Newspaper Clips

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Times Of India ND 25/05/2016 P-11

India ranked 24th in QS higher edu strength rating

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Bengaluru: The QS Higher Education System Strength Rankings (HESSR) 2016 — an overall ranking of higher education system — has ranked India at 24th position with a score of 60.9 out of 100. The US has scored a centum and tops the heap, UK is in the second place with 98.5, while Germany takes the third spot with 94.

With a score of 9.2, Pakistan ranks 50, the last position. The overall assessment is done through four categories — system strength, flagship, access and economic concept of different countries in higher education. All these categories are combined with equal weightage to give the overall rankings.

In the system strength category, the top two rankings are shared by US and UK respectively, with India at rank

US BAGS TOP SPOT

20. In this category, every country is awarded a score based on the number of institutions ranked 700 or above in the QS World Rankings, divided by the average position of those institutions.

US continues to bag the top position in the access category, too, with India at the 42nd position.

India has secured rank 26 in the flagship category, where US, UK and Switzerland have secured the top three rankings. This category assesses the performance of the country's top institution within global rankings, and this is a normalised score based on the place each nation's top university occupies in the QS World University Rankings.

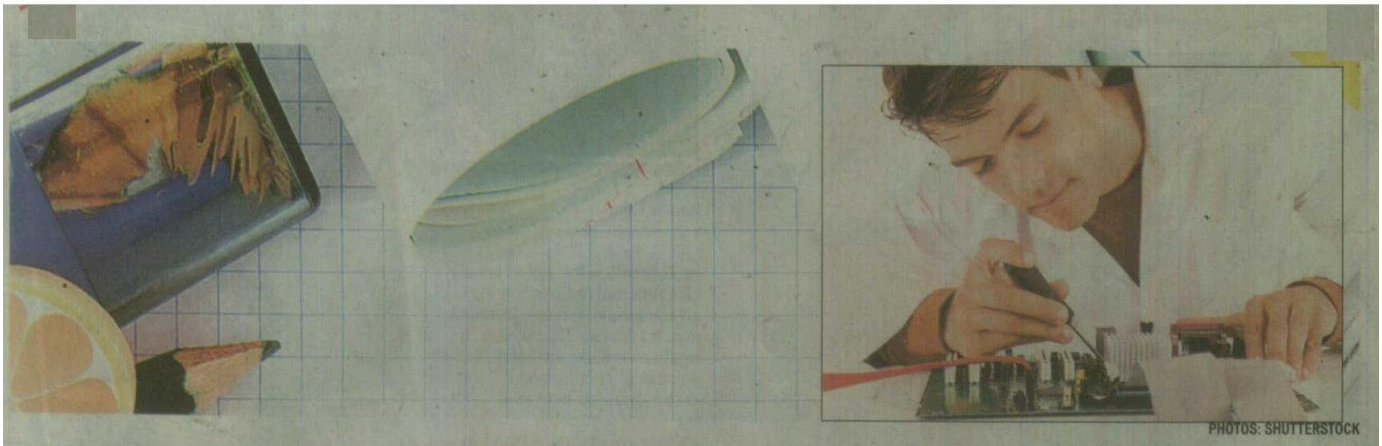
In economic context category, India has managed to get rank 4, with US again acing it. This category assesses impact of national investment in higher education.

Hindustan Times ND 25/05/2016 P-20

Director (Projects), EIL honoured by IIT-BHU

Ashwani Soni, Director (Projects), EIL has been conferred with the IIT-BHU Alumni Excellence Award for 2016-17 for his outstanding contribution to hydrocarbon industry and unparalleled professionalism. The award was bestowed upon him at a glittering function held in New Delhi.

Hindustan Times (HT Education) ND 25.05.2016 P-10



PHOTOS: SHUTTERSTOCK

Crack JEE: Get basics right, devise shortcuts

THE RIGHT STRATEGY Solving 100 quality and concept-based questions is much more important than tackling 1,000 questions which have not been selected carefully, say Joint Entrance Exam experts

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The Joint Entrance Examination JEE (Main) is the most important test for aspiring engineers and architects across the country. Conducted in two stages – JEE (Main) and JEE (Advanced), the test is taken by over 14 lakh students in more than 1,500 centres in India and abroad every year.

