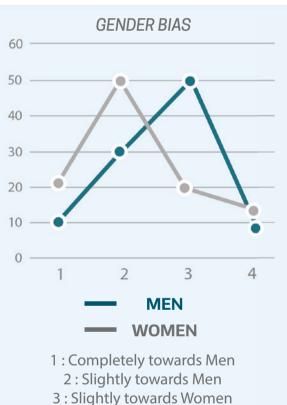


UG Freshers' orientation videos, artists that tell women to roll chapatis, transgender rights, and Deepika Padukone's video about choice - the Institute (at least just as much as the world outside of it) has seen spurts of discussion about gender over the past few months. While critiques of both patriarchy and feminism are well abound in today's discourse, there needs to be a closer look into its various aspects.

Findings of the survey

Insight conducted a survey to gauge people's opinions about gender inequality in the context of the campus. The perception of the existence of gender inequality in campus was roughly similar - a slightly higher proportion of men did, however, feel that overall, there was gender equality on campus, compared to women. Underneath this layer of apparent similarity, though, was a fundamental difference of perception. Many people of both genders tended to feel that the inequality was biased against their own.

Subjective questions were also asked to the respondents and many supplemented their views with examples of gender discrimination that they had seen, heard of, or experienced in campus. There was a stark difference in the kind of discrimination reported by men and reported by women. Men felt that there was bias in terms of favours and selections for projects, positions of responsibility and placements - many felt that it was easier for women to get jobs and projects because of bias: either subtle and implicit, or for maintaining a gender ratio in the company in case of placements. Separate queues and sports facility bookings for women were also cause of some complaints. Women, on the other hand, had distinctly different types of complaints overall. Casual sexist remarks on appearance and dressing and underestimation of girls' abilities seem to be extremely commonplace, although tolerated. Security restrictions and infrastructure issues (especially about room sharing and allocation compared to boys) are also causes of complaints.



4 : Completely towards Women

HAVE YOU PERSONALLY WITNESSED INSTANCES OF GENDER INEQUALITY ON CAMPUS? IF SO, WHAT WAS (WERE) THESE INSTANCE(S)?

Professors giving away extra marks just because a girl comes and asks. Actually, I only saw one professor doing that. Of course I have! A man having hairless legs is suddenly looked down upon and asked why he is being 'girly'. What's wrong with him? Gender





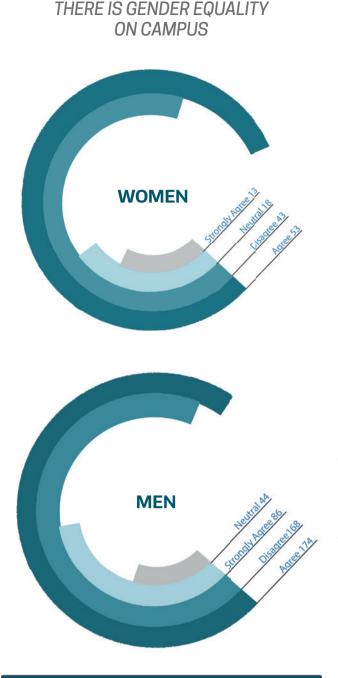
Insensitivity in handling sexual or verbal harassments, like having opinions about the victim, especially among security guards and hostel officials.



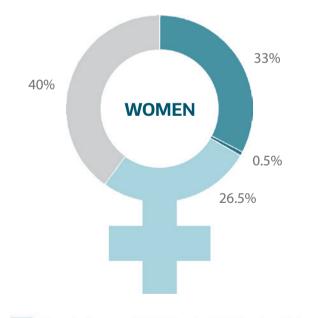
I have seen not-so-qualified girls (relatively) getting through interviews during placements just because the company is trying to maintain or improve its sex ratio. From a company's point of view, it might be justified but it sure acts a disadvantage to boys. expression and expectations from both the sexes is something that people seem to be genuinely confused about.

