

National Current Affairs

India's first railways disaster management centre in Bengaluru

India's first railways disaster management village is expected to come up near Bengaluru by December 2018, where situations like trains falling into rivers and coaches catching fire will be replicated and mock rescue operations will be carried out in real time.

More Details about India's first railways disaster management village in Bengaluru:

The Railways Ministry has earmarked the 3.32-sqkm village of Hejjala, with a population of 3,483 people for this purpose.

This Disaster Management Institute and Safety Village will be set up at a cost of Rs 44.42 crore.

The village, about 25 km from Bengaluru, will also have a virtual reality centre for analysis of railway accidents

Indra: India, Russia for first time conduct tri-services exercise

India and Russia for first time are going to conduct Indra tri-services exercise, involving their armies, navies and the air forces in October 2017 to further ramp up military ties.

It will be for the first time India will participate in a tri-services exercise with a foreign country with such large scale participation by Army, Navy and Air Force.

Key Facts

- The 2017 Indra exercise will be held in Russia including in mountainous Vladivostok region. It will primarily focus on achieving coordination between forces of the two countries in a tri- services integrated theatre command scenario.
- A total of 350 Indian Army personnel will participate at the mega exercise. The contingents by the Indian Navy and AirForce (IAF) will also be sizeable in numbers. Russian army, navy and air force also for time holding tri-services exercise with other country.

Comment

The exercise will take place in the midst of evolving unpredictable security situation in the region. It will be conducted at a time when India's ties with China have nosedived over the border dispute issue and also at time when its ties with Pakistan have deteriorated over cross-border terrorism and number of other issues.

Background

India is significantly ramping up its defence capability and has lined up billions of dollars of procurement proposals as part of military modernisation. Russia has been a long-standing defence partner of India and both the countries are now eyeing to further deepen the ties. During Prime Minister Narendra Modi's visit to Russia in June 2017, both countries had decided to "upgrade and intensify" defence cooperation through joint manufacture, co-production and co-development of key military hardware and equipment. A vision document, issued then also had mentioned that both the countries also decided to work towards a qualitatively higher level of military-to-military cooperation.

IMMSAREX: IONS's maiden maritime search and rescue exercise will be held in November 2017

Indian Ocean Naval Symposium's (IONS) maiden International Maritime Search and Rescue Exercise (IMMSAREX) will be held in November 2017 in the Bay of Bengal under the chairmanship of Bangladesh.

The ships and aircraft of the members and observers of the IONS including China, India and Pakistan will participate in the exercise. In addition, Bangladesh is also scheduling to host "extraordinary conclave of Chiefs," a meeting of chiefs of Navy of IONS members before it hands over the Chair to Iran.

Comment

The side-by-side participation of the Indian and Chinese Navies in IMMSAREX exercise will come amid growing India's skepticism of Chinese naval activities in the Indian Ocean region (IOR) and establishment of China's first overseas base at Djibouti. India has considerably expanded its engagement with countries to further its own interests as well as to check the rapid expansion of Chinese naval forays in the IOR. Other countries in the region are also engaged in rapid expansion of their military capabilities.

About Indian Ocean Naval Symposium (IONS)

- The IONS is a regional forum of Indian Ocean littoral states launched by India in February 2008. It is a voluntary initiative that seeks to increase maritime co-operation among navies of the littoral states of the Indian Ocean Region (IOR) by providing an open and inclusive forum for discussion of regionally relevant maritime issues.
- It endeavors to generate a flow of information between naval professionals that would lead to common understanding and possibly cooperative solutions on the way ahead. These states are represented by the heads of their navies.
- Under the IONS charter of business adopted in 2014, the forum has working groups on Humanitarian Assistance and Disaster Relief (HADR), Information Security and Interoperability (IS&I) and maritime security (anti-piracy).

