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Nav Bharat Times ND 17.11.2016 P-2

IIT दिल्ली में MBA कोर्स

■ प्रस, नई दिल्ली : आईआईटी दिल्ली का डिपार्टमेंट ऑफ मैनेजमेंट स्टडीज एमबीए और एमबीए टेलिकॉम्युनिकेशन सिस्टम्स मैनेजमेंट के लिए एडमिशन प्रोसेस जनवरी के दूसरे हफ्ते से शुरू होगा।

डिपार्टमेंट के एक अधिकारी ने बताया, कैट का रिजल्ट जनवरी के दूसरे हफ्ते में आ जाएगा। रिजल्ट के दूसरे दिन से आईआईटी दिल्ली के एमबीए कोर्सेज के लिए ऑनलाइन ऐप्लिकेशन भरने का प्रोसेस शुरू होगा। 30 जनवरी तक ऐप्लिकेशन भरी जा सकती है। डिमांड ड्राफ्ट के साथ ऐप्लिकेशन फॉर्म की प्रिंट कॉपी 31 जनवरी तक जमा की जाएगी।

एमबीए, एमबीए टेलिकॉम्युनिकेशन सिस्टम्स मैनेजमेंट के लिए कॉमन एडमिशन टेस्ट (कैट) रिजल्ट के आधार पर एडमिशन होंगे। 6 से 9 अप्रैल तक स्टूडेंट्स का ग्रुप डिस्कशन और इंटरव्यू सेशन आईआईटी कैंपस में चलेगा। 2 मई को फाइनल रिजल्ट का ऐलान किया जाएगा। 21 जुलाई को स्टूडेंट्स को हॉस्टल फैसिलिटी के लिए अप्लाई करना होगा और 22-23 जुलाई को नए स्टूडेंट्स का रजिस्ट्रेशन प्रोसेस चलेगा। 25 जुलाई से क्लासेज शुरू होंगी। कोर्सेज के लिए मिनिमम 60% मार्क्स या 6.75 सीजीपीए होना चाहिए (रिजर्व क्लास के लिए 5% छूट)। दोनों प्रोग्राम के लिए फीस 4 लाख रुपये है। इन प्रोग्राम के लिए क्वालिफाइंग एजाम के फाइनल ईयर के स्टूडेंट्स भी अप्लाई कर सकते हैं। सिलेक्ट होने पर इन स्टूडेंट्स को सर्टिफिकेट दिखाने होंगे।

Indian Institute of Science ranked 38th in global ranking of 150 varsities

<http://www.hindustantimes.com/education/indian-institute-of-science-ranked-38th-in-global-ranking-of-150-varsities/story-VOQra9uphTu1s4NatfE0DI.html>

Employers consider IISc in Bengaluru to be one of the world's best universities at producing graduates with the skills they need for the workplace.

Employers consider the Indian Institute of Science in Bengaluru to be one of the world's best universities at producing graduates with the skills they need for the workplace, placing it 38th in a new global ranking of 150 varsities.

Graduates from American universities are ranked as the most employable, with the California Institute of Technology (1st place) leading the pack, followed by the Massachusetts Institute of Technology (2nd) and Harvard University (3rd).

The sixth annual Global University Employability Ranking published by Times Higher Education is based on feedback from 2,500 recruitment managers from large international companies. It shows employers continue to favour graduates from US institutions.

Large global employers based in India surveyed as part of the research revealed that Indian employers value communication skills, adaptability and the ability to work in a team above other non-academic skills graduates may possess, researchers said.

Indian employers also placed more importance than those around the world on flexibility, motivation and the ability to work under pressure, they said.

Phil Baty, Times Higher Education World University Rankings editor, said: "A university education brings a host of life-enhancing benefits but for many students, launching a successful career is one of the most important outcomes.

"For these students, the sixth Global University Employability Ranking will bring them insight and clarity they can't get anywhere else."

The survey asked those responsible for graduate recruitment at large international employers to define what they look for and which universities are most successful at producing graduates who meet their needs.

The findings are drawn from 20 countries and reveal some clear distinctions in what employers consider to be the most important employability skills.

For example, employers in India, France, the US and Britain seek students with strong communication skills, while Chinese and German managers consider adaptability to be the most important trait.

SHOW ME THE JOB

IAIN MARLOW &
ARCHANA CHAUDHARY
Bloomberg

JOBLESS growth triggers concern as employment creation was slowest on record in 2015 even as GDP surged, widening social schisms may hurt Modi's 2019 re-election bid

India's financial capital Mumbai woke to a strange sight earlier this month. More than 100,000 young men and women on motorbikes drove through the city for almost six hours. Their demand: guaranteed jobs in state-owned and private companies.