About two lakh top candidates, based on their performance in the JEE (Main) Paper 1, including all categories, are eligible to appear in JEE (Advanced). The exam is usually held in April every year. JEE (Main) scores are taken into account for admission to undergraduate engineering and architecture programmes at the National Institutes of Technology (NITs), Indian Institutes of Information Technology (IIITs), other Centrally-funded technical institutions, and institutions funded by participating state governments.

PATTERN OF JEE (MAIN)

BE/BTech (Paper 1) entrance exam is of three hours and consists of objective questions from physics, chemistry and mathematics with equal weightage given to each subject. Each question has four options. There is negative marking for incorrect answers.

BArch/BPlanning (Paper 2) entrance exam is of three hours comprising mathematics, aptitude test and drawing test. While mathematics and aptitude test have objective questions, the drawing test has questions to check the drawing aptitude of a student.

Clearing JEE (Main) is not a difficult task. A systematic approach towards preparation will help you secure a good rank. JEE (Main) consists of CBSE syllabus from physics, chemistry and mathematics and some common topics from Class 11 and Class 12 state boards. The cut-off for JEE (Main) is generally around 60% to 70% for NITs and IIITs but may change every year.

SOLVING THE PAPER

According to Anand Kumar, founder, Super 30, Patna, "The tough chapters include probability, permutation and combination and integral calculus in maths; rotational dynamics and geometrical optics in physics; solid state and inorganic chemistry in chemistry; 3D images in engineering drawing; and logical reasoning in aptitude. Revision of Class 11 and 12 syllabus and practising the last 10 years' question papers of the previous papers helps a lot. For logical reasoning, solving GRE questions is a good idea."

The JEE (Main) pattern is set and predefined, the marking system is fixed i.e. plus four for every correct answer and minus one for an incorrect answer. The questions are based on a fixed pattern. You must focus a lot on the fundamentals and specifically NCERT books including every subject and topic. It is also a good idea to try conventional methods first, say experts. If they don't work out, try to understand the problem again and find clues that can lead you to the solution. Doing 100 quality and concept-based questions is more important than doing 1,000 questions, which have not been selected carefully. Devise your own shortcuts and ways to tackle particular kind of problems.

Sometimes, the right strategy and time management play a vital role in deciding the rank for an aspirant. So, you must be quick enough to adapt to the level of the paper and act promptly. For a three-hour paper with three subjects, generally students tend to devote one hour each. It is advisable that you devote 40-45 minutes for attempting questions from any one subject you feel confident about and move on to the second subject and then to the third. You can review the unsolved questions in the remaining time. It is important that questions are attempted in a sequence so that you remember the order of answering the questions.

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STRATEGY FOR JEE ADVANCED PREPARATION

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After clearing JEE (Main), the top two lakh candidates are eligible for the next stage which is JEE (Advanced). Through JEE (Advanced), the Indian Institutes of Technology and Indian School of Mines, Dhanbad, offer admission to undergraduate courses leading to a bachelor's, integrated master's or bachelor's-master's dual degree in engineering, science, architecture, or pharmaceutics. Both bachelor's and master's degrees are awarded to candidates enrolled in the dual degree programmes upon successful completion of the course curriculum. In a few of the IITs, students enrolled into the four-year bachelor's programme have the option to convert to BTech (honours) and/or BTech with minors.

Apart from being in the top two lakh candidates, you must fulfil the age limit (have been born on or after October 1, 1991). You can attempt JEE (Advanced) a maximum of two times in consecutive years. Therefore, those who appeared in JEE (Advanced) for the first time in a given year are also eligible.

You should have appeared for the Class 12 (or equivalent) examination for the first time in all the subjects in either that year or the previous year.

