

General Knowledge GK Notes – November

1st November

AROUND THE WORLD

Virgin Galactic Spaceship Crashes



- Virgin Galactic's first commercial spacecraft crashed during a test flight over California, leaving at least one pilot dead.
- This is the second disaster involving a US spacecraft this week, after an unmanned Orbital Science rocket carrying supply to the International Space Station exploded after launch.
- The spaceship had been carried aloft on a bigger aircraft known as WhiteKnightTwo and then released for a test of its rocket engine above the Mojave desert, in what was the 35th such flight.

EARTH MATTERS

Glacial Retreat will Continue but can be Checked



- The glaciers in the Himalayas will continue to retreat for another 40-50 years and if this phenomenon is not checked, the temperature will rise by at least four degrees Celsius by the end of this century.
- But everything is still not lost. It can be checked by policy interventions. The consistent receding of glaciers will be a big threat to the food security.
- A small window of opportunity is still available to India and the world to save the situation (glacier



receding). If we keep the level of glaciers to what existed in 1980s, it can possibly lead to their conservation.

Petrol, Diesel Prices Slashed Again



- State-owned oil companies slashed the prices of petrol and diesel due to fall in international Brent crude oil prices.
- International Brent crude oil price is hovering about USD 85 per barrel in the market and sources say, this has been the reason behind the likely cut in the price of fuel in India.
- The petrol cut is the sixth consecutive cut since August 2014 while for diesel it is the first since the government deregulation its prices.
- The cut in diesel price, in particular, is likely to ease inflation in the country.

INDIA – OTHERS

Hyderabad Doctors Perform Rare Heart Surgery on Foetus



- In a significant medical breakthrough and the first in the country, a rare surgery on a foetus was performed inside a pregnant woman's womb by doctors at a hospital in Hyderabad.
- The doctors performed the path-breaking surgery on the foetus in the 27th week of the patient's pregnancy.
- The first-of-its-kind surgery was carried out by 12 specialists.



• The procedure was successfully completed, but only 60 per cent of the work has been done while the rest 40 per cent will be completed after the baby is born.

SCIENCE & TECHNOLOGY

Prototype Flying Car Takes to the Skies



- Aimed at countries with underdeveloped road infrastructure, the AeroMobil 3.0 has taken its maiden flight.
- The AeroMobil 3.0 features a high-tech cockpit and wings that can fold in behind the cabin.
- It was unveiled at an innovations conference in Vienna where AeroMobil's chief executive Juraj Vaculik said it could "change personal transport on a global scale".

3rd November

AROUND THE WORLD

NASA's Orion Spacecraft Complete



- The US space agency, NASA put finishing touches on its Orion spacecraft designed to take humans into deep space.
- This marks the conclusion of construction on the first spacecraft designed to carry humans beyond the



moon, including a journey to Mars and asteroids. The spacecraft is gearing up to make its first test flight on December 4.

- During the 4.5-hour flight, called Exploration Flight Test-1, Orion spacecraft will be launched aboard a Delta IV heavy rocket.
- The December flight test will send Orion 3,600 miles from Earth on a two-orbit flight intended to ensure the spacecraft's critical systems are ready for the challenges of deep space missions.
- The first crewed mission is expected to take place after 2020.

EARTH MATTERS

Cut Emissions to Zero by 2100: UN report



- Governments can keep climate change in check at manageable costs but will have to cut greenhouse gas emissions to zero by 2100 to limit fast-worsening risks said a UN report.
- The 40-page synthesis, summing up 5,000 pages of work by 800 scientists published in September 2013, said global warming was now causing more heat extremes, downpours, acidifying the oceans and pushing up sea levels.
- He was referring to a UN goal of limiting average surface temperature rises to 2 degrees Celsius (3.6F) above pre-industrial times. Temperatures are already up 0.85 C (1.4F).
- To get a good chance of staying below 2C, world emissions would have to fall to "near zero or below" in 2100.

INDIA – BUSINESS/ECONOMY

Assets of India's Financial Institutions Touch \$2.8 Trillion

- The total value of assets held by India's financial institutions touched nearly USD 2.8 trillion in 2013, the third largest among BRICS nations.
- Way ahead, neighbouring China's financial institutions held assets to the tune of USD 34.43 trillion last year.
- In the case of India, the total value of assets held by financial institutions in 2013 was the lowest as compared to the preceding two years. In 2012, the same stood at USD 2.90 trillion which was higher than USD 2.83 trillion recorded in 2011.



INDIA – OTHERS

Dengue Vaccine Tested on Indian Adults, Found Safe



- The world's first dengue vaccine CYD-TDV has passed the crucial India test and could be available in the country by the end of next year.
- Sanofi Pasteur revealed that their first study of the vaccine on Indian adults (aged 18-45 years) across five sites in India, found the vaccine "safe and immunogenic in Indian adults" with results comparable to other clinical studies in Asia.
- The study showed that 87% of the Indian adults in the trial were positive to dengue at enrolment, confirming the significant endemic nature of the vector borne disease in the country.

Actor Sadashiv Amrapurkar Dies



- Bollywood actor Sadashiv Amrapurkar, who was being treated for a lung infection at Kokilaben Dhirubhai Ambani Hospital in Mumbai, has died. He was 64.
- Amrapurkar had won two Filmfare awards. In 1984, he won the award for the best supporting actor for "Ardh Satya" and in 1991, the best villain trophy for his portrayal of a ruthless eunuch in "Sadak".
- He later shifted his focus on Marathi movies. Amrapurkar was last seen on the big screen in 2013 film 'Bombay Talkies'.



SCIENCE & TECHNOLOGY

Parallel Worlds Exist

- In a radical new theory, scientists have proposed that parallel universes really do exist and they interact with one another.
- Professor Howard Wiseman, Dr. Michael Hall and Dr Dirk-Andre Deckert have proposed that parallel universes exist, and rather than evolving independently, nearby worlds influence one another by a subtle force of repulsion.
- Quantum theory is needed to explain how the universe works at the microscopic scale, and is believed to apply to all matter. But it is notoriously difficult to fathom, exhibiting weird phenomena which seem to violate the laws of cause and effect.
- The idea of parallel universes in quantum mechanics has been around since 1957.

4th November

AROUND THE WORLD

The Centre Tower of World Trade Center Opens after 13 Years



- One World Trade Center, America's tallest building, on Monday welcomed its first tenants, publishing group Conde Nast, in a symbolic moment 13 years after the 9/11 attacks that brought down the original Twin Towers.
- The new tower is the centerpiece of a five tower complex. It stands 104 stories and 1,776 feet (540 meters) tall, a height representing the year the United States declared its independence from Britain.
- As for safety, the building features dense fireproofing, biochemical filters, extra-wide pressurized stairs, multiple backup, emergency lighting, and concrete protection for all sprinklers.

Bill Gates to Donate \$500 Million to Fight Malaria

• US philanthropist Bill Gates announced that he will donate over \$500 million to fight malaria and other infectious diseases in the developing world, saying the Ebola outbreak is a call to action.



• The former Microsoft CEO said that his Gates Foundation is committing more than \$500 million in 2014 "to reduce the burden of malaria, pneumonia, diarrheal diseases, and an array of parasitic infections that are leading causes of death and disability in developing countries. Bill Gates also said that in addition to that pledge, his foundation has boosted its annual funding for malaria by 3%.

INDIA – BUSINESS/ECONOMY

Large-scale Account Inheritance Emerges in Black Money Probe



- Accounts inherited from family members as also from previously-constituted trusts or companies have come to the fore in a big way, as India seeks further details from Switzerland about those suspected to have 'unaccounted' wealth parked in the Swiss banks.
- While Switzerland has agreed to provide 'prompt' assistance to India and reply to information requests in a time-bound manner, the Indian authorities are conducting their own probe before approaching the Swiss government.
- While the exact number of such accounts could not be ascertained, sources said that there are quite a few such accounts on which India is seeking further details from the Swiss authorities.
- Switzerland, long accused of being a safe haven for illicit funds, last month promised to extend all necessary assistance to India and reply to requests for information in a "time-bound" manner, or at least provide a reason for denial.

Infrastructure, BFSI, IT to be Indian Growth Engines



- India is poised for "improved prosperity" as the reforms initiated by the new government are taking shape and sectors, including infrastructure, will be the key drivers of growth.
- Riding on the back of economic reforms and demographic dividend, Deloitte said that Information and Communication technology, BFSI (Banking, financial services and insurance), Retail as well as



Infrastructure and Construction are among the sectors which are poised to drive growth in the country over the next 30 years.

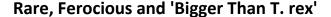
• According to the report, infrastructure and construction sector is forecasted to become the world's third largest construction market by 2025.

INFOTAINMENT

Michael Schumacher's Future Unclear



- At a time when F1 fans across the world are praying for the speedy recovery of seven-time world champion Michael Schumacher, Dr. Gary Hartstein a former medical delegate for the Formula 1 World Championship isn't too convinced with his recovery.
- According to a report the reality is that the 45-year-old's chances of regaining any semblance of normality are virtually non-existent.
- As per reports Michael Schumacher's weekly medical bill comes close to 100,000 pounds a week.





• It was 53 feet long from snout to tail, 9 feet longer than the largest known dinosaur, Tyrannosaurus rex.

The enormous dinosaur — named Spinosaurus after the ridge of bony spines on its back — has remained elusive, until now.

• In 1912, German paleontologist Ernst Stromer von Reichenbach discovered Spinosaurus fossils in the Sahara desert, shipped them home, and put the assembled bones on display until the skeleton was destroyed in an Allied bombing raid in 1944. Since then, efforts to find another specimen have been unsuccessful. Fortunately, Stromer kept detailed, illustrated records, which led to a new discovery in the



cliffs of Morocco.

• The Nova/National Geographic documentary "Bigger Than T. rex," which premieres on Nov. 5 on PBS, tells the fascinating story of this lesser known dinosaur. With technology funding from the National Geographic Society, researchers have created a digital model of Spinosaurus, revealing what the carnivorous behemoth looked like, what it ate, and how it lived.

5th November

AROUND THE WORLD

ECB Takes up Role of Eurozone Banking Watchdog

- The European Central Bank assumed its role as Europe's banking watchdog under a new system aimed at shoring up the financial system to ward off another euro-threatening crisis.
- As banking supervisor, the ECB will directly oversee the Eurozone's 120 largest banks, making up more than 80 percent of total banking assets in the single currency area.
- The Single Supervisory Mechanism, or SSM, the new watchdog which the Frankfurt-based ECB takes on board, is one of the three main pillars of a future European banking union.
- The others are a single banking rule-book and a Single Resolution Mechanism (SRM) in charge of winding up failing banks.

Oil Swoons 3% to a Four-year Low



- Oil dived more than 3 percent to a four-year low, as Saudi Arabia's sharp cut in export prices to the United States looked likely to deepen a global supply glut that has already driven prices down 30 percent since June.
- Saudi Arabia surprised the market by raising prices for Asia and Europe but cutting prices for US customers. Oil slid as much as \$2 a barrel in late trade, and the sell-off continued triggering technical sellstops.



- US crude futures were down \$2.33 at \$76.45 after reaching the lowest price since October 2011.
- Many analysts say the US shale boom could slow if crude stays below \$80 a barrel.

INDIA – OTHERS

Kolkata Port under Terror Threat



- Patrolling has been intensified at the Kolkata Port Trust following inputs of threat perception at the port and its installations.
- The terror alert was received after a couple of intercepts that suggested Kolkata Port was under threat of terror attack.
- INS Khukri and INS Sumitra have been sent to undisclosed location after intelligence intercepts said that there were threats of attack on Navy warships as well.
- The Indian Navy warships had docked at Kolkata for Navy week celebrations but now have gone back to sea.

SCIENCE & TECHNOLOGY

Wrist Wearable Drone to Take Photos from Hard-to-reach Places



• Intel awarded \$500,000 to a group of do-it-yourselfers who developed a wristband that converts to a



camera-equipped drone to win a contest the chipmaker hopes will help guarantee it a leading position in the emerging market for wearable computing devices.

