

My Notes....

NATIONAL

10% QUOTA BILL BECOMES LAW

President Ram Nath Kovind gave his assent to the Constitution amendment that provides 10% reservation to the economically backward section in the general category in government jobs and education. With the Ministry for Law and Justice issuing a notification about the Constitution (103 Amendment) Act, 2019 receiving the Presidential assent, reservation for the economically weaker among general category is now law.

What

1. The Act amends Articles 15 and 16 of the Constitution — ensuring Fundamental Rights to a citizen — by adding a clause that allows the State to make “special provision for the advancement of any economically weaker sections of citizens”.
2. These provisions would **relate to “their admission to educational institutions, including private educational institutions, whether aided or unaided by the State, other than the minority educational institutions”.**
3. The Act makes it clear **that reservation would be “in addition to the existing reservations and subject to a maximum of 10% of the total seats in each category.**
4. Amendment of Article 16 stated, “Nothing in this article shall prevent the State from making any provision for the reservation of appointments or posts in favour of any economically weaker sections of citizens other than the classes mentioned in clause (4), in addition to the existing reservation and **subject to a maximum of 10% of the posts in each category.”**
5. Unlike other Constitutional Bills that require ratification from half of the State Assemblies, the Law Minister had clarified that this Act would not require such a process.
6. If the Parliament is amending the Fundamental Rights under Article 368, there is no obligation to go to the State Vidhan Sabha.
7. This was a part of the Constitution, as framed by them in 1949 and 1950. That needs to be appreciated, Law Minister had responded to the query during the Parliament discussions on the Bill.
8. The Bill that was passed by Parliament on January 9 has been challenged in the Supreme Court.

Who all are eligible for the quota?

1. People who earn less than Rs 8 lakh annually
2. People who have agricultural land below five acres
3. For availing the quota, a residential house should be below 100 square feet.
4. The residential plot should be below 100 yards in notified municipality.
5. The residential plot below 200 yards should be in a non-notified municipality area.

AADHAAR AMENDMENT BILL GETS LOK SABHA NOD

Lok Sabha passed a bill to amend the Aadhaar Act and two related laws which will allow individuals to offer voluntarily biometric ID as a means of identity verification for obtaining services such as opening bank account and procuring mobile phone connection. The Aadhaar and Other Laws (Amendment) Bill proposes changes in the Aadhaar Act, Indian Telegraph Act and the Prevention of Money Laundering Act to comply with a Supreme Court judgment pronounced on September 26 last year, in which it upheld the constitutional validity of unique identification project with certain

restrictions and changes. The compulsory use of Aadhaar-based KYC for mobile connections and bank accounts was prohibited by the apex court.

What

1. Aadhaar being a digital identity has removed the role of a middleman in a substantial measure whose basic role was cutting, fitting and setting.
2. The bill also gives a minor the option to opt out of the 12-digit identity scheme on attaining the age of 18 years.
3. It also provides for stiff penalties for violation of norms set for the use of Aadhaar.
4. Out of 130 crore people in the country as many as 123 crore people have reposed faith in Aadhaar.
5. The Aadhaar and Other Laws (Amendment) Bill 2018, moved by Prasad in the Lok Sabha, bans storing of core biometric information as well as Aadhaar number by service providers in cases of individuals who have voluntarily offered the national ID as a means of authentication.
6. It also makes it clear that anyone not offering Aadhaar cannot be denied any service, be it a bank account or a SIM card.
7. The bill seeks to amend the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016, the Indian Telegraph Act, 1885 and the Prevention of Money-laundering Act, 2002.
8. The legislation proposes telecom service providers, apart from using Aadhaar for authentication, can also leverage off-line verification, use of passport, or any other officially valid document or modes of identification as notified by the central Government.

Flashback

1. Aadhaar is a 12-digit unique identity number that can be obtained by residents of India, based on their biometric and demographic data.
2. The data is collected by the Unique Identification Authority of India (UIDAI), a statutory authority established in January 2009 by the government of India, under the jurisdiction of the Ministry of Electronics and Information Technology, following the provisions of the Aadhaar (Targeted Delivery of Financial and other Subsidies, benefits and services) Act, 2016.
3. Aadhaar is the world's largest biometric ID system.

FIRST EVER ANCIENT COUPLE FOUND IN HARAPPAN GRAVE

Archaeologists from the Deccan College Deemed University in Pune have discovered two skeletons, a young male and a female, buried at the same time in the **same grave with the man's face turned toward** the woman. It is the first anthropologically confirmed joint burial of a couple in a Harappan cemetery. The 'couple's grave' was found in the Harappan settlements excavated at Rakhigarhi in Harayana, some 150km northwest of Delhi.

What

1. Archaeologists said evidence points at the couple being buried simultaneously or about the same time. They could not find clear evidence if one was buried after the other.
2. Although many settlements and cemeteries have been discovered and investigated, no couple's burials at Harappan cemeteries have been reported till date.
3. Archaeologists who excavated this site found the two bodies placed in the supine position (face up) with arms and legs extended.
4. The discovery of couple's burial sites has often sparked interest among archaeologists. The recent findings by the Deccan College Deemed University

team have been published in the peer-reviewed international journal *ACB journal of Anatomy and Cell Biology*.

5. The excavation and analysis were undertaken by the department of archaeology of the Deccan College Deemed University and the Institute of Forensic Science, Seoul National University College of Medicine, Seoul, Korea.
6. Harappans believed in life after death which explains the pottery and bowls found in the graves. The pots may have contained food and water for the dead, a custom probably fuelled by the belief that the dead may need them after death.
7. In the past, a Harappan joint burial discovered at Lothal was regarded as a **'probable' instance of a widow's self-sacrifice** as an expression of the grief over her husband's death.
8. The manner in which the individuals had been buried—**with the male's face towards the female**—could commemorate lasting affection even after death.
9. **A couple's joint grave is not so rare in other ancient** civilizations. Yet, it is strange that they were not discovered in Harappan cemeteries till now.
10. The grave had burial pottery and a banded agate bead, probably part of a **necklace. It was found near the right collar bone of the woman's skeleton.**
11. Both skeletons were brought to the laboratory of the Deccan College for analysis **after the field surveys were completed. Each skeleton's sex was determined after studying the pelvic region.**
12. Their ages at the time of death have been estimated to be between 21 and 35 years **and the man's approximate height as 5 feet 6 inches and the woman's as 5 feet 2 inches.** Researchers could not find any evidence of trauma or lesions in the skeletons.



