आईआईटी प्रवेश परीक्षा साल में दो बार होगी

नई दिल्ली | मदन जैक्स

आईआईटी, पूर्वआईटी और ट्रिपल आईआईटी समेत केंद्र सरकार के इंजीनियरिंग संस्थानों के लिए अगले साल से होने वाली प्रवेश परीक्षा का अंतिम प्रारूप तैयार कर लिया गया है।

अब इसे 23 अप्रैल को केंद्रीय पिलास्का संस्थान के बोर्ड (केब) की मंजूरी मिलनी चाहिए है। केंद्र सरकार के अंतिम प्रारूप के अनुसार परीक्षा साल में दो बार अप्रैल और नवंबर में आयोजित होगी।

इससे छात्रों के लिए परीक्षा पास करने के बेहतर अवसर उपलब्ध होंगे। एक बार असफल रहने पर उन्हें साल भर इतना नहीं करना होगा।

मानव संसाधन विकास मंत्रालय ने इस प्रस्तावित टेस्ट के लिए अपने भारतीय स्कूलों और प्रति दिन 40 फीसदी बैटेज दिए जाए। बाकी 30-30 फीसदी की हिस्सेदारी में मैन और एडवांस प्रश्नपत्रों की होगी।

दूसरी तरफ, केब की निकाय में मंजूरी मिले होंगे, इसी महीने जारी होगी।

नवीन सिखियों के लिए यह बड़ा वर्तमान है। पहली बार प्रवेश परीक्षा का अंतिम प्रारूप तैयार कर लिया गया है।

पहल

- केब की बैटेज में मंजूरी मिली तो इसी महीने जारी होगी।
- मंत्रालय ने परीक्षा के कई और 

पहलुओं पर भी स्थिति स्थापित कर दी है।

पहलों के अंकों को बैटेज को लेकर भी स्थिति साफ कर दी है। बोर्ड परीक्षा के अंकों का बैटेज लेकर भी स्थिति साफ कर दी है।

Hindustan ND 11/04/2012 p-9
IITs reveal entrance cut-offs in advance

By Ritika Chopra
In New Delhi

FOR the first time in 50 years, IITs have announced the cut-off (read qualifying) marks for the Joint Entrance Examination (JEE) before the official declaration of results.

Dogged by controversies and litigation on the issue of cut-off marks in the recent past, the IITs have now been driven to notify a new procedure for calculating sectional and overall cut-off marks in the information brochure for JEE.

So, in what comes as a big relief, the candidates not only know how well they have to perform in each section beforehand, but can also calculate their score as this year, for the first time, they were allowed to carry a copy of their answer sheet (ORS sheet) back home. Though the answer keys have not been made public by the IITs yet, many coaching institutes have which could give students a fair idea of their performance and their fate.

According to the brochure, the cutoffs in each subject are 10 per cent of the maximum marks for general candidates, nine per cent for OBC candidates and five per cent for SC/ST and physically challenged students. The maximum marks for each section are already known and hence the cut-off marks can be calculated.

For example, in JEE 2012, Paper I had 70 marks of questions in each subject, followed by 66 marks, in Paper II. So, the subject cutoffs are 14 marks in each subject for the general category.

A candidate, who is above the cutoffs, will get an All India Rank (AIR). Then, based on the AIR, in each category, he or she will get an allotment of IIT/course of study based on his preferences.

Till last year, there used to be a cloud of secrecy over how much a student needed to score to secure a seat in the coveted engineering institutes as the cut-off marks were based on the "average marks of all the candidates," which were known only after having the marks of all the candidates.

In such a situation, candidates were stressed as there would be great uncertainty about their performance as cut-off marks varied from one year to another and were known only after the results. The JEE 2012 results are expected on or after May 18.
In a first, IITs disclose JEE admission cutoffs

Himaanshi Dhinwan | TNN

New Delhi: Overturning a five-decade-old tradition, India's premier institutes, the Indian Institutes of Technology (IITs), have disclosed admission cutoffs for the first time in the Joint Entrance Examination (JEE) held on April 8.