It is often cited that before H14 was constructed, there was a time when male PhD students had to stay in double occupancy rooms and there was a lot of pressure from faculty to speed up the construction of H14 so that such pressure could be alleviated at the earliest, because 'PhD students should have privacy'. However, female PhD students have been living in double occupancy rooms for so long, and yet, the response is, 'It is good to live in shared rooms because you can get support from one another'.





WHAT DO YOU RECOGNIZE YOURSELF AS?



DO YOU THINK THAT THE DEMANDS FOR GENDER EQUALITY ARE JUSTIFIED?

MEN 63%	Yes. I feel there are acts of casual sexism (for both genders) and something should be done about it	WOMEN 76%
18%	Yes. But change will be more organic and gradual and I/we can't contribute much in my/our personal capacity	09%
11%	No. I don't think their problems are relevant and they miss the point	03%
03%	No. People just exaggerate their issues which aren't even pertinent to gender	05%
05%	Other	07%

The Open Session and Women's Cell

Insight had also conducted an Open House about Gender Inequality in October 2014 (the full recording can be found on IITBBC's You-Tube channel). It included Prof. U.A. Yajnik (the former Dean of Student Affairs), Mr. S.S. Jha (the Chief Security Officer), Prof. T. Kundu (the former Security Head) and Prof. Suparna Mukherji (former Convener of the Women's Cell). Various issues came up in the Open House, including sexist videos and comments on display in the freshmen orientation, lack of student interaction and safety of women on campus. There were instances pointed out where students felt that the Quick ResponseTeam was not sensitized when it came to handling cases of harassment. The vagueness in the mandate of the Women's Cell (which has been defined now, however, as observing the law on and addressing complaints against sexual harassment, in addition to gender sensitisation, as stated on the WC website), and the lack of awareness about the Cell was also brought up. Various suggestions were made as to how it could be improved, including restructuring and strengthening pre-existing bodies, and gradual sensitization programs.

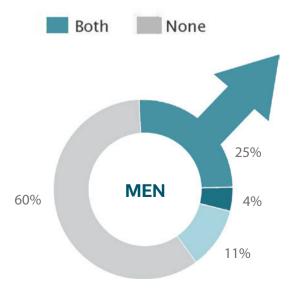
In February, the Women's Cell was reconstituted by the Director following the end of the previous tenure of its members. Prof. Neela Nataraj from the Mathematics department and Prof. Prita Pant from MEMS are the new Conveners for the Women's Cell. ly infrastructure and sensitisation workshops. While the UGC circular has been received by the Institute and by the relevant authorities within, not much work has been done on ground with respect to infrastructure. GATE, the entrance exam for M.Tech candidates, now has an option for third-gender candidates to apply.

Coming back to the 'gender debate'

While the issues in the context of the campus are slightly polarized, and that too in a men-vs-women fashion, it ought to be noted that both men and women face forms of discrimination on campus. While such discrimination is properly recognised as inequality in its literal sense, usually the 'blame' is put not on the reason or cause of the discrimination, but on the side that supposedly benefits through it, causing this polarization. For example, one of the survey respondents said, "Companies tend to favor girls during the intern process. Sometimes having 'two buttons open' is what counts more than ability or substance." It is easy to only blame a girl for using her so-called 'bandi-influence' to get a PoR. However, not many people (ignoring the issue of women's representation here for simplicity's sake) seem to recognise the decision-makers' incompetency for having made such a decision.

This perception often also extends to feminism and patriarchy, due to which feminism, instead of being seen as people - regardless of gender - fighting for equality for women, is seen as women trying to overpower men. One respondent presents such a view: "Sexism hurts everyone. But you can not finish it by reverse-sexism. Feminism started as a noble cause but has turned into something like Femi-Nazism." Similarly, patriarchy isn't seen as a system consisting of societal, political and economical structures that favour men, but only as men discriminating against women. The underlying causes of discrimination on the basis of gender can thus be better understood and tackled by shifting the paradigm away from this intense men-vs-women approach, because gender and its associated issues are much more intricate than just that.