BILL TO REMOVE LEPROSY AS GROUND FOR DIVORCE

A bill seeking to remove leprosy as a ground for divorce was passed by Lok Sabha. Leprosy is being removed as a ground for divorce as it is now a curable disease **as against the earlier notion of it being incurable," Minister of State for Law P P Chaudhary** while replying to a discussion on 'The Personal Laws (Amendment) Bill, 2018.

What

1. The bill seeks to remove leprosy as a ground for divorce in five personal laws — Hindu Marriage Act, Dissolution of Muslim Marriages Act, Divorce Act (for Christians), Special Marriage Act and the Hindu Adoptions and Maintenance Act.
2. The Bill was introduced in Lok Sabha in August 2018. The Law Commission in its report had also recommended repeal of laws and provisions which were discriminatory against leprosy affected people.

3. Besides, India is a signatory to a UN Resolution which calls for elimination of discrimination against persons suffering from leprosy.
4. In 2014, the Supreme Court had also asked the Centre and the state governments to take steps for rehabilitation and integration of leprosy-affected people into the mainstream.

INDIA TAKES OVER OPERATIONS OF PART OF CHABAHAR

The Government of India took over the operations of a part of Shahid Beheshti Port, Chabahar in Iran during the Chabahar Trilateral Agreement meeting held there on the 24th of December 2018. The heads of Indian, Iranian and Afghanistan delegation jointly inaugurated the office of the Indian SPV - India Ports Global Chabahar Free Zone (IPGCFZ), at Chabahar. The physical take-over of the terminal area, cargo handling equipment and Office building was completed by 29th December 2018.

What

1. Commercial operations began at IPGCFZ with the arrival of a vessel. A Cyprus registered bulk carrier had arrived at Chabahar with 72458 MT of corn cargo.
2. The vessel MV MACHERAS berthed at the terminal at 0130 hrs on 30th December 2018. Thus IPGCFZ carried out its first cargo operation by discharging the imported cargo (ex Brazil) using pneumatic un-loaders.
3. This step marks the beginning of a long journey. India has written a history with its engagement in Chabahar and is now leading the regional cooperation and joint efforts to support land locked Afghanistan. This is the first time India will be operating a port outside its territories.
4. India started interacting with Iran on Chabahar Port around 2003 but a major push was received in the second half of 2014, resulting in the signing of an MOU between the two countries for the development of Chabahar Port in May 2015.
5. This MOU translated into a formal 10-year Contract for Equipping and Operating the Chabahar Port, which was executed on 23rd May 2016, during **Prime Minister Shri Narendra Modi's visit to Tehran** .
6. Since there were challenges in activation of the said contract, the foundation of an interim period contract was laid during the visit of His Excellency Dr. Hassan Rouhani, President of Islamic Republic of Iran to New Delhi in February 2018. Resultantly a formal short term Contract between the two sides was signed on 6th May 2018.
7. The efforts of Government of India were fully reciprocated by PMO, Islamic Republic of Iran and Iranian Embassy in India, Indian Embassy at Iran, Ministry of External Affairs, Ministry of Finance and Niti Aayog for guidance and continuous support in achieving this major milestone.

“WEB- WONDER WOMEN” CAMPAIGN

The Ministry of Women and Child Development, Government of India, has launched an **online campaign, '#www: Web- WonderWomen'**. The **Campaign** aims to discover and celebrate the exceptional achievements of women, who have been driving positive agenda of social change via social media. Through the campaign, the Ministry and the **Campaign's Partners** aim to recognize the fortitude of Indian women stalwarts from across the globe that have used the power of social media to run positive & niche campaigns to steer a change in society. This Campaign will recognize and acknowledge the efforts of these meritorious Women.

What

1. Women online, though niche, are a very powerful voice. #www: WebWonderWomen is a campaign to specially honour and encourage such voices that have in their own capacity driven a positive impact on social media platforms. **The Ministry is glad to partner with Breakthrough and Twitter India on this.**

2. The Campaign invites Entries via Nominations from across the world, as per the laid out criteria. Nominations are now open till 31st January, 2019.
3. Indian-origin women, working or settled anywhere in the world, are eligible for nomination. The shortlisted entries will be open for public voting on Twitter and the finalists will be selected by a specialized panel of judges.
4. Nominations have been invited in a large number of categories including Health, Media, Literature, Art, Sports, Environmental protection, fashion among others.

INDIAN MEDICAL COUNCIL BILL 2018 PASSED

The Lok Sabha on 31 December 2018 passed the Indian Medical Council (Amendment) Bill, 2018 that aims to run the scam-tainted Medical Council of India (MCI) through a panel of eminent professionals. With this, the government is looking at regulating the medical education in India in a qualitative and transparent manner. This bill supersedes MCI and the powers of the council have been vested in a Board of Governors (BoG).

What

1. The BoG has all eminent personalities and includes directors of All Indian Institute of Medical Sciences (AIIMS) and PGI Chandigarh.
2. This board will continue to perform till a Council is constituted, said J.P. Nadda, union minister of health and family welfare while piloting the Bill.
3. This bill has been issued so that medical education can be regulated in best manner, as MCI turned out to be massive failure.
4. In wake of allegations of corruption against the MCI office bearers and investigations into opaque accreditation to several medical colleges, the Supreme Court in May 2016 had directed the government to constitute an oversight committee.
5. The apex court had said that the committee would have the authority to oversee all statutory functions of MCI till the new legislation comes in.
6. In 2017, another Oversight Committee was set up with the approval of the Supreme Court after expiry of the one-year term of the first panel.
7. The second committee was chaired by V.K. Paul and included eminent doctors including those from AIIMS (Delhi), PGI Chandigarh and NIMHANS. In July 2018, the committee resigned citing instances of “non-compliance of their instructions by MCI”.
8. Thereafter, the government in September had brought an ordinance--Indian Medical Council (Amendment) Ordinance, 2018--to supersede MCI.
9. With the ordinance coming into force, the powers of the council were vested in a BoG. The powers of MCI were also switched from the elective council body to the BoG headed by V.K. Paul, member, NITI Aayog.
10. The BoG will continue to perform till a council is constituted in line with the provisions of the Act in one year.
11. As the oversight committee constituted by the government on direction of the Supreme Court had resigned en masse citing the reason that its instructions were not being followed, the government was forced to bring in this Bill as the MCI could not function. Thereafter the government came with an ordinance.
12. The related National Medical Commission (NMC) Bill 2017 that seeks to replace MCI with a National Medical Commission and overhaul the medical education system in India is still pending in the Parliament.