Over 5.6 lakh students appeared for the JEE on Sunday. The minimum qualifying mark for the general category for IIT-JEE 2012 is 10%, while it is 9% for OBCs and 5% for SC, ST and physically-disabled (PD) candidates.

General category students appearing for JEE need 14 out of 136 in chemistry physics and mathematics. The aggregate cutoff for the general category is 35%, or 143 out of 408, to qualify for an all-India rank.

Similarly, the minimum marks for OBC candidates are 13 out of 136, while it is seven out of 136 for SC/ST and PD.

In addition to these minimum marks, a student will have to obtain aggregate cut-off to be eligible to be part of all-India ranking. The aggregate cut-off for the general category is 35%, OBCs 31.5% and SC/ST/PD 17.5%.

The decision is a result of the Supreme Court's observations in a case filed by IIT-Kharagpur professor Rajeev Kumar. The court in its judgment last year had ruled that the selection process needed to be "upgraded" and "fine-tuned" year after year with periodic changes, so that the selection process and examination remain relevant and meaningful.

The disclosure has ensured that candidates can evaluate their performance soon after giving the exam.

RTIs filed by Kumar on IIT-JEE revealed how the country's top technology institute has changed its examination system. From 2006 to 2011, there were varying cut-off marks for different subjects unlike the uniform pattern adopted this year.

IITs lift curtain, reveal JEE cut-off marks

ENTRANCE Parents hail move, teachers say it will help students prepare for exam

Chetan Chauhan
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NEW DELHI: The Indian Institutes of Technology have finally emerged from their veil of secrecy, revealing the cut-off marks for gaining admission through the just-concluded Joint Entrance Examination (IIT-JEE). For the first time in IIT-JEE's five-decade history, the chain of institutes has revealed the minimum qualifying marks in each subject, and in aggregate form for various categories of students.

While a general category student will have to get 10% in each subject, the minimum qualifying marks would be 9% for other backward class (OBC) students, and 5% for scheduled caste (SC), scheduled tribe (ST) as well as physically disabled (PD) students.

In addition to this, the student would have to clear the aggregate cut-off to be eligible for being a part of the all-India ranking. While the aggregate cut-off for the general category is 35%, it is 31.5% for OBCs and 17.5% for SC, ST and PD.

This means that if a general category student scores 14 marks out of 136 in all the three subjects — physics, chemistry and mathematics — and has an overall aggregate cut-off of 143 out of 408 marks, he or she will be eligible for the rank.

According to IIT professors, providing the qualifying marks will help students evaluate their performance as soon as they leave the IIT-JEE exam centre, and reduce stress on students. It will also help them prepare for the examination, they added.

Welcoming the move, a parent of an aspiring IIT student suggested that the institutes upload the answer keys of the question papers after the exam. "It will further help students evaluate their performance and reduce their dependence on coaching centres," he said.

The decision is an outcome of the Supreme Court's observations in a case filed by IIT-Kharagpur professor Rajeev Kumar, who was hailed as an unsung hero for bringing transparency into the IIT-JEE examination system.
Three cheers for IIT-JEE new avatar

MOUSHUMI BASU ■ NEW DELHI

IIT-Joint Entrance Examination (JEE) 2012 held on Sunday last was in a new avatar. For the first time ever after five decades of its conduction, JEE came out transparent settling the much disputed issue of cut-off marks or the minimum qualifying marks that a candidate is required to secure.

This has been pegged at a fixed 10 per cent of the maximum marks for the subjects and 35 per cent of the net marks at the aggregate level for the general candidates. The cut-off rates for the OBC and SC/ST ones have also been calculated accordingly.

Further, for the first time, the candidates also walked out with the copies of their Optical Response Sheets (ORS) after the completion of exams. This enabled a candidate to assess his/her performance; while also making the ORS tamper-free. Accordingly to JEE announcement, the subject-based cut-off for general candidates stands at 10 per cent, 9 per cent for OBCs and 5 per cent for SC/ST candidates. The three subjects – Mathematics, Physics and Chemistry – have two papers with maximum of 70 and 66 marks each. This puts the subject cut-offs for general candidates at 14. While it is 13 for OBC, SC/ST candidates and finally, cut-off marks row settled, optical response sheets made tamper-free they are required to score 7.