The protesters, some as young as 14, are just one part of the swelling ranks of discontented citizens frustrated at the lack of job opportunities in India despite the country's brisk economic growth.

While gross domestic product grew at one of the fastest paces in the world, employment creation was the slowest on record in 2015, with just 135,000 net new jobs in the formal sector of the economy against the 12 million estimated new entrants to the workforce, government data show.

"Our youngsters have no jobs, no security – and they say the economy is booming," said Manohar Anand Rao Patil, a 50-year-old farmer who travelled 500 km for the rally. "We voted for Narendra Modi, gave him full majority. Yet half-way through his term he's done nothing to assure our kids of education or well-paying work," Patil said.

With the world's second-most-populous nation shifting from agriculture at a much slower pace than forecast, prime minister Modi risks a

Growth without employment opportunities sets off concern as job creation was the slowest in 2015, even as the GDP surged

backlash that could jeopardise his re-election prospects come 2019.

Public anger is also concentrated around India's affirmative action programme that enshrines employment and education preferences for members of disadvantaged castes and there are fears this could push political parties to play on religious and caste divisions in the lead up to state polls next year.

"The lack of job growth has significant potential political and operational risk implications for companies in India," said Jan Zaleski, Singapore-based analyst at Verisk Maplecroft, a political risk firm. "In the longer term this could tip the balance away from its business focus. We could see a more socially and communally divisive approach emerging, especially in the context of local election campaigning," Zaleski said.

The office of Arvind Subramanian, Modi's top economic adviser, could not immediately make him available for an interview on the government's job-creation push.

According to a vision docu-

Bleak scenario

Survey of eight sectors shows job losses in Oct-Dec 2015 period



Source: The ministry of labour and employment

ment published by top bureaucrats this year, India will create 115 million new jobs by 2032 if gross domestic product (GDP) grows at 7 per cent each year, which will rise to 175 million at a 10 per cent growth rate.

The mass protests in Mumbai by the Marathas, a land-owning community that forms more than a third of the local population in the western state of Maharashtra, mirrors similar and at times violent mass agitations over the last two years by dominant caste groups across India.

In February, Modi was forced to call in 5,000 security forces to quell jat mobs block-

ing roads and setting shopping malls on fire in riots that led to more than 15 deaths and cut off part of the water supply to the capital, New Delhi.

Earlier this year in Gujarat, which Modi ruled as chief minister from 2001 to 2014, the relatively well-off Patel caste assembled in huge protests numbering up to half a million, again forcing Modi to send in the troops to help quell the unrest.

Caste reservations began as a way to right historical wrongs, but evolved into political tools as traditionally rural groups migrated to India's cities for work, but found no jobs, according to Dipankar Gupta, a sociologist who studies India's caste sys-

tem. While the government has not done enough to create jobs, farming groups have also been unable to shift focus to a future that's urban and competitive, said Chandrabhan Prasad, a researcher and entrepreneur who belongs to one of the lowest castes in India's rigid social hierarchy.

Only about half of Indian job-seekers do find jobs, and half of these jobs are in the low-wage construction sector, said Jayan Jose Thomas, an economics professor at the Indian Institute of Technology (IIT) in Delhi.

"It's an opportunity, in a way, the demographic dividend. But it's also a challenge, in that some of this growth is coming in the poorest, least-developed northern, eastern states, such as Bihar and Uttar Pradesh," Thomas said. "These are really tough times – for any government," he remarked.

Modi's party – the Baharatiya Janata Party (BJP) lost state polls in Bihar last year. Uttar Pradesh, the nation's most populous state, holds elections early next year, as will at least

four other states.

While jobs data in India are delayed and partial, available figures paint a bleak picture. About half of Indian households have just one employed person, and in 77 per cent of households no one earns a regular wage, according to a government survey of 156,563 households conducted between April-December 2015. More than two-thirds live on less than \$150 a month.

The lack of a security net is due to the fact that more than 90 per cent of Indians work in the so-called informal sector, that includes tailoring and pickling. Modi has been unable to win support from lawmakers and trade unions to ease some of the world's most rigid land and labor laws, stifling job creation.

While the government remains an attractive employer, the fight for jobs is getting tougher. The public sector's share in formal employment fell to about 60 per cent in 2011 from 68 per cent in 2003, and the number of jobs across federal, state and local bodies dropped 6 per cent to 17.5 million. Private employees rose 38 per cent to 11 million.

With more than 41 per cent of India's 1.3 billion people below the age of 20, the issue of jobs may become a key issue in next year's elections, said Romita Das, an analyst formerly with Control Risks.