- The Nixie quadcopter is worn around the wrist and springs into the air to take pictures from hard-to-reach places. Like a boomerang, it returns to its owner and then syncs with the owner's smartphone.
- Falling behind Qualcomm in recent years after it was slow to embrace smartphones and tablets, Intel has been keen to make sure its processors are at the front of future technology trends.

6th November

AROUND THE WORLD

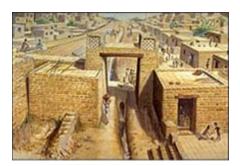
US Republican Party Won the Control in the US Mid-term Elections



- The Republican Party of United States on 5th November 2014 won the control of the Senate in the US mid-term elections 2014 after defeating the Democrats. The party now controls 52 seats.
- Republican leader Mitch McConnell was re-elected in Kentucky for a sixth time against Democrat Alison Lundergan Grimes, fulfilling his ambition of becoming Senate majority leader.
- The Republicans also increased their grip on the House of Representatives and now control both chambers of Congress for the first time since 2006.

EARTH MATTERS

Harappan era drawings discovered





- Experts have discovered at least 20 drawings of the Harappan (Sindhu) era, in Gondi dialect, near Hampi, Karnataka. The drawings were found on a boulder.
- The script used on the boulders was identified as Harappan culture-based script in Gondi dialect.
- Such drawings are found in Chhattisgarh and also in interior structures of Gotuls (learning centres for youths) in Bastar region.

INDIA – BUSINESS/ECONOMY

Housing Deficit in India more than 18 Million

- India has been assessed to have a deficit of about 18.78 million housing units in urban areas and more than 95% of these pertain to economically weaker sections and low-income groups of the society, according to an estimate of the Urban Development Ministry, Government of India.
- The government is evolving comprehensive strategies towards "Housing for All" by 2022.

INDIA – OTHERS

Narendra Modi on Forbes Power List



- Prime Minister Narendra Modi made his debut among the world's most powerful people, ranked 15th on the Forbes list, topped by Russian President Vladimir Putin who piped his US counterpart Barack Obama for the second year in a row.
- The list of 72 most powerful people in the world also included the names of Reliance Industries Chairman Mukesh Ambani, Arcelor Mittal Chairman and CEO Lakshmi Mittal and Microsoft's Indian-born CEO Satya Nadella.
- This year there are 12 newcomers on the list.

7th November

AROUND THE WORLD

Strong Support` for Greece Credit Line



- Eurozone ministers moved towards throwing twice bailed out Greece a new credit line that would come with conditions over its handling of budget and continued monitoring by the International Monetary Fund.
- Athens is set to end the EU-side of its 240 billion-euro (\$300 billion) international bailout at the end of the year, and as earlier hinted it was seeking to break its bailout ties altogether in a move that spooked the markets.
- The IMF portion of the Greek bailout runs until 2016 and many EU member states, wary of an unsupervised Athens, would like Brussels to stay linked to that programme.

Two Nuclear Reactors at Fukushima Plant to Restart



- A local assembly in Japan approved plans to restart two nuclear reactors, removing a major hurdle to get atomic power back online after the Fukushima disaster.
- The assembly's approval came after the Nuclear Regulatory Authority (NRA) confirmed that the two units met safety standards introduced after the Fukushima accident.
- However, the actual restart is likely to be delayed until next year as technical procedures are still under way, including more NRA approvals for remedial work at the site.

INDIA – BUSINESS/ECONOMY

Growth Forecast for India Cut to 5.4 %



- Paris-based think tank OECD projected 5.4 per cent growth for the Indian economy this year as global recovery continues at a moderate pace.
- Growth rate projected by OECD for India in September this year was 5.7 per cent.
- As investment picks up growth will strengthen in India, from 5.4 per cent rate in 2014 to 6.4 per cent in 2015 and 6.6 per cent in 2016.



WTO Talks Set for Revival as India Nears Deal with US, EU



After being in deep freeze for over three months, a global trade deal is finally in sight with the US and the European Union showing signs of accepting India's demand for providing flexibility to developing countries in fixing minimum support price for farm products. India will sign the stalled international treaty on easier customs rules once an agreement on the contentious food security issue is reached at the World Trade Organization (WTO).

INFOTAINMENT

ATP Awards for Federer, Murray, Bryan Brothers

- Federer was selected by his peers as winner of the Stefan Edberg Sportsmanship Award for a 10th time.
- Murray receives the Arthur Ashe Humanitarian Award for his involvement in fundraising exhibitions and campaigns.
- Bob and Mike Bryan took the doubles award for a sixth straight year.

8th November

EARTH MATTERS

New Virus Putting Tiger Population at Threat of Extinction





- A new research from the Wildlife Conservation Society (WCS) and its partners has observed that a new virus called canine distemper virus (CDV) is proving to be a threat to the tiger populations in the wild.
- The authors evaluated these impacts on the Amur tiger population in Russi's Sikhote-Alin Biosphere Zapovednik (SABZ), where tiger numbers declined from 38 individuals to 9 in the years 2007 to 2012. In 2009 and 2010, six adult tigers died or disappeared from the reserve, and CDV was confirmed in two dead tigers-leading scientists to believe that CDV likely played a role in the overall decline of the population.

Shipment of Shark Fins Banned by Jet Airways

- To protect declining shark populations and to save marine ecosystems, Jet Airways Cargo has instituted a policy against the shipment of shark fins.
- The leading Indian airline took the decision after Human Society International (HSI) appealed to do so amidst the rising concern related to shark fin globally.

INDIA – BUSINESS/ECONOMY

Coal India to Produce 1 Billion Tonnes by 2019



- State-miner Coal India (CIL) is looking to double its production to a billion tonnes in the next five years, according to Power and Coal Minister Piyush Goyal.
- "I see Coal India production doubling in the next five years. It makes about 500 million tonnes hopefully this year. We'll do a billion tonnes in 2019" Mr. Goyal said at the India Economic Summit.

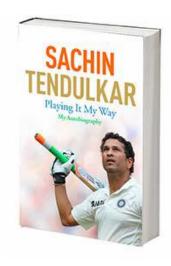


INDIA – OTHERS

Congress Forms Shadow Panels to Keep Tab on Govt.

- Congress has formed shadow committees to follow central ministries and departments to play an effective role as opposition.
- The seven panels will follow issues relating to finance, foreign affairs, commerce and information and broadcasting, home, defence, law, agriculture, sanitation, railways, labour, women and child development, HRD, rural development and environment.

Sachin's 'Playing It My Way' Breaks Multiple Records



- Cricketer Sachin Tendulkar's autobiography 'Playing It My Way' has broken all records of an adult hardback on pre-order subscriptions across both fiction and non-fiction categories, a statement from the publishers said.
- Tendulkar's book broke the record set by Steve Jobs' biography by Walter Isaacson, which had sold 130,000 copies.
- According to reports, on the day of release and before sales began, 150,000 copies had already been pre-ordered to Hachette India, the publishers of the book.

SCIENCE & TECHNOLOGY

Dawn of the Cyborg Cockroach





- Bionic bugs could now be sent to disaster zones to seek out humans trapped under rubble.
- Researchers at North Carolina State University have fitted cockroaches with electrical 'backpacks' to control their movement
- The device is wired to their sensory organs and contains microphones. Cyborg roaches are programmed to seek out the faintest of noises.
- One day, the roaches could be sent into crumpled buildings to seek out trapped survivors of earthquakes and send data to emergency workers.

9th November

AROUND THE WORLD

Pakistan Opens Trade Road Linking Afghanistan

- Pakistan has opened a key road in the South Waziristan tribal region to facilitate trade with neighbouring Afghanistan.
- The Central Trade Corridor (CTC) is a strategic road link to facilitate trade between Pakistan and Afghanistan and will directly and indirectly help revive the local economy in the country's tribal regions and northwestern Khyber Pakhtunkhwa province.
- The CTC is an international standard 705-km-long road network through the southern parts of Khyber Pakhtunkhwa.

China, Pakistan to build economic corridor

- China and Pakistan vowed to advance joint efforts to build a bilateral economic corridor.
- The China-Pakistan economic corridor was proposed in an agreement reached during Li's visit to Pakistan in May 2013. It is aimed at connecting Kashgar in China's Xinjiang Uygur autonomous region with the Gwadar Port in Pakistan's Balochistan province.
- The two countries also signed documents on cooperation in areas like technologies, energy, finance, industrial parks and communications.

EARTH MATTERS



Was 'big bang' surge of species due to continental drift?



- Research shows that a sudden explosion of new life-forms hundreds of millions of years ago may have been triggered by a major tectonic shift.
- Recent studies suggest that, during the Cambrian explosion, life evolved about five times faster than at present. The sudden increase in species is sometimes referred to as "Darwin's dilemma."
- Scientists are still unsure what caused the number of species to skyrocket in such a short period of time.

INDIA – OTHERS

India Concerns over 'Jobless Growth' at G-20 Summit



- Prime Minister Narendra Modi will express his concerns over "jobless growth" at the upcoming G-20 summit in Australia to emphasise that economic progress should also create employment.
- Growth in economic output without creation of jobs was a matter of concern for India.
- It is necessary to create employment-generating economic growth.
- At present jobless growth had emerged as a global phenomenon and New Delhi was particularly concerned about it.

Government to Amend Land Act

- The government will make amendments to the Land Acquisition Act even if the opposition does not support them.
- Many states have criticised the new Land Acquisition Act, saying it has hurt the process of acquiring land for infrastructure projects.
- The finance minister had proposed allocation of Rs. 7,060 crore during this financial year for developing 100 smart cities in the country.
- The government is considering changes to some "illogical provisions" of the new law.



10th November

AROUND THE WORLD

New York Biggest Subway Hub Opens



- New York's biggest subway hub has opened in lower Manhattan a vital link between the new World Trade Center and the rest of the city.
- The Metropolitan Transportation Authority inaugurated the \$1.4 billion Fulton Center.

EARTH MATTERS

New Protection for Migratory Birds, Fish and Mammals



- There are 31 new species granted new protection status by the UN conservation body, following intense talks by leading conservationists.
- 21 species of shark, ray and sawfish were added to the list.
- The polar bear, found in the Arctic and the widely-distributed Cuvier's beaked whale made the list too.
- The red-fronted gazelle and the great bustard are also in the new list.

INDIA – OTHERS

21 New Faces in Cabinet





- There were 21 new faces in the first Cabinet expansion of Prime Minister Narendra Modi's government. Former Goa CM Manohar Parrikar, senior BJP leader JP Nadda, former Shiv Sena leader Suresh Prabhu and former Congressman Birender Singh were inducted as Cabinet Ministers.
- Mukhtar Abbas Naqvi, Ram Kripal Yadav, Haribhai Parthibhai Choudhary, Sanwar Lal Jat, Mohanbhai Kalyanjibhai Kundariya, Giriraj Singh, Hansraj Ahir, Ram Shankar Katheria, TDP's YS Chowdary, Jayant Sinha, Rajyavardhan Singh Rathore, Babul Supriyo, Sadhvi Niranjan Jyoti and Vijay Sampla were inducted as Ministers of State.
- Bandaru Dattatreya, Rajiv Pratap Rudy and Mahesh Sharma took oath as Ministers of State (Independent Charge).

Successful Test Fire of Nuclear-capable Agni-II



- India successfully test-fired its medium-range nuclear-capable Agni-II missile with a strike range of more than 2000 km from the Wheeler Island off Odisha coast.
- The test of Agni-II surface-to-surface missile was conducted from a mobile launcher from the Launch Complex-4 of Integrated Test Range.
- The 20-metre long Agni-II missile is a two-stage, solid-propelled ballistic missile. It has a launch weight of 17 tonnes and can carry a payload of 1000 kg over a distance of more than 2,000 km.
- The Agni-II missile was developed by Advanced Systems Laboratory (ASL) and integrated by the Bharat Dynamics Limited (BDL), Hyderabad.