Flashback

1. The Medical Council of India was first established in 1934 under the Indian Medical Council Act, 1933.
2. The Council was later reconstituted under the Indian Medical Council Act, 1956 that replaced the earlier Act.

13. The government has been pushing the NMC Bill amid resistance from Indian Medical Association (IMA) and other sections.

NATIONAL ACTION PLAN ON DRUG ABUSE

The Ministry of Social Justice and Empowerment has drafted a five-year action plan for addressing the problem of drug and substance abuse in the country, dumping a long-pending draft policy on the matter. The National Action Plan for Drug Demand Reduction (2018-2023) aims to employ a multi-pronged strategy — involving education, de-addiction and rehabilitation of affected individuals and their families — to address the issue.

What

1. The move comes after the ministry withdrew the draft National Drug Demand Reduction Policy from the Cabinet. It had been pending for more than five-and-half years and was redrafted twice during the period. Instead of the policy, the ministry has now prepared a national action plan.
2. The plan focuses on preventive education, awareness generation, counselling, treatment and rehabilitation of drug-dependent people, besides training and capacity-building of service providers through collaborative efforts of the Centre, state and NGOs.
3. The ministry has planned several measures — including coordination with implementing agencies for controlling sale of sedatives, painkillers and muscle relaxant drugs, and checking online sale of drugs by stringent monitoring by cyber cell — under the national action plan.
4. It includes holding awareness generation programmes at schools, colleges, universities, workplaces and for police functionaries, paramilitary forces, law enforcement agencies, judicial officers and Bar council, among others.
5. The official said plans are also afoot for awareness generation through social, print, digital and online media, and engagement of celebrities, besides strengthening the national tollfree helpline for drug prevention.
6. It also calls for persuading principals, directors, vice chancellors of educational institutions to ensure that no drugs are sold within/nearby the campus.
7. Increasing community participation and public cooperation in the reduction of demand by involving Panchayati Raj institutions, Urban Local Bodies, Nehru Yuva Kendra Sangathan and other local groups like Mahila Mandals, self help groups etc is also planned.
8. The objective of the NAPDDR is to create awareness and educate people about the ill-effects of drugs abuse on the individual, family, workplace and the society at large in order to integrate them back into the society.
9. The ministry, in collaboration with the National Drug Dependence Treatment Centre (NDDTC) under the AIIMS, is also conducting a national survey on the extent and pattern of substance abuse.
10. A steering committee would be constituted under the chairmanship of the secretary, Social Justice Ministry, and with representatives from the Ministries of Health, Human Resource Development, Women and Child Development, Home Affairs, Skill development and Entrepreneurship, among others.
11. The committee will hold quarterly meetings to monitor effective implementation of the NAPDDR.
12. The ministry has also asked states and union territories to prepare action plan for ensuring facility of de-addiction centres in each district or as per prevalence of addiction and also establish separate and specialised de-addiction treatment centres.
13. As a part of the plan, module for re-treatment, ongoing treatment and post-treatment of addicts of different categories and age groups will be developed and database on substance use will be maintained, he said.
14. It also includes identification of vulnerable areas based on survey, skill development, vocational training and livelihood support of ex-drug addicts

through National Backward Classes Finance and other Development Corporations and continuous research on drug use pattern.

ISCA TO FORM MONITORING PANEL

The Indian Science Congress Association (ISCA) has decided to form a committee to monitor the interactive sessions at the annual congress organized every year. The **decision came after Andhra Pradesh University's vice chancellor claimed on-stage** that Kauravas of the Mahabharata were test tube babies, prompting sharp criticism from scientists. The decision was taken during the general body meeting of the association on the concluding day of the five-day congress in New Delhi.

What

1. **A controversy had erupted after Andhra Pradesh University's vice chancellor professor G. Nageswar Rao claimed that the Kauravas were "test-tube babies"** during an interactive session with students during the Children Science Congress.
2. The statements drew flak from senior scientists across the country, who criticized the vice chancellor for making unsubstantiated and scientifically untenable statements.
3. The association also came under fire for lack of monitoring such statements during one of the biggest science gatherings in India, attended by scientists from across the world.
4. The organizers too have distanced themselves from the unscientific statements made by the vice chancellor and condemned it.
5. The Science Congress has been organized every year since 1914 with the objective of promoting the cause of science in India and inculcates scientific temperament. This is the only major annual national science event which is attended by the prime minister.
6. This year, the congress was attended by five cabinet ministers—including union minister for science and technology, Dr Harsh Vardhan, textiles minister Smriti Irani, HRD minister Prakash Javdekar, and IT and law minister Ravi Shankar Prasad.
7. The theme for this year was Future India : Science and Technology. As many as 15,000 delegates, students and researchers from across the world attended the five-day congress.

MONSANTO'S PATENT ON GM COTTON SEEDS VALID

The Supreme Court on 8 January 2019 held that **Monsanto's patent claim on** genetically modified (GM) Bt. cotton was valid. A bench headed by Justice R.F. Nariman set aside a 2 May order of the division bench of the Delhi High Court, which had held that plant varieties and seeds cannot be patented under Indian law by companies such as Monsanto Inc., and that royalties on GM technology would be decided by a specialised agency of the agriculture ministry.

What

1. As a result, the patent held by Monsanto, through its Indian arm Mahyco-Monsanto Biotech Ltd (MMBL) over its Bollgard-II Bt cotton seed technology, a GM variant which resists the bollworm pest, was decreed to be unenforceable in India.
2. A division bench of the Delhi High Court comprising justices Ravindra Bhat and Yogesh Khanna had permitted MMBL to approach the Protection of Plant **Varieties and Farmers' Rights Authority (PPVFRA)** under the agriculture ministry for registering the variety within three months, following which the authority had to decide on a benefit-sharing mechanism. At present, trait fees on Bt cotton seeds are decided by a price control committee under the agriculture ministry.
3. The court had also directed Monsanto to continue with its obligations under the sub-licence agreements **and allowed "the suit to proceed with**

respect to the claim for damages and other reliefs”, in the light of the sub-licence termination notices issued by Monsanto.”