At the aggregate level, a general candidate has to score at least 143 marks which is 35 per cent of 408 marks (maximum marks of three papers). For an OBC candidate it is 129 which is 31.5 per cent of the total maximum marks and 72 for SC/ST candidate which is 17.5 per cent of the net marks.

This is a complete departure of the five-decade-old procedure. In the past, it was based on the average performance of the candidates, which was known only after evaluating the answer scripts (ORS) of all students.

This has been hailed as the biggest reform carried out by IITs so far by the candidates. "In the past, varying cut-off marks based on the average performance of the student for the year had been dangling as a sword over our head," pointed out Manish Goel, an IIT aspirant from Delhi. But now, with the cut-off known while answering in the examination, we can calculate accordingly and improve our prospects by opting for more questions on the subjects of our choice, he added.

The sources pointed out that in the past cut-offs varied widely across the years as well as across the subjects. For example, the cut-offs, in 2006 varied from 37 in Maths to 55 in Chemistry. In 2011, Maths cut-off was 34, while it was 20 for Chemistry. Equally arbitrary were the cut-offs year-wise in the past. Chemistry cut-offs for instance varied from 55 in 2006, to 3 in 2007 and 2008. Surprisingly, Physics cut-off was zero in 2008. But in 2012, cut-offs are same for all the three subjects.

This kicked up controversies and uncertainties in the past. The sources pointed out that JEE 2006 cut-offs were known only after receiving directions from CIC. While IIT have not been able to yet explain how the JEE 2006 cut-offs were calculated, JEE 2007 cut-offs were known after almost a year, by an RTI application. JEE 2008-JEE 2010 cut-offs were declared after completing all the admissions. JEE 2011 cut-offs were announced a few days after the result.

The fixed cut-offs of JEE 2012 were decided in the wake of Supreme Court judgment (2011) in which the JEE 2006 selection process was challenged. A per the judgment "selection process requires to be upgraded and fine-tuned by year with periodic changes in the process, so that the selection process and examination remain relevant and meaningful."

14 innovation universities coming

Chandigarh, April 10

The Government today said it will set up 14 innovation universities during the 12th Five-Year Plan. “We are going to open 14 innovation universities,” the Union Minister of State for Planning, Mr Ashwani Kumar, told reporters here. Mr Kumar was in the city to review the flagship programmes of the State. The innovation universities are aimed at making India a global knowledge hub. Each one to be built around a theme or subject, these unique universities will enjoy total autonomy with regard to appointments, collaborations, resource generation and nomenclature of degrees awarded by it. – PTI
IIT-JEE analysis for you

Paper I for IIT-JEE 2012 saw some minor deviations from the pattern while paper 2 featured some tricky questions.

Praveen Tyagi

IIT-JEE 2012 was conducted on April 8, 2012 in 1067 centres all over India. This year’s JEE had two tests of 60 marks each, having questions from mathematics, physics and chemistry with 20 questions from every subject. Here’s a paper-wise analysis of the exam.

**Paper I**

Paper I for IIT-JEE 2012 saw some minor deviations from the pattern as compared to the last couple of years. This edition featured 20 questions each in physics, chemistry and mathematics with only three sections per subject (or part). Section 1 featured 10 multiple choice type questions with only a single option to be chosen, section 2 featured five multiple choice questions with more than a single option to be chosen and section 3 had five questions of the ‘integer answer type’ variety.

Initial analysis indicates that the question set was well-balanced featuring questions distributed from the entire syllabus with more emphasis on conceptual clarity and application of fundamentals. **Physics:** Other than a couple of sections such as gravitation and simple harmonic motion which were omitted, the question set featured a balanced approach to the syllabus. Also the emphasis was more on application of concepts rather than lengthy calculations.

**Chemistry:** This was ‘neither difficult nor easy’. Equal weightage was given to organic, inorganic and physical chemistry. The emphasis on different topics and the types of problems related well with the content arrangement in NCERT books.

**Mathematics:** This section stood out in comparison to the others as it was slightly lengthier. While there were hardly any lengthy calculations required, the problems did require sufficient time for analysis. There seemed to be more focus on calculus, vectors and 3D coordinate geometry sections. As far as paper I is concerned, mathematics might turn out to be the deciding factor.