INFOTAINMENT

Virat Kohli Becomes Fastest ever to Cross 6000 Runs in ODIs





- Virat Kohli, India's star batsman became the fastest ever batsman to complete 6000 runs in One-Day Internationals. The batting maestro broke former West Indian legend Viv Richards's record. Kohli achieved the feat against Sri Lanka.
- Kohli needed 50 runs to complete the milestone, had 5950 runs in 135 innings. Viv Richards had managed to score 6000 runs in 141 innings.

SCIENCE & TECHNOLOGY

View of Alien Planet Birth



- A huge radio telescope in Chile has captured the best-ever image of planets forming around a distant star.
- These features are almost certainly the result of young planet like bodies that are being formed in the disk. The astonishing thing is that HL Tau is no more than a million years old and such young stars are not expected to have large planetary bodies capable of producing the structures we see in this image.

11th November

AROUND THE WORLD

US-Iran Nuclear Deal





- The United States and Iran began high-level talks ahead of a looming deadline for a deal on Tehran's nuclear programme.
- Despite the approaching deadline, Iran and the P5+1 group Britain, China, France, Russia and the United States plus Germany are far apart on what capabilities Iran's nuclear programme should have.
- The West has as yet been unconvinced by Iran's denials that it has never sought a nuclear weapon, while Tehran insists its atomic activities are for peaceful, civilian energy purposes only.

EARTH MATTERS

Biomass Burning a Major Source of Pollution in India

- Vehicles, air conditioners and industries may be the usual suspects contributing to the rise in pollution levels across the country, but the practice of biomass burning is an equal threat, if not bigger.
- A recent study assessing the effects of biomass burning on pollution in South Asia was conducted by Pune-based Indian Institute of Tropical Meteorology (IITM) and National Centre for Atmospheric Research in the US.
- The study reveals that burning of agricultural produce leftovers and forests during the major harvesting period (between March and May) contributes up to 60% release of toxic gases such as carbon monoxide and nitrogen dioxide in the eastern region, including Myanmar, 50% in central India, 25% in the Indo-Gangetic region and 40% over the Bay of Bengal.
- These gases are a precursor to another harmful gas, ozone (O3), which was found to be adversely affecting the country's crops and contributing to global warming.

INFOTAINMENT

Hockey India Announces First Ever Annual Awards

- In a first for Indian hockey, the national federation has decided to have the 'Hockey India Annual Awards' wherein the top players in the men's and women's categories will walk away with a prize money of Rs. 25 lakh each.
- Hockey India will be identifying and rewarding the most promising and potent players from the current as well as upcoming teams.

List of Awards:

Dhruv Batra Player of the Year (Men) – Rs. 25,00,000 Dhruv Batra Player of the Year (Women) – Rs. 25,00,000 Upcoming Player of the Year (Men U-21) – Rs. 10,00,000 Upcoming Player of the Year (Women U-21)- Rs.10,00,000



Goalkeeper of the Year - Rs.5,00,000
Defender of the Year - Rs.5,00,000
Midfielder of the Year - Rs.5,00,000
Forward of the Year - Rs.5,00,000
Award for Invaluable Contribution (For coaches and support staff) - Rs.5,00,000
President Award for Outstanding Achievement - Rs.5,00,000

SCIENCE & TECHNOLOGY

Safe Return after 165-day Mission



- After a 165-day mission, three International Space Station (ISS) crew members of Expedition 41 have landed safely in Kazakhstan.
- The crew members travelled 70 million miles and their mission included numerous scientific experiments and spacewalks. Aboard the station, the crew participated in research focusing on Earth remote sensing, advanced manufacturing, and studies of bone and muscle physiology.
- They also set a milestone for station science by completing a record 82 hours of research in a single week in July.

Anti-Typhoid Gene Found



- Scientists have found a variant of a gene that confers a near five-fold protection against typhoid fever, which affects millions of people each year.
- The discovery came from screening the genomes of hundreds of infected people.
- According to World Health Organization (WHO), about 21 million people are infected with typhoid fever, and an estimated of 216,000 to 600,000 people die every year.



12th November

AROUND THE WORLD

Russia to Build More Nuclear Reactors for Iran

- Russia signed an agreement with Iran for helping the latter build two new nuclear reactors in the latter country.
- The two new nuclear reactors will be built in a nuclear power plant based in Iran's Bushehr region, which houses the country's existing 1000 megawatt reactor that was completed by Russia.
- Nuclear fuel for the eight energy reactors will be provided by Russia and the used fuel rods will be returned to Russia.

US Urges IMF to Cancel Debt of Ebola-stricken Countries

- The United States proposed that the International Monetary Fund write off some \$100 million debt owed by Guinea, Liberia and Sierra Leone to free up more resources for those countries, the hardest hit by the Ebola outbreak.
- The debt relief should enable the three West African countries to spend more on government services and to support their economies as they cope with the devastating epidemic.
- The International Monetary Fund has already played a critical role as a first responder, providing economic support to countries hardest hit by Ebola.

EARTH MATTERS

Air Pollution in Indian Cities



- If current trends of vehicle population, fuel and emission standards persist in India, PM 2.5 (particulate matter smaller than 2.5 micrometers) emissions will increase three times and NOx (nitrogen oxide) will rise five times in the coming years.
- According to a report, the transport sector in India contributes about 15 to 50 percent of PM 2.5 emissions in cities, and is a dominant contributor to NOx emissions.
- Vehicular emissions contribute to PM 2.5 and NOx. PM 2.5 is the dominant contributor to premature deaths and numerous other illnesses, followed by NOx, and these are the major contributors to agricultural impacts too.



INDIA – BUSINESS/ECONOMY

Builders' Liquidity to Improve after Easing FDI Rules

- According to a report, the easing of FDI rules in the realty sector would improve the liquidity situation of developers and boost supply but could also result in increased price competition among the builders.
- In October, the Cabinet had relaxed FDI rules in construction sector by reducing minimum built-up area as well as capital requirement and easing the exit norms.
- These moves may encourage more foreign developers to tie-up with their domestic counterparts, which will improve domestic developers' liquidity and speed up project turnaround times.

INDIA – OTHERS

Compulsory Voting in Civic Polls

Voting is now compulsory for local body polls in Gujarat. If you don't cast your franchise, there's a good chance you could be punished. Now, what that punishment could be is unknown. But there's a debate on. Local body polls now, it could be state and national elections next. So where do you stand? Should the right to vote be made compulsory?

INFOTAINMENT

Viswanathan Anand Squares up with Win over Magnus Carlsen



- Indian chess king Viswanathan Anand beat Magnus Carlsen of Norway in the third game of the World Chess Championship in Sochi.
- Having lost the second game, Anand was almost in a must-win situation and the Indian ace came up with his best effort against Carlsen in recent years.
- The Indian grandmaster, who is looking for his sixth world title, lost to Carlsen in Chennai last year.



13th November

AROUND THE WORLD

Doors Closing for Syrians Seeking Refuge Abroad



- Syria's neighbours Lebanon, Turkey, Jordan and Iraq are cutting back sharply on the number of Syrians they allow onto their soil as they can no longer cope with the influx of refugees.
- Lebanon, Turkey, Jordan and Iraq have taken in more than three million Syrian since the conflict began in 2011, while countries outside the region have agreed to accept around 50,000, or less than 2 percent of the total refugee population.

8-Year-Old Indian-Origin CEO



- An eight-year old Indian-origin child prodigy is among experts who will address a cyber security conference.
- The US-based whizkid Reuben Paul will highlight and demonstrate the need for developing the current generation with cyber security skills.
- The prodigy has been trained by his father, in Object C programming language, and is now learning Swift programming for Apple's iOS platform. Mano Paul, born and raised in Odisha, moved to the US in 2000.
- In August Reuben started Prudent Games, his own gaming firm and is designated as CEO of the company.



INDIA – BUSINESS/ECONOMY

Consumer Inflation Falls to Record Low



- Consumer inflation fell to a record low of 5.52 per cent in October, with sharp drops in food and oil prices. This is the slowest pace of price rise since retail inflation was first published in January 2012.
- Food price inflation, under a new series published by the government, eased to 5.59 per cent in October from 7.67 per cent in September. Petrol prices have been cut six times since August while diesel prices have been lowered twice since it was decontrolled last.
- With consumer inflation coming below the Reserve Bank of India's target level of 6 per cent, and global oil prices hovering near 4-year lows, expectations are high that the central bank could cut rates.

Rising Dollar Threatens Rupee



- The US dollar has gained over 7 per cent over the last four months, but the rupee has held on to the 58-62/dollar range because of the over 30 per cent fall (since late June) in crude prices and continued restrictions on gold imports. These two factors have led to a substantial drop in India's import bill and have supported the rupee.
- Further strength in the dollar will make the rupee vulnerable because the Indian currency is more sensitive to a rising dollar than falling oil prices.
- The INR has typically been unable to withstand this cross-currency pressure despite a favorable movement.



INDIA – OTHERS

Hyderabad HC Common for AP, Telangana



- A division bench headed by Chief Justice Kalyan Jyoti Sengupta on Wednesday ruled that the Hyderabad High Court is the common HC for both the states of Andhra Pradesh and Telangana and that it will continue to have the jurisdiction over the two states till a new High Court is set up for the state of AP.
- The CJ bench said the current common HC has emerged as a consequence of the AP Reorganization Act which laid down that it will continue to function as common High Court till the Supreme Court notifies the setting up of a separate High Court for AP.

14th November

AROUND THE WORLD

UN Official Wants International Support in Fight against Boko Haram

- The UN's special representative for central Africa called for more international support in the struggle against Boko Haram.
- Attacks by Boko Haram have gone beyond Nigeria's borders and now constitute a threat for neighbouring countries.
- Between June and October, more than 17,000 Nigerians have arrived at a refugee camp in Minawao, northern Cameroon.
- Local officials and the UN refugee agency estimate between 4,000 and 5,000 new arrivals in the region each week.

EARTH MATTERS

Visiting Birds Down by Half at Sultanpur National Park





- More than a month after Sultanpur National Park started attracting migratory birds from various parts of the world, the number is still quite low as compared to the previous year.
- Last year around 35,000 migratory birds arrived in the park, while authorities claim that this year the number ranges between 17,000 and 18,000.
- There are 66 to 68 species of birds which arrive every year in the national park

INDIA - OTHERS

India, US Reach Agreement on Food Security



- India achieved a major victory with the US agreeing to its proposal on food security issues at WTO, this development that will pave the way for a breakthrough to end the three-month long stalemate.
- As per the agreement, the US will support India's proposal at WTO that 'peace clause', crucial for uninterrupted implementation of India's food security programme, should continue indefinitely till a permanent solution is found.
- This will enable India to continue procurement and stocking of foodgrain for distribution to poor under its food security programme without attracting any kind of action from WTO members even if it breaches the 10 per cent subsidy cap as prescribed by the multilateral trade body.

SCIENCE & TECHNOLOGY

NASA Rover Finds Remnants of Freshwater Lake on Mars





- A US space agency rover tooling around on the dry surface of Mars has for the first time uncovered direct evidence of what used to be a freshwater lake, scientists said on Monday.
- There is no water left in it, but drill tests and chemical analysis of fine-grained rocks by the Curiosity robot's science tools suggest conditions were right for the lake to have once supported microbial life, perhaps 3.6 billion years ago.
- The rocks contained signs of carbon, hydrogen, oxygen, nitrogen and sulphur, and "would provide perfect conditions for simple microbial life," said the report in the journal Science.
- Small bacterial life forms known as chemolithoautotrophs are known to thrive under similar conditions on Earth, and are typically found in caves and under the sea in hydrothermal vents.

15th November

AROUND THE WORLD

7.3 Magnitude Earthquake Rattles Indonesia



- A strong earthquake with a magnitude of 7.3 was recorded off the Moluccas in Indonesia and a tsunami warning was issued for the area near the quake.
- A report from the Pacific Tsunami Warning Center in Hawaii said hazardous tsunamis were possible within 300 km (185 miles) of the quake's epicentre.

