TNPSC THERVU PETTAGAM

CURRENT AFFAIRS – SEPTEMBER, 2017 www.tnpscthervupettagam.com



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TNPSC BITS

- ❖ The Forest Department under the banner 'Pulikutties' has started conducting coaching classes for tribal students at their hamlets by roping in the local teachers in the Sathyamangalam Tiger Reserve (STR) here.
- ❖ Operation Sagar Kavach' coastal security exercise begins in Tamilnadu. It is usually conducted once in 6 months along coastal areas of Tamilnadu for coastal security. After the Mumbai terror attack of 2008, this kind of exercise is being carried out in all the coastal states of the country.

TAMILNADU

128 officers to receive Anna Medal

- Recognising the outstanding devotion to duty of uniformed service officers, 128 officers will receive 'Anna Medal' this year.
- ❖ Every year, these medals are announced on September 15, the birth anniversary of C N Annadurai, former chief minister.
- ❖ Officers from the police, fire and rescue services, prison, home guards and finger print bureau personnel are eligible for a bronze medal and a grant according to their rank as specified in the Medal Rules.

Injectable contraceptive launched

- ❖ The Tamil Nadu Health and Family Welfare Department launched 'Antara', an injectable contraceptive, which will be made available at all government hospitals and medical colleges in the State.
- Antara would increase the available choices of contraceptives and help with the spacing of children, thereby improving maternal and infant mortality rates.
- ❖ The contraceptive, DMPA (Depot Medroxy Progesterone Acetate) contains synthetic progesterone. Doctors at the launch said DMPA could be used by women between the ages of 18 and 45 and that it was reversible

NHM to set up five mental health care and recovery centres

- ❖ The National Health Mission, Tamil Nadu, is setting up five emergency care and recovery centres for the mentally ill and homeless people across the State
 - ✓ Vellore
 - ✓ Tiruppur
 - ✓ Tiruvannamalai
 - ✓ Theni
 - ✓ Villupuram





- ❖ The project is being implemented with the help of NGO "The Banyan", which works in the field of mental health and poverty.
- ❖ This is in line with the Mental Healthcare Act, 2017, which states that persons with mental illness living below the poverty line who are homeless are entitled to treatment and services free of cost at establishments run or funded by the government.

Vaccination drive held

- Animal Husbandry Department in association with the Forest Department conducted vaccination drive to prevent anthrax in tribal villages in the Coimbatore district.
- Similar camps will be conducted till September 21.

T.N. Speaker disqualifies 18 rebel ruling party MLAs

- ❖ Tamil Nadu Assembly Speaker disqualified 18 dissident ruling party's MLAs, owing allegiance to side-lined party leader.
- Since the Speaker disqualified them under the Members of the Tamil Nadu Legislative Assembly (Disqualification on Ground of Defection) Rules, 1986, the 18 ceased to be legislators.
- ❖ MLAs have "incurred disqualification" under Article 191 (2) of the Tenth Schedule of constitution.
- ❖ Article 191(2) A person shall be disqualified for being a member of the Legislative Assembly or Legislative Council of a State if he is so disqualified under the Tenth Schedule.

The Construction of Training Walls for the Pulicat lake's estuary

- ❖ The walls will help to prevent the silting up of the lake, which is the second largest brackish water lake in India. It will also help to save the rich biodiversity.
- ❖ The proposal was developed based on a study by the Department of Ocean Engineering of IIT Madras.
- ❖ The heavy siltation is a cause for worry. If the mouth closes, the growth of sea food and fauna will get reduced drastically.
- The walls would keep the mouth open and silt-free

Prince of Arcot to head MEASI

- ❖ The Prince of Arcot, Nawab Mohammed Abdul Ali, has been elected as president of Muslim Educational Association of Southern India (MEASI).
- ❖ He will be the president of MEASI for three-year tenure.





New Water Conservation Irrigation technology

- * K Satya Gopal, currently serving as Commissioner for Revenue Administration (CRA), Tamil Nadu has innovated the 'water conserving root zone irrigation technique'.
- ❖ It is a low-cost technology to improve water retention and moisture at deeper layers, resulting in enhancement of growth of plants/trees.
- * water conserving root zone irrigation technique can be linked with drip irrigation
- ❖ The new method ensures that water is taken up to two feet depth unlike in conventional method and drip irrigation with surface drips, and the requirement of water is also much less.
- While in surface drip system evaporation losses are common and root zone may not get moisture at lower levels, the root zone irrigation system ensures water percolating into deeper layers through the sand columns and availability of moisture in the root zone.

World Contraception Day-26 September

- ❖ Main aim of the day is -Promotion of family planning and ensuring access to preferred contraceptive methods for women and couples is essential to securing the well-being and autonomy of women.
- ❖ Allowing women to choose whether, when, and how many children to have, achieves progress on global health goals.

Tamilnadu Status

- ❖ The latest National Family Health Survey (NFHS) for 2015-16 has found that Tamilnadu has seen an eight per cent decline in use of all kinds of contraceptives in the last decade.
- ❖ Use of any family planning method (currently married women age 15–49 years) fell to 53.2% in 2015-16 from 61.4% (in 2005-06)
- ❖ Female sterilization has come down to 49.4% from 55.0%
- ❖ Male sterilization is currently 0.0% from 0.4%
- ❖ Tamil Nadu government has recently launched the 'Antara scheme' that provides free injectable contraceptives to women from 18-45 thrice a year. Such schemes are of particular help to women who do not want to permanently lose their fertility, but merely want to delay pregnancy.

NATIONAL

India and Brazil cooperation in Cattle Genomics

- ❖ The Union Cabinet chaired by Prime Minister was apprised of Memorandum of Understanding (MoU) signed between India and Brazil for cooperation in the fields of Zebu Cattle Genomics and Assisted Reproductive Technologies.
- ❖ The MoU was signed in October, 2016.





Zebu Cattle

❖ A Zebu (Bos primigenius indicus or Bos indicus or Bos taurus indicus), sometimes known as indicine cattle or humped cattle, is a species or subspecies of domestic cattle originating in the Indian subcontinent during the time of the Indus Valley Civilization from its range in the Indus River basin.



- ❖ Zebu are characterised by a fatty hump on their shoulders, a large dewlap, and sometimes drooping ears. They are well adapted to withstanding high temperatures, and are farmed throughout the tropical countries.
- ❖ Zebu is used as draught oxen, dairy cattle, and beef cattle, as well as for byproducts such as hides and dung for fuel and manure.
- ❖ In 1999, researchers at Texas A&M University successfully cloned a zebu.

Reshuffle of Union Council of Ministers

- ❖ The Prime Minister led Union Cabinet has been expanded.
- ❖ Four cabinet ministers and nine ministers of state were sworn in by President Ram Nath Kovind at the Rashtrapati Bhawan.

Minister	Charge	
Nirmala Sitharaman	Defence	
Piyush Goyal	Railways; and Coal.	
Suresh Prabhu	Commerce and Industry.	
Dharmendra Pradhan	Petroleum and Natural Gas; and Skill Development and Entrepreneurship	
Nitin Jairam Gadkari	Road Transport and Highways; Shipping; and Water Resources, River Development and Ganga Rejuvenation	
Col. Rajyavardhan Singh	Youth Affairs and Sports; and Information and	
Rathore (Independent	Broadcasting	
Charge)		





- Nirmala Sitharaman is the first "full time" woman Defence Minister and the second woman next to Indra Gandhi to hold the prestigious post.
- ❖ Nirmala Sitharaman becomes the second woman after external affairs minister Sushma Swaraj to be a part of the cabinet committee on security (CCS) in PM Narendra Modi's government. She has also become part of Cabinet Committee on Security (CCS) chaired by Prime Minister, which also includes External affairs minister Sushma Swaraj, Finance minister Arun Jaitley and Home minister Rajnath Singh

President lays foundation stone for Link-4 of SAUNI scheme

President Ramnath Kovind laid the foundation stone of the second phase of link-4 pipeline canal of Saurashtra Narmada Avataran Irrigation (SAUNI) Scheme in Rajkot district of Gujarat.

SAUNI Project

❖ Saurashtra Narmada Avtaran Irrigation(SAUNI) is a project with objective of filling 115 major dams by diverting floodwaters overflowing from the Sardar Sarovar Dam across the Narmada river to the drought areas of Saruashtra region of Gujarat.

Social media campaign to promote Geographical Indications

- ❖ The Cell for IPR Promotions & Management (CIPAM) under the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, has launched a social media campaign named 'Let's Talk IP' to promote Indian Geographical Indications (GIs) to make more people aware about the importance of Intellectual Property Rights.
- ❖ A Geographical Indication or a GI is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin. Such a name conveys an assurance of quality and distinctiveness which is essentially attributable to its origin in that defined geographical locality. Darjeeling Tea, Mahabaleshwar Strawberry, Blue Pottery of Jaipur, Banaras Sarees and Tirupati Laddus are some of the GIs.
- ❖ GIs are of utmost importance to the country as they are an integral part of India's rich culture and collective intellectual heritage. The promotion of GIs is in line with the Government's 'Make in India' campaign. It's an area of strength and optimism for India, whereby the GI tag has accorded protection to a number of hand-made and manufactured products, especially in the informal sector.
- ❖ Certain GI products can benefit the rural economy in remote areas, by supplementing the incomes of artisans, farmers, weavers and craftsmen. Our rural artisans possess unique skills and knowledge of traditional practices and methods, passed down from generation to generation, which need to be protected and promoted.





NITI Aayog launches the National Nutrition Strategy

- NITI Aayog launched the National Nutrition Strategy. Under this strategy the problem of Malnutrition will be eradicated in a phased manner.
- ❖ The nutrition strategy focussing the determinants of nutrition uptake of health services, food, drinking water & sanitation and income & livelihoods. Also it aims to ensure that States create customized State/ District Action Plans to address local needs and challenges.

Eastern Fleet Ships on Overseas Deployment to East and South-East Asia

- ❖ In accordance with India's 'Act East Policy', two Indian Naval Ships proceeded on deployment to East and South-East Asia this year. INS Satpura and INS Kadmatt of Eastern fleet departed Visakhapatnam on Sep 8, 2017 to visit 12 ports in Singapore, Indonesia, Malaysia, Thailand, Vietnam, Cambodia, Philippines, South Korea, Japan, Brunei and Russia.
- ❖ During this deployment, the ships will participate in the International Fleet Review hosted by the Association of South East Asian Countries (ASEAN) at Thailand. They will visit Singapore, Vietnam, Philippines, Cambodia and Brunei to commemorate the 25th anniversary of India-ASEAN dialogue.
- The ships will also participate in the Humanitarian Assistance and Disaster Relief (HADR) exercise at Malaysia.
- ❖ At Russia, the ships will participate in the annual India-Russia bilateral exercise INDRA. This year, for the first time, Exercise-INDRA will witness the joint participation of Army, Navy and Air Force of both countries, thus, a major milestone in the bilateral relations between India and Russia.