**Paper II** for IIT-JEE 2012 was tougher than the first paper and more tricky as well. It also featured a structural change as compared to the last two editions of the exam. This time each part featured three sections each with section I containing eight multiple-type questions with only one option to be selected, section 2 containing three paragraph-type questions with two questions per paragraph (therefore a total of six questions) and section 3 containing six multiple choice questions with more than one option to be selected.

The question sets again had more emphasis on concepts as opposed to questions requiring extremely lengthy solving. **Physics:** Paper 2 was trickier as compared to paper 1 with some interesting questions in mechanics in particular.

**Chemistry:** Subject experts have rated the chemistry section for paper 2 to be relatively easy in comparison to paper I. Overall, the questions focus more on conceptual understanding and there is a high correlation with the NCERT curriculum. Also, the chemistry parts of both papers 1 and 2 featured few technical ambiguities compared to previous years.

**Mathematics:** This section should not have presented any major hiccups to well-prepared students. Neither were the questions conceptually tricky and nor were they lengthy.

The author is managing director of IITian’s IITian’s FACE Education Pvt. Ltd., an IIT-JEE coaching centre.
IIT-Bombay focusses on naval research

MoU with research arm of top global player in naval defence and energy opens up new avenues in India for maritime and energy studies

D CNS, a world leader in naval defence and an innovative player in energy, signed through DCNS Research, a memorandum of understanding with the Indian Institute of Technology Bombay, dedicated to engineering and technology research.

Signed by Dr Alain Bovis, executive director of DCNS Research and Professor Shiva Prasad, dean of academic programmes in IIT Bombay, the MoU opens new cooperation avenues to DCNS in India for education and research programmes in naval defence and energy. Considering their respective domains of expertise, DCNS and IIT Bombay expect a rapid deployment of several projects. These will include:

- sponsoring research and development programmes to be carried out cooperatively by IIT Bombay and DCNS Research teams,
- sponsoring Indian student projects and fellowships at IIT Bombay,
- training DCNS personnel through "continuing education programmes" conducted by IIT Bombay.

The research projects will be run at IIT Bombay premises with support of DCNS Research teams or in dedicated common facilities.

Professor Shiva Prasad said: "There is a huge potential for cooperation in educational programmes and R&D programmes in the maritime and energy domains between IIT Bombay and DCNS".

Speaking on the occasion, Professor Shiva Prasad said: "There is a huge potential for cooperation in educational programmes and R&D programmes in the maritime and energy domains between IIT Bombay and DCNS".

Dr Alain Bovis added: "This new development emphasises our investments in long term in India. It also aims to accelerate technology progress in mutually beneficial areas by tying up with one of the top Indian research centres".

IIT Bombay's vision is to be a fountainhead of new ideas and of innovations in science and technology. There has been an increasing emphasis on research. This emphasis is reflected in the increasing number of postgraduates, publications, patents at the Institute. In 2011, of the 1846 degrees awarded at the convocation, 1341 were postgraduate degrees.

DCNS Research is the corporate Research Centre of DCNS, dedicated to major scientific and technology areas relevant in naval systems and systems for energy production design such as computational fluid dynamics, computational structure dynamics, material science, information technology, acoustics and electromagnetism.

This agreement is strongly supported by the Science and Technology Department of the French Embassy in India.
HARD LESSONS

Increase enrollment for sure, but that alone won’t fix our higher education problem.

THE LATEST in a plethora of reports suggesting ways to fix India’s education deficit advises that our universities should enroll many times more students than they do at present. As reported in Mint, the University Grants Commission in a document seeking to chart the course of university education for the 12th Plan period finds that a majority of government-funded universities don’t enroll close to the number of students that would justify their large campuses, even as scarcity of land demands optimum utilisation of this resource. It argues, for example, a 100% increase in student intake is feasible in 30 of the 43 central universities’ campuses. While quantity must not come at the expense of quality, the above suggestion obviously merits serious reflection when we consider the rise of successful, vertically-oriented, compact campuses all the way from Singapore to Middlesbrough. If India is to raise its higher education gross enrollment ratio from 11% today (which is way behind developed countries’ 54%) to 30% by 2030, a mixture of such innovations will be necessary.