G20 summit in Brisbane (Australia)





- The two-day G20 summit in Australia took off in Australia with world leaders meeting to focus on growth as their top most agenda.
- The Ukraine crisis and Ebola threat will also be part of the agenda for discussion.
- The summit will conclude with the release of an official communiqué, a rundown of what the countries have achieved and want to achieve in the future.

EARTH MATTERS

Global Warming to Increase Lightning Strikes by over 50 Percent



- A new research has revealed that lightning is expected to increase by 50 percent with global warming.
- Scientists at University of California, Berkeley, who looked at predictions of precipitation and cloud buoyancy in 11 different climate models, concluded that their combined effect will generate more frequent electrical discharges to the ground.
- They said that with warming, thunderstorms become more explosive and this has to do with water vapor, which is the fuel for explosive deep convection in the atmosphere.

INDIA – BUSINESS/ECONOMY

Indian Railways Rope in Sreedharan to Boost Efficiency



- With Suresh Prabhu taking over, the Railways has initiated a number of steps to bring about efficiency with former Delhi Metro chief E. Sreedharan also being roped in as part of this process.
- Sreedharan, popularly known as 'Metroman', has also been appointed as head of one-man committee, to suggest a "proper system and procedure to ensure proper accountability and transparency" at the levels of General Manager and other functionaries for taking all commercial decisions including tendering.
- He has been asked to submit an interim report within two weeks and a final report within three months.



Inflation Drops to Five-year Low

- The wholesale price index-based inflation dropped for the fifth straight month to 1.77 per cent in October, the lowest in more than five-years on the back of softening food and fuel prices.
- This will intensify pressure on the Reserve Bank of India to cut interest rates to boost investment, more so as it follows the retail inflation that cooled down further to an all-time low of 5.52 per cent during the month, its lowest since the government started computing the data in 2012.
- The factory output had also posted a moderate growth of 2.5 per cent in September after recording almost-flat growth in the previous two months.
- The wholesale price index (WPI), released by the commerce and industry department, was seen slowest in September 2009. It was 2.38 per cent in September 2014 while the WPI during April-October stood at 2 per cent. The inflation for August was revised upwards to 3.85 per cent from 3.74 per cent earlier.

INDIA – OTHERS

UGC Issues Guidelines for Choice-based Transfer System



- omversity draints commission
- After HRD Minister Smriti Irani informed about the implementation of a 'choice based transfer system' scheme in universities, UGC issued guidelines for uniform adoption of the system across all campuses from 2015-16 academic year.
- The system will ensure seamless mobility of students across higher educational institutions in the country and abroad.
- A student can take courses of their choice under this system, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.

INFOTAINMENT

Viswanathan Anand Draws Game 5 vs Magnus Carlsen





- Viswanathan Anand missed out on an opportunity to press for serious advantage and settled for a draw with defending champion Magnus Carlsen in the fifth game of the world chess championship.
- The third draw in five games restored the parity and the scores now stand at 2.5-2.5 with seven games still remaining in the million Euros match.

SCIENCE & TECHNOLOGY

Black Hole Producing Mysterious Particles



- The giant black hole at the center of the Milky Way may be producing mysterious particles called neutrinos.
- Neutrinos are tiny particles that carry no charge and interact very weakly with electrons and protons.
- Figuring out where high-energy neutrinos come from is one of the biggest problems in astrophysics today.

16th November

AROUND THE WORLD

Biggest Parrot-beaked Dinosaur Fossil Found in Siberia





- Fragments of the skeleton of the biggest known psittacosaurus sibiricus, or a parrot-beaked dinosaur, have been unearthed near the village of Shestakovo in Russia.
- Large-scale excavation has been taking place in Shestakovo for the last 60 years.
- The excavations have yielded fragments of skeletons of eight dinosaurs -- from small raptors to a giant 30-metre tall sauropod.
- But the most important finds are two well preserved skeletons of endemic parrot-beaked dinosaurs that roamed the Earth some 125 million years ago.
- Dinosaurs of the psittacosaurus family lived in Asia about 100-130 million years ago.

INDIA – BUSINESS/ECONOMY

FPI Inflows in Stocks Cross \$15 bn for 2014



- Overseas investors have pumped in USD 1.55 billion in equity market so far during November, taking the total to over USD 15 billion since the beginning of the year.
- As per the latest data, foreign investors have purchased stocks worth Rs 42,866 crore between November 3 and 14, while they offloaded shares to the tune of Rs 33,352 crore during the same period, resulting into a net inflow of Rs 9,514 crore (USD 1.55 billion).
- Market analysts said overseas investors (foreign institutional investors, sub-accounts or foreign portfolio investors) are betting on the government's reforms agenda.

Production of Santro to Stop



- South Korean major automaker Hyundai Motors will soon end the production of one of its most popular cars, Santro, in India.
- The company will stop the production of its most successful model by end of November. But it will continue to provide sales, service and spare parts of the products.
- The Hyundai Santro became the 'Sunshine car' of millions of Indian households after it was launched in October 1998 with Bollywood superstar Shah Rukh Khan as its brand ambassador.



17th November

EARTH MATTERS

Google in Battle Against Illegal Fishing

- Global Fishing Watch a partnership between Google, Oceana, and satellite non-profit SkyTruth will sift through location information and other identifying data to map where fishing is taking place around the world, making it possible to identify who's fishing responsibly.
- Illegal fishing is estimated to bring in \$10 billion to \$23.5 billion globally every year, and the practice poses a serious danger to stocks fished beyond sustainable limits.
- The new Google-backed initiative will bend the power of data analysis to track fishing activity on the high seas -- and help single out those doing it illegally.

INDIA BUSINESS/ECONOMY

Two States, Three UTs Achieve 100 Percent Financial Inclusion under PM Jan Dhan Yojana



- Union Finance Ministry announced that Goa and Kerala became the first states in the country to achieve 100 percent Financial Inclusion under Pradhan Mantri Jan Dhan Yojana (PMJDY).
- Also, three Union Territories (UTs) namely Chandigarh, Puducherry and Lakshadweep achieved 100 percent financial inclusion.

FIPB Approves 74 Percent Foreign Holding In HDFC Bank

- The Foreign Investment Promotion Board (FIPB) has approved the HDFC Bank proposal to raise foreign investment ceiling of the bank to 74 percent.
- According to FDI norms, foreign investment up to 49 percent in banks is permitted under the automatic

route and beyond 49 percent FIPB clearance is required.

Life-saving Drugs to Show Govt-fixed Rates

• All life saving drugs from January 2015 will come with a bold red strip on their packs highlighting price as fixed by the government and also specify if they are under price control.



- Signaling a New Year gift for consumers, the government is set to make it mandatory for regulated drugs to print on their packs 'DPCO Scheduled Drug' in black ink on a bold red strip along with their ceiling price per unit, an official source said.
- The move will enable consumers, who are presently highly dependent on doctors and chemists, to make an informed choice while purchasing medicines.

INDIA OTHERS

Delhi's Connaught Place gets free public Wi-Fi



- Telecom company Tata Docomo has joined hands with the NDMC for providing the service in the commercial hub in the heart of the national capital.
- The first 20 minutes of the service would be free of cost and after that one has the options of buying a recharge card, starting from Rs 10 for 30 minutes, Rs 20 for 60 minutes and Rs 50 for 180 minutes.
- Launching the service, BJP leader Meenakshi Lekhi said: "These initiatives are in line with Prime Minister Narendra Modi's vision of a Digital India, which would enable greater transparency and better governance".

INFOTAINMENT

Indians Win Both Singles Titles in China Open Badminton

- Indian shuttlers Saina Nehwal and Kidambi Srikanth clinched women's and men's singles title of the 700,000 US dollar China Open Super Series Premier of Badminton respectively, in Fuzhou, China.
- Olympic bronze-medalist Saina defeated Akane Yamaguchi of Japan in the women's singles final.
- On the other hand, Srikanth defeated two-time Olympic champion and five time world champion Lin Dan of China in the men's singles final.
- This was the first time that any Indian male shuttler has won a Super Series Premier event since the Super Series and Premier tournaments were introduced.

18th November

AROUND THE WORLD

China and Australia sign Free Trade Agreement



- China and Australia on 17th November 2014 signed Free Trade Agreement (FTA). The agreement was witnessed by the President of China Xi Jinping and Prime Minister of Australia Tony Abbott.
- The FTA will ensure that 85 percent of all exports from Australia will enter China tariff-free. This will rise to 93 percent within four years and 95 percent when it is in full force.

EARTH MATTERS

Pacific blue-fin is threatened due to increasing sushi market

- The sushi craze of the last two decades may have some severe consequences. According to the International Union for Conservation of Nature, the demand may be bringing the Pacific bluefin tuna to extinction.
- It has now been given the status of "vulnerable" on their list of endangered species. Part of the problem is that many are caught as juveniles, before having the chance to reproduce in the wild. The fish is believed to have declined by 33 percent since the 1990s.

Tiny Batteries Could Revolutionize Green Energy



- Nanotechnology could dramatically improve energy storage for electronics, cars, and buildings.
- A small battery made up of a billion nanopores, or microscopic holes capable of producing electric current, is the latest breakthrough in the search for lighter, more potent batteries.
- The latest breakthrough: a "nanopore" that's the ultimate in miniaturization. It's a hole in a ceramic sheet, no thicker than a grain of salt, that contains all the components a battery needs to produce electric current. One billion of these holes, connected in a honeycomb fashion, could fit on a postage stamp.
- The battery fully charges in 12 minutes and recharges thousands of times, according to University of Maryland researchers

INDIA – BUSINESS/ECONOMY

Axis Bank Raises \$500 Million in U.S. Dollar Bonds

• India's Axis Bank Ltd. raised \$500 million via the sale of U.S. dollar-denominated bonds, to bulk up its



balance sheet, according to a banker on the deal.

- The Mumbai-based bank, India's third largest non-state bank by assets, will pay an interest of 3.25% on the 5.5-year bonds, or 1.7 percentage points above the yield of a comparable U.S. Treasury bond.
- This is the best pricing any Indian bank has got for a comparable bond since 2008.

Government looking at 100,000 MW solar power by 2022

- The government is working at revising the solar power generation target to 100,000 MW for 2022 from the current 20,000 MW, said Power and Renewable Energy Minister Piyush Goyal.
- The minister said the government is working to make solar projects viable by providing grid parity, making it economically viable and ensuring that bankability and returns are reasonably assured.

INFOTAINMENT

China's Tianhe-2 Retains Fastest Supercomputer Title



- Tianhe-2, developed by China's National University of Defence Technology, has emerged to be the fastest supercomputer yet again.
- It retained the top spot as the world's fastest supercomputer, according to a biannual Top500 list of supercomputers for the fourth consecutive time.
- Tianhe-2, which means "Milky Way-2" in Chinese, can operate at 33.86 petaflops per second (Pflop/s), the equivalent of 33,860 quadrillion calculations per second.

SCIENCE & TECHNOLOGY

New software helps you hear Wi-Fi signals





- A London-based science writer Swain, 32, who has been going deaf since his 20s, has created a project called Phantom Terrains with sound artist Daniel Jones. The software works with iPhones and hearing aids to turn local Wi-Fi signals into audible soundscapes.
- Funded by UK innovation charity Nesta, the project aims to "challenge the notion of assistive hearing technology as a prosthetic, reimagining it as an enhancement that can surpass the ability of normal human hearing."

19th November

AROUND THE WORLD

World Bank Approves \$285 Million to Fight Ebola



- The World Bank has approved a grant of \$285 million to finance the three West African countries hardest hit by the Ebola crisis.
- The grant is part of the one billion dollars of financing announced by the World Bank for Guinea, Liberia and Sierra Leone.
- The financing will enable the three countries to deploy additional national and international health workers, scale up community-based care and community engagement for early detection of suspected Ebola cases.
- A previous World Bank analysis showed that if Ebola continues to surge in these three countries and spread to neighbouring countries.