Feminist Men's Right Activist



Transgender rights

One avenue to broaden the scope of the discussion about gender from the box of just men-vs-women, is factoring in the April 2014 Supreme Court judgement about transgender rights. A transgender person is someone who does not identify with the gender assigned to them at birth. They may self-identify as men, women or a third gender and are supposed to be referred to using that gender. Read our previous article 'Born a he, now a she' to know more about the experiences of an alumna.

The government has taken up the SC recommendation for more inclusive spaces for transgender people in institutions through UGC. This includes recommendations like TG-friend-

DEPRESSION The elephant in the room

ANUKRITI CHAUDHARI, PARTH SHRIMALI, SHARDUL VAIDYA, SHREEYESH MENON, SHREYA SRIDHAR

The institute woke up on the 3rd of May to the sad news of the demise of a third year student, Jitesh Sharma, from the Chemical Engineering Department. His death was confirmed to be a suicide by the police. Barely a month after the unfortunate incident, a first year student pursuing an integrated M.Sc. + Ph.D. degree in the Earth Sciences department also attempted suicide.

The deceased student was under pressure due to poor academic performance and his parents had been notified. However, this isn't an isolated case. Across the IITs, we see a number of such incidents with similar reasons being put forward. We take a look at the problems students face, and what the administration is doing to tackle this issue.

A pan-IIT issue

With concerns having been raised across the IIT system, the issue demands a prudent,

over the issue and absolves the institute of any part to play in the incident. However, it is worth noting that the situation is improving with the new academic reforms making academics a lot more flexible in general, and there has also been a consistent effort at improving the awareness about mental health among students.

In IIT Kharagpur too, student depression rose as a major concern after two suicide cases were reported within the same week in March 2014. The authorities launched a major student reach-out program, under which all students were compulsorily made to come out of their

SOME OF THE MAJOR REASONS OF MENTAL STRESS AMONG STUDENTS ARE THE ATMOSPHERE WITHIN THE INSTITUTE AND THE SOCIETAL IMAGE OF AN IITIAN

rooms and interact with one another. This was enforced by switching off the electricity supply of hostels for an hour. Despite the unconventional approach, the program was seen as a major success. The situation regarding depression among

students has improved a lot as a response to the awareness campaigns run by the institute authorities.

Across IITs, the issue of depression is real. The student counsellor at IIT Madras reported that about 75% of all students who turned up seeking help were actually reported with clinical depression. He associates part of the problem with the overwhelming competition at premier institutes, often creating discontent among students who were once the best of the lot, but are now surrounded by equally talented people. Coupled with homesickness and a feeling of loneliness, this culminates in depression if left unchecked, according to Dr. Prabhakar Thyagararajan, a consulting psychiatrist at the IIT-M hospital.

Counselling at IITB

As of now, there are two full-time counsellors and one counsellor who stations herself

long-term solution. The IITs have come up with counselling facilities and programs on tackling depression following such incidents. At IIT Kanpur, four deaths have been reported on campus since 2011. Two of these were adjudged to be suicides. Academic stress was identified as a major concern in both the cases. The grading system, allowing for only even numerical grades - 10, 8, 6 and 4, with 4 being the minimum grade required for passing - is seen by some as very harsh on students who happen to miss out on a higher grade or a better CPI by just a few marks. There is a Counselling Service in the institute, put in place to help students dealing with excessive mental stress. But according to the students, little is done by the authorities except for forming a committee that very superficially goes

Contact details of student counsellors:

MRS. AMITA TAGARE maithili@iitb.ac.in | 022 25767071 MS. HIMA ANAREDY hima.anaredy@iitb.ac.in | 9820747079 in hostels, rotating between hostels 11, 12 and 15. The students can reach out to the counsellors via email or telephone, or can contact the counselling coordinator through the Facebook page I-care which was launched in 2013. Strict confidentiality is maintained and if academic help is required, the counselling team tries to arrange for extra tutorials/help sessions via the department. The counselling co-ordinator, Mrs Shivani Manchanda, reveals that some of the major reasons of mental stress among students are the atmosphere within the institute and the societal image of an IITian. A fiercely competitive environment coupled with the expectations of parents and the society can take a toll on the students' mental health. She argues that the pressure of living up to the expectations of the parents and society can be so mentally exhausting that failing to secure grades is directly correlated to abject and utter failure. "In the two rigorous years that a kid spends preparing for IIT-JEE, he/she tends to lose touch with his/ her emotional side. Having a tenderness around the campus could help change that," says Mrs Machanda. She also laments the perception of a "stigma" associated with seeking counsel. This is one of the prime reasons why students consciously avoid reaching out to the counsellors. (We interviewed Mrs Manchanda to know more about causes of depression among students and how IITB plans to tackle the malaise. You can view the complete interview here: http://tinyurl. com/shivani-manchanda-interview).

CURRENTLY THERE ARE 3 COUNSEL-LORS CATERING TO A POPULATION OF 10,000 STUDENTS WHILE THERE IS A REQUIREMENT OF 1 COUNSEL-LOR FOR EVERY 700 STUDENTS

So, does counselling work?

A STUDENT'S ACCOUNT

"There was a time in my life when I was uninterested in everything. I wouldn't want to wake up in the morning, I wouldn't want to eat anything, talk to friends, go out and roam, play any sport. But I didn't know why and honestly, didn't care either. I was more worried about people's perception of me. I didn't want my friends to think I was weak and was feeling sad for no apparent reason. So I pushed myself. Everyday. Pushed myself to go to classes. Pushed myself to roam with my friends. And I hated myself for it. I hated everyone and everything. If someone cracked a joke, I would laugh my heart out, but in the inside I just wanted to rip his throat.

This was when I realized I needed help. I did not want to be a danger to everyone around me. I'd heard of the counselling services in IITB. I got hold of their number and scheduled an appointment. After my first visit, she told me that the reason was that I've been doing too many things and couldn't handle it. I wasn't convinced at all. I'd never felt any problem in being part of so many things. In fact, I enjoyed it. But she told me to make a priority order of my interests and to let go of the last few for just 2 weeks. After the two weeks, I finally realized that what she said was true. I'd been trying my hand at too many things. And when it occurred to me that I wasn't going anywhere in any of my interests, I concluded that everything I did was futile and gave up. All of this happened without me being conscious of it. All I knew was that I felt terrible. And it required external help to come in terms with what was actually happening. Thankfully, everything sorted out soon enough to not affect my acads a lot."

A FATHER SHARES...

"I really appreciate the counselling services available at IITB. The response of the Dean of Student Affairs and the Counsellors was prompt and superb, and I was really astonished to see their concern. To be frank, I don't see any such system of tackling student problems, especially regarding depressive moments, in any other institute. It is really commendable. I think apart from the institute, the student bodies also need to organize watch squads to identify people in suspected depressive phases and initiate action like observing, keeping company, informing authorities, etc. There is no need to lose hope. We have to resolve to strengthen such good efforts to stop such unfortunate events."

Clearly, the current counselling services have helped quite a few students to deal with their problems. There is however, a definite need for more sensitization for mental health. Currently, there are 2 counsellors catering to a population of 10,000 students while according to Dr Harish Shetty, visiting psychiatrist at Hiranandani Hospital, there is a requirement of 1 counsellor for every 700 students. As compared to the 1990s, the student populace in IIT in 2012 increased to more than double at roughly 7500 students and currently it stands at around 10,000 students. The administration, in a response to the growing demand of the need for counselling, expanded the counselling section in 2012. A further expansion was proposed in the meeting between the authorities and the psychologists as