Faculty constraints will obviously be the biggest bottleneck. According to statistics released by UGC this February, between 1950-51 and 2010-11, enrollment in universities/colleges rose from 3.97 lakh to 169.76 lakh, while teaching staff rose from 0.24 lakh to 8.17 lakh. Even if hiring of teachers and enrollment of students marches apace from today onwards, the backlog is such that we will still remain far from the lecturer-to-student ratio recommended by UGC, at 1:12 for postgraduate students and 1:15 for undergraduates. And we are unfortunately looking at a situation where the two are not proceeding at pace, where vacancies even at elite institutions like Delhi University are reportedly in the stratospheric 40% zone. Fixing this supply problem will require a whole different set of fixes, like improving the supply of PhDs and reducing administrative bottlenecks in recruitment.
Making meta colleges work

Delhi University's proposed meta college concept can be a boon for students with varied interests, but the challenges need to be addressed too.

Are you an aspiring econo-...
China, India top GMAT game

Number of GMAT exams taken by Asian citizens reached all-time high of 85,551 in testing year 2011 - up 47% from 2007

HT Education Correspondent

When it comes to the Graduate Management Admission Test (GMAT), the Chinese surpass the rest of us Asians in terms of numbers of examinees – but Indians too have done well in terms of average score reports, sending 4.4 GMAT reports (the highest in the region) to management schools around the world, the Asian Geographic Trend Report reveals.

The report, an analysis of data collected after each examinee completes the GMAT; and score-sending patterns, illustrates which countries and schools are of interest to citizens of various Asian countries. Data from the most recent testing year (TY) are compared against data from four years prior to identify changes in examinee preferences.

The number of GMAT exams taken by Asian citizens reached an all-time high of 85,551 in testing years 2011. This represents an increase of 47% when compared with TY 2007.

Much of regional testing growth can be attributed to Chinese citizens who took 40,069 exams in TY 2011, up from 13,048 in TY 2007. The characteristics of Chinese examinees stand in stark contrast to most regional groups. They are more likely to be younger women who are interested in pursuing specialised master’s degrees in the United States.

Asian citizens sent 289,388 GMAT scores to schools around the world in TY 2011, reflecting an average of 3.4 scores sent per exam taken. This is significantly higher than the global average of 2.9. Indian citizens sent an average of 4.4 score reports, the highest in the region. India was the second highest citizen group in terms of GMAT score reports sent in TY 2011 (112,725) behind China (128,086).

“The significance of the Asian impact on management education is real,” said Dave Wilson, president and chief executive of the Graduate Management Admissions Council, which monitors GMAT. “The flows of graduate management students to, from and within the region have positive benefits for Asian firms as well as multi-national companies that operate there,” he added.

The proportion of score reports that Indian citizens sent to US programmes fell from 67% in TY 2007 to 55% in TY 2011.

Asian citizens sent 289,388 GMAT score reports to business schools around the world in TY 2011. This reflects an average of 3.4 score reports sent per exam taken – much higher than the global average.
Excelling in a 21st century digital workplace

The Adobe Education Leadership Forum 2012 held in Singapore brainstorms on how students and educators can gain maximum advantage from using next-generation tools.

Vandana Ramani
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The fourth Adobe Education Leadership Forum 2012 held in Singapore recently saw educators brainstorming on ways and means to help students prepare for and excel in a 21st century digital workplace. It was aimed at delivering new insights into how next-generation tools like tablets, e-textbooks and cloud computing can empower educators to deliver richer, personalised and more impactful classroom experiences.

Attended by over 100 education leaders from across Asia Pacific, the event provided an opportunity for them to share their views on the transformation of the academic landscape and the integration of digital communication and creativity tools in the modern-day educational set-up.

Jon Peers, vice president, Worldwide Education Marketing, Adobe Systems Incorporated, said, “The world of education as we know it is rapidly changing and so are the contours of the teaching and learning process. It is more important than ever that we enable educators to help students prepare for and excel in a 21st-century workplace. Equally important, we need to help them ride these new waves of technology and opportunity that are emerging in an ever-evolving digital world.”

