National Current Affairs

Jammu and Kashmir government to set up Eco-Park in Rajouri district

The Jammu and Kashmir government has decided to set up an Eco-Park on over 34 acres of land retrieved from encroachers in the state's Rajouri district; announced on 25th of Aug 2017.

Key Points:

- The park is a first-of-its-kind project in the region. It will have a botanical garden, a cactus garden, a cafeteria and other amenities.
- The project has been planned under the convergence of local resources and it is expected to be completed by end of 2017.
- About, 34 acres of land has been included in the Eco-Park project that will come up at the Kandi belt of Rajouri.
- The Department of Rural Development has started fencing on the retrieved land.

About Jammu and Kashmir Tourism:

Gulmarg

Gulmarg is well known for its amazing natural beauty and it is counted as one of unique tourist destinations in the world.

Vaishno Devi

The town of Katra, which is close to Jammu, contains the Vaishno Devi shrine. Nestling on top of the Trikuta Hills at a height of 1700 m is the sacred cave shrine of Vaishno Devi, the mother goddess.

Sonmarg

It is located at an altitude of around 2730 meters from the sea level; it has snow-covered mountains as its backdrop against the sky.

Bahu fort

It was modified and improved by Dogra Rulers of Jammu but first it was built by the Raja Bahulochan.

American Ship USS Pearl Harbor arrived in India as part of Defense cooperation

American Navy's amphibious dock landing ship USS Pearl Harbor arrived in Goa on 24th Aug 2017 as part of defense cooperation between the two countries. It is the American Ship USS Pearl Harbor's first visit to India.

Key Points:

- USS Pearl Harbor is a Whidbey Island-class amphibious dock landing ship with a crew of over 700 sailors and marines.
- The 15th Marine Expeditionary Unit (MEU), which is one of seven marine expeditionary units of the US Marine Corps, has also come to Goa as part of the trip.
- The sailors and marines of Pearl Harbor were looking to strengthen the US Navy's long-standing partnership with the Indian Navy.
- As per the US embassy in Goa, the ship's sailors and marines will conduct exchanges with the Indian Navy's marine commandos relating to amphibious warfare.

About USS Pearl Harbor

- USS Pearl Harbor was launched on February 24, 1996, and commissioned on May 30th, 1998. The ship is based in San Diego, California.
- The 15th MEU is based at Camp Pendleton, California.
- Both USS Pearl Harbor and the 15th MEU are currently deployed as a part of the USS America Amphibious Ready Group.
- It is operating in the Indo-Asia Pacific region to strengthen partnerships and serve as a ready-response force for any type of happening.

Arun Jaitley launches BEML's ultra modern metro manufacturing facility

Defence Minister Arun Jaitley has launched BEML's third Line Ultra Modern Metro Manufacturing Facility announced on 26th Aug 2017. It has been launched to enhance the production of metro cars for the forthcoming metro projects in India.

- Jaitley also inaugurated the indigenously designed and developed biggest ever diesel excavator BE1800D and crawler dozer BD475-1 and T-72 hull.
- It has been designed for fitting into tanks, at Kolar Gold Fields (KGF) unit of Bharath Earth Movers Limited.
- A number of organisations and local leaders including Kolar MP Muniyappa submitted memo against disinvestment of BEML.
- BEML had forayed into manufacturing and supply of hi-tech metro cars during 2002 and so far supplied over 1,000 metro cars to Delhi, Bengaluru and Jaipur Metro Corporations.
- On 27thMarch BEML had secured a Rs 1,421-crore contract from Bangalore Metro Rail Corporation (BMRCL) for supply of metro cars.

• The contract is scheduled to be completed by December, 2018.

Assam forest dept deploys excavators to evict illegal encroachers from Amchang Wildlife Sanctuary

Assam forest department deployed around 10000 security and State Disaster Response Force (SDRF) personnel, 20 elephants and 20 excavators to evict 1400 families that have been encroaching upon Amchang Wildlife Sanctuary on the north eastern fringe of Guwahati. The sanctuary is spread over 78.64 sq km.

Key Points:

- As a precautionary measure against possible protest by the encroachers, a huge contingent of police, forest and security forces personnel have also deployed at Batahghuli area of the sanctuary where the eviction process has started.
- The Guwahati High Court on 2nd August had given the state government a month's time to clear the encroachers.
- According to a survey by the forest department, about 1,400 families had illegally settled in the protected area following which the high court took up a PIL in 2013 over the encroachments inside the sanctuary.
- The drive will continue until all encroachers are evicted from the wildlife sanctuary.
- The Guwahati High Court ordered the state government to stop eviction drive at two sides named Yousuf Nagar and Bajra Nonke village till 18th Sep.

Supertech gets green nod for Rs1,130 crore Sports Village project in Greater Noida

Supertech has received green nod for developing a sports-centric housing project in Greater Noida. It is an investment of Rs1,130 crore.