Exercise Yudh Abhyas - 2017

- ❖ Exercise Yudh Abhyas is one of the largest joint running military training and defence cooperation between India and USA. This will be the 13th edition of the joint exercise hosted alternately between the two countries.
- ❖ This exercise was started in the year 2004 under US Army Pacific partnership programme.
- ❖ The Exercise Yudh Abhyas 2017 will be held from September 14-27 at Joint Base Lewis-McChord in the US.
- Over 200 Indian soldiers from the Gorkha Rifles will take part in the military exercise.





India Refuses to Sign Bali Declaration-2017

- ❖ World Parliamentary Forum on Sustainable Development was held at Nusa Dua in Indonesia (6-7 September 2017). It discussed about achieving the 2030 Agenda through Inclusive Development. Finally, the conclusions were adopted as Bali Declaration (2017).
- ❖ An Indian parliamentary delegation, led by Speaker Lok Sabha Sumitra Mahajan attended the meeting. At the end of Proposals India dissociated itself from the Bali declaration as Bali Declaration specifically mentioned a reference to violence in Rakhine state of Myanmar, from where 125,000 Rohingyas have fled to Bangladesh.
- ❖ India argued that specifying a particular country is unjustified as this Forum is focused on SDGs (Sustainable Development Goals) and inclusive development for all countries based on cooperative and collaborative approach to achieve the 2030 Agenda for the world.

Bharat Petroleum upgraded as 8th Maharatna Company

- Government running Bharat Petroleum Corporation (BPCL) is all set to become a Maharatna company. The oil marketing company is at present a Navaratna firm.
- ❖ The decision to elevate BPCL to Maharatna status was taken by a panel headed by the Cabinet secretary.

Eligibility criteria for Grant of Maharatna status

- ✓ It should be A Navratna Company
- ✓ Listed on Stock exchange
- ✓ It should have an average annual turnover of 25000 crores for last 3 years.
- ✓ It should have an average annual net worth of 15000 crores for last 3 years.
- ✓ It should have an average annual net profit after tax of more than 5000 crores for last 3 years.
- ✓ It should have the significant Global presence.







- ❖ At present, there are seven Maharatna companies Bharat Heavy Electricals, Coal India, GAIL (India), Indian Oil Corporation, NTPC, Oil and Natural Gas Corporation and Steel Authority of India.
- ❖ After becoming a Maharatna firm, the board of BPCL will get enhanced powers which will help in expansion of operations, both in India and abroad.

CGWB enters into MoA with IIS Bangalore for development of ground water flow models

- ❖ Central Ground Water Board (CGWB), Ministry of Water Resources, RD & GR has entered into an Memorandum of Agreement (MoA) with Indian Institute of Science (IISc), Bangalore for 'Development of ground water flow models and preparation of aquifer management plans for parts of Karnataka'.
- * This model being developed as a part of the aquifer mapping and management programme will render better understanding of existing groundwater scenarios, predicting response of groundwater system to various stress conditions expected to arise in the future and developing effective management plans.

Government releases no fly list rules for unruly passengers

- Ministry of Civil Aviation released India's first three-tier rules for a national nofly list in an effort to keep blacklisted people off airlines to ensure safety and check unruly behaviour.
- * There are three categories of unruly flyers from the perspective of the no-fly list

Level 1	Unruly physical gestures, verbal harassment and unruly inebriation	Ban – upto 3 months
Level 2	Physically abusive behaviour (pushing, kicking, hitting, and inappropriate touching)	Ban – upto 6 months
Level 3	Life threatening behaviour – assaults, damage to aircraft systems etc.	Ban – min. 2 years





FAME- India scheme gets another six-month extension

- ❖ The Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME)-India scheme
- ❖ The Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME)-India scheme is set to receive an extension of six month. The scheme was under the Ministry of Heavy Industries and Public Enterprises.
- ❖ The Phase 1 of the scheme was effective from April 2015, to March 2017, but had received six-month extension till end-September 2017. Now it has been extended by another six months up to March 31, 2018.

About FAME-India

- ❖ The FAME-India scheme is proposed to be implemented over a period of 6 years, till 2020, wherein it is intended to support the hybrid/electric vehicles market development and its manufacturing eco-system to achieve self-sustenance at the end of the stipulated period.
- ❖ The scheme has four focus areas, technology development, demand creation, pilot projects and charging infrastructure.

Army to induct women into military police

- ❖ The government has decided to recruit women jawans into the Army's Corps of Military Police (CMP) for investigating gender specific crimes. The proposal is being finalised for the induction of about 800 women with a yearly intake of 52.
- ❖ However, induction of women into the Army's Combat Arms could still be a long way as the Army's Corps of Military Police is only a support arm. The Army has four such combat arms infantry, mechanised infantry, armour and artillery

India-Sri Lanka joint maritime naval exercise- SLINEX 2017

- ❖ The seventh edition of India-Sri Lanka joint maritime naval exercise SLINEX 2017 was held near Vishakhapatnam (Andhra Pradesh) in Bay of Bengal.
- SLINEX is aimed to develop greater interoperability and close cooperation between the two navies.
- ❖ SLINEX series of bilateral maritime exercises were initiated in 2005 and since then three successful engagements have been conducted.
- ❖ This exercise was paused till 2011 due to security situation in Sri-Lanka. The third exercise in the series, SLINEX-13 was conducted off Goa in November 2013.





DIKSHA portal - National Digital Infrastructure for Teachers

- ❖ The Union Ministry of Human Resource and Development (HRD) have launched DIKSHA Portal (diksha.gov.in) for providing digital platform to teachers.
- ❖ It will serve as National Digital Infrastructure for Teachers. Through this portal, all teachers across nation will be equipped with advanced digital technology.
- ❖ It will aid teachers to learn and train themselves for which assessment resources will be available. It will help teachers to create training content, profile, in-class resources, assessment aids, news and announcement and connect with teacher community.

NITI Aayog sets up task force on employment, exports

- NITI Aayog sets up task force on employment, exports to provide a major thrust to job creation by enhancing India's exports, an Expert Task Force has been constituted with the NITI Aayog Vice Chairman, Dr. Rajiv Kumar, as its Chairperson.
- ❖ While the Indian workforce has high aspirations, a majority of the workers are still employed in low-productivity, low-wage jobs in small, micro and own-account enterprises. An urgent and sustained expansion of the organized sector is essential to address India's unemployment and under-employment issue.
- Members of the Task force include CEO, NITI Aayog, Secretary, Department of Commerce, Secretary, Department of Industrial Policy and Promotion, Secretary, Department of Economic Affairs, Secretary, Ministry of Textiles.

125th Year of Swami Vivekananda Chicago Address



- ❖ This year marks the 125th year of Swami Vivekananda speech at Chicago.
- ❖ Swami Vivekananda represented India and Hinduism at the Parliament of the World's Religions (1893). This was the first World's Parliament of Religions and it was held from 11 to 27 September 1893. Delegates from all over the world joined this Parliament.





❖ He begins his speech with salutation, "Sisters and brothers of America!". To these words he got a standing ovation from a crowd of seven thousand, which lasted for two minutes. When silence was restored he began his address. He finished his speech with appeal "Help and not Fight," "Assimilation and not Destruction," "Harmony and Peace and not Dissension."

Union Government reconstitutes six Committees of Cabinet

- ❖ The Union Government reconstituted six Committees of the Cabinet after recent ministry reshuffle.
- ❖ Under the Government of India Transaction of Business Rules (TBR), 1961 the Cabinet Committees are formed. They are not mentioned in the Constitution. To reduce the workload of the government these committees were formed.
- * Railway Minister Piyush Goyal and Dharmendra Pradhan were included as permanent members of the Cabinet Committee on Economic Affairs (CCEA).
- ❖ At present six committees of Cabinet are there. They are as follows:

Appointments Committee of the Cabinet (ACC) - It is responsible for all appointments of higher ranks in the Central Secretariat, Public Enterprises, Public Enterprises and Financial Institutions.

Cabinet Committee on Accommodation (CCA) - It is responsible for the allotment of accommodation for various top positions in the Government of India.

Cabinet Committee on Economic Affairs (CCEA)- It deals with the activities pertaining to the economics of the country.

Cabinet Committee on Parliamentary Affairs (CCPA) - It looks into the matters related to the progress of government business in the Parliament of India.

Cabinet Committee on Security (CCS) - It is one of the most important committees in India, it looks into the matters of defence expenditures and National Security.

Cabinet Committee on Political Affairs - It is the most powerful committee in India. It takes important decisions of the country.

❖ All Committees of Cabinet except Cabinet Committee on Parliamentary Affairs (CCPA) is chaired by Prime Minister. CCPA is headed by Union Home Minister.

FSSAI launches online platform for food inspection, sampling

- ❖ To bring in transparency in food safety inspection and sampling, food regulator Food Safety and Standards Authority of India (FSSAI) launched a nationwide online platform named as FoSCoRIS.
- ❖ The web-based 'FoSCoRIS' system (Food Safety Compliance Through Regular Inspections and Sampling) will help verify compliance of food safety and hygiene standards by food businesses as per the government norms.





- The new system will bring together all key stakeholders -- food businesses, food safety officers (FSOs), designated officers, state food safety commissioners -- on a nation-wide IT platform and data related to inspection, sampling and test result data will be shared seamlessly by all the officials.
- ❖ The system will ease out the process of sample collection, make it transparent and traceable and controls the quality of compliances.
- * This system will give a clear picture to the FSSAI on the real-time basis and helps eliminate any discrepancy, hence inspection is accountable.
- ❖ In every State a Nodal officer was appointed to integrate State Food Authority with FSSAI.

Dairy Processing & Infrastructure Development Fund

- ❖ The Union Government sets up the Dairy Processing & Infrastructure Development Fund.
- ❖ The project will focus on building an efficient milk procurement system by setting up of chilling infrastructure & installation of electronic milk adulteration testing equipment, modernization of processing infrastructure and procuring faculties for Value Added Products for the Milk Producer Companies.
- * The project will be implemented by National Dairy Development Board (NDDB) and National Dairy Development Cooperation (NCDC).

Indian Citizenship- Chakmas and Hajongs

❖ Indian government has decided to give indian citizenship to 1 lakh Chakma and Hajong refugees, who has been living in India for more than 50 years.



- ❖ These people took refuge from East Pakistan (Bangladesh) and settled in north eastern states of India
- ❖ Earlier in 2015, the supreme court has given an order asking the government to consider giving citizenship to Chakma and Hajong refugees.





- Some social organisations in Arunachal Pradesh were showing defiance for giving citizenship to refugees stating that such act would alter the state's democratic set up. The refugee population is high in Arunachal Pradesh
- Even though the refugees are getting an Indian citizenship there is no provision for providing land property holding rights as in case given to Arunachal Pradesh's Scheduled Tribes.
- In 1960's during construction of dam in Chittagong hill region of Bangladesh, nearly 5000 Chakma and Hajong people migrated to India as refugees. Now their population has increased to 1 lakh.
- Chakmas people belongs to Buddhist religion.
- ❖ Hajong people belongs to Hindu religion.

