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IISc feat, inspiration for other institutions

It should be a matter of cheer for the students and faculty of the Indian Institute of Science (IISc), for Bengaluru and for the country as such, that the premier science study and research institution has been listed among the top 100 universities of the world in the latest Times Higher Education rankings. The ranking is for science and technology universities and IISc is placed 99th. This is the first time an Indian university has found a place among the first 100 in the world. The IISc is at the fifth place in the QS BRICS university rankings. Along with IIT-Delhi, it has also been ranked within the first 200 of the QS list of the world's best universities. The Institute has done well to improve its position in all respects, as the ranking takes into consideration a number of factors including teaching, international outlook, research, citations and industry outcome.

While IISc's achievement is creditable, it should also be matter of concern that the country's best institution is not even among top 50 in the world. We have a large number of institutions for study and research in science and technology. We also have the world's second largest population to feed these institutions with top talent. But we are nowhere in the picture when many Asian countries like China and even the tiny Singapore have universities which are counted among the top

few in the world. In the past, the methodology of assessment and a bias in favour of universities in the west have been blamed for the poor position of Indian universities in world rankings. But these are lame excuses. IISc Director Anurag Kumar has said that a new under-graduate course and the providing of complete data needed for the rankings helped the institute get into the first 100 positions in the Times ranking. The IISc has also seen an uptrend in collaborative research with industries and entered into alliances with global players in many areas of technology. This also has helped.



“The system of scientific, technical education has to change.”

The need to improve the standards of higher education and make our institutions world class centres of learning cannot be overstated. Standards have to be improved from the school level onwards, and the entire system of scientific and technical education has to change. There should be more funding support, better faculty and greater independence for the institutions. There should be no political and government interference in their affairs. There is also the need for better linkages with industry and a stronger emphasis on research. The IISc's ranking should inspire action in these areas. The premier institute should also strive to further improve its position.

IIT की रैंकिंग में सुधार के लिए सरकार का GIAN पर दांव

दशकों तक ग्लोबल रैंकिंग में जगह बनाने में नाकाम रहे देश के प्रीमियर इंजीनियरिंग इंस्टीट्यूट्स IIT के अब इनमें शुमार होने के चांस बढ़ गए हैं। बीजेपी की अगुवाई वाली NDA सरकार ने अपने पसंदीदा प्रोजेक्ट ग्लोबल इनिशिएटिव ऑफ एकेडेमिक नेटवर्क्स (GIAN) को अच्छी शुरुआत देने के लिए हाल में 165 कोर्सेज को मंजूरी दी है। इससे इंटरनेशनल फैकल्टी इंडियन इंस्टीट्यूट्स के साथ जुड़ सकेगी। एचआरडी मिनिस्ट्री के एक सीनियर ऑफिसर ने इकनॉमिक टाइम्स से कहा, 'यह देश में IIT के एकेडेमिक और रिसर्च नेटवर्क में सुधार लाने की कोशिश है। इससे इसकी ग्लोबल रैंकिंग में भी सुधार आएगा।' **पेज 8**

IIT की रैंकिंग सुधारने के लिए GIAN पर दांव

इस प्रोजेक्ट से इंटरनेशनल फैकल्टी भारतीय संस्थानों से जुड़ेंगी

[प्राची वर्मा | नई दिल्ली]

दशकों तक ग्लोबल रैंकिंग में जगह बनाने में नाकाम रहे देश के प्रीमियर इंजीनियरिंग इंस्टीट्यूट्स IIT के अब इनमें शुमार होने के चांस बढ़ गए हैं। बीजेपी की अगुवाई वाली NDA सरकार ने अपने पसंदीदा प्रोजेक्ट ग्लोबल इनिशिएटिव ऑफ एकेडेमिक नेटवर्क्स (GIAN) को अच्छी शुरुआत देने के लिए हाल में 165 कोर्सेज को मंजूरी दी है। इससे इंटरनेशनल फैकल्टी इंडियन इंस्टीट्यूट्स के साथ जुड़ सकेगी।