Members to IONS

- There are 35 members – navies of the IONS which have been geographically grouped into the following four sub-regions:
- South Asian Littorals: India, Bangladesh, Maldives, Pakistan, Seychelles and Sri Lanka
- West Asian Littorals: Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, UAE and Yemen
- East African Littorals: Comoros, Djibouti, Egypt, Eritrea, France, Kenya, Madagascar, Mauritius, Mozambique, Somalia, South Africa, Sudan and Tanzania
- South East Asian and Australian Littorals: Australia, Indonesia, Malaysia, Myanmar, Singapore, Thailand and Timor Leste.
- Observer Countries: China, Japan etc.

India's first online course on Infusion Therapy launched by INS

The Infusion Nurses Society (INS)-India in its 6th National conference launched country's first online course on Infusion Therapy for nurses. INS is global authority in infusion therapy.

Under the online course, the INS aims to train over 3000 nurses in the vital medical procedure. The course will enable members to access the various infusion therapy modules and presentations through its website.

About Infusion therapy

- Infusion therapy involves the administration of medication drug intravenously i.e. through intramuscular injections and epidural routes. It is prescribed when a patient's condition is severe that it cannot be treated effectively by oral medications.
- Nine of ten patients admitted in hospitals receive infusion therapy for therapeutic or diagnostic purposes. Some of the diseases requiring infusion therapy include infections that are unresponsive to oral antibiotics, cancer and cancer-related pain, gastrointestinal diseases, dehydration and more. Improper infusion practices may lead to complications, causing an increase in morbidity, mortality, duration of hospital stay and healthcare costs.

IMMSAREX: India, China to join Indian Ocean exercise in November

Despite growing tensions with China, the Indian Navy would join the Chinese Navy in the maiden International Maritime Search and Rescue Exercise (IMMSAREX) to be chaired by Bangladesh at the Indian Ocean Naval Symposium (IONS) in November 2017.

- International Maritime Search and Rescue Exercise (IMMSAREX) will be held in Bay of Bengal.

- In addition, Bangladesh is also scheduling an “extraordinary conclave of Chiefs,” a meeting of chiefs of Navy before it hands over the Chair to Iran next year.

About Indian Ocean Naval Symposium (IONS):

The ‘Indian Ocean Naval Symposium’ (IONS) is a voluntary initiative that seeks to increase maritime co-operation among navies of the littoral states of the Indian Ocean Region by providing an open and inclusive forum for discussion of regionally relevant maritime issues.

- Countries are represented at IONS by their respective Navy chiefs.
- It was launched by India in February 2008.
- IONS presently has 23 members and nine observers.

Gabriel Chundan (Snake Boat) is the winner OF 65TH NEHRU TROPHY BOAT RACE 2017

Gabriel Chundan, the snake boat powered by oarsmen of Thuruthippuram Boat Club has won the 65th edition of the prestigious Nehru Trophy held at the Punnamda Lake.

Key Points:

- The oarsmen of ‘Gabriel Chundan’ lifted the Nehru Trophy Boat Race.
- The members of the Ernakulam-based boat club dipped their oars in unison, leading the majestic ‘chundan’ (snake boat) to the finishing point, pushing fellow competitors behind.
- While ‘Mahadevikkad Kattiltheekkethil’ came second, ‘Payippad’ and ‘Karichal’, last year’s winner, secured the third and fourth spots respectively as thousands of spectators gathered on the banks to cheer them, organisers said.
- Of the 78 boats, 24 were ‘chundans’ (snake boats), each with a carrying capacity of about 100 rowers.
- Around 20 snake boats, known as ‘chundanvallam’ in local parlance, took part in five heats in the event, which is held on the second Saturday of August every year.
- A large number of spectators including foreigners thronged the banks of the lake to get a glimpse of the event, which is considered as one of the biggest water-sport events in the country.
- The Nehru trophy was instituted to commemorate the visit of the first Indian Prime Minister Jawaharlal Nehru to the area and his boat ride in the lake.
- Kerala Chief Minister Pinarayi Vijayan inaugurated the boat race.