- The 62-acre project will be developed in Sector 27 of Greater Noida (west), known as Noida Extension.
- The proposed residential project 'Sports Village' will be launched during Diwali this year and will be completed in four years.
- The Union Environment Ministry has given its clearance (EC) to the proposed 'Sports Village project' after taking into account the recommendations of its expert panel.
- It will offer 4,228 flats and 400 villas with club and enough space for sports (golf) and recreational activities.
- The company has informed the ministry that it will develop the proposed project in a plot area of 2,51,371 square meter.
- The project will have academies for other sports like badminton and shooting.

The first edition of Miss Transqueen India, a beauty pageant for transgenders takes place in Gurugram

The first edition of Miss Transqueen India, a beauty pageant for transgenders, will take place in Gurugram on 22nd Aug 2017.

Key Points:

- In this beauty pageant, a total of 1500 participants fought it out to make it to the top 16.
- Auditions were held in Delhi, Mumbai and Manipur.
- At the final event, 16 contestants from Delhi, Maharashtra, Uttar Pradesh, Manipur, Karnataka and other states will compete to win the Miss Transqueen India title.
- Like other beauty pageants, the contestants will have to go through swimming costume, traditional wear, evening gown and question-answer rounds.
- Natasha, a trans woman who hails from Kolkata, was named the first Miss
 Transqueen India. Loiloi from Manipur bagged the first runner-up position and
 Ragasya from Chennai was crowned the second runner-up.
- Miss Transsexual Australia 2017 Laeticia Phylliscia Raveena will be crowning the first Miss Transqueen India.
- The winner will go to Thailand for Miss International Queen, the first runner-up will compete at Miss Transsexual Australia.

International Current Affairs

US imposes financial sanctions on Venezuela

The US has imposed "strong" financial sanctions on Venezuela, barring banks from any new deals with the government announced on 25th AUG 2017.

- US President Donald Trump has signed an executive order imposing "strong, new financial sanctions" on Venezuela.
- The sanctions restrict trading of Venezuelan bonds sold by the government in the American financial markets to raise money.
- The president's new action prohibits dealings in new debt and equity issued by the government of Venezuela and its state oil company.
- The Treasury Department is issuing general licenses that allow for transactions that would otherwise be prohibited by the Executive Order.

• These include provisions allowing for a 30-day wind-down period; financing for most commercial trade, including the export and import of petroleum; transactions only involving Citgo; dealings in select existing Venezuelan debts; and the financing for humanitarian goods to Venezuela.

About Venezuela

• Capital: Caracas

President: Nicolas MaduroCurrency: Bolivar fuerte

Trump bans transgender recruits from US military

President Donald Trump has formally signed a presidential memo directing the Pentagon to ban transgender people from joining the US military announced on 25th Aug 2017.

Key Points:

- The Obama administration in June 2016 had changed longstanding policy, declaring that troops could serve openly as transgender individuals and set a July 2017 deadline for determining whether transgender people could be allowed to enter the military.
- The presidential memo directs the secretaries of defense and homeland security (which oversees the US Coast Guard) to put forward a plan to implement the new policy by February 21, 2018 which should be put in place on March 23, 2018.
- According to a 2016 RAND study, there are currently an estimated 2,150 to 10,790 active-duty and reserve transgender troops.
- According to a senior White House official Trump also ordered the military to stop paying for gender-reassignment surgical procedures from March 23.

Banking & Finance

Govt. notifies changes in Banking Regulation Act

The government has found a way to initiate insolvency resolution process to recover bad loans by giving authorization to RBI through Banking Regulation (Amendment) Act.

• The banking sector is burdened with non-performing assets (NPAs) of over Rs 8 lakh crore, of which Rs 6 lakh crore is with public sector banks (PSBs).

- The RBI had identified 12 accounts each having more than Rs 5,000 crore of outstanding loans and accounting for 25 per cent of total NPAs of banks for immediate referral for resolution under the bankruptcy law.
- The RBI can specify authorities or committees to advise banks on resolution of stressed assets. The members on the committees will be appointed or approved by the RBI.
- The bulk of the NPAs are in sectors such as power, steel, road infrastructure and textiles.

IRDAI launches central database of insurance sales persons

The Insurance Regulatory and Development Authority of India (IRDAI) has launched a Central Database of all Insurance Sales Persons in the country.

- `Envoy': The database makes sure that all licensed insurance sales persons working for insurers and intermediaries including entities such as insurance agents, broker qualified persons, specified persons of corporate agents, authorized verifiers of web aggregators, point of sales persons (POS) do not work with multiple insurers and intermediaries in the same business category.
- Envoy covers POS, specified persons of corporate agents, qualified persons of insurance brokers and authorised verifiers of web aggregators.
- Search facility for insurers and insurance intermediaries whereby an applicant insurance sales person's details are queried for a match in the database. Appointment of such a person by the insurer or insurance intermediary shall be taken up only after ensuring that the applicant does not already figure in the database.