एचआरडी मिनिस्ट्री के एक सीनियर ऑफिसर ने इकनॉमिक टाइम्स से कहा, 'यह देश में IIT के एकेडेमिक और रिसर्च नेटवर्क में सुधार लाने की कोशिश है। इससे इसकी ग्लोबल रैंकिंग में भी सुधार आएगा।' GIAN के तहत अब तक IIT खड़गपुर में 28 और IIT मद्रास में 31 कोर्सेज को मंजूरी दी गई है। मनिपाल ग्लोबल एजुकेशन के चेरमैन और फॉर्मर इफोसिस बोर्ड मेंबर टी वी मोहनदास पाई ने कहा, 'GIAN से अच्छी फैकल्टी, बेहतर रिसर्च और बेहतर नेटवर्क का एक्सपोजर मिलेगा।' उन्होंने यह भी कहा कि GIAN से IIT की ग्लोबल रैंकिंग में भी सुधार आएगा।

IIT अब तक इंटरनेशनल फैकल्टी और इंटरनेशनल स्टूडेंट रेशियो के मामले में दूसरों से बहुत पीछे हैं। रैंकिंग में आने के लिए किसी एजुकेशनल इंस्टीट्यूट के लिए जरूरी 6 चीजों में ये एक है। परफॉर्मेंस के हिसाब से हाल के दिनों में IIT दिल्ली दूसरों से बेहतर रहा था। QS वर्ल्ड यूनिवर्सिटी रैंकिंग में यह पहली बार 36वें

पायदान पर आया है। लेकिन इसमें वह इंटरनेशनल फैकल्टी और स्टूडेंट्स के मामले में पिछड़ गया है।

IIT बॉम्बे के डायरेक्टर देवांग खाखर के मुताबिक, फैकल्टी विजिट से IIT को अपना एकेडेमिक एक्सीलेंस बेहतर बनाने में मदद मिलेगी। इससे उसकी रैंकिंग भी बेहतर होगी। खाखर कहते हैं, 'विजिटिंग प्रोफेसर को इंस्टीट्यूट्स को बेहतर तरीके से समझने में हेल्प मिलेगी। पिछले कुछ वर्षों में IIT की रिसर्च क्षमता में खासा सुधार आया है। वे अपनी विजिट में इन बातों को अच्छे से समझेंगे और इंस्टीट्यूट्स की इज्जत बढ़ाएंगे।'

IIT में जो नए कोर्स शुरू हो रहे हैं, उनमें से एक 3डी डिजिटलइजेशन फॉर कल्चरल हेरिटेज सबसे पहले IIT गांधीनगर में इसी महीने शुरू होगा। इसके लिए इटली की फैकल्टी से कोलैबोरेशन किया गया है। फॉरिन फैकल्टी के साथ दूसरे जो कुछ कोर्स दिसंबर में शुरू होने हैं, वे IIT मद्रास, IIT खड़गपुर, IIT पटना, जामिया मिल्लिया इस्लामिया, सेंट्रल यूनिवर्सिटी ऑफ गुजरात, IIT बॉम्बे, जवाहरलाल नेहरू यूनिवर्सिटी और NIT वारंगल में होंगे।

फैकल्टी को एक से दो हफ्ते के इयूरेशन के हिसाब हर कोर्स के लिए 8000 से 12000 डॉलर तक दिए जाएंगे। इस कॉस्ट में फॉरिन फैकल्टी का ट्रैवल का खर्च, उनका मानदेय, कोर्स की वीडियो रिकॉर्डिंग और लेक्चर नोट्स की कॉस्ट वगैरह शामिल होगी। ज्यादातर मान्यताप्राप्त कोर्स इस साल के अंत या अगले साल की शुरुआत में होंगे।