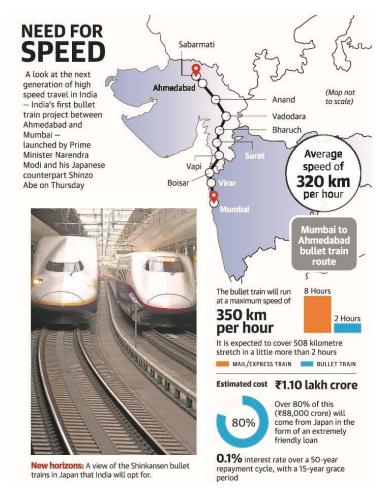
Official state visit of Shinzo Abe

- ❖ Shinzo Abe, the Prime Minister of Japan made an official state visit to India.
- Prime Minister Narendra Modi addressed the 12th India-Japan Annual Summit with Prime Minister Shinzo Abe by his side after launching the Ahmedabad-Mumbai bullet train project
- ❖ The estimate cost of the project is Rs. 1.10 lakh crore. Out of which, Japan's credit contribution is around 88,000 crore rupees with mere 0.1% interest rate.
- Among the total track distance, 92% will be on elevated flyover; 21 kilometre in underground tunnel; 7 kilometre will be under sea.
- ❖ The project is expected to be accomplished by 2022. The project would reduce 550 kilometre journey to 2 Hrs.

India - Japan Annual Summit

- Prime Minister Narendra Modi addressed the 12th India-Japan Annual Summit with Prime Minister Shinzo Abe by his side after launching the Ahmedabad-Mumbai bullet train project.
- ❖ PM Modi positioned India as a global manufacturing hub and urged Japanese investors to enhance their presence in this country.





❖ Four locations have been finalized for development of Japanese Industrial Townships in Gujarat, Rajasthan, Andhra Pradesh & Tamil Nadu.

Advanced Towed Artillery Gun System

Advanced Towed Artillery Gun System (ATAGS) is a indigenous artillery gun which has set a new world record in range by hitting targets at a distance of 48 km.







- ❖ It is being jointly developed by the DRDO and the private sector.
- ❖ The development is being done through a consortium based model, similar to that adopted for the Pinaka multi-barrel rocket launch system.
- ❖ The Army has not inducted any new artillery gun since the Bofors in the 1980's.
- ❖ Last year, India signed a contract for 145 M-777 Ultra-Light Howitzers from the US.

Sardar Sarovar Dam - India's largest dam

- Sardar Sarovar Dam on the river Narmada world's second biggest concrete gravity dam after America's Grand Coulee - has been inaugurated by PM Narendra Modi on September 17.
- ❖ The Sardar Sarovar dam is intended to provide drinking water and irrigation facilities for 18 lakh hectares of land.
- ❖ The dam's reservoir is spread 214 kilometers upstream in the Madhya Pradesh and Gujarat.



- ❖ The Sardar Sarovar Project is one of the largest water resources project of India covering four major states Maharashtra, Madhya Pradesh, Gujarat and Rajasthan.
- ❖ The project will also help take water from the dam to the Indo-Pak border in Gujarat to fulfil the water needs of BSF soldiers.





Indian start-up Kheyti wins prestigious award in Israel

- ❖ Indian startup 'Kheyti,' that provides technological solutions to farmers, has won the MassChallenge Israel a global competition that promotes and accelerates high-impact, early-stage entrepreneurs.
- Kheyti has won the prestigious award in Israel for developing an affordable modular greenhouse that aims to give farmers a steady and dependable income.
- ❖ The Startup Company has created many project models for providing higher yields in low water usage and providing sustainable income to farmers.

Google Tez payment service

❖ Google has launched a new mobile application called 'Tez' for electronic cash transactions.

Tez- An Introduction

- ❖ Google Tez, a new digital payments app based on NPCI's UPI platform, was launched in India.
- ❖ The Hindi term 'Tez' means 'Speed'.
- ❖ The application will be compatible across different mobile platforms and support most of the smart phones in India
- ❖ Google Tez is built on UPI and allows for payments directly via bank accounts.
- ❖ There are no transaction charges for financial transactions carried over in the application.

Cabinet approves Revamped Khelo India Programme

- ❖ The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved the revamped Khelo India programme.
- ❖ The Programme aims at mainstreaming sport as a tool for individual development, community development, economic development and national development.

Salient features

- ❖ An unprecedented Pan Indian Sports Scholarship scheme, which would cover 1,000 most talented young athletes each year across select sports disciplines.
- ❖ Each athlete selected under the scheme shall receive an annual scholarship worth Rs. 5.00 lakh for 8 consecutive years.
- ❖ The Programme aims to promote 20 universities across the country as hubs of sporting excellence, which would enable talented sports persons to pursue the dual pathway of education and competitive sports.





- The Programme also aims at creating an active population with healthy lifestyle.
- ❖ The Programme would cover about 200 million children in the age group of 10-18 under a massive national physical fitness drive.

Youth from Jammu & Kashmir Participating in Operation Sadbhavana call on the President

- ❖ Group of youth from the Gurez Valley of Jammu & Kashmir, participating in Operation Sadbhavana
- ❖ The Sadbhavana tour was organised by the 109 Infantry Brigade of the Indian Army with an aim to develop trust among and reignite the minds of youth towards national integration.
- ❖ As part of this tour, these youth are visiting Srinagar, Delhi, Lansdowne, Rishikesh and Dehradun.

"Hunar Haat" to be organised in Puducherry

- ❖ Ministry of Minority Affairs is organising "Hunar Haat" at Puducherry, one of renowned centre of art & culture, from 24th to 30th September, 2017.
- ❖ It aims to provide market and opportunity to master artisans belonging to the Minority communities.
- ❖ Master artisans from 16 states would be showcasing their traditional talent.
- Artisans will bring for display and sale, a wide variety of traditional and rare Handicraft and Handloom items

Scorpene submarine delivered

- ❖ The states owned Mazagon Dock Shipbuilders Ltd. (MDL) of Mumbai handed over the first of the indigenously built Scorpene submarines, Kalvari, to the Navy.
- Scorpene's superior features such as
 - √ Advanced acoustic silencing techniques
 - ✓ Low-radiated noise levels
 - √ Hydro-dynamically optimised shape
 - ✓ The ability to launch a crippling attack on the enemy using precision guided weapons





First LPG Panchayat launched in Gujarat

- Ministry for Petroleum and Natural Gas has launched the Pradhan Mantri LPG Panchayat initiative in Gujarat.
- it also aims to make 1 lakh LPG panchayat across India.
- ❖ The LPG Panchayat is an interactive communication platform aimed at
 - ✓ Educating rural LPG users about proper safety precautions to be taken while using LPG.
 - ✓ Its benefits to the environment.
 - ✓ Its effect on Women Empowerment and Health.

Char Dham Highway Project

- ❖ National Green Tribunal (NGT) has cleared the proposal for Char Dham Highway project.
- ❖ The Char Dham highway development project is an initiative to improve connectivity to the Char Dham pilgrimage centres in the Himalayas i.e., Gangotri, Yamunotri, Kedarnath and Badrinath.
- ❖ Notably, these four ancient pilgrimages sites in Uttarakhand are known as Chota Char Dham to differentiate them from the bigger circuit of modern day Char Dham sites namely Badrinath, Dwarka, Puri and Rameswaram.
- ❖ The projects objective is to provide roads with paved shoulders, make provisions for landslide mitigation and other road safety measures, which will provide all weather road connectivity for pilgrims and for movement of defence forces.

VASTRA 2017

- ❖ VASTRA 2017 is an international textiles and apparel fair organized by the Union Ministry of Textiles in Jaipur.
- ❖ The international fair was started in 2012 and it is considered as the place for disseminating technology in textile sector.

Indian Coast Guard's interceptor boat launched

- ❖ Indian Coast Guard's (ICG) new interceptor boat V-409 was launched in Mangaluru, Karnataka by Bharathi Defence and Infrastructure Limited (BDIL).
- The boats are being constructed as per billion contract signed between Ministry of Defence and BDIL which will give boost to coastal security and national security.





PM launches Pradhan Mantri Sahaj Bijli Har Ghar Yojana

- Prime Minister Launched "Pradhan Mantri Sahaj Bijli Har Ghar Yojana" (Saubhagya) to provide last mile electricity connectivity to all rural and urban households.
- ❖ It will provide subsidy on equipment like transformers, meters and wires.
- ❖ The government has set the target of providing 24X7 power for all by 2019.

Saubhagya Scheme

It covers,

- * Environmental upgradation by substitution of Kerosene for lighting purposes
- Improvement in education services
- Better health services
- ❖ Enhanced connectivity through radio, television, mobiles, etc.
- Increased economic activities and jobs
- Improved quality of life especially for women

Economic Advisory Council revived

- ❖ Niti Aayog member Bibek Debroy has been picked as the chairman of the Council
- Niti Aayog's principal advisor and former Finance Secretary Ratan Watal has been picked as its member-secretary.
- Members of the Council also includes
 - ✓ Economist Surjit Bhalla,
 - ✓ National Institute of Public Finance and Policy Director Rathin Roy
 - ✓ Indira Gandhi Institute of Development Research Prof Ashima Goyal
- ❖ The Economic Advisory Council (EAC)-PM is an independent body to give advice on economic and related issues to the Government of India, specifically to the Prime Minister.

Brahmaputra's floating lab

- Central Biotechnology department planned to setup a Floating lab Called as B 4 (Brahmaputra Biodiversity and Biology Boat) in the Brahmaputra River
- It aims to protect the Majuli River Island in the Brahmaputra River.
- ❖ This Floating Laboratory Planned to do Research on how the dams, Climate Change and Human intervenes affecting the River ecosystem.
- ❖ Majuli is the world largest river island. Located in Brahmaputra river, Assam.





Indian Navy Commissions Water Jet Fast Attack Craft

- ❖ INS Tarasa, a Water Jet Fast Attack Craft was commissioned into the Indian Navy at the Mazagon Naval Dockyard, Mumbai.
- ❖ INS Tarasa is the fourth and last of the follow-on Water Jet FAC's built
- The first three ships of the class were,
 - ✓ INS Tarmugli
 - ✓ INS Tihayu
 - ✓ INS Tillanchang
- ❖ These ships are an upgrade of the Car Nicobar class Fast Attack Crafts with the Indian Navy.
- ❖ INS Tarasa has been named after the picturesque island in the Andaman and Nicobar archipelago in Bay of Bengal.
- ❖ It will be used for missions like coastal and off-shore surveillance, EEZ Patrol, law enforcement. It will also conduct non-military missions such as Search and Rescue, Humanitarian Assistance and Disaster Relief.

Government launches Divyang Sarathi Mobile Application

- The Ministry of Social Justice and Empowerment launched the beta version of 'Divyang Sarathi'-The accessible and comprehensive mobile application for easy dissemination of information to 'Divyangjans'
- ❖ The mobile app aims to empower Divyangjans by providing them easier and convenient access to information pertaining to
 - ✓ Schemes,
 - ✓ Scholarships,
 - ✓ Institutional support systems, jobs and other crucial information.
- ❖ The app is an integral part of ICT component of Accessible India Campaign (Sugamya Bharat Abhiyan).
- ❖ It is also compliant with principles of UNCRPD for universal access and the provisions of the Rights of Persons with Disabilities Act, 2016 which mandates that all information to be made available in accessible form.
- ❖ The unique features of the mobile application 'Divyang Sarathi' are its audio notes (text-to-voice conversion software) embedded in the application and the adjustable font size which can be altered as per the user's requirement.