Fete de Puducherry’ Festival celebrated in Puducherry

A three-day annual cultural festival named ‘Fete de Puducherry’ organized by the Government of India begins in Puducherry.

Key Points:

- The festival is held in association with the South Zone Cultural Centre (Tamil Nadu) every year to bring to focus the multi-faceted cultural features of various states.
- Artistes from 11 states and the union territory of Puducherry will take part in 'Fete de Puducherry'.
- The festival holding started since 1985 as part of celebrating Independence Day and also Liberation Day of Puducherry.
- The fete is celebrated annually on the occasion of liberation day and the Independence Day of Pondicherry and India respectively.
- From August 15th to August 17th the days are regarded as the Fete De Pondicherry and this create a heavy inflow of tourists in the Union Territory.

About Puducherry

- lieutenant Governor: Kiran Bedi
- CM: V. Narayanasamy

International Affairs

African country to release Lord Krishna coin on Janmashtami

- African country, The Republic of Chad will release a limited edition Lord Krishna silver coin on Janmashtami in commemoration of the 5,244th birth anniversary of the Hindu God.
- Numismatist Alok K Goyal, the designer of the coin informed that this full-dimensional 3D coins weighs 100 grams and is made of pure silver.
- HE added that there will be 251 pieces made available for sale in the Indian market out of a total of 501.
- The price has been kept at Rs 25,555 per coin with free shipping within India.
- The Lord Krishna-themed coin has been decorated with more than 50 pieces of Swarovski crystals. It has a 3D figure of baby Krishna on a leaf. It is 65 mm in diameter and of 40 mm height.
- A special container made of bamboo has also been designed and made by artisans hailing from a small village of Malda, in West Bengal.
- Minted in Switzerland, the coin has been packed in an air tight dome shaped capsule.
- Quick facts about The Republic of Chad:
 - Capital: N'Djamena
 - Currency: Central African CFA franc

- Current President: Idriss Deby

World Health Organisation declares Somalia free of polio

UN World Health Organisation (WHO) has declared that in the last three years Somalia had not recorded any case of polio disease and announcing the country polio free on 13th of August 2017.

Key Points:

- The WHO announced the country recorded the last case of polio in 2014 in the central part of the country but has since then remained free of the paralyzing disease.
- The head of the WHO Eastern Mediterranean, which covers Somalia, Mohamed Fiqi announced that massive vaccination campaigns and commitment from government and international actors had ensured the polio virus did not recur in the Horn of Africa country.
- The polio programme in Somalia needs to continue to work to maintain and improve the level of population immunity against polio through target vaccination campaign.
- Afghanistan, Nigeria and Pakistan are the remaining countries where polio is still being recorded.
- On the other hand, the WHO chief warned Somalia remains at risk of importation of the virus from these countries.
- No child was affected by this disease from last 3 years.

About Somalia

- Capital: Mogadishu
- President: Mohamed Abdullahi Mohamed
- Prime Minister: Hassan Ali Khayre

India-ASEAN Youth Summit begins in Bhopal

The India-ASEAN Youth Summit began in Bhopal, Madhya Pradesh to commemorate 25th anniversary of Association of Southeast Asian Nations (ASEAN)–India dialogue partnership in the ongoing year.

The first of its kind event was organised by Union Foreign Ministry, Union Sports Ministry, Madhya Pradesh government and India Foundation.

Key Facts

- The five day Summit will commemorate this year's theme of "Shared Values, Common Destiny". Madhya Pradesh was chosen for this event as the Sanchi stupa located here strengthens the state's cultural affiliation with the ASEAN countries.

- Around 100 delegates from ASEAN countries Indonesia, Singapore, Philippines, Malaysia, Brunei, Thailand, Cambodia, Laos, Myanmar and Vietnam are going to participate in the summit. It will also have participation of 75 youth leaders from India.
- The participants will represent some of the largest institutions in their countries, including leaders from ruling as well as opposition parties, think tanks, media and universities to renew and revitalise engagement with the region reflecting close cultural and civilisational links.