GIAN may Help IITs Better Ranks

IITs may have a brighter chance of getting good global rankings as the Global Initiative of Academic Networks (GIAN) project gets underway, reports Prachi Verma >> 10

INTERNATIONAL FACULTY MEMBERS TO TEACH IN INDIA

GIAN to Help Improve Rankings of Indian Institutes

GLOBAL EXPOSURE The GIAN initiative will enable international faculty members to engage with the premier engineering schools and other institutes of higher learning

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New Delhi: After decades of failing to make it to global rankings, the Indian Institutes of Technology (IITs) may have a brighter chance of doing so as the Global Initiative of Academic Networks (GIAN) project gets underway. The government recently approved 165 courses as part of the initiative, which will enable international faculty members to engage with the premier engineering schools and other institutes of higher learning.

"This is an attempt to improve the academic and research network of the institutes in the country and improvement in ranking would be one of the byproducts," a senior human resource development (HRD) ministry official told ET. IIT Madras and IIT Kharagpur have the highest number of approved courses under GIAN at 31 and 28, respectively. In all, 60 institutes will conduct different courses in various parts of the country.

"GIAN will definitely lead to an ex-

More, Better Research in IITs

ET VIEW The Global Initiative of Academic Networks should be seen as the first step towards improving the level of research and global collaboration in the IITs. But the intent must be more than to game the global rankings system. Research in the IITs has been lagging, and the structured emoluments have made it difficult to attract international faculty. India needs a higher level of research in its engineering institutes. The government and the IITs must do more to improve the quantity and quality of research. Perhaps it's time to implement the Kakodkar Committee's road map to achieve this end.

tensive exposure to good faculty, better research, better networking," said TV Mohandas Pai, chairman of Manipal Global Education and a former member of the Infosys board. He added that GIAN would also make an impact in the global ranking of the IITs eventually.

The GIAN initiative is "aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of higher education

in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence," according to the IIM Indore website.

The objective is to increase the exchange of student, faculty, research and course content between Indian and overseas universities. The ministry is also trying to build high-quality course materials in niche

areas based on the GIAN exchanges to be used by other students and faculty across the country.

Indian institutes have lagged behind overseas schools with respect to the numbers of international faculty and students, among the six criteria that determine overall rankings. IIT Delhi, which has fared better than other IITs, was at 36 in the QS World University rankings, faring poorly on the aforementioned standard. Faculty visits will help improve academic standards and thus the rankings, said Devang Khakhar, director, IIT Bombay.

"The visiting professors will certainly get a chance to get to know the institutes better," Khakhar said. "The research capabilities of the IITs have improved significantly over the past few years and this will get better known through such visits, adding to the reputation of the institutes."

Many of the approved courses will begin this year-end or early next year. IIT Gandhinagar will launch the first one — 3D Digitisation for Cultural Heritage — in collaboration with faculty from Italy. Other

courses will be started in December at IIT Madras, IIT Kharagpur, IIT Patna, Jamia Millia Islamia, Central University of Gujarat, IIT Bombay, Jawaharlal Nehru University and National Institute of Technology Warangal. Teachers will get \$8,000-12,000 per course depending on duration, which can range from one to two weeks.

"GIAN is a stepping stone for improving rankings," GIAN group coordinator AN Samanta told ET. "The government is trying to give the institutes an opportunity through GIAN to engage with the international faculty. At the end of the day, it all depends on the institutes how well they use this opportunity," said the IIT Kharagpur professor.

For the courses at IIT Kharagpur, teachers will come from the Zuckerman Institute for Water Research and Tel Aviv University (both based in Israel), University Pierre et Marie Curie (France), Ecole Polytechnique Fédérale de Lausanne (Switzerland), York University (Canada), University of California Riverside (US), Leeds University (UK) and TU Berlin (Germany).