EARTH MATTERS

Wetlands Facing Threat in India

- Basai Wetland of Gurgaon in Haryana, one of the important bird areas of country, is facing threat of being lost forever. Located close to national capital Delhi, migratory bird count of this wetland has shown a decline, mainly because of habitat loss due to human encroachment.
- A study conducted by Bombay Natural History Society (BNHS) has revealed that at least 10 Important Bird and Biodiversity Areas (IBAs) as they are now called globally are in serious danger of being lost forever.



- Some of the major reasons behind the loss of biodiversity and habitat in these and other areas are destruction or disturbance due to infrastructure development, wrong anti-people conservation policies, indiscriminate livestock grazing beyond traditional pastoral lands, industrial and sewage pollution, indiscriminate agricultural expansion including use of pesticides, rapid urbanization and poaching.
- Commenting on the issue, Dr Raju Kasambe, Project Manager, IBA Programme, BNHS said, "Unfortunately in India, nearly 50% of the IBAs are not getting any sort of official recognition from the government agencies."

INDIA - BUSINESS/ECONOMY

Government Re-launches Kisan Vikas Patra

- With the objective to raise savings in the country, the government has re-launched Kisan Vikas Patra (KVP), an instrument which will provide trusted option of investment to poor and keep them off ponzi schemes.
- In the last 2-3 years, the savings rate in country has declined from a record high of 36.8 percent to below 30 percent due to slowdown in the economy.
- KVP would serve two purposes, one it would help inexperienced investors to channelise their savings towards trusted government schemes instead of some ponzi schemes.
- Secondly, there is an urgent need to raise savings for nation building. Such saving instruments not only earn interest but help in development of the country.

FII Investments via P-Notes Surge to \$43 billion in October



- Investments into domestic shares through participatory notes (P-Notes) surged to the highest level in more than six-and-half years at Rs 2.65 lakh crore in October.
- According to the data released by the Securities and Exchange Board of India (SEBI), the total value of PNote investments in Indian markets (equity, debt and derivatives) rose to Rs. 2,65,675 crore at the end of October from Rs. 2,22,394 crore in September.
- This is the highest level since February 2008, when the cumulative value of such investments stood at Rs. 3,22,743 crore.

INFOTAINMENT

Terry Walsh Quits as Indian National Hockey Coach





- Indian hockey national coach Terry Walsh quit from his post after the demands put by him were not met by the Indian authorities.
- Walsh, whose current contract with the Indian team will end on November 19, is likely to fly back to Australia without taking his resignation back.
- A fresh proposal will be sent by Hockey India to Terry Walsh for consideration.

SCIENCE & TECHNOLOGY

IBM Launches New Email Service 'Verse'



- International Business Machine Corp has launched a new e-mail application for businesses that integrates social media, file sharing and analytics to learn a user's behavior and predict interactions with coworkers.
- The application is part of IBM's attempt to shift its focus to cloud computing and data analytics from the hardware services that had long been the company's bread and butter.
- The new e-mail service, known as IBM Verse, includes a built-in personal assistant that can learn from a user's behavior and draft responses to e-mails based on similar previous interactions.
- It also allows users to transform e-mail content into threads for blogs and social media, view the relationships between different employees in an e-mail, mute a chain and search through attachments.

20th November

AROUND THE WORLD

New Settler Homes Approved for East Jerusalem



- The Jerusalem municipality approved the construction of 78 new homes for Jewish settlers in two neighbourhoods of occupied Arab east Jerusalem.
- The announcement comes among tensions in the Holy City, partly over Palestinian objections to Jewish settlers moving in. Russia Ready to Work with the US
- Russian President said that Russia is prepared to cooperate on different levels with the US on the basis of mutual respect for both countries` strategic interests.
- Russia and the US bear a special responsibility to maintain international security and stability, and to counter global challenges and threats.
- The Russian President also clarified that his country is interested in developing cooperation with the East and West.

EARTH MATTERS

Increased Global Shipping has Caused Pollution on Seas



- Owing to growing international trade, maritime traffic on the world's oceans has increased four-fold over the past 20 years, causing more water, air and noise pollution on the open seas.
- Ship traffic grew by more than 300 percent over the 20 year period in the Indian Ocean, where the world's busiest shipping lanes are located.
- During the past 20 years shipping traffic has increased in every ocean, except off the coast of Somalia, where increasing piracy has almost completely halted commercial shipping since 2006.

INDIA - BUSINESS/ECONOMY

Switzerland Moves Closer to Automatic Tax Info Exchange

- Switzerland agreed to join the global framework that allows automatic exchange of tax information, a move that would bolster efforts of various countries, including India, in their fight against black money menace.
- The approval from Swiss Federal Council comes close on the heels of G20 leaders discussing black money issue at the meeting in Australia.
- This development comes at a time when India is making all efforts to bring back unaccounted money stashed by its citizens in overseas jurisdictions.
- Last month, 51 states and territories signed MCAA on the fringes of the plenary meeting of the Global



Forum in Berlin.

• MCAA sets out the conditions for the annual exchange of account information between the competent authorities of two countries in accordance with the OECD standard.s

Govt. Notifies New Duty Drawback Rates for Exporters

- The government has notified revised duty drawback rates for exporters as the country's outward shipments slipped into 'red' for the first time in six months in October.
- The Ministry of Finance notified the new All Industry Rates (AIR) of Duty Drawback for the 2014-15 financial year.
- Duty drawback is a refund of duties on imported inputs for export items.

INDIA – OTHERS

In Space-starved Mumbai, a \$12 Billion Redevelopment Plan

- The redevelopment of Mumbai's mostly derelict docklands will, if a government appointed panel has its way, create a waterfront where people living in the world's second most densely-populated city can go to lift their spirits, and the rich can go to play.
- Owned by Mumbai Port Trust, the largest landowner in India's financial hub, much of the 7 square kilometres (2.7 square miles) up for redevelopment is occupied today by crumbling warehouses, informal housing and workers who eke out a living breaking down disused ships or sorting through scrap metal.
- The government, which has valued the land at \$12 billion, is pitching the project as a shining example of what urban regeneration in India should look like.
- With its natural harbour, Bombay, as it was called back then, was rapidly developed during British colonial times, and much of today's city sits on reclaimed land that joined up a string of tiny islands off India's western coast.
- Mumbai hasn't got a great track record for urban planning, however. Mounting demographic pressures and long delays for infrastructure projects have often meant that whatever progress takes place has already been overtaken by the population's growing needs.
- There are some 12.5 million people crammed on the 'island city', a narrow wedge of land jutting into the sea, and around 21 million in the greater metropolitan area.
- Half of them live in slums, and according to a 2012 study, there is just 1.1 square metres of open space for each resident. This is less than the 15 square metres available in capital city Delhi and the 31 square metres in London.

Yahoo replaces Google as Firefox's Default Search Engine





- Yahoo will supplant Google's search engine on Firefox's Web browser in the U.S., signalling Yahoo's resolve to regain some of the ground that it has lost in the most lucrative part of the Internet's ad market.
- The five-year alliance announced on Wednesday will end a decade-old partnership in the U.S. between Google Inc. and the Mozilla Foundation, which oversees the Firefox browser.
- Even though Chrome is now more widely used, Firefox still has a loyal audience that makes more than 100 billion worldwide search requests annually.

21st November

EARTH MATTERS

Polar Bear Numbers Plummeting in Alaska and Canada



- According to reports, the number of the large predators living in the southern Beaufort Sea (map) plummeted from 1,500 animals in 2001 to just 900 in 2010.
- There is a lot we don't know about the 18 other known polar bear populations, which are scattered throughout the U.S., Canada, Russia, Greenland, Norway and Denmark.
- Nine groups, which live in places like northern Siberia, are little studied due to the remoteness of their locations and lack of funding.
- The species as a whole is decreasing in number, and is listed as vulnerable by the International Union for the Conservation of Nature.

Cut Emissions to Zero by 2070





- Setting stringent targets for emission cuts for the world, a UN body wants countries across the globe to collectively cut carbon emission to zero (achieve carbon neutrality) by 2070 and bring down emissions to net zero for all greenhouse gases, including methane, nitrous oxide and climate damaging refrigerant HFC, by 2100.
- The timeline for the desired emission cut was suggested by the United Nations Environment Programme (UNEP) in its annual emission gap report, released in Washington. The report wants the nations to follow the timeline diligently so that the world can contain temperature rise under the level considered disastrous.

INDIA - BUSINESS/ECONOMY

Kotak Mahindra Bank to Acquire ING Vysya Bank



- Kotak Mahindra Bank announced the acquisition of private sector ING Vysya Bank for about Rs. 15,000 crore. So far it is India's biggest banking merger.
- In the all-share deal, 725 equity shares of Rs. 5 each (face value) of Kotak Mahindra will be issued for every 1,000 shares of Rs. 10 each held in ING Vysya Bank.
- Dutch lender ING Group NV which currently holds 42.73 percent stake in ING Vysya Bank, will become the second largest shareholder in Kotak Mahindra Bank at 6.5 percent.
- Holding of Uday Kotak in the merged entity will also be diluted to 34 percent from 39.71 percent. The deal will help him to comply with RBI directive of bringing his stake down to 30 percent by end of 2016.
- The combined banking entity will have a network of 1,214 branches across the country.

INDIA – OTHERS

Deendayal Upadhyaya Gram Jyoti Yojana





- The Government approved the Rs. 43,033 crore rural electrification scheme 'Deendayal Upadhyaya Gram Jyoti Yojana'
- The scheme will replace the existing Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY).
- Cabinet approved the launch of Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) with components to separate agriculture and non-agriculture feeders facilitating judicious rostering of supply to agricultural and non-agricultural consumers in rural areas.
- The scheme also includes strengthening and augmentation of sub transmission and distribution infrastructure in rural areas, including metering of distribution transformers and feeders.

INFOTAINMENT

Carlsen Draws Game 9 against Anand, Maintains One-point Lead



- Champion Magnus Carlsen opted to split points with title challenger Viswanathan Anand in their ninth game of the World Chess Championship in Sochi.
- Carlsen went for a draw through the route of perpetual checks-checks by repetitive moves to Anand's black king.
- Both the players signed their peace treaty after Carlsen made his 20th move.

22nd November



AROUND THE WORLD

Pak and Russia Sign Defence Cooperation Agreement



- Pakistan and Russia have signed a defence and military cooperation agreement aimed at bringing peace and stability in the region.
- The pact was signed by Pakistan Defence Minister Khawaja Asif and his Russian counterpart General Sergey Kuzhugetovich Shoygu in Islamabad, Pakistan.
- The defence agreement covers wide range of subjects including Pakistan's plans to acquire Mi-35 gunship helicopters and other military equipment from Russia.
- The visit was the first visit of a Russian Defence Minister in Pakistan in 45 years.

EARTH MATTERS

3-million-year-old Canyon Discovered under the Brahmaputra in Tibet



- A canyon buried along the Yarlung Tsangpo (called the Brahmaputra in India) in south Tibet has been discovered by a team of researchers from California Institute of Technology (Caltech) and the China Earthquake Administration.
- Geologists say that the ancient canyon thousands of feet deep in places effectively rules out a popular model used to explain how the massive and picturesque gorges of the Himalayas became so steep, so fast.
- Researchers used a paleocanyon that was carved by a river, where by recovering the geometry of the bottom of the canyon, they were able to say how much the range has moved up and when it started moving.

INDIA - BUSINESS/ECONOMY



Govt May Do Away with LPG Subsidy for Rich

The government is considering doing away with the LPG subsidy for the well-off, Union Finance Minister Arun Jaitley said on Friday.

"The next important decision India will have to take is whether people like me...(are) entitled to get our LPG subsidy," he said.

"I think the sooner we are able to take these decisions as to who is entitled to these subsidies, of course some people would be, the better it would be for our system. These decisions are all on our agenda," he added.