Besides going deep in concepts, you need skills of comprehension, reasoning and analytical ability to solve problems.

The question papers are designed to test your comprehension, reasoning and analytical ability. JEE (Advanced) has a bouquet of mix of various types of problems and there are two papers of three hours each. Each paper (physics+chemistry+math) consists of objective type (multiple choice and numerical answer type) questions. The examination has two papers – one and two, each of three hours duration.

JEE (Advanced) 2015 cut-offs

General category

- Minimum **35%** in aggregate i.e. 126 marks
- **10%** in each subject i.e. 12 (each subject)

OBC (non-creamy layer)

- Minimum **31.5%** in aggregate i.e. 113.4 marks
- **9%** in each subject i.e. 10.8 marks

SC/ST

- Minimum **17.5%** in aggregate i.e. 63 marks
- **5%** in each subject i.e. 6 marks

Maximum marks 360

HOW TO ENSURE A HIGH RANK

You should avoid selective study. With more questions in objective type papers, all major concepts/topics are likely to be covered with intermingling of the concepts of various topics in the same question, says RL Trikha, director, FIITJEE.

You should strictly follow a well-planned time table for revision. While attempting mock papers, aim for 100% ie all attempted questions should be correct. This will give you an edge over others who will be left behind in the race because of negative marking for incorrect attempts. Questions carrying no negative marking must be attempted since you would have nothing to lose and get a fairly good chance of maximising marks, Trikha says. Speed and accuracy will also help in finishing JEE (Advanced) papers ahead of time, giving you time for revision and solving unattempted questions.

Periodic checking of progress made by solving quizzes/mock test papers regularly also helps. The idea is to increase speed and accuracy as a result of working on weak areas known from the attempts. Quick revision of theory/illustrations from flagged notes devoting equal time to all three subjects should be done.

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Marriage of engineering and research the next big thing

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Prof Sarit K Das, director and professor, Indian Institute of Technology Ropar, Punjab, is a man in a hurry. He wants to catapult IIT Ropar into the big league, at par with the older IITs. Smart recruitments – local as well as global faculty – need-based research with an eye on the future, setting up departments that can do meaningful research based on local demands is key for his institute, which despite its age, made it to number nine in the HRD ministry's National Institute Ranking Framework (NIRF) rankings for engineering category A.

On the emerging trends in engineering, Prof Das says the marriage of medicine and engineering is now on the cards. The last half of the 20th century belonged to electronics. Also, "once we, a group of IIT directors, were talking about the greatest innovation mankind has made and we thought it was the internet. It has literally revolutionised the world."

Things are now set to change. "There are various reasons for engineering and medicine to come together. People and the world need it. The West, which is surviving on innovations, is now focused on healthcare. They have stopped manufacturing and are focusing on just services. Electronics is out of their hands except for perhaps an Apple or Intel. Whatever they have done is now being replicated in Taiwan or Singapore. Millions of dollars are being spent on healthcare and it is globally important. Areas of focus will be medical diagnostics, personalised medicine, nanotech based medicine, drug delivery and genetics," he says.

> Total energy solutions will be a key area of focus with emphasis on micro units generating energy locally – through solar, wind and bioenergy managed over a small area. Alternative energy solutions are also required for the villages, especially at night
>
> PROF SARIT K DAS, director and professor, Indian Institute of Technology Ropar, Punjab

Indian focus should be on affordable healthcare. "We have to ensure better health, education and housing for our people," says Prof Das. His institute is now in talks with IIT Mandi and the Postgraduate Institute of Medical Education and Research (PGI), Chandigarh, to combine strengths and work on innovative breakthroughs, with PGI providing the IITs a platform for clinical trials and research. Cancer incidence in Punjab (where IIT Ropar is based) is higher than the national average – such tie-ups will help IIT Ropar provide critical healthcare to local communities.

Agriculture is also the next big thing, especially when it comes to managing water resources. Intensive research is also required in soil degradation, study of standing crops, irrigation and fertilisers. The civil and chemical engineering courses to be started at IIT Ropar, too, will focus on the needs of the region.