Tapping Global Talent Pool

165 COURSES Approved by the HRD Ministry

Indian institutes that have not performed well in global rankings stand to gain from GIAN

IIT Madras & IIT Kharagpur have the maximum approved courses — 28 and 31, respectively

IN ALL 60 INSTITUTES WILL CONDUCT DIFFERENT COURSES ACROSS VARIOUS PARTS OF THE COUNTRY

In the first phase, the HRD ministry has sanctioned 35 crore for the GIAN initiative



The crisis in engineering education

Students everyone is chasing don't want to pursue engineering, while their counterparts in lower-rung institutes are stuck with dead-end jobs



HUMAN FACTOR

SHYAMAL MAJUMDAR

The director of a top-rung engineering college asked his third-year students a simple question: Would they pursue a higher-level engineering course or opt for an engineering job? Ninety-five per cent of the students said they would choose neither. "I knew the majority would say no, but 95 per cent came as a huge surprise. The manufacturing sector has been a big no-no for some time, but it seems even information technology jobs are

losing their attraction," the director says, as bright students tell him in private they don't want to do coding work for the rest of their lives.

To avoid engineering jobs, most students are either taking courses such as chartered financial analyst or preparing for management entrance exams to enter the consultancy or financial services sector, while treating their core engineering course as a part-time vocation from the second year itself. As a result, the average cumulative performance index has been dropping but nobody, except perhaps the teachers, seems to be bothered. Mind you, the institute the director heads is not one of the IITs (Indian Institute of Technology) where the situation could be even worse.

The director's concern finds echo in the corridors of some of the leading manufacturing companies in India. Larsen & Toubro Chairman A M Naik has been quite vocal about the fact

that nobody wants to join an infrastructure company and that L&T has become a recruitment haven for others. The head of an automobile firm says his company has not been able to convince even one student from top engineering institutes (forget the IITs) to join in the last few years. He thus questions the current practice of subsidising education in the IITs. "The IITs attract the cream of our young men and women," he says. "The government has established the IITs and a large proportion of taxpayers' funds has gone into them. Perhaps, we could legitimately ask why their education should continue to be subsidised if the students keep on refusing to drive manufacturing enterprises in India."

Several of India's leading companies have no option but to reach out to lesser-known engineering institutes in tier three or four towns and invest hugely in training. That's actually a good thing, but the problem is that the

jobs these students get often do no justice to their engineering degree. For example, the resumé of an engineering graduate with four years of experience in an auto company says he has exposure to "making invoice and demonstrating vehicles to customers, including taking them for drives".

Also, the attrition rate is extraordinarily high as entry-level salary is pathetically low, and has stagnated at that level for the last eight-nine years. There are stories galore of software developers in Bengaluru, who work for as low as ₹10,000 a month. Last year, "The Logical Indian", a Facebook community which started its own website some time back, wrote about a mechanical engineer from a well-known college in Karnataka, who is driving an auto-rickshaw in New Delhi. He doesn't want to do an MTech for two reasons: One, who pays for his degree? and two, "even if I do an MTech, I would get ₹25,000 as my initial salary. I'm getting the same now, so

doing an MTech is meaningless".

These cases may be exceptions, but companies say this is bound to happen as the quality of students is abysmally poor. The number of engineering colleges has gone up from a not-too-modest 1,511 in 2006-07 to 3,345 in 2014-15. Andhra Pradesh alone has more than 700 colleges even though more than a third of the 1.5 million engineering students graduating every year run the risk of not getting a job at all.

The situation isn't too bright at the other end of the spectrum, too. An engineering graduate says in his blog that he has got a Master's degree in engineering from a prestigious institute and has worked in a Fortune 500 company as well as a mid-sized engineering firm, but has now "fallen completely out of love with engineering". "I look at older engineers and ask myself if I want to be like them in 10 or 15 years, and the answer is always, 'Hell no!'," he writes. "I don't believe it's just because I'm a younger engineer and thus lower on the totem pole; I've worked with many middle-aged engineers, who basically did the same work as me despite their seniority."