Home Ministry launches PENCIL

❖ The Home Ministry launched a portal called PENCIL - (Platform for Effective Enforcement for No Child Labour) which is developed by the Ministry of Labour and Employment.





- ❖ The portal creates a robust implementing and monitoring mechanism for enforcement of the legislative provisions of National Child Labour Project. (NCLP).
- ❖ National Child Labour Project-NCLP is central sector scheme launched in 1988 for rehabilitation of child labour.
- Since the subject of labour is in the concurrent list, the enforcement of the policy depends on respective state governments.
- ❖ The PENCIL is an electronic platform that aims at involving governments of Centre, State, District, civil society and the general public in achieving the target of child labour free society.
- ❖ The portal has a component of child tracking system and complaint Corner.

INTERNATIONAL

Ninth BRICS Summit - Xiamen, China

- ❖ The ninth edition of the BRICS Summit happened in Xiamen, China on September 3,4 and 5. China hosted the summit for the second time since 2011.
- ❖ BRICS leaders, Brazilian President Michel Temer, Russian President Vladimir Putin, Chinese President Xi Jinping, South African President Jacob Zuma, and Indian Prime Minister Narendra Modi participated in the summit.
- ❖ Prime Minister Narendra Modi raised the issue of terrorism in the context of being an impediment to economic growth and prosperity
- ❖ PM Modi and other BRICS leaders, through consensus, had adopted the Xiamen Declaration, which named Pakistan-based terror groups Lashkar-e-Taiba and Jaish-e-Mohammad in the segment on counter-terrorism and "concerns" on security situations.
- China's position on naming these terror groups in the final declaration is considered, given the fact that Beijing had nixed the very idea of reference to Pakistan-based terror groups at the Goa BRICS Summit in 2016 hosted by India.
- ❖ The Conference was centered around the theme of 'Stronger Partnership for a Brighter Future'.
- ❖ The 2018 BRICS summit is next the tenth annual BRICS summit. The summit will be held in Johannesburg, South Africa

Key Points of Declaration

- ❖ The leaders affirmed their commitment to intensify dialogue and experience sharing and support compiling a compendium on fighting corruption in BRICS countries.
- ❖ The leaders committed to enhance communication and cooperation in international fora on issues concerning international peace and security to





- address global security challenges and threats faced by the international community
- * The BRICS nations condemned unilateral military interventions, economic sanctions and arbitrary use of unilateral coercive measures in violation of international law and universally recognized norms of international relations.
- ❖ The leaders strongly condemned terrorist attacks resulting in death to innocent Afghan nationals
- ❖ The leaders called upon the international community to establish a genuinely broad counter-terrorism coalition and support the UN's central coordinating role in this regard

Five banks of BRICS nations sign pact for credit lines

- ❖ Five banks of the BRICS Bank Cooperation Mechanism have agreed to establish credit lines in the national currencies and cooperate on credit ratings.
- The agreement was signed as a part of the 2017 BRICS (Brazil, Russia, India, China and South Africa) summit in China's Xiamen city in which leaders of the five countries participated.
- * "Brazilian Development Bank (BNDES), Vnesheconom bank of Russia, Export-Import Bank of India, China Development Bank and Development Bank of South Africa (DBSA) are those five banks made this agreement.

Credit Lines

- ❖ A Credit Line is an arrangement between a financial institut;ion, usually a bank, and a customer that establishes a maximum loan balance that the lender permits the borrower to access or maintain.
- ❖ The borrower can access funds from the credit line at any time, as long as he does not exceed the maximum amount set in the agreement and as long as he meets any other requirements set by the financial institution, such as making timely minimum payments.

3rd Eastern Economic Forum meeting: Vladivostok, Russia

- The Third edition of Eastern Economic Forum meeting was held at Vladivostok, Russia. On behalf of India, External affairs minister Sushma Swaraj attended the meeting.
- ❖ The Eastern Economic Forum is considered as the biggest international communication platform for cooperation between businesses leaders and senior government representatives from Russia, the Pacific Region and the Association of Southeast Asian Nations (ASEAN).





Colombia's FARC transforms into a political party

- ❖ Colombia's former FARC rebel group has relaunched as a political party, after disarming to end a half-century civil conflict. The party named as, The Common Alternative Revolutionary Force.
- ❖ The name controversially retains the same acronym (FARC) and the revolutionary spirit of the Marxist rebel group, which fought a bloody 52-year campaign against Colombia's government before signing a peace deal last year.

India, Japan to step up defence cooperation

- ❖ India and Japan stepped up their cooperation in defence opening up multiple new windows that range from training the Indian Navy personnel on antisubmarine warfare to joint counter-terrorism exercise between the two armies in 2018.
- ❖ Japan also proposed to dispatch it P1 maritime patrol aircraft along with a warship for the Malabar series of trilateral exercise involving India, US and Japanese navies in 2018.
- ❖ Furthermore, Indian Navy has been invited to the mine counter-measure training by the Japanese Maritime Self Defence Force.
- ❖ These were decided at the two-day India-Japan Annual Defence Ministerial Dialogue in Tokyo.
- ❖ This dialogue gains importance because, Japanese Prime Minister Shinzo Abe in the past urged about the creation of an "Arc of Democracy" in the Indian Ocean region, to tackle China's "String of Pearls" strategy. India and Japan had slowly transformed their defence relations, repositioning themselves as military allies in the last few years as China became assertive in the Indian Ocean region.

India's UJALA scheme launched in Melaka, Malaysia

- ❖ Energy Efficiency Services Limited (EESL), under Ministry of Power, Government of India has launched UJALA (Unnat Jyoti by Affordable Lighting for All) Scheme in the State of Melaka, Malaysia.
- ❖ The successful Indian model of UJALA scheme has become a sought-after example for the different nations of the world and will now be implemented in Melaka to extend programme benefits to people of the region.
- ❖ In India, UJALA scheme was launched on 1 May 2015. The scheme was announced as "Domestic Efficient Lighting Programme (DELP)", urging the people to use LED bulbs in place of incandescent bulbs, tube lights and CFL bulbs as they are more efficient, long lasting and economical in their life cycle duration.





Across Barriers-International Business Women's Summit

- ❖ The South Asian Women Development Forum (SAWDF) would be organising "Across Barriers-International Business Women's Summit" from 11 to 12 September 2017 at Kathmandu, Nepal.
- ❖ This event aims to encourage partnerships between Women entrepreneurs from the SAARC and ASEAN member countries.

About SAWDF (South Asian Women Development Forum)

- ❖ The South Asian Women Development Forum, is incorporated under the Organization Registration Act 1977, is an autonomous, non-profit organization based in Kathmandu, Nepal.
- ❖ SAWDF was granted the status of SAARC Recognized Body at the 18th SAARC Summit which was held in Kathmandu on 24th of November 2014. It is the first and only SAARC Recognized Body working on gender issues.

Sahara Forest Project takes-off in Jordan



❖ In a bid to turn the desert land into a flourishing farmland, Jordan has launched Sahara forest project, which will use innovative technology to produce food using, sun and sea water. Earlier this project was successfully applied in Qatar.

2nd Edition of India-Afghanistan Strategic Partnership Council Meeting

- ❖ The 2nd meeting of the Strategic Partnership Council between India and Afghanistan, set up under the bilateral Strategic Partnership Agreement 2011, was held in New Delhi.
- External Affairs Minister of India, Smt. Sushma Swaraj, and Foreign Minister of the Islamic Republic of Afghanistan H.E. Salahuddin Rabbani co-chaired the meeting.





❖ The Strategic Partnership Council discussed a range of bilateral, regional and global issues of mutual interest. The outcomes of the meeting are four Joint Working Groups in the areas of political and security issues; trade, commerce and investment; development cooperation; and human resource development, education and culture were reviewed.

First women president of Singapore

- ❖ Halimah Yacob is elected as a president of Singapore without opposition. She was former speaker of Singapore parliament
- ❖ She is the first women to adorn the high seat in Singapore.



Proposed India-Russia new sea route from Chennai to Vladivostok of Russia

❖ India proposed new sea route to connect Russia with India. This maritime route connecting India with Northeast Asia and Western Pacific region. The proposed direct Sea route will take place between India's Chennai port to Russia's Vladivostok port.





- ❖ This shipping link would enable to transfer cargo between Chennai and Vladivostok in 24 days in comparison to over 40 days currently taken to transport goods from India to Far East Russia via Europe.
- This move is viewed as a competition to China's ambitious Maritime Silk Route (MSR) connecting Asia with Africa.



New Jane Austen 10-pound notes in circulation in UK

- A new polymer 10-pound note featuring one of the world's most famous female novelists, Jane Austen, entered circulation in the UK.
- ❖ Apart from the Queen, whose portrait is on all U.K. currency, Austen is only the third woman to feature on a modern-day British banknote, after medical innovator Florence Nightingale and social reformer Elizabeth Fry. She was chosen after a campaign for more female representation.







NASA's Cassini spacecraft ends 20-year-long epic journey

- ❖ After 20 years in space, NASA's famed Cassini spacecraft made its final death plunge into Saturn on September 15.
- ❖ The spacecraft has sent 4.5 lakh photographs and millions of data to the Earth in nearly 20 years of its research.



- ❖ The Cassini-Huygens, commonly called Cassini mission was a collaboration between NASA, the European Space Agency (ESA), and the Italian Space Agency (ASI) to send a probe to study the planet Saturn and its system, including its rings and natural satellites. Cassini was launched on October 15, 1997
- Operators deliberately made Cassini, the first spacecraft to orbit Saturn, dive into the gas giant to ensure that the planet's moons remain pristine for future exploration.

U.S. resumes processing of H-1B visas

- ❖ The U.S. Citizenship and Immigration Services (USCIS) resumed premium processing on Monday for all H-1B visa petitions subject to the Fiscal Year (FY) 2018 cap.
- ❖ On March 3, 2017 the U.S. Citizenship and Immigration Service announced on their website that starting from April 3, 2017 they would temporarily suspend premium processing for all H-1B visa petitions until further notice

H-1B visa

❖ The H-1B is a visa in the United States under the Immigration and Nationality Act, which allows U.S. employers to employ foreign workers in specialty occupations.

Duration of stay

❖ The duration of stay is three years, extendable to six years.





❖ The maximum duration of the H-1B visa is ten years for exceptional United States Department of Defense project related work.

India to hold first BIMSTEC Disaster Management exercise

- ❖ India is going to conduct first BIMSTEC Disaster Management Exercise- 2017 (DMEx-2017) from October 10-13, 2017.
- ❖ It will be conducted by National Disaster Response Force (NDRF)
- ❖ The purpose of the exercise is to provide platform for sharing Best Practices on all aspects of Disaster Risk Reduction (DRR), strengthening regional response and coordination for Disaster Management among BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) member countries.
- ❖ Delegates from all seven nations of BIMSTEC grouping, including India, Bangladesh, Bhutan, Myanmar, Nepal, Sri Lanka and Thailand are participating in BIMSTEC DMEx-2017.