About Association of South East Asian Nations (ASEAN)

- ASEAN regional organisation comprising 10 South east Asian countries that aims to promote intergovernmental cooperation and facilitates economic integration amongst its members. It came into existence on August 8, 1967 after ASEAN declaration (also known as Bangkok declaration).
- Principal aims of the ASEAN are to accelerate economic growth, intergovernmental cooperation, social progress, and socio cultural evolution among its members, protect of regional stability and facilitate political, military, educational and cultural integration amongst its members and Asian states.
- Its 10 members are Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. Its motto is “One Vision, One Identity, One Community”.

Business

IIP output contracts 0.1% in June 2017

India's Factory output fell to a four-year low and contracted by 0.1% in June 2017 with poor performance of manufacturing and mining sectors.

Key Points:

- Since June 2013 this is the lowest growth when the Index of Industrial Production (IIP) contracted by 1%. In June 2016, it had grown 8%.
- Manufacturing sector: It shows negative growth of 0.4% in June from previous May 2017 as 1.2%
- In Mining output: It signs positive by 0.4% in June.
- Electricity generation: It showed slow as 2.1% from May 2017 growth recorded 8.28 %.
- Consumer durables output: It slow down by 2.1% in June 2017 from May 2017.
- Consumer non-durables production: It rose by 4.9%.

- Capital goods output: is a barometer of investment. It reduced by 6.8% in June 2017.
- About Index of Industrial Production (IIP)
- The Index of Industrial Production (IIP) is an index for India which details out the growth of various sectors in an economy such as mineral mining, electricity and manufacturing
- The all India IIP is a composite indicator that measures the short-term changes in the volume of production of a basket of industrial products during a given period with respect to that in a chosen base period.

SCIENCE & TECHNOLOGY

New-found TRAPPIST-1 is older than our Solar System

As per new study published in The Astrophysical Journal, researchers have found that the TRAPPIST-1 star is between 5.4 and 9.8 billion years. This is up to twice as old as our own solar system, which formed some 4.5 billion years ago.

About TRAPPIST-1:

- TRAPPIST-1 is a system of seven Earth-size planets orbiting an ultra-cool dwarf star about 40 light-years away.
- Three of the TRAPPIST-1 planets reside in the star's "habitable zone," the orbital distance where a rocky planet with an atmosphere could have liquid water on its surface.
- At the time of its discovery earlier this year, scientists believed the TRAPPIST-1 system had to be at least 500 million years old.

Norway has world's fastest mobile Internet: Ookla

In August 15, 2017, according to the global leader in broadband testing, Ookla declared that Norway has the fastest mobile Internet in the world.

Key Points:

- The Netherlands and Hungary are ranked number two and three on the list of the world's fastest mobile networks.
- In only 13 months, Norway has jumped from 11th to first place on the list of world best providers of fast Internet connection.
- Ookla created the popular application Speedtest.net, where the users can measure the speed of their Internet connection at any time.

- According to their statistics, the average Internet connection speed of Norwegians' mobile phones has increased by 69% during the last year and has speed of 52.6 megabits per second.
- Telenor is one of the three operators in Norway that have built their own mobile networks which other operators are hiring.

About Norway

- Capital: Oslo
- PM: Erna Solberg
- Currency: Norwegian Krone

Scientists develop world's first plant-based Zika vaccine

Scientists from US have developed the world's first plant-based Zika vaccine that may be more effective, safer and cheaper than other vaccines against the mosquito-borne Zika virus.

The vaccine was developed using proteins derived from Tobacco plant. Currently, there are no licensed vaccines or therapeutics available to combat Zika.