Total energy solutions will be another key area, but at the local level. The focus will be on micro units generating energy locally – through solar, wind and bioenergy, managed over a small area. Energy solutions are also required for villages, especially alternative sources of energy due to non existence of solar energy at night.

Someone who is passionate about research and has guided 25 PhD students so far, Prof Das is happiest when surrounded by his students, when "some of them put forward great ideas." Managing the affairs of the institute keeps him busy through the day and he gets time for his research only very late at night. His current research interests include heat transfer in nanofluids, microfluidics, biological heat transfer and nanoparticle mediated drug delivery in cancer cells. He usually manages to sleep at 2 am and gets just a few hours of rest.

The support that newer IITS are getting is satisfying. "We have complete support from the (IIT) senate, they never say no and allow us complete autonomy. You ask for grants and get them easily – something which even the old IITs don't get. We have got grants of ₹167 crore out of which ₹40 crore have been spent on scientific instruments and ₹94 crore on infrastructure, putting us on the path of growth. The older IITs have had so much time to grow, we have to work smarter and harder to be at par with them," Prof Das adds.

Economic Times Hindi ND 25.05.2016 P-08

PM स्कीम से सड़कें सुरक्षित बनाएगी सरकार

2,000 करोड़ रुपये की शुरुआती फंडिंग के साथ स्कीम के तहत बेहतर डिजाइन और रोड इंजीनियरिंग के जरिए हाइवे पर दुर्घटना वाली जगहों को ठीक करने की कोशिश की जाएगी

[रजत अरोड़ा | नई दिल्ली]

दुनिया की सबसे खतरनाक मानी जाने वाली भारतीय सड़कें जल्द ही सुरक्षित होंगी। प्रधानमंत्री सुरक्षित सड़क योजना के लॉन्च के साथ सड़कों को सुरक्षित बनाने पर फोकस किया जाएगा। 2,000 करोड़ रुपये की शुरुआती फंडिंग के साथ स्कीम के तहत बेहतर डिजाइन और रोड इंजीनियरिंग के जरिए हाइवे पर ऐसी खतरनाक जगहों को ठीक करने की कोशिश की जाएगी, जहां अक्सर दुर्घटनाएं होती हैं। इसके अलावा, पहाड़ी सड़कों पर रेलिंग्स लगाई जाएंगी। मिनिस्ट्री ऑफ रोड ट्रांसपोर्ट एंड हाइवेज ने पहाड़ी राज्यों से ऐसी जगहों के ब्योरे मांगे हैं, जहां अक्सर दुर्घटनाएं होती हैं। इन सड़कों के लिए खास रिफ्लेक्टर्स तैयार करने को सरकार इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी (IIT) से मदद लेगी।

एक सीनियर गवर्नमेंट ऑफिसर ने बताया, 'इस स्कीम को रोड ट्रांसपोर्ट मिनिस्टर ने पहले ही मंजूरी दे दी है।' सड़क हादसों के मामले में भारत दुनिया में सबसे आगे है। वर्ल्ड हेल्थ ऑर्गेनाइजेशन के मुताबिक, देश में सड़क दुर्घटनाओं में हर साल 2,31,000 से ज्यादा लोगों की मृत्यु होती है। ऑफिसर ने बताया, 'राज्यों से पहले ही उन लोकेशंस की डिटेल्स भेजने को कहा गया है, जहां आमतौर पर दुर्घटनाएं होती हैं। हमारी इंफॉर्मेशन के मुताबिक देश भर में ऐसे करीब 796 स्पॉट हैं।'