India-Russia to collaborate on Bangladesh nuclear plant

- ❖ India is collaborating with Russia to build Rooppur nuclear power plant in Bangladesh.
- ❖ It will be the first initiative under an India-Russia nuclear deal to undertake atomic energy projects in third countries. It will also be India's first atomic energy venture abroad.
- * Rooppur Nuclear project is Bangladesh's first atomic energy project. It is being built with Russia's help near Dhaka.
- ❖ After commissioning of two units, each with capacity of 1200 MWs, Bangladesh will be third South Asian country after India and Pakistan to harness atomic energy for energy purpose.

Anti-nuclear treaty

- ❖ With the north korea's nuclear crisis looming large 51 world countries signed the Anti-nuclear treaty which is a multilateral disarmament treaty in the 72nd united nations general assembly.
- ❖ So far 122 countries have adopted this treaty.it is notable that among them none of them are nuclear powers.
- ❖ This treaty will come into force when 50 countries have ratified it.
- None of the 9 countries that possess nuclear weapons had signed the treaty.





Iran unveiled its ballistic missile

- ❖ Iran's Revolutionary Guard has unveiled its latest ballistic missile capable of reaching much of the Middle East including Israel.
- ❖ The unveiling came during a military parade in Tehran that commemorated the 1980's Iran-Iraq War.
- ❖ It was the first time that the Khorramshahr missile, with a range of 2,000km was displayed in public.

Pakistan Navy Successfully fires Anti-Ship Missile

- * "Shaheen"-the Joint Air Exercise of China and Pakistan Air Force
- ❖ With the Joint Air Exercise concluded recently Pakistan Navy has launched "AM-39 Exocet" Anti-Ship Missile successfully from the North Arabian Sea.
- It belongs to air to sea level Missile class.

Merkel wins 4th term as Chancellor

- Germany's present Chancellor Angela Merkel clinched a fourth term in Germany's election
- ❖ Ms. Merkel's conservative bloc emerged as the largest parliamentary party with 33.2% of the vote
- ❖ The anti-immigration Alternative for Germany (AfD) won 13.1% of the vote, a result that will bring a far-right party into Parliament for the first time in more than half a century.

Electoral system of Germany

- The German Basic Law stipulates that Bundestag elections are to take place every four years and that one can vote, and be elected, upon reaching the age of 18
- ❖ Germans elect their members of parliament with two votes. One vote is for a direct candidate, who ought to receive a plurality vote in their election district.
- ❖ The second vote (considered as more important) is to elect a party list in each province as established by its respective party caucus.

Pakistan, Russia hold joint military drill

- ❖ The joint exercise DRUZBA 2017 between special forces of Pakistan and Russia Armies started in Minralney Vody, Russia.
- ❖ The joint exercise will focus on counter-terrorism operations, hostage and rescue, cordon and search operation.





❖ The joint exercise will enhance and further strengthen military ties between the two countries.

ECONOMY

Project Insight

* "Project Insight" has been introduced by the Income Tax department to collect information through social media for preventing black money and nab tax evasion.



- ❖ Project Insight is an initiative by the Income-Tax Department to mine big data from social media to scrutinize potential tax evaders.
- * This plan is designed to verify the income of one person and the details mentioned in the social media. Person exhibiting expensive spending, disproportionate to their income will be scrutinized by the Income Tax Department.
- ❖ The central government has already made it mandatory to link the Aadhar number with the PAN number to easily track the income and property details of everyone. It has now expanded its surveillance activity through the 'Project Insight'.
- ❖ The tax department has signed a contract with L&T Infotech Limited for its implementation.

SBI unveils bond index at LSE

- ❖ The State Bank of India has introduced the FTSE SBI Bond Index series in partnership with the global index provider FTSE 100,
- ❖ The bank hopes it would give investors from India, U.K. and globally, tools to analyse India's government bond market, and drive growth in this market.





India proposed a global pact on Trade Facilitation in Services

- ❖ India at the 'Asia-Europe Meeting' (ASEM) Economic Ministers' meeting in Seoul, called for tapping the full potential of the services sector to boost the world economy.
- For that India has proposed a global pact on 'Trade Facilitation in Services' (TFS)
- ❖ India has already submitted to the World Trade Organisation (WTO) a proposal for the TFS-aimed at easing norms including those related to the movement of skilled workers across borders for short-term work, to in turn increase the global services trade growth.

Government imposed Countervailing duty on some Chinese steel products

- ❖ The government has imposed countervailing duty for 5 years on imports of certain flat steel products from China to guard domestic players from imports that are subsidised by exporting nations.
- ❖ The decision to impose the duty was taken by the finance ministry after the Directorate General of Anti-Dumping and Allied Duties (DGAD) found that despite sufficient demand in India and capacities, the domestic industry has lost sales opportunities, which is a direct consequence of subsidised imports from China.

What is Countervailing duty?

❖ Countervailing duty is an additional import duty imposed on imported products (by the importing country) when such products enjoy benefits like export subsidies and tax concessions in the country of their origin (ie., where it is produced and exported).

SCIENCE AND TECHNOLOGY

IRNSS-1H launch unsuccessful

- ❖ ISRO's launch of the much-anticipated IRNSS-1H satellite failed on August 31. The navigation satellite was launched on the Polar Satellite Launch Vehicle C-39 (PSLV C-39).
- ❖ The Indian Regional Navigation Satellite System (IRNSS) has an operational name of NAVIC NAVigation with Indian Constellation.
- ❖ NAVIC is an autonomous regional satellite navigation system with constellation of seven satellites. IRNSS-1A , the first satellite of the NAVIC series was launched in 2013. IRNSS-1H is designed to replace IRNSS-1A, whose life time expired recently.





IRNSS satellites at a glance

Satellite	Launch Date	Launch Vehicle
IRNSS-1A	1 July 2013	PSLV-C22
IRNSS-1B	4 April 2014	PSLV-C24
IRNSS-1C	15 October 2014	PSLV-C26
IRNSS-1D	28 March 2015	PSLV-C27
IRNSS-1E	20 January 2016	PSLV-C31
IRNSS-1F	10 March 2016	PSLV-C32
IRNSS-1G	28 April 2016	PSLV-C33
IRNSS-1H	31 August 2017	PSLV-C39

IRNSS and Surveillance

- ❖ IRNSS satellites are designed to provide information services within the Indian territory, and upto a distance of 1500 kms around India's borders. The satellite system will greatly aid disaster management activities. The satellite system is capable of monitoring objects on ground and water.
- ❖ IRNSS provides accurate information about freight carriers and vehicles on road, ships and submarines. The system can be used for disaster management, coordination of vehicles using voice commands, civilian and security based surveillance.
- NavIC will reduce India's dependency on foreign satellites for GPS data
- ❖ IRNSS can be used for Disaster Management, Mobile Phones Coordination of v, Monitoring of Geographical Maps, Car, Motor Vehicle (DX) Driving Directly.
- ❖ This failure is the first for the PSLV since 1994 when the rocket became operational. On 20 September 1993 a PSLV D1, the first developmental flight rocket, failed during the launch of IRS-1E (Indian Remote Sensing Satellite).





❖ The rocket had been successful in 39 consecutive missions, delivering 48 Indian and 209 foreign satellites to space

World's biggest and powerful X-ray laser gun unveiled in Germany

- ❖ The world's largest and powerful X-ray laser- European X-ray Free Electron Laser (XFEL) unveiled in Hamburg, Germany.
- ❖ The XEFL is series of 3.4-kilometer tunnels up to 38 meters underground near the city of Hamburg.
- ❖ It has the capacity to generate extremely intense laser flashes, at a rate of 27,000 per second. It can capture images of individual atoms in a few millionths of a billionth of a second.
- ❖ It is employed in the study of photosynthesis process by which molecules capture light and turn it into energy during photosynthesis.
- ❖ Also, scientists will attempt to recreate the conditions deep inside the sun and produce film-like sequences of viruses and cells.

Study identifies climatic risks for dengue outbreaks

- ❖ A new study undertaken in India has identified the climatic risks for dengue disease outbreaks by evaluating the relationship of climatic factors in the spread of the disease in different climatic zones of the country.
- ❖ The research was jointly conducted by the University of Liverpool, Hyderabadbased Indian Institute of Chemical Technology, and National Institute of Pharmaceutical Education and Research (NIPER), Guwahati.
- ❖ The team studied the changes in a climatic factor of the dengue virus by taking into account daily and monthly mean temperatures in the states of India.
- ❖ The research found that climatic conditions play an important role in incubation period of Dengue virus. Lower temperatures between 17 to 18 degree centigrade result in longer incubation period, thereby leading to decreased virus transmission. However, with increasing temperatures, incubation period become shorter because of enhanced metabolism of the mosquito.
- ❖ With an increase in temperature from 17 to 30 degrees centigrade, dengue transmission increases fourfold, the study found.
- It has been found that incubation period is the shortest during the monsoon season in most states and therefore there is an enhanced risk of dengue during this time.





CSIR scientists developed artificial leaf create hydrogen fuel from sunlight, water

- ❖ CSIR Scientists have developed an artificial leaf that absorbs sunlight to generate hydrogen fuel from water, an advance that may provide clean energy for powering eco-friendly cars in the future.
- ❖ The ultra-thin wireless device mimics plant leaves to produce energy using water and sunlight. When visible light strikes the semiconductors, electrons move in one direction, producing electric current. The current almost instantaneously splits water into hydrogen.
- ❖ At present, hydrogen is produced from fossil fuels by steam reforming and in this process emits a large amount of carbon di-oxide (CO2) a green house gas that promotes global warming

CERT-In issues alert on 'Locky Ransomware'

- ❖ The Indian Computer Emergency Response Team (CERT-In) issued an alert about spread of a new malicious software 'Locky', which is being circulated through spam messages that can potentially lock computers and demand ransom for restoring access to users.
- * Ransomware is basically type of malicious software designed to block access to computer system until sum of money is paid.
- This 'Locky' could be the third major ransomware attack this year after Wannacry and Petya that crippled thousands of computers, including those of multinational corporations.

Hubble captures image of pitch-black planet







❖ Astronomers have found that the exoplanet WASP-12b reflects almost no light, making it appear essentially pitch black. This discovery sheds new light on the atmospheric composition of the planet, about 1,400 light years away from the earth.

DRDO successfully tests air-to-air missile Astra

- ❖ India's indigenously developed Astra Missile was successfully field tested. The missile was jointly developed by Defence Research and Development Organisation (DRDO) and Indian Air Force(IAF).
- ❖ 'Astra' is Beyond Visual Range Air-to-Air Missile (BVRAAM).
- ❖ The missile weighs 154 kilograms and can destroy targets ranging from 20 km to 110 km.
- ❖ Astra is planned to be inducted in Indian Air Force by 2018.