Adobe has a long history of bringing cutting-edge tools that have transformed teaching and learning experiences in classrooms and we stay committed to bringing about solutions that will keep the education sector taking full advantage of the changing digital landscape,” added Peers.

Dianne Marshall, director, public schools, New South Wales Department of Education and Communities, pointed out that young students or “digital natives” as they are called, learn to use technology faster and are more adaptable when it comes to using IT tools. Educators should take advantage of their lack of fear when it comes to technology. “Students get more likes on their Facebook. While interacting with friends they produce social capital. Educators need to work on how that social capital can be leveraged and put to use,” she said.

A survey conducted in the lead-up to the forum found that nearly 49% of APAC educators now use tools like e-textbooks and tablets in their classrooms. Fifty-five per cent educators believe that in five years’ time, there would be a significant increase in the role that digital technology (like e-textbooks, tablets) and digital content plays in their classroom work. Only 80% of respondents felt very prepared to adapt their teaching methodology in the rapidly changing digital landscape. This indicates that a vast majority of educators still need to up-level their skills as well as adopt newer digital tools that will help make the learning process for students future-ready.

Eighty-one per cent of respondents indicated that it is very important to incorporate creativity tools in the curriculum to help students prepare for a 21st-century workplace. The respondents represented all major APAC countries including Australia, New Zealand, Korea, India, China, Hong Kong, Singapore, Thailand and Malaysia, among others.

We need to help educators ride those new waves of technology and opportunity that are emerging in an ever-evolving digital world.

SAT vs ACT

Many students applying for college in the US can, and are, taking the American College Test instead of the Scholastic Aptitude Test. What’s the difference between them?

THE CASE FOR SAT

According to Kathleen Fineout Steinberg, executive director-communications at The College Board, there are a number of reasons why the SAT stands out:

1. The SAT features independent subsections in each section of the SAT is valid as an individual measure of critical reading, mathematics, and writing skills, which enables students to demonstrate mastery in specific areas.

2. SAT questions are pre-screened. Before any question appears on a scored section of the test, it is included on one of the unscored test forms that are included in every SAT administration around the world. This ensures that each question is fair to all students regardless of gender, race, ethnicity, country of origin or socioeconomic status.

3. The SAT is a longer test and this is beneficial to students because it provides more time per question.

4. The test goes beyond what students learn in school, thus encouraging them to apply the knowledge they have—a pre-requisite if you want to study abroad.

International students applying to universities in the US can take one of two tests—the SAT (Scholastic Aptitude Test) or the ACT (American College Test), which started in India in 2005. Traditionally, the SAT was the test of choice, but these days, an increasing number of students is taking the ACT because schools in the US now accept the scores of both the tests.

The SAT and ACT are different tests in that they measure varied skills, but both fulfill the same role in the admissions process. So depending on your strengths and weaknesses, you may perform better on one test than the other.

THE CASE FOR ACT

Sura Rajgavan, senior consultant, international client outreach and partnerships, ACT Inc, lists the advantages Indian students would have if they give ACT:

1. The ACT measures academic skills taught in school which can lead to better performance in the test, which is accepted by almost all US schools including the Ivy Leagues.

2. The test provides a clear assessment of student readiness based on unique college readiness benchmarks on the four subject areas—English, math, reading, and science, and the optional ACT writing test. Students who achieve scores at or above the benchmark scores demonstrate that they are ready for first year credit bearing classes, at all four-year institutions of higher education in the US including the Ivy League schools.

3. The ACT sends composite scores to the universities a student wants to apply to, so even if you have not done well on one particular section, you can make up for this in the overall score.

Both tests increasing in popularity in India

In the last three years, the number of SAT takers in India has increased by 98%. To serve the growing number of test-takers, the College Board and ETS, which administers the test, now have 32 test centers in India, up from only 20 in 2009,” says Steinberg.