4. **The court’s order came in a case filed in 2015 by Monsanto**, through MMBL, against Nuziveedu Seeds and its subsidiaries for selling Bt cotton seeds using its patented technology despite termination of a licence agreement in November 2015.
5. **The order and the court’s interpretation** of section 3(j) of the Patents Act, 1970, could prove to be an impediment for the entry of new technology in the Indian agriculture sector as technology developers will lose pricing freedom. Monsanto had appealed the order in the Supreme Court.

NATIONAL HEALTH AGENCY DISSOLVED

The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved the restructuring of existing National Health Agency as "National Health Authority" for better implementation of Pradhan Mantri - Jan Arogya Yojana (PM-JAY). With this approval, the existing society "National Health Agency" has been dissolved and will be replaced by National Health Authority as an attached office to Ministry of Health & Family Welfare.

What

1. The existing multi-tier decision making structure has been replaced with the Governing Board chaired by the Minister of Health & Family Welfare, Government of India which will enable the decision making at a faster pace, required for smooth implementation of the scheme.
2. The composition of the Governing Board is broad based with due representations from the Government, domain experts, etc. Besides, the States shall also be represented in the Governing Board on rotational basis.
3. No new funds have been approved. Existing budget that was approved earlier by the Cabinet for The National Health Agency, including costs related to IT, human resources, infrastructure, operational costs etc. would be utilized by the proposed National Health Authority.
4. It is envisaged that the National Health Authority shall have full accountability, authority and mandate to implement PM-JAY through an efficient, effective and transparent decision-making process.

INTERNATIONAL

PAK SHARES LIST OF NUCLEAR INSTALLATIONS

Pakistan on 1 January 2018 shared with India a list of its nuclear installations and facilities as per the provisions of a bilateral agreement. The list was handed over in accordance with Article-II of the Agreement on Prohibition of Attacks Against Nuclear Installations and Facilities between Pakistan and India, signed on December 31, 1988.

What

1. The list of nuclear installations and facilities in Pakistan was officially handed over to a representative of the Indian High Commission at the Ministry of Foreign Affairs.
2. The Ministry of External Affairs in New Delhi handed over the list of Indian Nuclear Installations and Facilities to a representative of the High Commission of Pakistan.
3. The agreement, which was signed on December 31, 1988 and entered into force on January 27, 1991, provides, inter alia, that the two countries inform each other of nuclear installations and facilities to be covered under the agreement on the first of January of every calendar year.
4. This has been done consecutively since January 1, 1992.
5. The practice of exchanging lists of nuclear installation has endured despite many low in bilateral ties.

CHINA CREATES HISTORY

China on 3 January 2019 successfully landed a spacecraft on the far side of the moon, becoming the first in history to touch the lunar surface unseen from Earth, according to media reports. The **Chang'e-4** lunar probe, named after the mythical Moon Goddess, landed. The China National Space Administration (CNSA) landed the robotic probe — Change's 4 — in the unexplored South Pole-Aitken basin, which is the largest, oldest and deepest crater on the moon's surface. The probe entered an elliptical path around the moon last weekend, drawing up to 15-kilometre close from the surface.

What

1. The Change's-4 was launched from Xichang, southwestern China, on December 8. The probe reached the final orbit around the moon after 22 days and transmitted the first-ever "close range" image of the dark side of the moon.
2. Landing on the unexplored region will enable **Chang'e-4's rover to better study the moon** because of the lack of electromagnetic interference from Earth.
3. The rover is equipped with a low-frequency radio spectrometer to help scientists **understand "how the earliest stars were ignited and how our cosmos emerged from darkness after the Big Bang"**. Scientists will test whether plants can grow while on the moon.
4. The mission is one in a series that underscore the country's ambitious plan to join the space race. Followed by the United States and Russia, China is only the third country to send its own astronauts into space on its own rockets.
5. The moon is tidally locked to Earth, rotating at the same rate that it orbits our planet, so the far side - or the "dark side" - is never visible from Earth. Previous spacecraft have seen the far side of the moon but none has landed on it.
6. The landing "lifted the mysterious veil" from the far side of the moon, and "opened a new chapter in human lunar exploration", reported Global Times. The mission aims to take detailed measurements of the moon's terrain and mineral composition.
7. China now plans to begin fully operating its third space station by 2022. It not only plans to send probes to Mars but also retrieve samples of the Martian surface.
8. The feat caps a series of lunar missions China has launched over the past few **years as part of its plan to become one of the world's top three aerospace powers by 2030**.
9. **The nation's space budget is about \$8 billion a year, second only to the US**.
10. The moon landing comes at a time when tensions between the two powers are at an all-time high, with their economic, technological and military rivalry deepening amid **China's quest for dominance**.

CHINA SUCCESSFULLY COMPLETES HYPERSONIC ENGINE TEST

China's home-grown turbine-based combined cycle (TBCC) engine system has entered the aircraft-engine integration test phase, a major step toward the development of the country's next generation hypersonic drone. The TBCC engine combines a turbine and a scramjet engine, which offers an ideal single-engine solution to achieve the shift from low speed to hypersonic speed.

What

1. The TBCC engine flight test project is led by the institute's chief architect Wang Haifeng, who also led key national defence projects, such as the development of the J-20 and J-10 fighter jets.
2. The TBCC engine will allow the aircraft to fly at speeds of up to Mach 6, which means five to six times faster than the speed of sound.
3. The TBCC engine, which is bigger and more expensive than traditional ones, is primarily used in hypersonic cruise missiles and unmanned aircraft,

- including supersized reconnaissance drones and pilotless bombers, since no human could stand long periods of hypersonic flights.
4. For years, US arms giant Lockheed Martin has been working on the development of the SR-72 using the TBCC propulsion system. The SR-72's top speed will be Mach 6. Its first flight is expected in 2023, and scheduled to enter service by 2030.
 5. The SR-72 is the successor of the fastest aircraft the world has seen, the SR-71, a Cold War reconnaissance jet that the US Air Force retired in 1998.
 6. As Chinese firms rapidly develop their own TBCC engine, a Chinese version of the SR-72 will not be far off.

INDIA-CENTRAL ASIA DIALOGUE

India and five Central Asian countries along with Afghanistan on 13 January 2019 condemned terrorism in all its forms and manifestations and agreed to cooperate in countering the menace which poses a threat to people across the world. This was part of a joint statement issued at the end of the first ever meeting of the India-Central Asia Dialogue which also saw the participation of Afghanistan at the ministerial level in Samarkand. External Affairs Minister Sushma Swaraj along with the foreign ministers of Afghanistan, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan took part in the meeting.