Currently, 12 cylinders are available to consumers at a subsidised rate of Rs. 414 each (in Delhi). Any requirement beyond this will have to be purchased at the market price of Rs. 880 per 14.2—kg cylinder.

INDIA – OTHERS

Barack Obama to Attend Republic Day Parade



- In a major diplomatic victory for the NDA government and a massive boost to Indo-American ties, US President Barack Obama accepted Prime inister Narendra Modi's invite to be the chief guest at India's 66th Republic Day Parade on January 26.
- This visit will mark the first time a U.S. president will grace the Republic Day parade, which commemorates the adoption of India's constitution.

India to Offer Online Visas to 45 Countries

- India will offer online visa facilities for 45 countries including US, Australia, Germany, Israel, Japan, UAE, Palestine, Jordan, Thailand, Singapore and Russia.
- The facility will be announced on November 27 by the ministries of home affairs and tourism.
- Elaborating on the Modi government's focus on tourism and culture, Union minister Mahesh Sharma told TOI, "The PM has given a vision for the importance of Indian tourism. We will take the country's rich heritage and culture via tourism and aviation to the world.

INFOTAINMENT



Mangalyaan Among Time's Best 2014 Inventions



- Describing it as a technological feat that will allow India to flex its "interplanetary muscles," Time magazine has declared India's Mangalyaan as one of the best inventions of the year.
- Calling it as "The Supersmart Spacecraft," Time said, "Nobody gets Mars right on the first try. The US didn't, Russia didn't, the Europeans didn't. But on September 24, India did. That's when the Mangalyaan...went into orbit around the Red Planet, a technological feat no other Asian nation has yet achieved."
- Mangalyaan is among the 25 'Best Inventions of 2014' listed by Time magazine that are "making the world better, smarter and in some cases a little more fun."

IIT-M becomes first full member of CMS

- Indian Institute of Technology, Madras, has become the first IIT to be made a full member of the CMS (Compact Muon Solenoid) collaboration of CERN (Conseil Européen pour la Recherche Nucléaire), the European Organization for Nuclear Research, where physicists and engineers are probing the fundamental structure of the universe.
- Although India has been part of the CMS experiment since its inception, IIT Madras is the only IIT invited to join the CMS experiment as a full member, according to the press release from IIT Madras.

SCIENCE & TECHNOLOGY

NASA Grant of \$500,000 for Heat Shield Research on Spacecrafts



• Alexandre Martin, a University of Kentucky assistant professor of mechanical engineering, has been awarded \$500,000 from NASA to improve the design of heat shields on spacecrafts over the next three



years.

- His UK proposal was one of 11 university-led proposals selected for the Early Stage Innovations Space Technology Research Grant.
- The goal of Martin's project is to better understand the behaviour of material under extreme heating environments, such as the one experienced by a spacecraft when it enters an atmosphere.
- The team's research should eventually improve the design of heat shields on spacecraft by increasing the fidelity of the predictive models and reducing the weight dedicated to the heat shield.

Twitter Launches Global Cash Register Service



- Twitter has outlined plans to make cash registers a thing of the past on Thursday as it held a global launch for new software that would help shopkeepers to track sales and provide digital receipts.
- The software, Square Register, was only available in Canada, Japan and the United States, where it tracked around four million sales a day. It can now be downloaded for free everywhere else and supports 130 currencies, although it will not allow actual payments for the moment.

23rd November

AROUND THE WORLD

Major Powers, Iran Racing against Time for Nuke Deal

- The world's major powers and Iran are racing against time to reach a deal over Tehran's nuclear programme.
- Hope for a comprehensive deal is fading, as gaps remain on some key issues, which include the size and scope of Iran's nuclear programme, particularly the number of centrifuges Iran will be allowed to operate, and the nuclear-relevant sanction relief for Iran.
- Iran and the six powers (Britain, China, France, Russia, the United States plus Germany) agreed in July to extend their nuclear talks for another four months till the end of November, as they could not narrow down significant gaps on core issues during the past six months.

Iran to Allow UN Inspectors Access to Marivan Nuclear Site





- Iran has decided to allow UN nuclear inspectors to access its Marivan nuclear site.
- Iran is ready to provide a controlled access to the Marivan site to prove the peaceful nature of Iran's nuclear activity.
- The Marivan nuclear site, close to the Iraqi border, is suspected of being used to develop explosive weapons, and was referred to by the International Atomic Energy Agency (IAEA) in a 2011 report on Iran's alleged pursuit of nuclear weapons.

Sarkozy Wants EU to Lose Half its Powers



- Former President of France Nicolas Sarkozy said that the European Union must hand back half of its powers, stepping up his criticism of the 28-nation bloc as he seeks to be elected head of France's conservative party.
- Sarkozy also wanted the bloc's executive Commission to lose its power to draft EU laws.
- The French have long been among the strongest backers of Europe. Support has waned over the past decade over fear of globalisation. The anti-Europe, far-right party National Front won the EU parliament elections in the country this year.



Government Mulls Amendments to Related Party Norms for Companies



- Seeking to address concerns of various stakeholders, the government is looking to amend certain provisions of the new Companies Law, including those pertaining to related party transactions.
- The Corporate Affairs Ministry, which is implementing the Companies Act, 2013, is now looking to make changes to certain provisions of the new law.
- According to sources, amendments are proposed for norms governing related party transactions and those pertaining to auditors being required to report suspected frauds at the companies that are audited by them.

INDIA – OTHERS

India One of Fastest Growing Markets for Twitter

- With more and more people getting engaged with the micro-blogging website, India is turning out to be one of the fastest growing markets for the US-based Twitter.
- "India is one of our fastest growing markets and we will be investing more here, said vice president of global media, Twitter.
- According to reports 78 percent of the Twitter traffic now comes from outside the US, which signifies the growing importance of emerging markets.
- According to a report, 'Internet in India 2014', the number of internet users in India would reach 302 million by December 2014, registering a year-on-year growth of 32 percent over last year.

SCIENCE & TECHNOLOGY

Facebook App to Help Groups Collaborate on Projects



• Facebook has launched a new app aimed at helping teams collaborate on projects. Called Facebook Group, the app will help people share information faster and more easily with "all the groups in their life".



- Aimed at enterprise collaboration, it can also be useful for student groups as well as friends looking to coordinate activities and schedules.
- This app will provide a much easier way for Facebook members to access and manage groups from their phones.

24th November

AROUND THE WORLD

China Starts Largest Hydro Project on Brahmaputra



- China has partly commissioned its largest hydropower station in Tibet, built on the Brahmaputra River that could restrict the flow of water in the major rivers in the riparian regions in India and Bangladesh.
- The huge project, which straddles the middle reaches of the roaring Yarlung Zangbo River, the local name for Brahmaputra, will have a total installed capacity of 510,000 kilowatts upon completion. It is designed to generate 2.5 billion kilowatt hours of power annually.
- Besides, Zangmu, China is building a few more dams. China seeks to allay the Indian fears of running river projects which are not designed to hold water.
- The dams also raised concerns in India over their ability to release the water at times of conflict which could pose serious risk of flooding.

EARTH MATTERS

World's Largest Earwig Declared Extinct





- The loss of a massive creepy-crawlie may not cause many to mourn, but the world has truly lost one of its great giants. The St. Helena giant earwig (Labidura herculeana), endemic to the isolated island of Saint Helena in the south Atlantic Ocean, has now been declared officially extinct.
- The earwig was the world's largest, capable of growing more than 3 inches in length. The remarkable insect was first described in 1798 by Danish scientist Johan Christian Fabricius. It was last seen alive in 1967, but body parts from dead individuals have been found on occasions until as recently as this year (picture of assembled body parts here). Unfortunately, none of these body parts were believed to belong to any animals alive within the decade.
- Earwigs are so-named because of the (false) folk belief that they seek out human ears to burrow into and lay their eggs in the brain. It's a good thing this isn't true.

INDIA – BUSINESS/ECONOMY

FDI dips 16% to \$2.45 Billion in September



- Foreign direct investments coming to India declined by about 16 percent to USD 2.45 billion in September, registering a fall for the second month in a row.
- The inflows had declined by about 10 percent to USD 1.27 billion in August. In September last year, the country had received foreign direct investments worth USD 2.91 billion.
- According to the latest data from the Department of Industrial Policy and Promotion, foreign, investments showed a growth of 15 percent to USD 14.47 billion during April-September period of this fiscal, as compared to USD 12.59 in the same period last year.

INFOTAINMENT

Magnus Carlsen Retains World Championship Title





- Norway's Magnus Carlsen retained his title, defeating Indian challenger Viswanathan Anand in the 11th round of their title match.
- The reigning world champion wrapped up the 12th game in 45 moves.
- Carlsen scored 6.5 points first to retain the title that he wrested from Anand last year.

SCIENCE & TECHNOLOGY

New Method Developed to Calculate Magnetic Field of Distant 'Exoplanet'



Scientists have recently developed a new method that can help in estimating magnetic field of a distant exoplanet.

25th November

AROUND THE WORLD

Russia Loses \$140 bn a Year from Sanctions, Oil Price

- Russia is losing up to \$140 billion (113 billion euros) a year because of Western sanctions over the Ukraine conflict and plunging oil prices, but the Russian President said that the economic damage is "not fatal".
- Russia is losing around \$40 billion per year due to geopolitical sanctions and the falling oil prices were also causing Russia an economic damage of "some \$90 to \$100 billion per year.
- The European Union and the United States have imposed several rounds of sanctions on Russia over its role in the Ukraine conflict, sending the rouble plunging and inflation soaring.



INDIA – BUSINESS/ECONOMY

Airtel Sells Mobile Towers in Nigeria



- Bharti Airtel has sold its 4800 mobile towers in Nigeria to US based American Towers Company for about \$1.05 billion in a move to pare debt.
- Airtel will be the anchor tenant on the portfolio under a lease with a ten-year initial term. The agreement has been signed between Bharti Airtel subsidiary, Bharti Airtel International (Netherlands) BV (Airtel) and ATC.
- In September 2014, Airtel had a consolidated debt of Rs. 62,215.8 crore.
- The deal is expected to be completed in the first half of 2015. The Indian telecom major is looking to sell off its mobile tower asset in Africa and focus on telecom services business only.

INDIA – OTHERS

Ajit Doval Appointed Special Representative on Indo-China Border Issue

- National Security Adviser (NSA) Ajit Doval has been appointed as the special representative by the Prime Minister's Office (PMO) to resolve the India-China border issue.
- Ajit Doval, has been appointed as the special representative of India to conduct boundary negotiations and strategic consultations with China.
- Doval's appointment comes at a time when there have been several incidents of tension between the two countries at the border and LAC.

SCIENCE & TECHNOLOGY

Researchers Create First Image-recognition Software

- Researchers have developed an image-recognition software that uses photos to locate documents on the Internet with far greater accuracy than ever before.
- The new system was tested on photos and is now being applied to videos. It shows that a machine learning algorithm for image recognition and retrieval is accurate and efficient enough to improve largescale document searches online.
- The system uses pixel data in images and potentially video rather than just text-to locate documents.



26th November

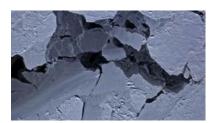
AROUND THE WORLD

SAARC Summit 2014

- With all eyes on Indian Prime Minister Narendra Modi's take on the future of South Asia, the 18th SAARC Summit.
- Apart from host Nepal, all seven heads of state and government are in Kathmandu to attend the summit. As chair of SAARC, Maldivian President Abdulla Yameen Abdul opened the summit and handed over the responsibility of the chair of the regional bloc to Nepal's Prime Minister Sushil Koirala.
- This is the third time Nepal is organising the summit first in 1987 and then again in 2002.
- Ahead of the summit, three meetings at foreign ministers', foreign secretaries' and joint secretaries' levels decided to scrap three SAARC regional centres and merge four others into one.