"Large-scale investment in the industrial and manufacturing sectors remains underwhelming, suggesting that jobless growth is likely to continue," Das said. "The burden of such growth is likely to fall on the country's most vulnerable workers – the young, the old, the poor," the analyst remarked.

ANTIBIOTICS THAT 'BOMB' MICROBES DEVELOPED

<http://ahmedabadmiraor.indiatimes.com/news/india/Antibiotics-that-bomb-microbes-developed/articleshow/55461426.cms>

Scientists have developed a new class of antibiotics using nanotechnology, which can be delivered at a particular or targeted location. The team from Indian Institute of Science (IISc), Bengaluru, and Bose Institute, Kolkata, said that analysis shows they act as "antimicrobial bombs". Elaborating, they said these "targeted bombs" damage the bacterial membrane with increased power and strength as compared to current drugs, thus resulting in better efficiency. This method, according to an official release from 'Research Matters' can address challenges faced with antibiotic resistance.

"Over the last several decades, antibiotics have played a critical role in fighting infectious diseases caused by bacteria and other microbes. However, blatant misuse and overuse of these drugs has resulted in the bacteria becoming resistant to a wide range of antibiotics where it changes itself to eliminate the action of the antibiotics and thus renders the drug useless. A recent work by researchers has addressed the challenge of antibiotic resistance using nanotechnology," said the release from Research Matters. The team — led by Prof Hanudatta Atreya from IISc and Prof Anirban Bhuniya from Bose Institute, used nanoparticles made of silver, and attached it chemically with an antimicrobial molecule.

According to experts, while nanoparticles degrade within a few hours to a few days in solution, this particular combination of nanoparticles with a peptide drug helped in enhancing the stability of the nanoparticle beyond two months. Thus, said the researchers, it was safe to use even after two months and it even demonstrated increased efficiency against bugs. "It is difficult for the bacteria to develop resistance to these types of drugs

because the mechanism of the combodrug is different from the way conventional antibiotics work. Thus, these types of drugs will be more effective,” said Prof Atreya.

The researchers used a technique called the “nuclear magnetic resonance” technique, which helps in drawing a detailed 3-D picture of the combination. This enabled them to figure out the nature of the interaction between the nanoparticle and the antibiotic in the nano-drug combination at the atomic level for the first time, said the release. “The antimicrobial molecules come close to the relatively large spherical nanoparticle, touch it momentarily and then move away like bees swarming around abeehive. The activity of the nanoparticle-peptide combination was found to be higher than the action of the individual components (nanoparticle and the peptide) alone, implying a synergistic action,” said Prof Atreya.

According to the researchers, a large number of antimicrobial drug molecules can be packed with one nanoparticle, thereby achieving high density of these molecules. “They can be delivered at a particular location, acting as an antimicrobial ‘bomb’. These bombs damage the bacterial membrane with increased potency as compared to the free non-conjugated drugs,” said the release.

November 16

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Varsities’ autonomy to depend on NAAC, NIRF grades

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The question of autonomy is critical to higher education institutes (HEI) and the government is mulling the option of clubbing ratings of the National Assessment and Accreditation Council (NAAC) and the HRD ministry’s National Institutional Ranking Framework (NIRF) to decide on grading and autonomy granted to institutes. Speaking at the Ficee higher education summit in Capital

Delhi, HRD minister Prakash Javadekar said there would be minimum regulation and maximum autonomy for HEIs with the best grades. For others, a balance between autonomy and regulation would be maintained. Those below standards should expect stricter control, he said. On the Ucehatar Avishkar Yojana (UAY), Javadekar said IITs were being encouraged to share innovative solutions and this would give students real hands-on training. They could even work on ideas for innova-

tions and startups from their hostel rooms, he quipped. Earlier, inaugurating the summit, Andhra Pradesh chief minister Chandrababu Naidu said the world was into the fourth industrial revolution which was characterised by technology and the Internet of Things. Sensors, robotics and machine learning were the order of the day, making things happen real time. An analysis of the kind of human resources required was needed to take on the new challenges.

EDUCATION INDIA: UPGRADE NEEDED

- Speaking at the education summit, Rita Teotia, secretary, ministry of commerce and industry, said there was a need to create a robust policy framework, conducive and friendly environment and hassle-free visa regime to encourage international students to come to India to study
- Teotia said that almost 230,000 students went abroad to study from India, of which 100,000 went to the US every year
- A massive US\$17 billion was being spent by these students abroad on higher education
- Hence, it was essential for India to upgrade its higher education system domestically to cater to the rising demand of its students

Business Standard ND 16.11.2016 P-2

Flipkart, Snapdeal might give IIM, IIT placements a miss

VINAY UJARIH
 Ahmedabad, 15 November

Normally regular recruiters Google, Flipkart, Snapdeal, Zomato and Hopsotch might not be visiting Indian Institutes of Management (IIMs) and Indian Institutes of Technology (IITs) campuses during final placements this year. According to IITs and IIMs, Google has opted out of select institutes to instead recruit through its own process. The other e-commerce players have either not registered or not confirmed their participation for final placements. Citing both a tough market scenario in e-commerce and the previous year’s experience, the institutes say some of these major players might not come.