Scientists for first time observe Optical polarisation

- Scientists for first time have observed Optical polarisation phenomenon (polarised light emitted by rapidly rotating stars) after it was predicted by Indian astrophysicist and Nobel laureate Subrahmanyan Chandrasekhar 70 years ago.
- Optical polarisation phenomenon is a measure of the orientation of the oscillations of a light beam to its direction of travel.
- ❖ The phenomenon was observed using High Precision Polarimetric Instrument (HIPPI), world's most sensitive astronomical polarimeter to detect polarised light from Regulus, one of brightest stars in night sky about 79 light years away.

India joins quantum computing race

❖ The Department of Science and Technology (DST) is planning to fund a project to develop quantum computers.

Quantum Mechanics

- ❖ A quantum computer, still largely a theoretical entity, employs the principles of quantum mechanics to store information in 'qubits' instead of the typical 'bits' of 1 and 0
- Qubits work faster because of the way such circuits are designed, and their promise is that they can do intensive number-crunching tasks much more efficiently than the fastest comparable computers.





A chemical technology that can clean lake water

- Scientists treated Hussain Sagar lake water with 'CV technology' and found that the water met the WHO and Indian standards.
- ❖ This chemical treatment is faster than a sewage treatment plant that uses a biological method of treatment.
- The researchers claimed an improvement in BOD (means lower level of BOD) level and 12 quality parameters in the treated water, significant improvement in the total dissolved solids and reduction in metal ions.
- ❖ BOD (BIOLOGICAL OXYGEN DEMAND)
 - > It's a measurement of amount of dissolved oxygen needed by aerobic biological micro organism to decompose the organic matter present in the water.
 - > Its level indicates the quality of water or pollution level of the water.
 - > lower level of BOD indicates the water's suitability to sustain the life dependent on oxygen.

NASA's asteroid-bound spacecraft swings by Earth

- NASA's asteroid-chasing spacecraft Osiris-Rex successfully swung by Earth to put it on desired trajectory towards near earth asteroid Bennu using Earth's gravity.
- ❖ The OSIRIS-REx (Origins, Spectral Interpretation, Resource Identification, Security, Regolith Explorer) mission was launched in September 2016 for studying 101955 Bennu, a carbonaceous asteroid.
- ❖ It is NASA's first asteroid sampling mission.

India's First Electric Bus

- ❖ India's First Electric bus service has started in Rohtang, tourist spot in Himachal Pradesh.
- ❖ National Green Tribunal (NGT) has ordered to ban the petrol & diesel vehicles in the fragile environmental areas.
- ❖ It aims to curb the melting of Himalayan glaciers due to carbon emission.

ENVIRONMENT

Labeo filiferus -New species of edible fish found in Pampa river, Kerala

* Researchers have discovered new species of edible freshwater fish in Pampa river in Pathanamthitta, Kerala. It has been named as Labeo filiferus and belongs to Labeo genus.





- The fishes in the Labeo genus are widely distributed in the inland waterbodies of India, Pakistan, Nepal, Bangladesh, Sri Lanka, Burma, Malaysia, tropical Africa and Syria.
- As many as 31 species of Labeo are reported to be present in India, with L.rohita, commonly known as Rohu, extensively used in aquaculture.
- ❖ The new species that belongs to the Labeo genus is only the second one to be reported from Kerala. The only other Labeo species reported from Kerala is L.dussumieri.

Smart-E transport service launched



- ❖ E-rickshaws under the brand name of "SmartE" were launched in Gurugram, Haryana by Ministry of Road, Transport and Highways.
- ❖ The E-rickshaws have been manufactured in India under Make in India scheme and are fitted with GPS and tracking system.
- ❖ It has established strategic partnerships with the Haryana government and Delhi Metro Rail Corporation.
- ❖ The major objective of the scheme is to provide the last mile transport connectivity in the area and meaningful self-employment for marginalised youths in next 4-5 years and to reduce the carbon emissions.

Zoological Survey of India releases first compendium of Animal species in Indian Sundarbans

- * Zoological Survey of India (ZSI) published first of its kind compendium titled 'Fauna of Sundarban Biosphere Reserve in Indian Sundarbans'.
- ❖ Sunderbans is part of United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage site. It forms part of Ganga-Brahmaputra delta across 9,630 sq. km, distributed among 104 islands. It has largest tidal halophytic mangrove forest in the world.





About ZSI

- ❖ ZSI is India's apex organization on animal taxonomy. It was established in 1916.
- ❖ Its main objective is to promote the survey, exploration, research, and documentation on various aspects of animal taxonomy in the Indian subcontinent.

Environment Ministry launches "Wood is Good" Campaign

- ❖ The Union Ministry of Environment and Forests and Climate Change (MoEFCC) has launched "Wood is Good" Campaign under Partnership for Land Use Science.
- ❖ It was launched on side-lines of two-day conference on "Sustainable landscapes and forest ecosystems: Theory to Practice" in New Delhi.
- * The purpose of campaign is to promote wood as climate-friendly resource and substitute to materials like steel and plastic as it is carbon neutral unlike others materials which leave carbon footprint in their production.

Mouse deer reintroduced into Amrabad forest, Telengana



- ❖ For the first time in our country, the Telengana Forest Department reintroduced the 'mouse deer' into the forests of Nallamalla in Amrabad Tiger Reserve. And, once they are found to have adapted to the wild vegetation, they will be released into the wild with the procedure repeated for the remaining mouse deer breed in the Nehru Zoological Park, adding to the biodiversity of the Tiger Reserve besides increasing the mouse deer population.
- ❖ Mouse Deer is also called 'Spotted Chevrotain', it is one of the endangered species usually found in deciduous and evergreen forests of the country.
- ❖ Earlier, The Nehru Zoological Park, in association with LaCONES and the Central Zoo Authority, Delhi, had undertaken conservation breeding programme of mouse deer in the Nehru Zoological Park in March-2010 and, after six years, the population of mouse deer has increased to 172.





Snow leopard upgraded to 'vulnerable' status

❖ The elusive snow leopard long considered an "endangered" species has been upgraded to "vulnerable" by the International Union for Conservation of Nature.



But experts warned that the new classification does not mean they are safe.

International Snow Leopard & Ecosystem Forum - Bishkek, Kyrgyzstan

International Snow Leopard & Ecosystem Forum was held at Bishkek, Kyrgyzstan.





- ❖ This high-level event aims to further strengthen the range countries ongoing effort to protect the snow leopard and to galvanize international support for their ambitious plan of securing 20 snow leopard landscapes by the year 2020.
- ❖ The Snow Leopard (Panthera uncia) is listed as globally Endangered on the IUCN Red List and the species is listed on Appendix I of CITES (Convention on International Trade in Endangered Species of Fauna and Flora), which prohibits international trade in the animal and its parts and products.
- ❖ The Snow Leopard inhabits parts of 12 countries: Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyzstan, Mongolia, Nepal, Pakistan, Russia, Tajikistan and Uzbekistan. All snow leopard range countries are parties to CITES with Tajikistan in the process of joining.

Lakshadweep island Parali I vanished completely

- One of the uninhabited islands that is a part of Lakshadweep has vanished due to coastal erosion.
- ❖ Parali I island, part of Bangaram atoll, which had an area of 0.032 sq.km in 1968 has been completely vanished due to coastal erosion. It is one of the uninhabited islands that are a part of Lakshadweep islands.



❖ The researchers recommended checking the feasibility of a bio protection strategy using mangroves, in addition to the conventional physical protection measures to protect the islands.

STATE

In a first, Assam extends AFSPA term on its own

❖ Assam government on September 1, 2017 extended the term of the Armed Forces (Special Powers) Act (AFSPA) and declared the state as a Disturbed Area for six more months.





- ❖ This is the first time the state government has extended the AFSPA and Disturbed Area provision on its own under Section 3 of the Armed Forces (Special Powers) Act, 1958. In the past, AFSPA in the state was always extended by the Centre.
- ❖ Assam has remained a "disturbed area" under provisions of the AFSPA for nearly 27 years, with the Centre invoking the AFSPA on November 27, 1990, following incidents of violence by the ULFA activists.
- Presently AFSPA is enforced in the 6 states of North East (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram and Nagaland) and Jammu and Kashmir.
- ❖ It was lifted in Tripura in May 2015.

Special Purpose Vehicle(SPV) formed for Smart City project

- The Puducherry government has formed a Special Purpose Vehicle (SPV) named "Puducherry Smart City Development Limited" to implement the Smart City project.
- * Registered as a limited company under the Companies Act 2013, the SPV will have the Government of Puducherry and the Municipality as its promoters having 50:50 equity shareholdings.
- ❖ It has a 16-member director board consisting of Chief Secretary Manoj Parida as the Chairman and Secretaries to Finance, Local Administration Department, Tourism, Information Technology, Power among others as directors. The SPV will also appoint a Chief Executive Officer.
- ❖ AFD, the French bilateral development agency, will provide technical assistance and capacity building to help the SPV in preparing and implementing the smart city project.

Operation "ZUBAIDA"

- * Rajasthan Anti-Terrorism Squad has busted he most powerful illegal arms cartel.
- ❖ It's an operation to seize the fake arms licences and illegal weapons & to arrest the offenders.

India's first Hyperloop project to come up in Andhra Pradesh

❖ India's first Hyperloop project will come up in Andhra Pradesh, connecting its city centres, Vijayawada and Amaravati. Andhra Pradesh Economic Development Board (APEDB) has inked memorandum of understanding (MoU) with Hyperloop Transportation Technologies (HTT) for developing this project.





What is Hyperloop?

❖ A Hyperloop comprises a sealed tube or system of tubes through which a pod may travel free of air resistance or friction conveying people or objects at optimal speed and acceleration.

PERSONALITIES, AWARDS AND EVENTS

Rajiv Mehrishi appointed as Comptroller and Auditor General of India

- Senior IAS officer Rajiv Mehrishi was appointed as the next Comptroller and Auditor General (CAG) of India. He will succeed Shashi Kant Sharma who is going to demit office on September 25, 2017.
- ❖ He was the 13th CAG of India.
- ❖ The Comptroller and Auditor General (CAG) of India is an authority, established by the Constitution under Constitution of India/Part V Chapter V/Sub-part 7B/Article 148, which audits all receipts and expenditure of the Government of India and the state governments, including those of bodies and authorities substantially financed by the government.
- ❖ The CAG is also the external auditor of Government-owned corporations and conducts supplementary audit of government companies, i.e., any non-banking/ non-insurance company in which Union Government has an equity share of at least 51 per cent or subsidiary companies of existing government companies.
- ❖ The CAG is also the head of the Indian Audit and Accounts Department, the affairs of which are managed by officers of Indian Audit and Accounts Service.
- ❖ The CAG is mentioned in the Constitution of India under Article 148 151.
- ❖ The CAG is ranked 9th and enjoys the same status as a judge of Supreme Court of India in Indian order of precedence.