That's a huge headache for India's engineering education administrators.

Gratuity & IIT courses to draw youth to forces

TIMES NEWS NETWORK

New Delhi: Seeking to make armed forces more attractive to the youth via the Short Service Commission (SSC), the 7th Pay Commission has proposed that they be paid gratuity and entitled to a fully-funded, one-year course at a premier institute of higher learning like IITs and IIMs for a good placement after leaving the forces.

Besides, making provisions for maximum risk and hardship allowance to Army personnel posted at Siachen (the world's highest battlefield), a handsome jump in entry-level pay and tightening norms of disability pension so that retiring officers can't fake disability to claim higher pension are other key features of the panel's recommendations for defence personnel.

To incentivise the SSC, the panel has proposed that officers be allowed to exit the armed forces any time between 7 and 10 years of service, with a terminal gratuity equivalent of 10.5 months of reckonable emoluments. "They will further be entitled to a fully-funded one-year Executive Programme or M Tech programme at a premier institute," it said.

Defence sources said even though the SSC was introduced to attract young blood, it hasn't achieved the desired objective. "Our aim was to have about 1 general officer against 4.1 SSC officers but it's almost the other way round. These recommendations will incentivise those wanting to join the SSC since they will get gratuity like a one-time pension. Moreover, they can easily undertake a higher course at government expenditure to acquire any other skill that will help them in their civilian life," a source said.

Talking about the Siachen allowance, the Pay Commission proposed Rs 31,500 as allowance to officers from the present Rs 21,000 and Rs 21,000 to JCOs and other ranks from the current 14,000. The Commission recommended a revised formulation for lateral



SOLDIERS & FORTUNES

entry/resettlement of defence personnel which keeps in view the specific requirements of organisations to which such personnel will be absorbed.

For lateral entry into central paramilitary forces, an attractive severance package has been recommended. The panel said Military Service Pay, a compensation for various aspects of military service, will be admissible to defence forces personnel only.

"As before, Military Service Pay will be payable to all ranks up to and inclusive of brigadiers and their equivalents," it said. While at present, service officers get Rs 6,000 as MSP, the proposed is Rs 15,500.

Similarly, while nursing officers get Rs 4,200 as MSP, the Commission has proposed Rs 10,800. While for JCO/OR, it is Rs 2,000, the recommended is Rs 5,200. As far as salary is concerned, entry level pay for defence personnel has been fixed in the Defence Pay Matrix at Rs 21,700 per month as against the present basic salary of Rs 8,460 per month.

If one wants to calculate salary of defence personnel as per the seventh pay panel recommendation, the current salary has to be multiplied by 2.57 to 2.78 for different ranks to arrive at the new proposed salary. Accordingly, the chiefs of defence services will get fixed basic salary of Rs 2.50 lakh per month — on a par with the new recommended salary of the cabinet secretary.

NRDC, IIT-Madras ink pact for sharing patented tech

Could lead to commercialisation of technologies

OUR BUREAU

Hyderabad, November 19

The industry will soon get access to patented technologies, with potential for commercialisation, from the Indian Institute of Technology, Madras.

Making this possible is a pact signed by the National Research Development Corporation (NRDC) with IIT-M in Chennai. Initially, five patents have been selected for offering to the industry, according to a press release from the Corporation.

One of the technologies is manufacturing oxygen-deficient perovskite nano material, for reversible carbon dioxide capture at room

temperature, which may prove path breaking for pollution control in thermal power and industrial furnaces.

Krishnan Balasubramanian, Dean of IIT-M, said the partnership could lead to successful commercialisation of technologies. The Institute has a reservoir of patents in different sectors, which are ready for commercial exploitation. H Purushotham, Chairman and Managing Director of NRDC, an enterprise under the Union Ministry of Science & Technology, said the Corporation shall also provide services in IP evaluation/valuation in terms of their commercial potential.

The NRDC has so far licensed technologies to more than 4,800 entrepreneurs/companies in almost all sectors of the industry.