Agarwal, head of career development services at IIM Bangalore. Prominent among these will be Flipkart, which earlier this year had deferred joining dates from May-June to December for students it had hired during campus placements last year, due to an organisational rejig. The move had sparked outrage among the IITs and IIMs, which then pledged to scrutinise companies that attend campus placements, especially start-ups and seek joining date commitments from e-commerce recruiters. Flipkart had been undergoing an organisational rejig amidst its struggle with global rivals Amazon and Alibaba, which have become aggressive in India. While placement sources at IIM Indore said Flipkart and Snapdeal hadn’t yet confirmed their participation, those at IIT Madras (IIT-M) said the former hadn’t registered for final placements, though the IITs begin these on December 1. At IIT-M, Google is also unlikely to participate – the search engine giant will be recruiting from select IITs, apart from its internal process.

In the recently concluded summer placements at premier B-schools, such absence was prominent

Business Standard ND 17.11.2016 P-2

IIT-Kanpur’s data analytics firm predicted Trump win

A team of data scientists and a data analytics incubated company at Indian Institutes of Technology-Kanpur predicted Republican candidate Donald Trump’s victory in the US Presidential election six days before the final results. While every pollster was predicting a clean sweep for Democratic candidate Hillary Clinton, these scientists were so confident of their model that they sent a formal invitation to Donald Trump on November 3, to be chief guest at IIT-K’s Annual Technical Festival in capacity of president of United States. **BS REPORTER**

India's Top Schools to Attract More International Students

<http://www.masterstudies.com/news/India%E2%80%99s-Top-Schools-to-Attract-More-International-Students-1211/>

India's 23 Indian Institutes of Technology (IITs) plan to attract at least 10,000 international students in the next year as part of a plan to globalize. This won't mean 10,000 fewer seats for Indian students; it will signal an expansion of IIT's programs. The number of international students cannot exceed 10 percent of the total seats in each course.

Why the push? V Ramgopal Rao, IIT Delhi Director hopes that opening up spaces in the IITs will lead to more international recognition and result in higher international university rankings.

Several IITs have already traveled to Canada, the US, and the UK looking for qualified faculty. Many of the faculty are Indian-origin scholars looking to live and work in India again. Rao reportedly said, "We are now putting together teams of officials and academics who will tour Ivy League colleges in the US and offer incentives to attract the best people to come and teach in our institutes." He confirmed that the IITs have approached India's Ministry of External Affairs to change visa rules so that foreign nationals can easily acquire teaching jobs at the IITs.

The IITs will offer a slightly different version of the entrance exams in nine countries for 2017—Afghanistan, Bangladesh, Sri Lanka, Nepal, Bhutan, Maldives, Singapore, the United Arab Emirates, and Ethiopia. Rao reports that the exam for international students will differ from the entrance exam for Indian students in order to level the playing field. In India, only 2 percent of students pass the exam, and most of them have gone through extensive coaching.

How much will it cost for international students? Probably around \$1,350 per year, without the benefit of IITs heavy subsidies.

Important Initiatives of Railways for Research & Development

http://www.business-standard.com/article/government-press-release/important-initiatives-of-railways-for-research-development-116111601442_1.html

Upgradation of Research and Development (R&D) capabilities to keep pace with world standards is a continuous process. Some of the important initiatives taken in this regard are:

Technology Mission for Indian Railways (TMIR) has been set up as a consortium of Ministry of Railways, Ministry of Human Resource Development, Ministry of Science & Technology and Industries, on an investment sharing model for taking up identified railway projects for applied research and use on Indian Railways.

Research Designs & Standards Organisation (RDSO), the Research & Development wing of Indian Railways, has signed Memorandum of Understanding (MoU) with Railway Technical Research Institute, Japan for joint research co-operation.

Centres for Railway Research (CRR) have been sanctioned at Indian Institute of Technology (IIT)/Kharagpur, Mumbai University, IIT/Roorkee, IIT/Chennai and IIT/Kanpur to carry out research work in various areas.