What

1. All sides condemned terrorism in all its forms and manifestations and agreed to cooperate in countering terrorism which posed a threat to the people and economies of the world, the statement said.
2. It referred to the ancient civilisational, cultural, trade, and people-to-people links between India and Central Asia and expressed commitment to dynamic and fruitful friendly relations and mutually beneficial cooperation between India and the Central Asian countries at bilateral and multilateral formats.
3. The countries reaffirmed their willingness for cooperation, mutual support, joint solution on relevant issues in order to ensure security, stability and sustainable development, the statement said.
4. The ministers welcomed the participation of Afghanistan in the India-Central Asia Dialogue as an important land link in the regional cooperation, transit of goods and energy and expressed support and commitment of Central Asian countries and India to peace, security and stability of Afghanistan.
5. They also called for an inclusive Afghan-led and Afghan-owned peace process and reconciliation, and assistance in economic reconstruction of Afghanistan through the implementation of joint infrastructure, transit and transport, energy projects including regional cooperation and investment projects.
6. The ministers noted the importance of sustainable economic growth in Afghanistan by attracting Afghan women to participate in the public life of the country and welcomed the successful holding of forums and conferences on this issue in the countries of Central Asia.
7. They also noted the results of the seventh Regional Economic Cooperation Conference on Afghanistan (RECCA VII), held in Ashgabat in November 2017, and expressed willingness to cooperate in preparation for the RECCA VIII meet in Tashkent in the second half of 2019.
8. The participants welcomed the accession of India into the Ashgabat agreement on creating an international transport and transit corridor.
9. The ministers emphasised the importance of developing and implementing projects, that provide a concerted solution to the problems and issues of economic growth of the countries of Central Asia based on the principles of equality, mutual benefit and respect for their interests.
10. The statement said the nations expressed their intention to strengthen cooperation in order to create real opportunities for expanding economic cooperation, and ensuring favourable conditions for mutual free trade.

11. They discussed promising opportunities and areas of cooperation in promoting mutual trade, attracting investments, innovations and technologies in key spheres of industry, energy, information technologies, pharmaceuticals and agriculture, education and training.
12. They also highlighted the importance of concerted efforts to improve the investment climate and the market attractiveness of the region's economy, business opportunities of the Central Asian countries on the world stage.
13. The statement said special attention was paid to the need to expand and establish direct mutually beneficial economic and cultural ties between the regions and cities of India and the countries of Central Asia and expressed their intention to contribute to this direction.

INDIA, NORWAY TO WORK ON SDGS

Norway and India have agreed to collaborate closely on the ocean economy and achieve the global Sustainable Development Goals (SDG), Prime Ministers of both countries said. The two nations will also enhance bilateral trade, Prime Minister Narendra Modi said on the state visit of his Norwegian counterpart Erna Solberg. India signed a Memorandum of Understanding (MoU) to conduct an India-Norway Ocean Dialogue after the delegation-level talks discussed ways to give “new energy and direction” to bilateral relations.

What

1. **Modi said that in his talks with Solberg they “reviewed all areas of our cooperation, and discussed ways of giving new energy and direction to bilateral ties,” and they also had “fruitful discussions” on all aspects of ocean economy.**
2. Modi said SDGs, the 17 global goals of the United Nations, are in complete consonance with India’s development goals. India’s and Norway, he said, have “strong cooperation” at the international level and both the countries coordinate closely on multilateral issues including the UN Security Council reforms.
3. **Solberg agreed and said that the UN “needs to reform”.** She said it is important that India achieves the SDGs, as given its size and economy the world will not be able to reach the sustainable goals unless “India is on board”.
4. **Solberg said she has seen “impressive improvements on the work done in India, especially on women’s empowerment”.** Solberg added that “no country is rich enough to not use half its talent” regarding women in workforce.
5. Modi also mentioned that the Norway Government Pension Fund Global has made a portfolio investment of \$12 billion in India.
6. Specifically under **India’s Sagarmala** programme, Norwegian companies will get a lot of opportunities in ship building, ports and port-led development.
7. As a mark of how important India is to her nation, Solber said Norway had recently developed a new strategy for engagement with India.
8. **This is Solberg’s first visit to India.**

BSA BETWEEN INDIA AND JAPAN

The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved the proposal for entering into an Agreement for Bilateral Swap Arrangement (BSA) between India and Japan and authorizing the Reserve Bank of India (RBI) to sign the Agreement for Bilateral Swap Arrangement between the RBI and the Bank of Japan for a maximum amount of USD 75 billion.

Salient Features

1. The swap arrangement is an agreement between India and Japan to essentially exchange and re-exchange a maximum amount of USD 75 Billion for domestic currency, for the purpose of maintaining an appropriate level of balance of payments for meeting short-term deficiency in foreign exchange.

Benefits

1. The BSA is a very good example of mutual cooperation between India and Japan for strategic objective of assisting each other in times of difficulty and for restoring international confidence.
2. This facility will enable the agreed amount of Capital being available to India on tap for use. Also, with this arrangement in place, prospects of Indian companies would improve in tapping foreign capital as there would be greater confidence in **stability of country's exchange rate**.
3. Availability of such swap line to tide over difficulties arising out of Balance of Payment (BOP) would deter speculative attacks on the domestic currency and **greatly enhance the RBI's ability to manage exchange rate volatility**.
4. The arrangement is another milestone in mutual economic cooperation and special strategic and global partnership between India and Japan.

SIGNING OF THE TOR WITH SWAZILAND APPROVED

The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved the Signing of Terms of Reference (TOR) governing the engagement of the designated Indian Expert to provide tax assistance to Swaziland (now known as Eswatini) under the Tax Inspectors Without Borders (TIWB) Programme between India and Eswatini.

What

1. An Indian Expert has been mutually selected by the Government of India and the Government of the Kingdom of Eswatini under the TIWB programme.
2. The Terms of Reference will formalize the conditions of the engagement of the designated Indian Expert to provide tax assistance to Eswatini under the TIWB Programme.
3. The engagement of the Indian Expert under the TIWB programme will give impetus to India's support in capacity building in tax matters in developing countries.

Background

1. The Tax Inspectors Without Borders (TIWB) Programme which is jointly launched by UNDP and OECD is intended to support developing countries to strengthen national tax administrations through building audit capacity and to share this knowledge with other countries.
2. The TIWB Programme aims to strengthen tax administrations of developing countries by transferring technical know-how and skills to their tax auditors, and through the sharing of general audit practices and dissemination of knowledge products with them.
3. The TIWB Programme complements the efforts of the international community to strengthen cooperation on tax matters and contribute to domestic tax mobilisation efforts of developing countries.
4. India has been supportive in capacity building in tax matters in developing countries. India being a global leader in this respect has a very important role to play in South-South Cooperation in tax matters.