FROM THE DOSA'S DESK

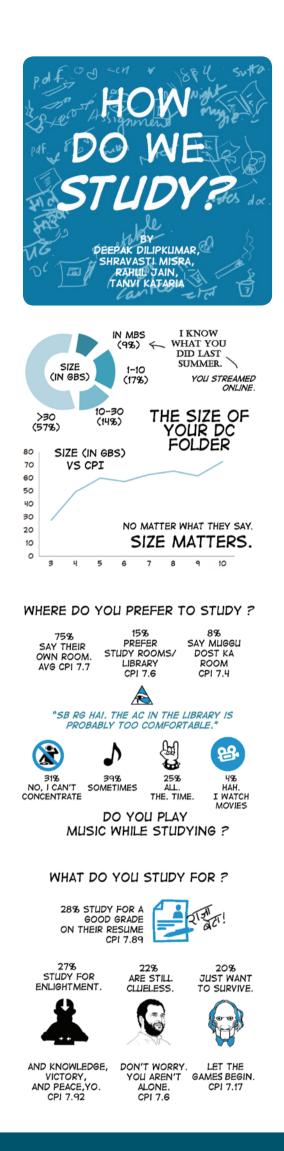
Acknowledging the need to identify problems and ameliorate existing services, the current DoSA convened a meeting with a few psychologists including internationally renowned psychiatrist Dr. Vikram Patel and also former DoSA Prof. Urjit Yajnik. In a meeting lasting over four hours, the competitive IIT environment and the general stress on students in higher education, most likely culminating in aspirations for glamourous jobs seemed to be the major factors contributing to stress. This, coupled with the fact that many students enter IIT due to the allure of opportunities for self-development and their career - rather than a pure interest in engineering - is something to be dealt with very delicately. Prof. Yajnik says, "The IIT system is probably unique in the world with respect to (i) a group assembled based on an exam that strictly filters for academic performance merit and (ii) a large fraction, perhaps 40%, entering without being sure that this is the profession towards which they want to go, and at least 20% quite sure that they have zero interest in engineering." With the Dean acknowledging that curbing mental stress is his number one priority (see Insight's interview with him at http://tinyurl.com/do-<u>sa-interview-15</u>), the meeting is a welcome response from authorities, especially with an ever-growing need for counselling.

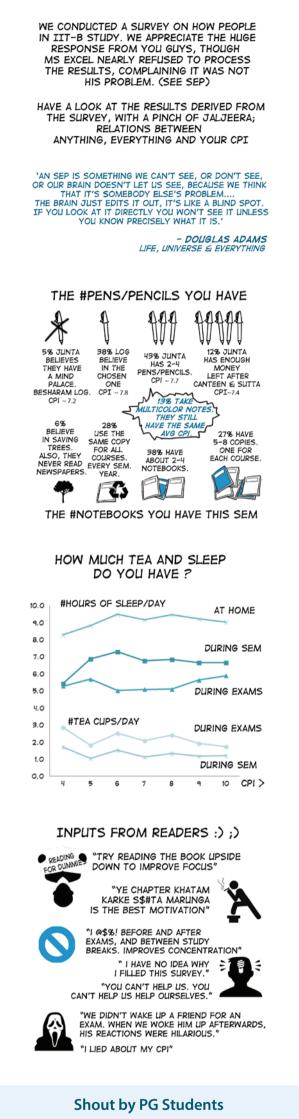
NIRANJAN THAKURDESAI INSIGHT CHIEF EDITOR

"I was suffering from depression throughout my freshie year due to some personal problems. Things went from bad to worse towards the end of the year, and I just couldn't handle it. I started having anxiety attacks, and I realised that I needed help. I dropped an email to one of the counsellors, and she promptly set up an appointment. After regular visits over a course of 4 months, I was normal again. To all those suffering from depression and not seeking help - it's not a thing to be ashamed of. Your societal image isn't going to be tainted, and you aren't going to be looked down upon in any way. Seeking help is not a sign of weakness; it's what you're supposed to do if you're under the weather. It's also important to understand that the condition is NOT a point of no-return. Complete recovery is possible, and you can live a normal life again."

mentioned in the box below, with the inclusion of one more counsellor to the already existing duo of professional counsellors. It has also been suggested that the visiting hours for part time specialists and psychiatrists be shifted to the evening from the current morning hours to facilitate easier student access due to class timings. Professional training of ISMP and DAMP mentors to make them better equipped at dealing with cases where the student might be facing mental or emotional stress could also provide a massive boost. Although the institute organises a training session at the start of the mentorship tenure, regular sessions with professionals would be a welcome change. We also need to strengthen the academic mentorship programme, DAMP, to help the students academically while also serve as the first response to a potential case of depression. The institute could also provide mandatory personal counselling for every student once a year by professionals. Furthermore, creating an environment for fostering a better student-professor relationship could help matters to a great extent. The institute also needs novel measures besides counselling to shift the focus on mental well-being rather than remedies for potential problems.