This Press Release is based on the information given by the Minister of State for Railways Shri Rajen Gohain in a written reply to a question in Lok Sabha on 16 November 2016, Wednesday.

Flipped Classroom Model Much Effective, Says IIT Bombay

<http://examswatch.com/flipped-classroom-model-much-effective-says-iit-bombay/>



A research on the flipped classroom model by IIT-Bombay professors says that it is more effective than a conventional classroom. The IIT researchers had taken to experimenting with the flipped class model in a bid to come up with an enriching classroom model.

In the Flipped Classroom model, students watch lectures through videos at home and utilize classroom hours in discussion, problem-solving and other activities. Basically, the model flips homework at classroom and class work at home. Students watch lecture videos at home and get back to the classroom with ideas to discuss, solve problems and have other subject related practical sessions or activities.

World-wide rigorous research is underway into better classroom teaching models to improve students' performance and experience. The model has been both praised and criticised around the world. While some say it improves performance, others say it increases students' workload.

However, the study by IIT researchers to determine its efficacy prove that 85 percent of students found this as 'effective' or 'more than effective.' 80 percent were of the opinion that the core component of the course such as weekly quizzes and mid-term exams must not be changed.

A subject called Process Control, was taught on mandate to 63 chemical engineering undergraduate students. A set of 36 one-hour lecture videos were recorded in the previous year when the course was delivered through the conventional method by one of the authors of the report. These pre-recorded videos were used as the instructional material.

Students studied three videos every week at home and discussed them through Moodle, a Learning Management System. Group discussion happened once a week with the regular quiz sessions, mid and end semester exams.

Titled '*Efficacy of a flipped method in an undergraduate class at IIT Bombay*' the study conducted by professor Kannan Moudgalya of Chemical Engineering and Educational Technology departments and other researchers showed favourable result in the students' performance.

“A limited comparison of the performance with a control group that did the same course taught by another instructor in the conventional way showed that the flipped classroom students performed better. Students who did well in the weekly quiz, did well consistently throughout the course,” read the report.

The report, however, pointed out that student satisfaction and overall performance alone were not sufficient reasons to convince traditional societies to adopt the flipped method.

“It is also necessary to show that the students go through the lecture material regularly and that learning happens throughout the semester. This requirement is indeed fulfilled in the current study: this fact is brought out through the weekly quiz and a detailed study of it,” the report mentioned.

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Universities have to catch up with tech-driven students



■ To prepare for the future, universities need to use MOOCs to develop programmes, a Ficci-EY report has recommended. ISTOCK

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India's educational institutes follow a concentrated learning model that emphasises on fixed-duration courses. This does not suit the needs of the learners' technology-dominated lifestyle. Offerings from academic institutes have to change to enable students understand how they can get good returns on their investments (in education), a report by Ficci and EY, Future of jobs and its implications on Indian higher education, has said.

The rapid evolution of technology, because of which innovations are reducing costs and time taken to develop and market productions, will bring about a huge change in the nature of jobs by 2030. Cognitive machines, robotic workforce – estimates say robots will take over most jobs within 30 years – automation (autonomous cars will bring down jobs, say of taxi drivers) and artificial intelligence will replace human workers.

Deep learning (machine learning based on a set of algorithms) and smart machines have enabled automation of manual work and affected tasks performed by information workers. Industrial automation and robotics have reduced labour requirements across sectors such as transport and logistics and retail, putting at risk a substantial number of jobs. India is the world's second largest growing services economy currently, but till 2020 the next wave in its job market is likely to be driven by the new pillars of technological growth, govern-

ment reforms and socio-political advances. SMAC (social, mobile, analytics and cloud) technologies are already disrupting sectors such as e-commerce, content creation and dissemination, e-gov services and retail. The government's decision to relax FDI norms in sectors such as civil aviation, single-brand retail, defence and pharma will attract big investments and boost job creation. Terrorism, cyber attacks and illegal migration will lead to increased employment in areas such as disaster management, business continuity planning and homeland security.

As a result of these drivers, SMAC will create 5-6 lakh jobs by 2020. Cloud computing, estimated to be a US\$650-billion-US\$700 billion market by 2020 will require security architects, network engineers, cloud based developers and specialists. As India is among the top 10 destinations for analytics with around 600 firms and 90,000 professionals, job growth is expected in areas such as custom visualisation, software, and predictive analytics. AI, being used for jobs of data mining, virtual assistants, decision support systems and automated reporting, will also require skilled workers.

Among an exhaustive list of what varsities needed to do, the report recommended improvement of interactions with industry to assess learning needs; focus on applied research; use freely available content/knowledge/MOOCs to develop programmes and credits for new areas of interest. Choice-based credit system was also the need of the hour.