MARITIME ISSUES BETWEEN INDIA AND DENMARK

The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved the Memorandum of Understanding (MoU) on Maritime issues between India and Denmark. The MoU is proposed to be signed during the upcoming visit of the WIP from Denmark to India in January, 2019.

Benefits

1. Signing of the MoU will pave way for both countries for exploration of areas for bilateral collaboration:
2. Facilitating cross-border cooperation and investments between the maritime sectors of India and Denmark;

3. Enabling both the countries to exchange expertise, publications, information, data and statistics to improve mutual capabilities for ensuring quality shipping; cooperation in the field of green maritime technology and shipbuilding, granting the Indian Register of Shipping (IRS) the status of Recognized Organization (RO), cooperation in the fields of maritime training and education;
4. Research and development for sustained cooperation in the field of merchant shipping and maritime transport related matters; and
5. It will also further extend and deepen the cooperation on the opportunities of mutual benefits to both the countries, at both bilateral and international level.

Background

1. Denmark is one of the important trading partners with India.
2. Major Danish exports to India include medicinal/ pharmaceutical goods, power generation machinery; industrial machinery, metal ores, organic chemicals, etc.
3. Major Indian exports to Denmark include apparels, textiles/ fabrics/ yarns, road vehicles and components, metal goods, iron and steel, footwear and travel goods.
4. In order to boost the bilateral trade between the two countries and to ensure cooperation and coordination in the maritime sector, it is proposed to enter into a bilateral MoU with Denmark.

ECONOMY

INDIA'S FIRST INDUSTRIAL CITY TAKES SHAPE

After a delay of several years, **Dholera, projected as India's first planned industrial city** and a part of the ambitious multi-billion dollar Delhi Mumbai Industrial Corridor (DMIC), is ready to draw investors. Plans for a Rs 7,000 crore high-speed metro rail network are being worked out. French aerospace and defence firm Airbus group and Baba Kalyani group have committed to invest in Dholera, but will do so only after receiving orders from government.

What

1. As many as 5,000 workers are seen readying infrastructure work of about Rs.3000 crore at the site for the first phase, which is likely to be ready by September.
2. In the upcoming Vibrant Gujarat summit later this month, pacts between the Gujarat government and private companies for setting up industries in Dholera are expected to be announced.
3. The land for the metro rail project has already been acquired and funding plans have been finalised. Spanning 100 kilometres in length, the first phase of the metro rail project will be built over 61.55 kilometres, while the second phase connecting Dholera will cover the remaining 38.45 kilometers.
4. The National Highways Authority of India (NHAI), which is acquiring land for a new expressway connecting Ahmedabad with Dholera has also acquired additional land for the metro rail project.
5. The Japan International Cooperation Agency (JICA) has agreed to fund the metro project from its rolling fund. We will take a call on the metro project in the next two to three years when Dholera is up and running.
6. **Conceptualised as India's first green field smart city**, Dholera was seen as a pet project of Prime Minister Narendra Modi when he was the chief minister of Gujarat.

7. The Dholera Special Investment Region will be showcased by the Gujarat government as an investment destination at the upcoming Vibrant Gujarat **Global Investors' summit scheduled to be held in Gandhinagar later this month.**
8. The Dholera city project, first envisaged in 2007, had faced some challenges in the past, including protests against land acquisition.
9. A number of ground-breaking events are expected to take place at Dholera this year, including the announcement of the Dholera International Airport, a 1000-megawatt (MW) solar park and a new express highway.
10. In the renewable energy space, the ultimate aim is to set up a solar park with an overall capacity of 5,000 MW, the largest in the world, according to Shivahare.
11. The Dholera Special Investment Region Development Authority (DSIRDA) is responsible for planning and developing the DSIR. DICDL was created between the Central government (DMICDC Trust) and the DSIRDA to implement the project.
12. The project is expected to be completed by 2040. It is likely to generate employment for 8 lakh people and house as many as 20 lakh people.
13. There has been some concern about Dholera being a low-lying area, which **makes it prone to flooding. "Keeping this in mind, we have designed the infrastructure in such a way that in worst case scenarios, there will be no flooding.**

FIRST-EVER THREE WAY MERGER IN INDIAN BANKING

The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved the scheme of amalgamation for amalgamating Bank of Baroda, Vijaya Bank and Dena Bank, with Bank of Baroda as the transferee bank and Vijaya Bank and Dena Bank as transferor banks. The amalgamation will be the first-ever three-way consolidation of banks in India, with the amalgamated bank being India's second largest Public Sector Bank. The amalgamation will help create a strong globally competitive bank with economies of scale and enable realisation of wide-ranging synergies. Leveraging of networks, low-cost deposits and subsidiaries of the three banks has the potential of yielding significant synergies for positioning the consolidated entity for substantial rise in customer base, market reach, operational efficiency, wider bouquet of products and services, and improved access for customers.

Key points of the Scheme of amalgamation

1. Vijaya Bank and Dena Bank are transferor banks and BoB is transferee bank. The scheme shall come into force on 1.4.2019.
2. Upon commencement of the scheme, the undertakings of the transferor banks as a going concern shall be transferred to and shall vest in the transferee bank, including, inter alia, all business, assets, rights, titles, claims, licenses, approvals and other privileges and all property, all borrowings, liabilities and obligations.
3. Every permanent and regular officer or employee of the transferor banks shall become an officer or employee and shall hold his office or service therein in the transferee bank such that the pay and allowance offered to the employees/officers of transferor banks shall not be less favourable as compared to what they would have drawn in the respective transferor bank.
4. The Board of the transferee bank shall ensure that the interests of all transferring employees and officers of the transferor bank are protected.
5. The transferee bank shall issue shares to the shareholders of transferor banks as per share exchange ratio. Shareholders of the transferee bank and transferor banks shall be entitled to raise their grievances, if any, in relation to the share exchange ratio, through an expert committee.

Some of the strengths of the envisaged amalgamated entity are-

1. The amalgamated bank will be better equipped in the changing environment to meet the credit needs of a growing economy, absorb shocks and capacity to raise resources.