Awards & Recognition

Island of Tuvalu world's least visited country in 2016

According to a report by the United Nations World Tourism Organization (UNWTO), The island of Tuvalu was the least visited country in 2016.

- The report said 2,000 people visited Tuvalu in 2016, while 1,000 people visited the country in 2014. Located in the South Pacific Ocean, Tuvalu is 4.6 metres above sea level and has a population of 11,000 people.
- Nestled in Polynesia, only two hours north of Fiji, it has not been able to attract many tourists to its region.

• According to the reports, only 2000 people visited the islets of Tuvalu in 2016, up from 1000 in 2014.

Appointments & Resigns

Tata Sons names Roopa Purushothaman as Chief Economist & Head of Policy Advocacy

Tata Sons has appointed Roopa Purushothaman as Chief Economist and Head of Policy Advocacy who will join the group with effect from 1st Sep 2017.

Key Notes:

- Purushothaman joins Tata Sons from Everstone Capital, where she was leading the research function.
- In her role, Purushothaman will drive macro-economic research and all policy and advocacy initiatives as relevant to the businesses of the Tata group.
- Before that, she was with Goldman Sachs International as Vice President & Global Economist.
- Purushothaman graduated from Yale University, and has a post-graduate degree from the London School of Economics.
- She is also the founder of Avasara Leadership Institute, a non-profit educational institution focusing on accelerating academic and leadership outcomes for high potential adolescent girls in India.

Science & Technology

NPCI approves Spice Digitals operation under Bharat Bill Payment System

Spice Money Ltd, a fintech company had received an in-principle approval to set-up as a BBPOU under the Payment and Settlement Systems Act, 2007 in May 2016. In August 2016, NPCI had launched a pilot project for BBPS with eight BBPS operating unit, Spice Digital was one of them

Need

Bill payments is a major component of the retail payment transactions in India. It is characterized by the presence of large number of billers and aggregators who provide a variety of payment options to customers. According to the Digital Payments 2020 report by Google and Boston Consulting Group, cashless payments contribution in the consumer payments segment will double to 40%.

Bharat Bill Payment System (BBPS)

- BBPS is an integrated bill payment system offering interoperable and accessible bill payment service to customers through a network of agents, enabling multiple payment modes and providing instant confirmation of payment. The BBPS initiative aims to provide a major push to digital payments as it is a big step forward in formalizing the bill payment system in the country.
- Under the BBPS framework, a customer will be able to pay several bills such as electricity, telephone, water, gas, and DTH television at a single location—physical or electronic—and receive instant confirmation once the payment is made.

National Payments Corporation of India (NPCI)

- NPCI is the umbrella organisation for all retail payments system in India. It is being promoted the Reserve Bank of India.
- It was founded in 2008 as a not-for-profit organisation registered under section 25 of the Companies Act, 2013.

NASA rockets to create glowing artificial clouds

NASA rocket mission is set to create white artificial clouds that will glow in the night sky. It has been created to study disturbances in the upper atmosphere that interfere with communication and technology systems.

- The artificial clouds will be visible to residents of the Republic of the Marshall Islands during two rocket flights to occur between 29th August and 9th September.
- The Waves and Instabilities from a Neutral Dynamo (WINDY) mission will study a phenomenon that occurs in the ionosphere a layer of charged particles in the upper atmosphere.
- The WINDY mission consists of two NASA suborbital sounding rockets that will be launched simultaneously in a window between 8 and 11 pm local time from 29th August through 9th September from the island of Roi-Namur.
- It is known as equatorial spread F (ESF). These disturbances occur after sunset at latitudes near the equator in part of the ionosphere known as the F region.
- The disturbances interfere with radio communication, navigation and imaging systems and pose a hazard to technology and society that depends on it.

- One rocket will carry a substance called tri-methyl aluminium (TMA), which will form the white artificial clouds that glow in the night sky.
- The first rocket launched a two-stage 47-foot long Black Brant IX rocket, will carry and release both TMA and lithium.
- The release of the lithium vapours is not visible to the naked-eye but can be viewed with special cameras on the ground.
- The movement of these clouds to measure the winds and energetic particles that is in motion in the upper atmosphere.
- The clouds are expected to be visible for about 30 minutes.
- TMA reacts spontaneously on contact with oxygen to produce a pale white glow visible from the ground.
- The second rocket, a two-stage 36-foot long Terrier- Malemute, will be launched five minutes after the first rocket.
- It will carry instruments to measure ionosphere densities and electric and magnetic fields present in these storms.