Sunil Arora to be new the Election Commissioner





- ❖ Former IAS officer Sunil Arora is all set to take charge as the Chief Election Commissioner on India.
- ❖ After Nasim Zaidi retired as Chief Election Commissioner in July, there was a vacancy in the poll panel.
- * The Chief Election Commissioner heads the Election Commission of India, a body constitutionally empowered to conduct free and fair elections to the national and state legislatures.
- ❖ The President of India (based on a recommendation from incumbent Govt of India) appoints the Chief Election Commissioner. Conventionally, senior-most Election Commissioner is appointed as CEC.
- ❖ He has tenure of six years, or up to the age of 65 years, whichever is earlier. He enjoys the same official status, salary and perks as available to judges of the Supreme Court of India and High court. The Chief Election Commissioner can be removed only through impeachment by the Parliament.
- Chief Election Commissioner of India is usually a member of the Indian Civil Service and mostly from the Indian Administrative Service. It is very difficult to remove the authority of the Chief Election Commissioner once elected by the president, as two-thirds of the Lok Sabha and the Rajya Sabha need to vote against him for disorderly conduct or improper actions.

Konkani author Mahabaleshwar Sail gets Saraswati Samman award

- ❖ Eminent Konkani writer Mahabaleshwar Sail has been honored with the Saraswati Samman 2016 for his novel Hawthan.
- ❖ Best known for his work, 'Paltadcho Munis', which inspired a film by the same name, Sail is a renowned bi-lingual writer based in Goa. He has four Marathi dramas and seven Konkani novels to his credit. He has also written short stories and a novel in Marathi.
- ❖ Published in 2009, 'Hawthan' is a work of fiction presenting the cultural map of the traditional potter community of Goa.
- The Saraswati Samman is an annual award for outstanding prose or poetry literary works in any of the 22 Indian language listed in Schedule VIII of the Constitution of India.
- ❖ It is named after an Indian goddess of learning and is considered to be among the highest literary awards in India.
- ❖ The Saraswati Samman was instituted in 1991 by the K. K. Birla Foundation.

Rajaswa Gyan Sangam, 2017- New Delhi

* Rajaswa Gyan Sangam-2017 a joint Conference of the two Boards -The Central Board of Direct Taxes (CBDT) and the Central Board of Excise & Customs





(CBEC) was held on 1st and 2nd of September, 2017 at New Delhi. It is the Second event after its formation in 2016.

- ❖ The Rajaswa Gyan Sangam, 2017 was attended by the senior officers of CBDT and CBEC. For the first time ever, senior officers of the Finance Department of the States and Union Territories attended this two-day event.
- ❖ The objective of the Conference is to enable a two-way communication between the policy-makers and the senior officers in the field offices with a view to increase revenue collection and facilitate effective implementation of law and policies in key result areas.

Ahmedabad gets India's first World Heritage City certificate

- Ahmedabad in Gujarat was formally accorded the status of India's first World Heritage City with UNESCO. The honour makes the walled city of Ahmedabad the first city in India, and the third in Asia, to be on the list.
- ❖ On July 8, India secured the nomination for Ahmedabad on UNESCO's World Heritage list during the 41st Session of World Heritage Committee.
- ❖ India now has a total of 36 World Heritage Inscriptions 28 cultural, 7 natural and 1 mixed site.
- ❖ India is second after China in terms of number of world heritage properties in ASPAC (Asia and Pacific) region, and overall seventh in the world.
- ❖ Founded in the 15th century, the walled city of Ahmedabad, on the eastern bank of the Sabarmati River, presents a rich architectural heritage. It has 28 Archaeological Survey of India's centrally protected monuments.
- * Present UNESCO Director General Irina Bokova (From 2009 to till date)

New chairman of Press Trust of India- Viveck Goenka

- ❖ Viveck Goenka, chairman and managing director of Express Group was elected as Chairman of Press Trust of India (PTI). N Ravi, former editor-in-chief of The Hindu was elected vice-chairman.
- ❖ Press Trust of India (PTI) is the largest news agency in India. It is headquartered in New Delhi and is a non-profit cooperative organisation. It provides news coverage and information of the regions in India. Press Trust of India is the only news agency in South Asia which operates its own communication satellite, an INSAT satellite, to broadcast news and information.





Smart Agriculture Conclave - New Delhi

- Department of Bio-Technology (DBT), Ministry of Science & Technology organised 'Smart Agriculture Conclave' on 30th 31st August, 2017 at New Delhi.
- ❖ DBT in partnership with UK's Biotechnology and Biological Sciences Research Council (BBSRC) and Research Councils UK (RCUK) India organized this conclave.
- As an outcome of this meeting, The Union Ministry of Science and Technology is planning to create FarmerZone, a collective open-source data platform for smart agriculture by using biological research and data to improve lives of small and marginal farmers.
- ❖ The FarmerZone will include a MarketZone where farmers can directly sell their produce which can be picked up by directly from the farm.

National Nutrition Week: 1st to 7th September

- ❖ The National Nutrition Week will be observed throughout the country from 1st to 7th September.
- ❖ The Food and Nutrition Board of Ministry of Women & Child Development arranged this event.
- ❖ The basic objective of this annual event is to intensify awareness generation on the importance of nutrition for health which has an impact on development, productivity, economic growth and ultimately National development.
- ❖ The theme of the National Nutrition Week for 2017 is "Optimal Infant & Young Child Feeding Practices: Better Child Health".

UNESCO International Literacy Prizes 2017

Since 1967, UNESCO International Literacy Prizes have rewarded excellence and innovation in the field of literacy. Currently there are two UNESCO International Literacy Prizes.

1. The UNESCO King Sejong Literacy Prize

❖ Established in 1989, with the support of the Government of the Republic of Korea. It gives special consideration to the development and use of mother-tongue literacy education and training.

2017 winners:

- Centre for the Study of Learning and Performance Canada
- We Love Reading Jordan





2. The UNESCO Confucius Prize for Literacy

❖ The UNESCO Confucius Prize for Literacy, established in 2005, with the support of the Government of the People's Republic of China. It gives special consideration to literacy amongst adults in rural areas and out-of-school youth, particularly girls and women.

2017 winners:

- AdulTICo Program -Colombia
- The Citizens Foundation- Pakistan
- FunDza South Africa

Surya Kiran-2017: Indo-Nepal joint Military exercise

- ❖ The 12th edition of India-Nepal joint military exercise- Surya Kiran initiated at Nepal Army Battle School (NABS) in Saljhandi, Nepal.
- ❖ The 14-day exercise (from 3 to 16 September 2017) focused on skills required counter-terrorism and counter-terror, forest fighting and natural disaster management operations.
- The Surya Kiran series of bilateral military exercises are conducted bi-annually, alternatively in India and Nepal. It is largest exercise in terms of troop's participation in series of military training exercises undertaken by India with various countries.
- The 11th edition of the joint exercise was held in Pithoragarh in Uttarakhand.

10th Global Agriculture Leadership Summit: New Delhi

- Global Agriculture Leadership summit is an annual event organised by ICFA (Indian Council for Food and Agriculture). The tenth summit was held at New Delhi. This summit focussed on recent issues faced by the agriculture sector.
- ❖ Indian Council of Food and Agriculture is launched as an apex body to act as think tank, policy research, trade facilitation, development catalyst and monitoring centre for food and agriculture sector and to serve as global platform for partnerships.

Regional Conference on Good Governance and Replication of Best Practices - Goa

❖ The Department of Administrative Reforms & Public Grievances (DARPG), Ministry of Personnel, Public Grievances & Pensions, Government of India organised Regional Conference on Good Governance and Replication of Best Practices in collaboration with Government of Goa.





- ❖ The Conference is an effort to create a common platform to share experiences in the formulation and implementation of citizen centric governance, improved public service delivery through e-Governance, transparent, accountable and citizen-friendly effective administration. Delegates from 25 States/UTs (of Southern, Central, Eastern, North Eastern Regions and 5 other States/UTs) participated in the conference.
- ❖ The theme for the Conference is "Good Governance and Replication of Best Practices".

Y.C.modi - Director General of NIA

❖ Y.C. Modi, a senior IPS officer is appointed as Director-General of the National Investigation Agency (NIA)

National Investigation Agency

- ❖ National Investigation Agency is a central agency established by the Indian Government to combat terror in India. It acts as the Central Counter Terrorism Law Enforcement Agency
- ❖ Parent agency: Ministry of Home Affairs

Nigerian lawyer gets top UN peace prize

- ❖ A Nigerian lawyer who helped secure the release of more than 100 schoolgirls kidnapped by Boko Haram was awarded one of the United Nations' top prizes.
- ❖ Zannah Mustapha was given the annual Nansen award for his "crucial mediating" role as well as his work helping children affected in conflict-riven and impoverished northeast Nigeria.

Boko Haram at a glance

- o Founded in 2002
- o Initially focused on opposing Western education
- o Launched military operations in 2009 to create Islamic state
- o Designated a terrorist group by US in 2013
- o Declared a caliphate in areas it controlled in 2014
- Most territory now recaptured by army

CNR Rao selected for 2017 Von Hippel Award

- ❖ Eminent Scientist and Bharat Ratna Prof C.N.R. Rao was awarded 2017 Von Hippel Award.
- ❖ It is the highest international prize in materials research & He is first Indian and first Asian to win this honour.
- ❖ The award will be presented to Prof Rao for his interdisciplinary contributions to development of novel functional materials, including nanomaterials





graphene, superconductivity, 2D materials and colossal magnetoresistance at Boston in November 2017. It is the highest international prize in materials research

Scientists awarded Shanti Swarup Bhatnagar Prize

❖ The winners of the annual Shanti Swarup Bhatnagar Prize, India's highest science award are,

Biological Sciences

- ❖ Deepak Nair, Regional Centre for Biotechnology, Faridabad.
- Sanjeev Das, National Institute of Immunology, Delhi.

Chemical Sciences

Naresh Patwari, Indian Institute of Technology Bombay.

Earth Sciences

Suresh Babu, Vikram Sarabhai Space Centre, Thiruvananthapuram.

Engineering Services

❖ Aloke Paul and Neelesh Mehta, Indian Institute of Science, Bengaluru.

Medical Sciences

- Amit Dutt, Tata Memorial Centre, Mumbai.
- ❖ Deepak Gaur, Jawaharlal Nehru University, New Delhi.

Physical Sciences

- Nissim Kanekar, Tata Institute of Fundamental Research, Pune.
- Vinay Gupta, National Physical Laboratory, Delhi.

Shanti Swarup Bhatnagar Prize (SSB)

- ❖ The Shanti Swarup Bhatnagar Prize for Science and Technology (SSB) is a science award in India given annually by the Council of Scientific and Industrial Research (CSIR) for notable and outstanding research, applied or fundamental, in biology, chemistry, environmental science, engineering, mathematics, medicine and Physics.
- ❖ It is the most coveted award in multidisciplinary science in India.
- ❖ The award is named after the founder Director of the Council of Scientific & Industrial Research, Shanti Swarup Bhatnagar. It was first awarded in 1958.





Pluto Mountains named after Tenzing Norgay, Edmund Hillary



- Two mountain ranges on Pluto have been named after Tenzing Norgay and Edmund Hillary respectively by the International Astronomical Union.
- ❖ These are the first geological features on the planet to be named following the close flyby by the New Horizons spacecraft in July 2015.
- ❖ This is the first set of official names of surface features on Pluto to be approved by the Working Group for Planetary System Nomenclature of the International Astronomical Union (IAU), the internationally recognised authority for naming celestial bodies and their surface features.
- ❖ Tenzing Montes and Hillary Montes are mountain ranges honouring Tenzing Norgay (1914-1986) and Sir Edmund Hillary (1919-2008), the Indian/Nepali Sherpa and New Zealand mountaineer who were the first to reach the summit of Mount Everest and returned safely.