यह स्कीम सरकार के नेशनल एक्शन प्लान का हिस्सा है, जिसका मकसद 2020 तक रोड एक्सिडेंट्स में होने वाली मौतों की संख्या घटाकर आधी करना है। इस स्कीम में व्हीकल्स को ज्यादा सुरक्षित बनाना भी शामिल है। इसके अलावा, सरकार सेफ्टी के आधार पर कार मॉडल्स को स्टार सर्टिफिकेशन भी देना शुरू करेगी। टेस्टिंग और भारत में बिकने वाली कारों की सेफ्टी के ग्रेड के लिए एक स्पेशलाइज्ड एजेंसी भारत नेशनल कार एसेसमेंट प्रोग्राम बनाई गई है।

मिनिस्ट्री दोपहिया वाहनों के लिए नए सेफ्टी नॉर्म्स ला रही है, भारत की सड़कों पर चलने वाली व्हीकल्स में इनकी हिस्सेदारी 72 फीसदी है। वहीं, बड़ी संख्या में दोपहिया वाहन चालक सड़क हादसों का शिकार होते हैं। प्रस्तावित नॉर्म्स के मुताबिक, भारत में सभी स्कूटर्स और मोटरसाइकिल में ऑटोमैटिक हेडलैंप होगा, जो कारों के डेटाइम रनिंग लैंप की तरह ही होगा। रोड ट्रांसपोर्ट एंड हाइवे मिनिस्टर नितिन गडकरी ने हाल में फाइनेंस मिनिस्ट्री को भेजे गए एक लेटर में लिखा था कि सड़क हादसों में होने वाली मौतों से जीडीपी का 2-3 फीसदी का नुकसान होता है। भारत बसों और ट्रकों समेत हेवी कमर्शियल व्हीकल्स के ड्राइवर्स के लिए फर्स्ट-एड ट्रेनिंग और बेसिक लाइफ सेविंग तकनीक की जानकारी जरूरी करेगा ताकि वे सड़क हादसों में घायल होने वालों को तत्काल आधार पर मदद पहुंचा सकें। सर्टिफाइड ट्रेनिंग पूरी करने के बाद ही ड्राइवर्स को लाइसेंस मिलेंगे।

Hindustan Times (HT Education) ND 25.05.2016 P-16

WATER MANAGEMENT EXPERT

Making every drop of water count

SUSTAINABLE SOLUTIONS India's unrelenting drought underscores the need for experts who can train communities in saving, storage and reuse of water

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About 256 districts across India and a population of at least 330 million are in the grip of a severe drought in India. Such disasters, going by statistics from 1900, when 1.25 million people were killed, to 2002, when 310 million people were affected, have and will occur in the future as fears of climate change and global warming get only too real.

Water management thus is now a key requirement to mitigate the drought crisis India, where there is so much diversity in topography, geology, land cover and land use patterns. Extensive research needs to be done on water budgeting, water sharing, water governance and water markets. "Thus, water experts need to work together and develop integrated solutions for sustainable management of water resources," says Pradnya Mathur, an MTech in aquacultural engineering from IIT Kharagpur. While studying for MTech, Mathur also did a one-year project in GIS (geographic information system, which uses computers to capture, store, check and display data related to earth's surface) and remote sensing as she felt "it had good scope for agriculture and water management."

A whole lot of questions started bothering Mathur when she was working in a rural development project, studying drought-prone villages. Seeing people struggling to reach a water source, trudging up and down hills to fill very small vessels with water which would be easier to carry back home made her wonder how they would manage if the source dried up. Watersheds to collect water and drain them to fields and villages had been developed, but these had run dry. Finding solutions then to work on community-based water management and climate change became a mission for her.

Mathur has been part of a team that handled drought situations in the semi-arid regions of Maharashtra. "One of the solutions we developed was a water budgeting tool. With the help of the community it was used for participatory crop planning based on available water in the community's watersheds." Drip irrigation (saving water by allowing it to drip slowly through pipes, valves to various parts of plants) was promoted as was composting to secure soil moisture for a longer period and kitchen gardening to utilise kitchen waste water. Farm ponds for collecting rain water were dug, thereby discouraging pumping of ground water.