EARTH MATTERS

Robot Sub Finds Surprisingly Thick Antarctic Sea Ice



- Antarctica's ice paradox has yet another puzzling layer. Not only is the amount of sea ice increasing each year, but an underwater robot now shows the ice is also much thicker than was previously thought.
- The discovery adds to the ongoing mystery of Antarctica's expanding sea ice. According to climate models, the region's sea ice should be shrinking each year because of global warming. Instead, satellite observations show the ice is expanding, and the continent's sea ice has set new records for the past three winters. At the same time, Antarctica's ice sheet (the glacial ice on land) is melting and retreating.
- Measuring sea ice thickness is a crucial step in understanding what's driving the growth of sea ice. Climate scientists need to know if the sea ice expansion also includes underwater thickening. The new findings suggest that Antarctica is home to 'significant areas of thick ice' that aren't included in climate models.

Ready to be more Flexible in Loan Recast to Spur Growth

- The RBI is ready to give banks more flexibility in restructuring of stressed loans if it facilitates recovery of stalled projects.
- The RBI is ready to give the flexibility as it recognises the fact that it cannot micromanage distressed loans.



• The Reserve Bank of India opposes forbearance which simply pushes problems into the future, while it will allow more flexibility so that problem loans can be dealt with effectively.

INDIA – OTHERS

Record Turnout in J&K Assembly Polls and High Polling in Jharkhand



- Jammu and Kashmir registered a record 71.28 percent turnout in the first phase of incident-free Assembly elections when people ignored boycott calls by separatists and cold conditions to cast their votes in 15 constituencies.
- Jharkhand also recorded a high turnout of nearly 62 percent in the 13 Naxal-affected constituencies in the opening phase of the five-phased polls.
- Polling was absolutely peaceful without any incident. It was 100 per cent flawless polls and there was not a single incident which vitiates poll process.

INFOTAINMENT

Lionel Messi Breaks Champions League Scoring Record



- Lionel Messi became the all time leading goalscorer in the Champions League just four days after achieving the same feat in La Liga with his 72nd goal in the competition against APOEL Nicosia.
- Messi now holds both scoring records at just 27 years of age and reached the new record mark, in 51 fewer games than Raul, with both men having won the tournament three times.
- Messi recently celebrated the 10th anniversary of his debut with the Catalan giants, a period which has seen him win 21 trophies.



Boxer Manoj Kumar to Get Arjuna Award



- Having taken the legal route after being denied the honour initially, boxer Manoj Kumar will be finally receiving the prestigious Arjuna Award from Sports Minister Sarbananda Sonowal.
- Manoj Kumar is an Indian boxer who won a gold medal in the light welterweight division at the 2010 Commonwealth Games. Kumar is currently supported by the Olympic Gold Quest.

Phillip Hughes Continues to Battle for Life amid More Scans



Phillip Hughes, who was pressing for a Test recall in the Australian team, was knocked out by a Sean Abbott bouncer in a freak incident at the Sydney Cricket Ground, crumbling to the ground unconscious after the heavy blow to the lower head. According to his doctors he was still in a 'critical condition' and will undergo scans.

SCIENCE & TECHNOLOGY

PC Passwords to have Biometric Authentication System





- Intel and McAfee are planning to replace computer passwords with a new biometric authentication system.
- According to PC World, McAfee software that will use biometric technology to authenticate users will be available for download by the end of the year.
- The biometric authentication system is not only safe for users, but also saves them the trouble of remembering passwords.

27th November

AROUND THE WORLD

Pakistan Plays Spoilsport at SAARC



- With Pakistan playing spoilsport by blocking three major SAARC connectivity agreements initiated by India, efforts are on to persuade Nawaz Sharif to ensure that the connectivity pacts, including a motor vehicle agreement, are inked before the SAARC declaration.
- The connectivity agreements have been stalled by Pakistan on the pretext that they have not completed their internal processes.
- As the 18th South Asian Association for Regional Cooperation (SAARC) summit appeared to become a non-starter with agreement on the three projects an electricity grid and trade in electricity, and road and rail connectivity stalled by Pakistan, the Heads of SAARC countries are expected to take up the matter with the Pakistan Premier.
- India has expressed its disappointed over the pacts not being signed, PM Modi in his address at SAARC summit outlined that "we will move to enhance our bonds with South Asia together if we can, if not with those who are ready for it".

EARTH MATTERS

Vehicles Older than 15 Years Banned in Delhi by NGT

• The National Green Tribunal cited the report on the worsening state of Delhi's air and issued a slew of directions to immediately address the problem.



- Among the 14 measures ordered by the green court was the ban on petrol and diesel vehicles older than 15 years. This move is likely to take an estimated 10 lakh vehicles off the road. It also barred burning of waste in the open besides placing restrictions on parking and ordering stricter vigil on overloaded trucks entering the city.
- NGT, which has the powers of a civil court, sought immediate steps for building cycle tracks in the city and asked authorities to probe the possibility of installing air purifiers at marketplaces.

INDIA – BUSINESS/ECONOMY

India 2nd most Loved Market in Asia



- In November the Asian equities captured the foreign institutional investors as the region recorded net inflows of USD 5.3 billion, out of which India attracted USD 1.4 billion.
- Among Asian economies, China regained the top position as the most loved market, pushing India down to second position in the region, with Thailand at the third spot.
- Till the end of November, the region recorded net inflow of USD 5.3 million and though all markets received positive flows, Taiwan and India received the major chunk of funds with inflows of USD 2.3 billion and USD 1.4 billion, respectively.
- So far this year, the total FII inflows to Asian equities stood at USD 38.7 billion.

Alibaba will Invest more in India



• Jack Ma, China's richest man and founder of e-giant Alibaba, has set his eyes on India. He has deployed a high-level team to increase engagement with India, promises to invest more here and is likely to hire Indian talent.



- Jack Ma, who is worth nearly \$25 billion, is upbeat on India as the country is the second-largest sourcing centre after China.
- According to Ma spices, chocolates and tea were the top three products sourced from India and acknowledged that the market had been ignored in the past. "Indians suppliers are smart. They are the second-highest Alibaba users after China. They use our site often. We are improving technology (to transform Alibaba) into a platform that'll help small business in India.

INDIA – OTHERS

Anoop Mishra New Secretary General of Lok Sabha



- Former Uttar Pradesh Chief Secretary Anoop Mishra is the new Secretary General of the Lok Sabha.
- Speaker Sumitra Mahajan has appointed Mishra as Secretary General of Lok Sabha and Lok Sabha Secretariat in the rank and status of Cabinet Secretary with effect from 1st December 2014 up to 30th November 2016 or until further orders.
- Mishra has held several important positions at the Centre and in Uttar Pradesh. He was the Chief Secretary for a year with the overall responsibility of the state administration, superintendence of law and order and developmental and infrastructure schemes in Uttar Pradesh.

INFOTAINMENT

Of Superstars and Tennis – IPTL's Top Ten Players





- The world of tennis will see a new competition where some of the biggest names in the game both past legends and current heartthrobs will fight it out for their respective franchises in the Indian Premier Tennis League (IPTL), arguably the biggest of all franchise-based tournaments.
- The International Premier Tennis League (IPTL) will have four teams (franchises) based in four cities across Asia. These teams from Bangkok (Thailand), Dubai (United Arab Emirates), Mumbai (India) and Singapore will compete for a total prize money of USD \$ 1 million.
- Here is a list of ten players to look out for in the inaugural edition of this super-tennis tournament:
- 1. Roger Federer, (Micromax Indian Aces)
- 2. Novak Djokovic, (UAE Royals)
- 3. Serena Williams, (Singapore Slammers)
- 4. Maria Sharapova, (Manila Mavericks)
- 5. Caroline Wozniacki, (UAE Royals)
- 6. Eugenie Bouchard, (UAE Royals)
- 7. Andy Murray, (Manila Mavericks)
- 8. Pete Sampras, (Micromax Indian Aces)
- 9. Andre Agassi, (Singapore Slammers)
- 10. Sania Mirza, (Micromax Indian Aces)

SCIENCE & TECHNOLOGY

How Galaxies Evolve in the Cosmic Web



- An international team of researchers has discovered that thread-like "filaments" in the cosmic web play an important role in the evolution of galaxies like our Milky Way.
- The cosmic web is a large-scale web-like structure comprising galaxies and the filaments are like bridges connecting the denser regions in the cosmic web.
- For the study, the team relied on a giant section of the cosmic web first revealed in two big cosmological surveys, namely COSMOS and HiZELS.



Microsoft Lumia 535 Launched in India



- Lumia fans have a lot to rejoice as Microsoft has finally launched its first non-Nokia Lumia phone— Lumia 535-- in India.
- The Dual SIM Lumia 535 has been affordably priced at Rs. 9,199 and will be available in the country from November end.
- Lumia 535 is Microsoft's first Lumia device without the iconic brand name of Nokia and it is aimed at the emerging market for affordable smartphones.

Google's No-shake Spoon



- Google is throwing its money, brain power and technology at the humble spoon.
- These spoons are a bit more than your basic utensil: Using hundreds of algorithms, they allow people with essential tremors and Parkinson's disease to eat without spilling.
- The technology senses how a hand is shaking and makes instant adjustments to stay balanced. In clinical trials, the Liftware spoons reduced shaking of the spoon bowl by an average of 76 per cent.
- Other adaptive devices have been developed to help people with tremors rocker knives, weighted utensils, pen grips.



28th November

AROUND THE WORLD

SAARC Summit: Energy Pact Sealed

- The 18th SAARC Summit concluded with the eight South Asian nations signing a pact on energy cooperation and adoption of the Kathmandu Declaration that called for deeper regional cooperation in core areas of trade, investment, finance, energy, infrastructure and connectivity.
- The two-day South Asian Association for Regional Cooperation summit started on a discordant note with Pakistan blocking three proposed agreements.
- But it ended on a bright and positive note with the eight countries signing the SAARC Framework Agreement on Energy Cooperation and promising to sign two other deals -- the SAARC Motor Vehicles Agreement for the Regulation of Passenger and Cargo Vehicular Traffic and the SAARC Regional Agreement on Railways within three months.
- The energy agreement will enable greater cooperation in the power sector among South Asian countries

It is expected to improve power availability in the entire SAARC region and would facilitate integrated operation of the regional power grid.

EARTH MATTERS

Earth on Track to Warmest Year on Record

- According to the US National Oceanic and Atmospheric Administration (NOAA), the globally averaged temperatures for 2014 were the highest on record since record keeping began in 1880.
- This year "is currently on track to be the warmest year on record".
- According to the US agency, the combined average temperature over global land and ocean surfaces for October was 14.74 degrees Celsius, beating the previous record of 2003 by 0.01 degrees Celsius.
- Warmer-than-average temperatures were evident over most of the global land surface, except for large parts of central Asia.

INDIA – BUSINESS/ECONOMY

RBI Issues Norms for Niche Banking, Small Finance Banks

- Introducing a new concept of niche banking in India, RBI on Thursday issued final norms for payment banks and small finance banks that would allow mobile firms and supermarket chains, among others, to enter the banking arena to cater to individuals and small businesses.
- The move, aimed to deepen financial inclusion and boost saving habits, comes within seven months of RBI issuing two full-fledged banking licences in April this year after a gap of over a decade.
- As per the guidelines, those seeking to set up these two new categories of banks would need a minimum of Rs. 100 crore of capital and fulfil the necessary 'fit and proper' criteria, among other conditions.



WTO Takes India's Food Security Concerns on Board - Impasse Over



- Ending months-long deadlock, the WTO finally approved a framework for implementation of a global pact for easing customs norms after acceding to India's demand to remove constraints on food stockpiling.
- The historic agreement would now need to be ratified by governments of individual member countries, including India, for coming into effect.
- The WTO's General Council, the highest decision making body met in Geneva and accepted India's demand for extending the peace clause till a permanent solution is found for its food stockpiling issue.
- This will enable India to continue procurement and stocking of foodgrain for distribution among poor under its food security programme without attracting any kind of action from WTO members even if it breaches the 10 percent subsidy cap as prescribed by the multilateral trade body.