While there is a pressing need to improve upon the existing facility and increase their awareness and visibility, it is equally important for students to seek their help when required. Students themselves have to understand that mental stress can be a pernicious problem and it is very important to work actively towards psychological calm and happiness. In the words of the counselling co-ordinator, Ms. Shivani Manchanda, "How do you cope is the key. Society is going to be the same, the institute is going to be the same, the organisations that you work in are going to be the same. Thus, the stress is going to be the same. How you cope with it, how emotionally resilient you are, is the key to remain happy. The students need to realize and work actively towards the same."





> 5 GB (12%) IN MBS (AADHI JUNTA) 3-5 GB (9%) CPI - 7.5 CPI -7.8 1-3 GB (28% JUNTA) WHATEVER YOU ARE THINKING. THINK BIGGER. STOP SMILING. PERVERT. THE SIZE OF YOUR ACADS FOLDER HOW DO YOU COMPLETE ASSIGNMENTS ? 45% AGREE WITH JOHN LENNON, CONFESS "WITH LITTLE HELP FROM THEIR F.R.I.E.N.D.S' AVG CPI - 7.3 DOST LOG SAB RG HAI. TRUST YOUR OWN insight bing 28% AGREE THAT THEY USE GOOGLE TO DO THEIR JOB 24% RELY ON THEIR OWN KNOWLEDGE ONLY AVG CPI - 7.9 AVG CPI - 8.2 WHEN DO YOU STUDY ? 66% 30% DO IT IN PREFER AFTER NIGHT THOURS CPI 7.6 NIGHT TIME DAYTIME CPI 7.9 33% 42% 18% 5% SAY THEY RARELY SAY ALMOST SAY CLAIM TO BE SOMETIMES SLEEPING SLEEP EVERYTIME BEAUTY CPI 7.77 CPI 7.8 CP 7.6 DO YOU SLEEP DURING CLASSES ? **CHIEF EDITORS** Mihir Kulkarni Niranjan Thakurdesai **EDITORIAL BOARD** Abhilash Kulkarni, Abhinav Garg, Devang Thakkar, Eeshan Malhotra, Mihir Bhosale, Nasiruddin Ahmad, Palka Puri, Parth Shrimali, Pritish Gupta, Rachil Maliwal, Rahul Jain, Sandeep Upadhyay, Sagun Pai, Sayesha Aravapalli,

EDITOR'S NOTE

Hey,

We're proud to bring you the first print issue of this academic year and our tenure, and really hope that you enjoyed reading it as much as we did creating it. We're constantly looking for feedback, article ideas, news and coffee. Feel free to contact us if that sounds like something you'd be interested in.

For regular campus updates, do visit www.insightiitb.org or just look us up on Facebook.

Mihir and Niranjan insight@iitb.ac.in

Our article in print edition 17.2, titled TA Selection and Accountability (in particular, our survey among UGs on problems with UG/PG TAs, such as communication skills and subject knowledge), was interpreted as a deliberate insult to the PG community by certain PG student representatives. They wrote to us about statements on PG students requiring stipends, biased answer-sheet checking and TAs being ill-equipped to handle classes. We wrote a detailed response to them, to which they replied with suggestions for reforms. We hope the dialogue has both clarified our stance and led to constructive feedback for improving TA allocation. To guote them, "We believe a holistic view of the TA structure from the PG community will help to improve undergraduate education at IIT Bombay".You can find the exchange at <u>http://tinyurl.com/insight-ta-15</u> Shreerang Javadekar, Shreya Sridhar, Shreeyesh Menon

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