जेईई मेंस अगले वर्ष तीन अप्रैल को

देहरादून : एनआईटी, ट्रिपल आईटी और सरकारी सहायता प्राप्त तकनीकी संस्थानों (जीएफटीआई) में स्नातक में प्रवेश के लिए होने वाली संयुक्त प्रवेश परीक्षा (जेईई-मेंस) के लिए केंद्रीय माध्यमिक शिक्षा बोर्ड (सीबीएसई) ने बुधवार को नोटिफिकेशन जारी कर दिया। परीक्षा ऑफलाइन और ऑनलाइन मोड में होगी। ऑफलाइन जेईई मेंस तीन अप्रैल को देशभर के विभिन्न केंद्रों पर आयोजित किया जाएगा, जबकि ऑनलाइन परीक्षा नौ व 10 अप्रैल को होगी। परीक्षा के लिए आवेदन एक से 31 दिसंबर तक ऑनलाइन किए जा सकेंगे। सीबीएसई ने परीक्षा की जानकारी जेईई मेंस-2015 की आधिकारिक वेबसाइट पर जारी की है। परीक्षा को लेकर इस सत्र में कोई बदलाव नहीं किया गया है। परीक्षा में सफल होने वाले छात्रों की कॉमन मेरिट लिस्ट तैयार होगी। इसी के आधार पर संस्थानों में प्रवेश दिया जाएगा। बीते सत्र की तरह ही रैंक लिस्ट में 40 फीसद वेटेज बोर्ड परीक्षा के अंकों से रहेगा, जबकि 60 फीसद जेईई मेंस में मिलने वाले अंकों का होगा।

एक दिसंबर से जेईई मेंस के लिए आवेदन

देहरादून (ब्यूरो)। देश के आईआईटी, एनआईटी, जीएफआईटी और अन्य तकनीकी शिक्षण संस्थानों में प्रवेश के लिए होने वाले ज्वाइंट एंट्रेंस एग्जामिनेशन(जेईई) मेंस की ऑनलाइन आवेदन प्रक्रिया एक दिसंबर से शुरू होने जा रही है। केंद्रीय माध्यमिक शिक्षा बोर्ड(सीबीएसई) ने बृहस्पतिवार को इसका नोटिस जारी कर दिया है। एक दिसंबर को वेबसाइट में पूरा नोटिफिकेशन जारी होगा। इच्छुक छात्र www.jeemain.nic.in पर जाकर आवेदन कर सकते हैं।

नोटिस के मुताबिक गुजरात, मध्य प्रदेश आदि राज्यों के साथ उत्तराखंड के तकनीकी संस्थानों में भी जेईई मेंस के स्कोर से ही दाखिला मिलेगा। एक दिसंबर से इसकी ऑनलाइन आवेदन प्रक्रिया शुरू होगी। बीई या बीटेक में दाखिले को पेपर-1 और बी आर्क में दाखिले को पेपर-2 होगा। ऑफलाइन परीक्षा तीन अप्रैल को देशभर में सुबह 9:30 बजे से दोपहर 12:30 बजे तक आयोजित होगी। ऑनलाइन जेईई मेंस का आयोजन नौ व 10 अप्रैल को होगा। अभ्यर्थी अपनी मर्जी से दिन का चयन कर सकते हैं।

इस उम्र वाले ही कर सकते हैं आवेदन : सामान्य श्रेणी के अभ्यर्थी केवल वही जेईई मेंस के लिए आवेदन कर सकते हैं, जिनकी जन्म तिथि एक अक्टूबर 1991 या इसके बाद की हो। एससी, एसटी, विकलांग अभ्यर्थियों के लिए जन्मतिथि 1 अक्टूबर 1986 या इससे ऊपर की होनी चाहिए। एक अभ्यर्थी इस परीक्षा में केवल तीन बार आवेदन कर सकता है।