Now a freelancer, Mathur, who was born in Mumbai and brought up in Dapoli, in Ratnagiri, Maharashtra, has done extensive work in participatory water budgeting, crop planning based on water budgeting, irrigation advisories using CropWAT (a computer programme for the calculation of crop water and irrigation requirements based on soil, climate and crop data), hydrodynamics modelling using Excel, watershed net planning using GIS and aquaculture livelihood development. Her research interests are in community-based adaptation, water management, sustainable agriculture, GIS and remote sensing, training and capacity building.

Mathur, who loves travelling, has worked in Maharashtra, Madhya Pradesh, Gujarat, and Meghalaya to study water dynamics. "And I am not done yet. This is just the beginning," she says.

ON DEMAND

Millions are impacted due to water shortage in villages and towns. They need relief and support

₹ I take home

₹15,000-₹30,000 for freshers, ₹30,000-₹60,000 for mid-level professions. Independent consultants can charge ₹3,500-₹10,000 per day

I ♥ MY JOB Because...

I get a tremendous amount of satisfaction when a specific solution is accepted communities I work with and they benefit from it

Expert gyan

Saving, conserving and managing water should not be the work of only water experts but should be the responsibility of each citizen of the country

Pradnya Mathur (right) inspects a dry well in a village of Madhya Pradesh while working on case studies for community water management

ALL YOU NEED TO KNOW ABOUT A CAREER AS WATER MANAGEMENT EXPERT

Lowdown

Awareness among communities in India, especially in remote or arid regions, is key for building their capacities so that they can manage drought situations. Water management experts have knowledge of facts and figures and have area-specific solutions. This knowledge needs to be transferred and, if necessary, translated for local action and made available to the public

Institutes

- Indian Institute of Technology (IIT) Kharagpur
- IIT Roorkee
- CAEPHT (College of Agricultural Engineering Post-Harvest Technology)
- All Agricultural Engineering Institutes

Eligibility

After a BSc in chemistry anyone interested in water management can do specialisation in water quality. Engineering in water resources, agriculture or aquaculture would be ideal

Skills and traits

- Ability to reach out to communities suffering because of acute water shortage and convince them of the need to learn and teach others about managing water
- Good teaching and communication skills, ability to pick up local languages
- Ability to work in tough conditions, especially in drought-affected, remote areas

Dainik Bhaskar ND
25.05.2019 P-11

आईआईटी कानपुर से 63 छात्रों का निष्कासन

पढ़ाई और प्रोजेक्ट में लापरवाही बरती थी

भास्कर न्यूज नेटवर्क | लखनऊ

आईआईटी कानपुर के 63 स्टूडेंट्स को सोमवार को संस्थान से निष्कासित कर दिया गया। सोमवार को सीनेट की बैठक में यह निर्णय लिया गया। पढ़ाई और प्रोजेक्ट वर्क पूरा करने में लापरवाही बरतने वाले सभी स्टूडेंट अंडर ग्रेजुएट और पोस्ट ग्रेजुएट फाइनल ईयर के हैं। एक या दो विषय में फेल अलग-अलग सेमेस्टर के 113 छात्रों को निष्कासन की चेतावनी भी दी गई है। निकाले गए छात्रों को जून के अंतिम सप्ताह में होने वाले दीक्षांत समारोह में डिग्री नहीं दी जाएगी। सीनेट में कहा गया कि निकाले गए छात्रों के पास मर्सी अपील (दया याचिका) का मौका है। यदि अपील समझ में आई तो निष्कासन वापस लिया जा सकता है। इस सिलसिले में सीनेट की आपात मीटिंग अगले दो सप्ताह में बुलाई जा सकती है। 2014-15 में छात्रों के प्रोग्राम से टर्मिनेशन के बाद बवाल मचा था। इसलिए सीनेट ने बीच का रास्ता तलाशने की कोशिश की है। सीनेट का कहना है कि प्रोग्राम से टर्मिनेट छात्रों को समर कोर्स कराया जा सकता है। यदि स्टूडेंट समर कोर्स में अच्छा प्रदर्शन करते हैं तो टर्मिनेशन वापस लिया जा सकता है।