INDIA – OTHERS

India Launches e-Visa Facility for 43 Nations

- With the launch of electronic visa (e-visa) facility, tourists from 43 countries can apply for Indian visa in four simple steps.
- The step is aimed at boosting tourism sector and offer hassle-free travel to foreign nationals.
- Within 30 days from the date of approval of ETA, this visa will allow entry of the tourists into India and will be valid for a stay of 30 days in India from the date of arrival in India.

INFOTAINMENT

Tributes Pour in from Cricket Fraternity for Phillip Hughes





- Australian batsman Phillip Hughes passed away after succumbing to his injuries sustained during a domestic match when he was hit by a bouncer.
- Players and members of the cricket fraternity from across the globe poured in tributes as soon as the news came in.
- Phillip Joel Hughes (30 November 1988 27 November 2014) was an Australian Test and One-Day International (ODI) cricketer who played domestic cricket for South Australia and Worcestershire. He made his Test début in 2009 at the age of 20.

SCIENCE & TECHNOLOGY

Human Waste to Turn Into Rocket Fuel



- Indian-origin researchers have developed a process to turn human waste into biogas that could fuel rockets to ferry astronauts back to Earth.
- "The idea was to see whether we could make enough fuel to launch rockets and not carry all the fuel and its weight from Earth for the return journey.
- "Methane can be used to fuel the rockets. Enough methane can be produced to come back from the moon.
- For the study, NASA supplied the scientists with a packaged form of chemically produced human waste that also included simulated food waste, towels, wash cloths, clothing and packaging materials.

29th November

AROUND THE WORLD

Thai Parliament Votes to Ban Commercial Surrogacy





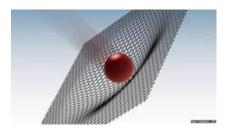
- Thailand's Parliament has voted to ban commercial surrogacy. The draft bill, which passed its first reading by 177 votes, says violators could face 10 years in jail.
- The bill forbids any middlemen or agencies, receiving any assets or benefits through the surrogacy process
- Ban on Commercial surrogacy was voted after outrage erupted over the unregulated industry following a series of scandals including the case of an Australian couple accused of abandoning a baby with Down syndrome.

EARTH MATTERS

Obama Announces \$3 Billion Contribution to Green Climate Fund

- U.S. President Barack Obama formally announced a \$3-billion U.S. contribution to an international fund to help poor countries cope with the effects of climate change.
- The contribution doubles what other countries had previously pledged ahead of a November 20, 2014 deadline.

Graphene shows promise for bulletproof armour



- The "wonder material" graphene could be used to make bulletproof armour.
- US researchers carried out miniature ballistic tests by firing tiny silica spheres at sheets of graphene.
- They compared the kinetic energy of the spheres before and after they pierced the graphene sheets.
- Observations using an electron microscope revealed that graphene dissipates energy by stretching into a cone shape and then cracking in various directions.
- Graphene consists of a sheet of single atoms arranged in a honeycomb structure. It is thin, strong, flexible and electrically conductive, and has the potential to transform electronics as well as other technologies.
- However, the way in which graphene sheets responded to the microbullet also resulted in a wider impact hole which could be a potential disadvantage.
- Nonetheless, the mini-ballistic tests showed that graphene's extraordinary strength, elasticity and stiffness allowed it to absorb between eight and 10 times the impacts that steel can withstand.

Novel clay to shape future of energy storage

• Materials scientists from Drexel University in the US have invented a novel clay by mixing a new class of material and water.



- The clay is highly conductive and can easily be moulded like cookie dough or Play-Doh compound into a variety of shapes and sizes and is familiar to elementary school kids.
- According to the team, the titanium carbide clay, which belongs to a class of materials known as MXenes, could serve as battery material for next generation cars, mobile devices and even power grid supercapacitors.
- The clay, which already exhibits conductivity on par with that of metals, can be turned into a film usable in an electrode simply by rolling or pressing it.
- The procedure to make the clay also uses much safer, readily available ingredients than the ones used to produce electrodes like Li-ion batteries and conductors in the past.

INDIA – BUSINESS/ECONOMY

Govt Eases Curbs on Gold Imports, Scraps 80:20 Scheme



- Easing the restrictions on gold imports, the government has done away with the '80:20' scheme, freeing incoming shipments of the precious metal from exports.
- The 80:20 rule, along with the high customs duty of 10%, 20% of the imported gold had to be mandatorily exported before bringing in new which raised in stages to that level last year, which in turn had led to a rise in smuggling, besides distorting imports.
- The government said the current account deficit is no longer a concern so there is no reason to keep the curb in place.

India and Mozambique Sign MoU for Cooperation in Oil and Gas Sector

- India and Mozambique on 28th November 2014 signed a memorandum of understanding (MoU) for cooperation in Oil and Gas sector for a period of five years. The MoU was signed during Minister of Foreign Affairs of Mozambique Oldemiro Julio Marques Baloi visit to India.
- The MoU will allow the Indian companies to participate in the LNG project of Mozambique that will facilitate access to LNG for the growing Indian gas market. It will bring natural gas to India at marketdetermined price.

World Gold Council and IIMA Set up India Gold Policy Centre



- World Gold Council (WGC) and Indian Institute of Management, Ahmedabad (IIMA) have collaborated to set up India Gold Policy Centre to conduct research on all aspects of the domestic gold industry.
- The objective of centre is to develop insights into how the significant stocks of gold India owns can be used to advance growth, employment, social inclusion and economic wealth of the nation.
- The Centre is situated within the campus of IIMA and it will be commenced it operations from December 2014. It is funded by WGC grant and will operate independently.

RBI to Sell 12000 Crore Rupee Govt Bonds Through Open Market

- Reserve Bank of India (RBI) has decided to sell worth 2000 crore rupees government bonds through Open Market Operations (OMOs) to squeeze the liquidity in the market.
- RBI will sell government securities maturing in 2017 (bearing interest rate of 8.07 per cent), 2020 (7.80 percent), 2022 (8.08 percent) and 2027 (8.26 percent).
- When the RBI feels there is excess liquidity in the market, it resorts to sale of securities thereby sucking out the rupee liquidity. Similarly, when the liquidity conditions are tight, the RBI will buy securities from the market, thereby releasing liquidity into the market.

INDIA – OTHERS

12 States Give Consent for Setting up Solar Parks



- The Central Government has initiated work to set up 25 solar parks across India over the next five years, taking the country's capacity up by 22,100 megawatt (MW). As many as 12 states have given consent for setting up the solar parks, according to an official statement.
- Jammu & Kashmir will house the largest capacity of 7500MW, followed by Rajasthan which will put up 3700MW, built in four stages in Bhadla and Jaisalmer. Madhya Pradesh will have two parks of 750MW each, Andhra Pradesh is planning a 2500MW park and Punjab will set up a 2000MW park.
- Telangana, Karnataka and Odisha are planning to set up 1000MW parks each. Gujarat, Uttar Pradesh, Tamil Nadu and Meghalaya are planning parks of relatively smaller capacities of 750MW, 600MW, 500MW and 50MW, respectively.
- The estimated cost for development of solar park would be around Rs 0.95 crore per MW and the capital cost of developing a grid-connected solar power project is Rs 6.91 crore per MW.
- The companies which will be setting up the plants inside the parks would be selected through a bidding process.



INFOTAINMENT

Australian photographer sets Guinness World Record for capturing 9 whales in single frame



- An Australian underwater specialist photographer, Darren Jew, set the Guinness World Record after becoming the first person to capture nine whales in a single frame.
- The 48-year-old Brisbane photographer said she thought that this occasion the weather, the light, the location, the water clarity and the whales travelling at as fast as 10 knots, everything came together perfectly in the pod.

Iconic Mexican comedian Chespirito died at 85



- Roberto Gomez Bolanos, the iconic Mexican comedian also known as Chespirito died on 28 November 2014. He was 85.
- Gomez Bolanos wrote and played the boy television character El Chavo del Ocho (The Boy from the Eight) that defined a generation for millions of Latin American children.

INFOTAINMENT

Reading mystery will never be the same without PD James!





- The British crime writer PD James, who became the 'most-read' author through her books which dealt primarily with cops and a poet, passed away at the age of 94.
- Also a former governor of BBC, the 'queen of crime fiction' charted the transformations of British life through bestselling crime fiction starring the detective Adam Dalgliesh.
- James also won a good number of public honours, eventually finding herself elevated to the House of Lords in 1991, where she sat with the Conservatives.

SCIENCE AND TECHNOLOGY

Eel-like Robotic Fish to Scan Inaccessible Ocean Areas



- Inspired by Anguilliform fishes due to their superior flexibility compared with other fish species, a team of scientists in Singapore has developed and built a prototype of an eel-like robotic fish.
- Such a robotic fish would allow marine forces to reach areas which are otherwise difficult or even impossible for divers to reach.
- The robotic fish is designed to move forward and backward, as well as turnaround through different reference inputs.
- The device is driven by 3D oscillators, an artificial neural network and an outer amplitude modulator.

30th November

EARTH MATTERS

Forest Owlet Sighted in Tansa Wildlife Sanctuary





- The critically endangered Forest Owlet, which was till now considered to be endemic to the Satpuda mountain ranges in central India, has now been spotted in Western Ghats by naturalists associated with the BNHS.
- This discovery is significant and more studies are required to identify its presence in other similar habitats in drier parts of northern Western Ghats.
- This bird is on the verge of extinction. This species belongs to the typical owls family, Strigidae. After it was described in 1873 and it was not seen after 1884 and was considered extinct until it was rediscovered 113 years later in 1997 by Pamela Rasmussen.
- It is known from a small number of localities and the populations are very low within the fragmented and shrinking forests of central India, leaving the species critically endangered.

INDIA – BUSINESS/ECONOMY

RBI May Keep Policy Rate Unchanged

- The Reserve Bank of India may keep policy rate unchanged in its upcoming monetary policy review on 3rd December even as the Finance Minister and industry clamoured for the rate cut to prop the economy after GDP growth slipped to 5.3 per cent in the second quarter of current fiscal.
- At the same time, inflation has hit multi-year low making a case for the rate cut.
- RBI Governor has indicated that he will be data driven ... May be by the end of the fiscal (cut in the interest rate by RBI.)
- Although parameters are conducive for the rate cut but there is hardly any appetite for loan in the market.

Rate reduction by 0.25 per cent is not going to generate significant demand in the market.

IOC's Paradip Refinery to be Commissioned from March 2015



- India's largest refiner and oil marketing company Indian Oil Corporation's Rs. 34,555-crore 15 million tonnes per annum Paradip Refinery will be commissioned in phases from March 2015 onwards.
- The refinery is capable for processing a broad basket of crude oil grades, including cheaper highsulphur heavy crudes, which will help the company to improve bottomline.
- The company is also setting up a polypropylene project with capacity of 680 KTA at Paradip.



INDIA – OTHERS

India to Test-launch its Heaviest Rocket in December



- India will test-launch its heaviest and upgraded rocket, the Geosynchronous Satellite Launch Vehicle (GSLV Mark III), sometime in the middle of December.
- The rocket will also carry a crew module to test its re-entry characteristics.
- The main purpose of the mission is to test the atmospheric characteristics and stability of the rocket on its way up.
- The experimental mission will cost Rs.155 crore.

INFOTAINMENT

Israeli Cricket Umpire Dies after Being Hit by Ball



- An international umpire and former captain of Israel's national cricket team died after being hit in the jaw by a ball, the country's cricket association said.
- His death comes just two days after Australian batsman Phillip Hughes died of a severe head injury after being hit by a bouncer in a New South Wales match in Sydney.



SCIENCE & TECHNOLOGY

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- Such a robotic fish would allow marine forces to reach areas which are otherwise difficult or even impossible for divers to reach.
- Simulations and experiments were performed on the robotic fish, equipped with a motion library to cope with different scenarios, and the results validate the effectiveness of the proposed controllers as it was able to swim forward and backward as predicted.