Key Facts

- The plant-based Zika vaccine works against DIII, a part of a Zika viral protein that plays a key role for the virus to infect people. All flaviviruses have the envelope protein on the outside part of the virus. It has three domains. The domain III has a unique stretch of DNA for the Zika virus.
- Researchers exploited domain III to generate a robust and protective immune response that is unique for Zika. First they had grown the envelope protein in bacteria then prepared the DIII protein domain in tobacco plants. The multiple immunisation experiments of the vaccine performed on mice shows 100% protection against multiple Zika virus strains in mice.
- **Significance:** The plant protein-based vaccine uses smallest and most unique part of the Zika virus that can still elicit a potent and robust immune response. It produces a potent protective immune response against Zika Virus and also not produce antibodies that may be cross reactive for West Nile fever, Dengue, Yellow fever or others.

About Zika virus

- Zika virus is vector borne disease transmitted primarily by Aedes aegypti mosquitoes, the same mosquito that transmits dengue, West Nile fever, Yellow fever. The virus has been named after Zika forest in Uganda where it was first isolated in 1947.
- The virus is capable of causing serious birth defects i.e. neurological disorders and foetal deformation known as Microcephaly in which infants are born with abnormally smaller heads. Besides a possible link between the virus and Guillain-Barré syndrome (a condition in which the body's immune system attacks part of the nervous system) is

also suspected. It is also found that, sexual transmission of Zika virus disease is possible.

- The worldwide Zika threat first emerged in 2015, infecting millions in South America. The World Health Organization (WHO) had declared the disease as epidemic and global health emergency but later revoked it after the outbreak was brought under control.

APPOINTMENT & RESIGNS

Santosh Sharma was appointed as Chairman and Managing Director of HCL

Santosh Sharma was appointed as Chairman and Managing Director of Hindustan Copper Limited (HCL). He is at present Director (Operations) in the HCL.

Key Points:

- The Appointments Committee of the Cabinet (ACC) has approved his appointment to the post for a period of five years, an order issued by the Department of Personnel and Training (DoPT).
- Emandi Sankara Rao has been appointed as Managing Director and Chief Executive Officer of IFCI Ltd.
- He is at present working as Director and Chief Executive Officer of IIFCL Asset Management Company Ltd.
- Rao has been appointed to the post for a period of three years.
- The ACC has also approved appointment of Debasis Jana as CMD of Andrew Yule and Co. Ltd (AYCL), Kolkata. He is working as Director (Planning) in the same company.
- He will serve for a period of five years.

ENVIRONMENT

Earths Largest volcanic region found in Antarctica

Researchers from the University of Edinburgh in Britain have discovered the largest volcanic region on Earth, two km below the surface of the vast ice sheet in west Antarctica.

They have found 91 previously unknown active volcanoes in the region known as the West Antarctic rift system, adding to the existing 47 volcanoes that were discovered earlier. This makes it largest volcanic region on the Earth.

Key Facts

- These active peaks are concentrated in the west Antarctic rift system region — which stretches 3,500 km from Antarctica's Ross ice shelf to the Antarctic peninsula. The height of these newly discovered active volcanoes range from 100 to 3,850 metres, with the highest being almost as tall as Switzerland's Eiger mountain (3,970 metre). All of these volcanoes are covered in thick layers of ice.
- This region is larger than east Africa's volcanic ridge which is currently rated as the densest concentration of volcanoes in the world. Any volcanic activity of Antarctic rift system may have crucial implications for the rest of the planet.
- If one of the volcanoes in Antarctic rift system erupts, it could further destabilise west Antarctica's ice sheets. If it causes the melting of ice on eruption may speed up the flow of ice into the sea. It will enhance sea level rises that are already affecting our oceans due to climate change.

El Nino of 2014-16 aided in massive carbon dioxide release: Study

According to recent study conducted by scientists, the monster El Nino of 2014-16 caused over 3 billion tonnes of carbon to get released into the atmosphere, pushing carbon dioxide (CO₂) concentration to record levels.

- The study was based on analysis of data collected by NASA's Orbiting Carbon Observatory-2 (OCO-2) satellite, which measures level of CO₂ in the atmosphere. These are the first measurements for satellite tracking CO₂ levels.