2. Economies of scale and wider scope would position it for improved profitability, wider product offerings, and adoption of technology and best practices across amalgamating entities for cost efficiency and improved risk management, and financial inclusion through wider reach.
3. It would also enable creation of a bank with scale comparable to global banks and capable of competing effectively in India and globally.
4. Strengths of individual banks - such as Dena Bank's relatively higher access to low-cost CASA deposits, Vijaya Bank's profitability and availability of capital for growth, and the extensive and global network and offerings of BoB will translate into advantages in terms of market reach, operational efficiencies and the ability to support a wider offering of product and services.
5. The amalgamated banks will have access to a wider talent pool, and a large database that may be leveraged through analytics for competitive advantage in a rapidly digitalising banking context.
6. Benefits would also flow as a result of wider reach and distribution network and reduction in distribution costs for the products and services through subsidiaries.
7. Public at large shall benefit in terms of enhanced access to banking services through a stronger network, the ability to support a wider offering of product and services, and easy access to credit.

PANEL TO SUGGEST MEASURES FOR MSMES

The Reserve Bank set up an expert committee under former Sebi chairman U K Sinha to suggest long-term solutions for the economic and financial sustainability of the MSME sector. The RBI has announced the panel a day after it allowed a one-time restructuring of existing debt up to Rs 25 crore for the micro, small and medium enterprises (MSMEs) which have defaulted on payment but the loans given to them have continued to be classified as standard assets.

What

1. The eight-member committee will also examine the factors affecting the timely and adequate availability of finance to the sector. The expert committee will submit its report by the end of June 2019.
2. The panel has been asked to review the current institutional framework in place to support the MSME sector and study the impact of the recent economic reforms on the sector and "identify the structural problems affecting its growth".
3. To study the global best practices with respect to MSMEs and recommend its adoption in India, wherever appropriate, and review the existing MSME focused policies and its impact on the sector are among the issues which the panel will look into.
4. The Sinha-led panel has also been asked to propose measures for leveraging technology in accelerating growth of the sector and suggest long-term solutions for the economic and financial sustainability of the MSME sector.
5. While constituting the panel, the RBI said that considering the importance of the MSMEs in the Indian economy, it is essential to understand the structural bottlenecks and factors affecting the performance of the MSMEs.
6. Such enterprises contribute about 40 per cent to the country's export and 45 per cent in the manufacturing sector.

FDI RULES IN E-COMMERCE

The FDI rules pertaining to e-commerce have not allowed foreign investment in the inventory-based model or multi-brand retailing, the Department of Industrial Policy and Promotion (DIPP) clarified. It also stressed that the provisions are also not against the interest of consumers, noting that only fair, competitive and transparent business practices would be beneficial for buyers. These clarifications have come against the

backdrop of new provisions announced by the DIPP related to FDI in e-commerce sector last month.

What

1. Certain averments suggest that Press Note 3/2016 had covertly allowed multi-brand retail trading. Such a view is completely contrary to the specific provisions of Press Note 3/2016, which unambiguously provided that FDI is not permitted in the inventory-based model of e-commerce which amounts to multi-brand retail, a note released by the DIPP said.
2. Under Press Note 3/2016, the government has enlisted provisions of foreign direct investment (FDI) in e-commerce.
3. The DIPP also said that the government continued to receive complaints that certain marketplace platforms were violating the policy by influencing the price of products and indirectly engaging in the inventory-based model.
4. An e-commerce platform operating an inventory-based model does not only violate the FDI policy on e-commerce but also circumvents the FDI policy restrictions on multi-brand retail trading," it said.
5. Recent provisions released by the department in FDI in e-commerce sector were needed to ensure that the rules are not circumvented, the DIPP mentioned.
6. Tightening the norms for e-commerce players, the government has barred them from selling products of the companies in which they have shareholdings.
7. E-commerce companies cannot enter into agreements for the exclusive sale of products, according to the rules.
8. These provisions are also not against the interest of consumers, it stressed. Fair, competitive and transparent business practices which are in compliance with the law will better protect consumers in both short as well as medium and long-term, it outlined.

Flashback

1. Foreign direct investment (FDI) is an investment made by a firm or individual in one country into business interests located in another country.
2. Generally, FDI takes place when an investor establishes foreign business operations or acquires foreign business assets, including establishing ownership or controlling interest in a foreign company.
3. Foreign direct investments are distinguished from portfolio investments in which an investor merely purchases equities of foreign-based companies.

FIRST 'FUGITIVE ECONOMIC OFFENDER'

Embattled liquor baron Vijay Mallya on 5 January 2019 became the first person **to be declared a 'fugitive economic offender' under the Fugitive Economic Offenders' Act, 2018** by a special Prevention of Money Laundering Act (PMLA) Court in Mumbai. **The court will begin hearing the arguments on the confiscation of Mallya's properties from next month.** Special judge MS Azmi declared Mallya an offender under Section 12 of the Act after hearing extensive arguments from the lawyer of Mallya and the ED counsel.

What

1. The Enforcement Directorate (ED) had filed an application before the court in November, requesting to declare Mallya, who is facing charges of financial irregularities, a fugitive under the Act.
2. It is only to aid the agency to bring somebody back to the country to face the law here, the ED counsel had said.
3. Mallya through his lawyers had told the court that he had not fled the country but had left to attend a meeting held in Geneva, Switzerland on March 4, 2016, at the World Motor Sport Council.
4. Under the provisions of the Act, a Fugitive Economic Offender is a person against whom an arrest warrant has been issued in respect of a scheduled

- offence and who has left India so as to avoid criminal prosecution, or being abroad, refuses to return to India to face criminal prosecution.
5. Once the person is declared a fugitive economic offender, the prosecuting agency has the powers to confiscate his properties.
 6. The fugitive tycoon was arrested in the UK last year and immediately granted **bail. The Westminster's court in the United Kingdom last month said Mallya can be extradited to India to face fraud investigations. He is wanted in India for defaulting on Rs. 9,000 crore in loans to his failed Kingfisher Airlines.**

ISSUES AT WTO

United States has been blocking the appointment of members of the WTO Appellate Body on some systemic and procedural issues. About 1/4th of the 164 WTO members, including India, have expressed concerns on the matter at every relevant WTO meeting. Further, India along with EU and 12 other countries have submitted a communication to the WTO General Council for addressing the issues raised by United States on functioning and operations of Dispute Settlement Body, including appointment of Appellate Body members. India has 7 disputes at WTO which are at different stages of settlement. India is defending its interest in these disputes with the help of experienced Law Firms.