यह होगा शुल्क : परीक्षा में पेपर-1 का शुल्क सामान्य व ओबीसी के छात्रों लिए एक हजार रुपये, छात्राओं के लिए पांच सौ रुपये ऑफलाइन परीक्षा के लिए देना होगा। आरक्षित वर्ग के छात्रों को 500 और छात्राओं को 500 रुपये देने होंगे। ऑनलाइन परीक्षा में सामान्य व ओबीसी छात्रों के लिए 500 रुपये और छात्राओं के लिए 250 रुपये शुल्क देय होगा। ऑनलाइन में आरक्षित वर्ग में छात्र-छात्रा दोनों को 250-250 रुपये शुल्क देना होगा।

democracywall

HARSH MANDER



The profession must heal itself

The Indian Medical Association needs to introspect on the state of private medical services in an unequal market-led India

School textbooks in recent decades have frequently become battlegrounds for ideological contestation in India. Most textbook wars are to advance majoritarian perspectives on history and culture. However, a recent very different textbook skirmish broke out about the public and private sectors in healthcare. The story of this ideological clash is bemusing and instructive, illuminating competing perspectives on the nature of education, healthcare and markets in new India.

This clash surfaced when the Indian Medical Association (IMA) complained to the President and prime minister about the 'objectionable description' of private health providers in a Class VII NCERT social science textbook. They protested that private sector treatment was depicted as sometimes resorting to unethical practices, and much more expensive than in government hospitals. This would give the message that 'private sector fleeces money' (sic) and 'brainwash' students, ruining their faith in private health services.

The textbook is part of a remarkable series on 'Social and Political Life' developed consultatively by the NCERT with academics, teachers, researchers, and civil society organisations. The chapter interrogates the state's responsibility in a democracy and the implications of insufficient provisioning by government of public goods, specifically healthcare. It relates the story of Hakim Sheikh, who fell off a train in West Bengal and suffered head injuries. Eight government hospitals refused to admit him for treatment, and he finally resorted to expensive private treatment. Later he went to court, which ruled that it was the duty of the State to safeguard the right to life, and directed the State to reimburse the cost of private treatment.

In a rejoinder to the PM to the IMA's allegation that students will be 'brainwashed' against private healthcare, 200 medical professionals, educationists, academics, and other concerned individuals observed, 'It has been long established that students, however young, bring to the classroom knowledge and experience that the classroom process needs to facilitate as part of the process of learn-

ing. The IMA's objection... is not only disingenuous but completely misunderstands and disregards the educational requirements of textbooks'.

There is no doubt that the textbook is founded on the premise that it is the primary duty of the State to ensure healthcare of all its citizens independent of their capacity to pay. This is in conformity with the position of the Constitution, and Supreme Court rulings which maintain that the fundamental right to life includes the right to healthcare. However, this contradicts the view not just of the IMA but also of the Niti Aayog, which recommends that the private sector and insurance-based models be given an even greater role in the health system which would require people to pay for health services. It says that providing free treatment, diagnostics and medicines would be anachronistic at a time when the government was trying to rationalise and target the subsidy regime.

However, India's public spending on healthcare, at just above 1% of GDP, is among the lowest in the world. By contrast, Brazil spends 4.7, China 3.1, South Africa 4.3 and the United States 8.1%. Public spending is under a third of total health spending in India, as compared with nearly half or more in these other countries. The WHO found in 2013 that 86% private health spending in India was 'out-of-pocket' payment. A 2011 Lancet study found that 39 million Indians fall into poverty yearly from medical expenses.