SPORTS

US Open 2017

Men Singles - Rafael Nadal won championship



* Rafel Nadal won the US Open Men singles championship by defeating South Africa's Kevin Anderson in the Finals.





❖ It is the 16th title of Nadal's grand slam history. At the same time, he won two grand slam titles in this year. Earlier he won French Open. Moreover, it is the third title of US Open for him.

Women Singles - Stephens won championship



USA's Sloane Stephens won the championship title by defeating her counterpart Madison Keys in the US Open Women's singles final. It is to be noted that it was her first grand slam title.

About US Open Tennis

❖ The United States Open Tennis Championships is a hard court tennis tournament. Since 1987, the US Open has been chronologically the fourth and final tennis major comprising the Grand Slam each year; the other three, in chronological order, are the Australian Open, the French Open and Wimbledon. The US Open is held annually, starting on the last Monday in August, and lasting for two weeks into September.

Life Time Achievement Award for Prakash Padukone

Indian Badminton Association has announced Life Time Achievement Award for badminton legend Prakash Padukone.







* This award has been given to him in recognition of the contributions he made to the badminton sport. The working committee of Indian badminton association has decided to give life time achievement award to those who are contributing for the development of the sport.

Los Angeles gets official go-ahead to host 2028 Olympics

International Olympic Committee Session was held in Lima, Peru. In this meeting, Los Angeles has received its formal go-ahead to host the 2028 Olympic Games, while 2024 Olympic Games has been awarded to Paris.

Rutuja clinches ITF women's tennis title

* Rutuja Bhosale won her second singles title of the season, defeating Hua-Chen Lee of Chinese Taipei.



Korea Open Super Series: PV Sindhu wins title

❖ P.V.Sindhu beat Nozomi Okuhara of Japan in the women's singles final at Korea Open Super series in Seoul



❖ P.V.Sindhu became the first Indian badminton player to lift the title in Korea Super series





Chitra and Lakshmanan bag gold

- ❖ Asian champions G. Lakshmanan and P.U. Chitra won gold in the athletics events of the fifth Asian Indoor and Martial Arts Games.
- **❖** Lashmanan won the men's 3,000m in 8:02.30s while Chitra took the women's 1,500m title in 4:27.77s.

Ajay Kumar Saroj won the men's 1,500m gold

❖ Asian champion Ajay Kumar Saroj won the men's 1,500m gold in the fifth Asian Indoor and Martial Arts Games, held at Turkmenistan.

India to host Asian Lawn Bowling

- ❖ India is set to host the Asian Lawn Bowling Championship and the 10th Asia U-25 Lawn Bowling Championship for the first time.
- The Bowling Federation of India has scheduled to conduct the event in New Delhi.

Axelsen wins his first Japan Open title

❖ World champion Viktor Axelsen of Denmark beat Malaysia's Lee Chong Wei to clinch his first Japan Open title.

57th National Open athletics championships

- Sarita P. Singh bagged the gold in women's hammer throw competition
- Tejinder Pal won the first place in the men's shot put
- ❖ G. Lakshmanan of Services won the men's 5000m gold
- ❖ L. Surya (Railways) won the women's 5000m gold

Asian Indoor Games

- India's Sourav Kothari won the Gold in billiards event at the Asian Indoor Games
- ❖ This is the first medal in cue sports in the year 2017.

Gold and silver in Tennis

- Vijay Sundar Prashanth and Vishnu Vardan clinched the Men's Doubles Gold in Tennis
- Ankita Raina & Prarthana Thombare clinched the Women's Doubles silver.





Bronze for Indians

- ❖ Indian chess players Tania Sachdev and Padmini Rout settled for bronze in the Women's Rapid Team event at the Asian Indoor Games.
- ❖ M. Karthikeyan and Diptayan Das settled for bronze in the men's u-23 section.

MISCELLANEOUS

World Coconut Day: September 2

- ❖ World Coconut Day was celebrated on September 2. In India this event is organized by Coconut Development Board.
- September 2 has been declared World Coconut Day by the Asian and Pacific Coconut Community (APCC) headquartered at Jakarta, Indonesia, to coincide with APCC's foundation day.
- ❖ The APCC is an inter-governmental organisation of 18- member countries mandated to promote, coordinate, and harmonise coconut developmental activities of the Asian Pacific region.
- ❖ All major coconut-growing countries, including India, are members of the APCC.
- ❖ 2017 World Coconut Day theme: Coconut for Family Nutrition, Health and Wellness

National Teacher's day: September 5

- ❖ Each year, Teacher's Day is celebrated on the 5th of September in India. Teacher's Day is marked in honour of Dr Sarvepalli Radhakrishnan, who was born on September 5, 1888.
- ❖ Dr Radhakrishnan was India's first vice president and second president. He was a great scholar, philosopher and Bharat Ratna recipient. Since 1962 the year he became president India has commemorated Dr Radhakrishnan's birth anniversary by paying tribute to its teachers and gurus on this day.

UN International Day for South-South Cooperation: 12 September

- South-South cooperation is a manifestation among peoples and countries of the South that contributes to their national well-being, their national and collective self-reliance and the attainment of internationally agreed development goals, including the 2030 Agenda for Sustainable Development.
- South-South Cooperation is a term used by policymakers and academics to describe the exchange of resources, technology, and knowledge between developing countries.







❖ In accordance to the cooperation, The Global South-South Development Expo 2017 will be hosted by the Republic of Turkey and will take place in Antalya from 27 to 30 November 2017.

India starts producing world's most expensive coffee

❖ India, Asia's third-largest producer and exporter of coffee, has started producing the world's most expensive coffee, made from the digested feces of civet cat, on a small scale in Coorg district of Karnataka.



❖ The Civet coffee, also called as Luwark coffee, is expensive because of uncommon method of producing such a coffee. It is produced from the coffee





beans digested by civet cat. The feces of this cat are collected, processed and sold.

National Hindi Divas: September 14

- ❖ The National Hindi Divas, an annual literary-day is observed on 14 September in Hindi speaking regions of India and other countries with Hindi Speaking Population.
- ❖ Observance of this day aims to propagate Hindi language and its cultural heritage and values.

Hurricane Irma hits Caribbean Islands

❖ The most powerful Hurricane Irma originated from Atlantic Ocean swept across the Caribbean islands at a wind speed of 185 mph.

International Literacy Day: September 8

- ❖ The International Literacy Day is celebrated on 8th September every year throughout the world.
- ❖ The UNESCO in its 14th Session in November, 1966, declared 8th September as the International Literacy Day.
- ❖ The key aspect of the observance of ILD is to mobilize public opinion in favour of struggle against illiteracy. ILD is a forum to disseminate information on literacy and raise the public awareness and the significance of literacy for individual and national development.
- ❖ 2017 Theme: Literacy in a digital world

First National Canine Seminar: Manesar (Gurugram), Haryana

- ❖ The first National Canine Seminar was held at Manesar (Gurugram), Haryana. The NSG (National Security Guard), popularly known as "The Black Cats" of the country is organizing this seminar.
- The seminar with an objective to discuss and deliberate on the techniques of dog training and strategies of deploying the dogs in Counter Terrorism.
- ❖ The theme of the National Canine Seminar is" Canine as Tactical Weapon in Fight against Terrorism"

World Ozone Day observed at Vizag zoo

❖ Indira Gandhi Zoological Park observed the World Ozone Day with a series of programmes on 16 September.





❖ An awareness program was conducted to highlight the effects of ozone layer depletion and best practices to protect ozone layer.

Indians use Zero since 3rd Century - Study reveals

- ❖ An Oxford University study has revealed that Indians used zero in the third century. The study is based on a manuscript dated back to 3rd Century.
- ❖ Scientists have discovered evidence of the symbol in the Indian Bakhshali manuscript − a mathematical text discovered in present day Pakistan's bakshali region. Carbon dating indicates that the manuscript dates from as early as the 3rd century, making it the world's oldest recorded origin of the zero symbol
- Previous studies predicted that Indians used zero since 8th century.

Underwater Octopus city found

- Scientists have discovered Octlantis an underwater site built entirely by octopuses where they communicate with each other by posturing chasing or colour changes.
- * Researchers from university of Illinois in the US found the site in the waters off the east coast of Australia.
- ❖ It is the second gloomy Octopus settlement found in the area and the first gloomy octopus site was found in Jarvis Bay off the east coast of Australia in 2009.

Vandalur zoo turns home for 19 new animals

- ❖ Arignar Anna Zoological Park in Vandalur bringing in 19 animals from Nandankanan Zoological Park in Bhubaneshwar.
- Animals like Water Monitors, Himalayan Black Bears will be new addition to the zoo.

International Day of Peace-21 September

- ❖ The International Day of Peace is observed around the world on 21 September. The UN General Assembly has declared this as a day devoted to strengthening the ideals of peace, both within and among all nations and peoples.
- ❖ The theme for 2017 is "Together for Peace: Respect, Safety and Dignity for All."
- * This year, the International Day of Peace focuses on engaging and mobilizing people throughout the world to show support for refugees and migrants.





World Tourism Day-27 September

- ❖ In 2017, the celebration of this World Tourism Day which is held in Doha (Qatar) focuses on how sustainable tourism can contribute to development.
- * Recognizing the importance of international tourism, the UN General Assembly proclaimed 2017-The International Year of Sustainable Tourism for Development.



Punjab National Bank, BSNL join hands for mobile wallet - Speedpay

- Punjab National Bank and state-run firm BSNL teamed up to roll out open mobile wallet "Speedpay".
- Speedpay wallet will operate like any other mobile wallet for paying bills; recharging phone besides its users will be able to deposit and withdraw money from authorised retail outlets. Also, Speedway users will be able to operate Internet banking services from the application.



India is now second largest market in the world with 120 crore mobile users.

World Ozone Day-16 September

September 16 was designated by the United Nations General Assembly as the International Day for the Preservation of the Ozone Layer.





- ❖ This year marks the 30th anniversary of the Montreal Protocol.
- ❖ As part of the anniversary celebrations, the Ozone Secretariat will launch a campaign "Ozone Heroes"
 - ✓ To celebrate the major accomplishments of the Montreal Protocol in protecting the ozone layer and the climate
 - ✓ Its new mandate to phase down climate-warming hydrofluorocarbons under the Kigali Amendment, adopted in 2016.

BACKGROUND

- ❖ Montreal Protocol is an international treaty designed to protect the ozone layer by phasing out the production of numerous substances that are responsible for ozone depletion, entered into force on 1 January 1989
- ❖ On 16th September 2009, the Vienna Convention and the Montreal Protocol became the first treaties in the history of the United Nations to achieve universal ratification.
- ❖ The Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer reached agreement at their 28th Meeting of the Parties on 15 October 2016 in Kigali (Kigali Amendment), Rwanda to phase-down hydrofluorocarbons (HFCs).