IIT Researchers develop biosensor to detect kidney disorders

Researchers from Indian Institutes of Technology (IIT), Bombay and Indore, have jointly developed a biosensor that makes it possible to detect kidney disorders in less than eight minutes.

The biosensor can accurately measure both the pH and urea concentration with a single drop of urine. It will help make a point-of-care test to determine whether the kidneys are functioning normally.

Drawbacks of conventional tests

- For conventional kidney function test, doctors estimate pH and urea contents in urine as most kidney disorders result in reduced pH and higher concentration of urea.
- In current available methods to detect urea, patients need to undergo two tests for accuracy.
- In addition, these methods have accuracy problem due to contaminations components in urine such as calcium, chloride, ascorbic acid, sodium and potassium.

Biosensor Tests

- The newly developed biosensor can detect both pH and urea contents in urine. It is made by encapsulating an enzyme urease and molecule FITC-dextran in alginate microspheres.
- The combination glows in fluorescence colour in response to chemical reaction with urea and changes in pH when urine is added.
- The fluorescence reduces when the pH is acidic and increases when it is alkaline.
- The change in intensity of fluorescence helps to calculate the values of pH and urea.

Significance

- The biosensor made using alginate is safe and non-toxic to handle. It can work in the ideal pH range of 4-8. It is able detect even low concentrations of urea up to 50 millimolar.
- It has showed accuracy of more than 97%. Moreover, it is stable for up to a month in a refrigerator and gives results unaffected by other components in urine samples.
- It can help to make rapid and accurate point-of-care diagnostic test for kidney disorders.

CSIR-NIIST develop new technique to produce bioethanol from cotton-stalks

Scientists from CSIR's National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), Thiruvananthapuram have developed new technique to produce bioethanol from discarded cotton-stalks. The technique uses combination of chemical and biological techniques.

- The new technique will help to produce bioethanol, a clean fuel from cotton stalk wastes. Converting the agro-residues such as cotton stalks and wheat and rice husks etc to ethanol reduces the food vs fuel competition.
- India has about 9.4 million hectares under cotton cultivation and every hectare generates 2 million tonnes of cotton stalk wastes.

New Technique

- In new technique, cotton stalks first are treated with acid, alkali and different enzymes to breakdown its complex organic polymers. The acid treatment remove hemicellulose, a polymer of cell wall and alkali makes easier to extract lignin, a binding matrix in cell wall, made of complex phenolics.
- These treatments exposes cellulose of cotton stalks made of glucose to the action of enzymes. It converts glucose into final product bioethanol by the process of fermentation using a novel yeast strain.
- The novel yeast strain used was Saccharomycescerevisiae-RRP-03N, obtained from a rotting wild fruit we found in the Silent Valley National Park, Kerala.

Significance

- The Saccharomycescerevisiae-RRP-03N yeast performs better than distiller's yeast strains commonly used in fermenting the cotton stalk hydrolysate.
- It has glucose conversion efficiency of 76% and it utilised entire glucose in just 24 hours and converted into alcohol.
- The final alcohol obtained after distillation can be made to fuel grade bioethanol (>99% purity).

Sports

Sports Minister announces first edition of Gramin Khel Mahotsav

Union Minister of Youth Affairs and Sports Minister Vijay Goel, on 26th Aug 2017 has announced that the first edition of Rural Games or Gramin Khel Mahotsav which will be started from Delhi.

Key Points:

- It will take place between 28th August to 3rd September 2017.
- The Rural Games will aim at popularising the domestic games like wrestling, athletics etc.
- It will also include fun games like Matka Race, Tug of War for senior citizens to add the fun element in the games.
- A Grameen Marathon marked the beginning of the Rural Games with participation of 16000 youth from rural Delhi.
- In the first stage, the games will be held in Alipur, Mehrauli, Nangloi, Najafgarh and Shahadara where 10000-12000 youngsters will participate.
- The second stage will be started from 31st August till 01 September 2017 which will have inter-block games.
- Shri Goel mentioned that the plan of the sports talent search portal will be a started on 28th August, 2017.
- The portal will enable any person from across India to upload his information.
- According to the information uploaded the Ministry will tap their talent and train them further in their respective disciplines.

Lionel Messi becomes the first player to score 350 La Liga goals

Barcelona and Argentina star Lionel Messi became the first player to pass 350 goals in La Liga history.

Key Points:

• Leo went on to score one more goal in Barcelona's 2-0 win over Alaves, bringing his all-time league tally up to 351.

- The Argentine scored twice against Alaves to take his total to a stunning 351.
- Messi has scored 274 goals of those goals with his left foot and 63 with his right.
- Messi's best goal tally for a session came in 2011/2012 when he netted 50 goals in 37 appreances.
- Messi, who has played 384 league matches, is now 66 goals ahead from Cristiano Ronaldo.