The inequities of India's health system are well-summarised in the remarkable school textbook, which so offended the IMA. It points out that India is the largest producer of doctors in the world, but most settle in urban areas and opt for the private service or migrate abroad, but half a million people still die of tuberculosis each year, a figure unchanged since Independence. A 2013 WHO paper observes that in 1947, only 8% healthcare delivery was private. Today, 80-85% licensed physicians, 93% hospitals and 80% OPDs operate for-profit. Private physicians are remunerated on a fee-for-service basis. Non-profit private physicians, in non-governmental or faith-based organisations, provide only 1.32% of private consultations. Rural medical providers are generally unqualified. It further



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states that the predominance of private healthcare is largely a consequence of the government's economic policies, the rapid influx of technology and the increasing number of Indians who have moderate incomes. It expresses concerns that private care is too expensive, poorly regulated and associated with inadequate training and a general lack of practice standards.

What riled the IMA most was the textbook's observation that the private sector sometimes resorts to unethical treatment practices. The offending passage reads: 'In order to earn more money, these private services encourage practices that are incorrect. At times, cheaper methods, though available, are not used. For example, it is common to find doctors prescribing unnecessary medicines, injections or saline bottles when tablets or simple medicines can suffice.'

But earlier this year, a whistle-blowing doctor in Maharashtra, Arun Gadre, reported much graver, widespread examples of irrational drug prescriptions, bribes for referrals, and unnecessary diagnostics and surgeries. He stated that India's private healthcare sector 'treats patients as revenue generators'. For instance, doctors get ₹30,000-40,000 for referring patients for angioplasty. A pathologist he interviewed testified that he contacted 150 doctors but only three agreed to refer patients for investigations without kickbacks. Gynaecologists performed ultrasound without indications on pregnant women and then advised cervical stitches to prevent miscarriage. He also spoke of the shocking 'sink test', in which numerous unnecessary laboratory tests are prescribed, the results fabricated and blood samples poured down the sink.

Amidst all this, rather than try to block enquiry and compassion among school students, surely the IMA needs to introspect on the shameful state of private medical services in unequal market-led India. It needs to recall that medicine is a profession for healing rather than cynical profit making.

Harsh Mander is convenor, Aman Biradari
The views expressed are personal

ICRISAT, IIT Bombay launches free online agriculture course

<http://timesofindia.indiatimes.com/home/education/news/ICRISAT-IIT-Bombay-launches-free-online-agriculture-course/articleshow/49846798.cms>

HYDERABAD: The National Virtual Academy for Indian Agriculture will launch an online course on diseases of horticultural crops and their management in collaboration with the International Crops Research Institute for Semi Arid Tropics (ICRISAT), Hyderabad, and the Indian Institute of Technology, Bombay.

The two month free online course, which begins on November 30 and concludes on January 29, 2016, is an initiative by a team of Information and Communications Technology (ICT) in agriculture and educators from the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and its partners together with the Indian Institute of Technology (IIT) Bombay.

"Complementing Prime Minister Narendra Modi's dream of a Digital India where - Quality Education reaches the most inaccessible corners driven by Digital Learning, we are excited to see the launch of MOOCs (Part-II) in India, which offers high quality learning opportunities for students across the country," said Dr David Bergvinson, Director General, ICRISAT.

"The course materials have been methodically planned and prepared by highly experienced team of educators and professors in the agricultural field, who have devoted their time and effort to educate the Indian masses on sustainable agriculture practices," said Dr Sumanthkumar, Scientist - ICT for Development, ICRISAT.

The Part-II course will cover distribution, symptoms, causes, disease cycles and management of diseases of important horticultural crops and their economic importance. The course can be used as a supplementary study material at the universities in the current semester where "Diseases of Horticultural Crops and their Management " course is being offered, said an official statement from ICRISAT.

Earlier, the NVAIA had completed its first Massive Open Online Course (MOOCs) in agriculture. The Part- I of the free online course (Diseases of Horticultural Crops and their Management), which was announced on February 2 in Chennai by Professor MS Swaminathan, Father of India's Green Revolution and Emeritus Chair of the MS Swaminathan Research Foundation (MSSRF) concluded on April 27. The course witnessed over 900 enrolments from learner participants from across the country ranging from participants holding degree from junior high school to doctorate level.