For ACT, the sole testing centre at Lalajpatrai College, which opened in 2005, has seen an increase in test takers (40 in 2010; 60 in 2011). “We are just beginning formal steps to introduce students to the advantages of taking the ACT as a way to demonstrate academic achievement and learn about their own level of college and career readiness,” says Rajgavan.

Which should you take?

Chirag Arya, founder of AP Guru, says, “SAT is more English-centric, so Indian students find it difficult because we are essentially a math and science society. SAT is 2/3rd English and students have to memorize 5,000 words while ACT is 1/3rd English. Students generally score 750 out of 800 in the math section in SAT but only 1,100 out of 1,600 in the verbal section. When these students give ACT, they get selected to top universities. Since ACT is not an IQ test, students tend to fare better in it.” According to counselors, while some students end up scoring substantially higher in ACT; there are others who could do better on the SAT. Some students also give both—to report the best of both scores to the universities they want to apply to.
भारत में 4-जी मोबाइल सेवा का आगाज

भारत में तंगलवार सुविधा तथा नियोजन की आधुनिकीकरण की आवश्यकता तकनीकों में शामिल 4-जी सेवा का आगाज हुआ। भारती एयरटेल में तंगलवार में दूसरघं तीन-जी कॉनस्टेबल शिवाक कार्यालय की उपजीतौरी में 4-जी आधारित ब्राउड वाटरलेन्ड एक्सेस (बीडब्ल्यूआईएल) लांच किया। पैसे है इस तकनीक की सुविधाओं वाली रिपोर्ट.

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<tr>
<td>2007 में फहती वर्जन नाम की कंपनी एनटी टेक्नोलॉजी ने 4-जी तकनीक के प्रोटोटाइप का किया परीक्षण</td>
<td>01 गर्मियाब प्रति सेकेंड की अधिकतम गति से जंट्जु बाइनर पर डाटालोड किया जा सकेगा कोई भी डाटा</td>
<td>3-डी टेलीविजन का उद्देश्य जा सकेगा लुक</td>
</tr>
<tr>
<td>2009 में स्टाफकोर्स (स्वीडन) और ओसलो (नीदरलैंड) में अभिव्यक्ति स्वरूप से हुई इस सेवा की शुरुआत</td>
<td>5 से 20 मेगाहर्ट्स है इसका ब्राउडवेबर, जहां से पत्रिका पर बाड़कर 40 मेगाहर्ट्स तक किया जा सकता है</td>
<td>4-जी टेलीविजन का बदला-बदल होगा अधिक</td>
</tr>
</tbody>
</table>

कई और खिदारी कूटें चर्चा

<table>
<thead>
<tr>
<th>कंपनियां</th>
<th>सार्क्कर</th>
<th>उल्लास</th>
<th>बीसामानस</th>
<th>टेलिकॉम</th>
<th>कंपनियां</th>
<th>उल्लास</th>
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</thead>
<tbody>
<tr>
<td>999 रुपये के पैकेज से होगी सुविधाएं</td>
<td>22</td>
<td>08</td>
<td>05</td>
<td>04</td>
<td>02</td>
<td>11</td>
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<tr>
<td>06 में गर्मियाब टाइम के लिए कंपनियों के द्वारा</td>
<td>7,750 रुपये है दाई-पाई उपकरण की कीमत</td>
<td>7,999 रुपये में सिलेंड्र 4-जी टेलीमोड मोडल</td>
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किसमें-कितना-दर

<table>
<thead>
<tr>
<th>क्षेत्र</th>
<th>उल्लास</th>
<th>4-जी</th>
<th>तकनीक</th>
<th>तकनीकी रूप से इंजीनियर, इंजीनियर और एघरसी एंटीज, वायस्फिश और एघरसी भौगत्यों</th>
<th>गति</th>
<th>21 एमबी / सेकेंड अधिकतम</th>
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</thead>
<tbody>
<tr>
<td>100 एमबी / सेकेंड अधिकतम</td>
<td>4-जी टेलीविजन किसा, टीवी-टूटी की भौगत्यों और एघरसी एंटीज, वायस्फिश और एघरसी भौगत्यों</td>
<td>4-जी टेलीविजन का बदला-बदल होगा अधिक</td>
<td></td>
<td></td>
<td></td>
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