El Nino

El Nino is a complex periodic climate event that causes waters to warm up in east-central Pacific Ocean. The warming of ocean causes huge changes in wind directions which bring less rain to south-east Asia and Indian subcontinent, while increasing rain in other parts of the world.

Key Highlights of study

- The El Nino led to excessive carbon dioxide releases in three ways. They are (i) Hot weather and drought caused extensive wildfires in south-east Asia, (ii) Drought in the Amazon rainforest stunted plant growth, reducing the amount of carbon they absorb while growing (iii) Warmer weather and near normal rainfall in Africa caused forests to exhale more CO₂.
- The rate of growth of CO₂ in the atmosphere had hit an all-time high of 2.94 parts per million per year in 2015 and slightly below that at 2.89 ppm per year in 2016. In other

words, CO2 was being added to the atmosphere at a much higher rate than ever before even though carbon emissions were flat.

- In 2014 and 2015, CO2 emissions from burning of fossil fuels had flattened out to about 36.2 billion tonnes. Projections for 2016 too indicated that emissions were still flat.
- The industrialised countries do not appear to be on course to meet the targets that they pledged at the Paris Climate Accord of 2015. Emissions from European Union countries have actually increased in 2015, the rate at which emissions from US and Japan are declining does not comply with what they had pledged at Paris.

SPORTS

India beat SL Test Series 2017, Clinch Series 3-0/India claimed their first ever 3-0 series win overseas.

On August 14, 2017, India claimed their first ever 3-0 series win overseas, beating Sri Lanka in the third and the final Test at Pallekele International Cricket Stadium, Sri Lanka by an innings and 171 runs.

- In the third and the final test match, Indian openers Shikhar Dhawan and KL Rahul set the tone with an aggressive 188-run partnership. In the lower order Hardik Pandya came up with a brilliant knock of 108 off 96 balls.
- On the third day of the final test match, Indian bowlers did not take much time to wrap up Sri Lanka's second innings.
- Earlier, India won the first Test against Sri Lanka in Galle by 304 runs and the second by an innings and 53 runs in Colombo.

IMPORTANT DAYS

Pakistan hoists 'largest' national flag to mark 70th Independence Day

Pakistan on 14th of August celebrated its Independence Day. Pakistan hoisted a 400-feet high national flag, the largest in its history at the Attari-Wagah border to mark its 70th Independence Day.

Key Points:

- Pakistan Army chief Gen Qamar Javed Bajwa hoisted the flag at the border after midnight last night.
- The flag is 400-feet high and 120 feet by 80 feet in size. The flag is said to be the highest in South Asia and the 8th highest in the world.
- According to General Bajwa, 77 years ago Pakistan resolution was passed in the same city (Lahore).
- He also said the country is progressing on the path of the law and the constitution and all institutions are working properly. Pakistan will become the country of Quaid-e-Azam and Allama Iqbal.
- Other speakers also paid rich tributes to those killed during migration to Pakistan.
- Earlier in March this year, the India hoisted a 360-foot-tall tricolour at the Wagah border.
- The flag could be spotted from Lahore in Pakistan. An estimated Rs 3.50 crore was on the flag by Punjab government.
- However, days later, strong winds tore down the flag and the authorities decided to take it down.

About Pakistan

- Pakistan is officially the Islamic Republic of Pakistan is a country in South Asia and on junction of West Asia, Central Asia and East Asia. It is the sixth-most populous country.
- Capital: Islamabad
- Largest city: Karachi
- President: Mamnoon Hussain
- PM: Shahid Khaqan Abbasi

Social Security Day

The Social Security day is being observed on 14th of August 2017.

Key Points:

- Wherever a person and whatever a person do a small part of a greater society and there's no better indicator of togetherness than a social security system, that is why everyone should celebrate Social Security Day.
- A good way to celebrate Social Security Day is to think about the more unfortunate members of society and do something for them