What

1. DS430 - Import of poultry and poultry products from United States, Complainant: India,
2. DS436 - Countervailing duty by United States on Indian steel products, Complainant: India,
3. DS456 - National Solar Mission dispute with United States, Complainant: United States,
4. DS510 - **United States' Sub-Federal** Renewable energy programme, Complainant: India,
5. DS518 - India-certain Measures on imports of iron and steel products from Japan, Complainant: Japan,
6. DS541 - Export Subsidies measures of India, Complainant: United States,
7. DS-547 - United States-Certain measures of United States on steel and aluminium products, Complainant: India.

SCIENCE AND TECHNOLOGY

NCAP LAUNCHED

The Centre on 10 January 2019 stepped up its efforts to combat air pollution by launching a five-year action plan with a tentative target of 20-30% reduction in concentrations of PM10 and PM2.5 by 2024, with 2017 as the base year. The National Clean Air Programme (NCAP) was launched by Union minister for environment, forests and climate change, Harsh Vardhan with an initial budget of ₹300 crore for the first two years.

What

1. The plan includes 102 non-attainment cities, across 23 states and Union territories, which were identified by Central Pollution Control Board (CPCB) on the basis of their ambient air quality data between 2011 and 2015.
2. Non-attainment cities are those which have been consistently showing poorer air quality than the National Ambient Air Quality Standards. These include Delhi, Varanasi, Bhopal, Kolkata, Noida, Muzaffarpur, and Mumbai.
3. As part of the programme, the Centre also plans to scale up the air quality monitoring network across India. At least 4,000 monitors are needed across the country, instead of the existing 101 real-time air quality (AQ) monitors, according to an analysis.

4. The government also proposes to conduct studies across 102 non-attainment cities to ascertain pollution sources and extent of their contribution.
5. The apex committee in the ministry will periodically review the progress of these components on the basis of appropriate indicators, which will be evolved. However, it is not binding on the state governments as it is not a legal document.
6. The plan proposes a three-tier system, including real-time physical data collection, data archiving, and an action trigger system in all 102 cities, besides extensive plantation plans, research on clean-technologies, landscaping of major arterial roads, and stringent industrial standards.
7. It also proposes state-level plans of e-mobility in the two-wheeler sector, rapid augmentation of charging infrastructure, stringent implementation of BS-VI norms, boosting public transportation system, and adoption of third-party audits for polluting industries.
8. **The government's zeal to combat air pollution seems to have reduced compared to its earlier stand of reducing pollution levels by 50% in the next five years.**

PANEL TO BOOST DIGITAL PAYMENTS

The Reserve Bank of India 8 January 2019 constituted a high-level committee under Aadhaar architect Nandan Nilekani to suggest measures to strengthen the safety and security of digital payments in the country. The five-member panel on deepening of digital payments has been constituted with a view to encourage digitisation of payments and enhance financial inclusion through digitisation. The committee shall submit its report within a period of 90 days from the date of its first meeting.

What

1. The panel has been tasked with reviewing the existing status of digitisation of payments in the country, identifying the current gaps in the ecosystem and suggesting ways to bridge them and assessing the current levels of digital payments in financial inclusion.
2. It will also "suggest measures to strengthen the safety and security of digital payments... (and) a road map for increasing customer confidence and trust while accessing financial services through digital modes".
3. It has also been asked to undertake cross country analyses with a view to identify best practices that can be adopted in our country to accelerate digitisation of the economy and financial inclusion through greater use of digital payments.
4. Another term of reference of the panel, the RBI said is to suggest a medium-term strategy for deepening of digital payments.
5. Besides Infosys co-founder Nilekani, other members of the panel are former RBI deputy governor H R Khan, former MD and CEO of Vijaya Bank Kishore Sansi and former secretary in ministries of IT and steel Aruna Sharma.
6. The fifth member is Sanjay Jain, chief innovation officer, Centre for Innovation, Incubation & Entrepreneurship (CIIE), IIM Ahmedabad.

FOR FIRST TIME SEEN BIRTH OF A BLACK HOLE

A mysterious cosmic explosion detected about 200 million light years away may be the exact moment a star collapsed to form a black hole or neutron star, scientists says. Researchers from Northwestern University in the US are getting closer to understanding the mysteriously bright object that burst in the northern sky this summer. On June 17, **the ATLAS survey's twin telescopes in Hawaii** found a spectacularly bright anomaly 200 million light years away in the Hercules constellation.

What

1. Dubbed AT2018cow or "The Cow," **the object** quickly flared up, then vanished almost as quickly. After combining several imaging sources, including hard X-rays and radiowaves, the multi-institutional team now speculates that the

- telescopes captured the exact moment a star collapsed to form a compact object, such as a black hole or neutron star.
2. The stellar debris, **approaching and swirling around the object's event horizon**, caused the remarkably bright glow. This rare event will help astronomers better understand the physics at play within the first moments of the creation of a black hole or neutron star.
 3. Massive nuclear reactions at the centre of a star are what hold it up, preventing it from collapsing in on itself due to the mass of the material it is made of.
 4. When those reactions come to an end, the star will collapse and become a smaller, denser object. Stars the size of our Sun, which is a relatively small one, will collapse to about one-hundredth of its original size, forming what is known as a white dwarf. However, when stars about five times bigger than the Sun collapse, there will be a supernova — the ejection of some outer material into space.
 5. What is left will be a highly dense, but exponentially smaller object in which the atoms of the matter the star was made of gets completely crushed. Such an object is called a neutron star. But if a collapsing star is bigger still, then the result of the collapse will likely be a black hole.
 6. A black hole is unimaginably dense and the gravitational pull of it will be so strong that not even light will be able to escape it.
 7. After it was first spotted, The Cow captured immediate international interest **and left astronomers scratching their heads**. **“We thought it must be a supernova.** But what we observed challenged our current notions of stellar death.
 8. For one, the anomaly was unnaturally bright — 10 to 100 times brighter than a typical supernova. It also flared up and disappeared much faster than other known star explosions, with particles flying at 30,000 kilometers per second (or 10 percent of the speed of light).
 9. Within just 16 days, the object had already emitted most of its power. In a universe where some phenomena last for millions and billions of years, two weeks amounts to the blink of an eye.

CRISPR REPURPOSED TO DEVELOP BETTER ANTIBIOTICS

Scientists have repurposed the gene-editing tool CRISPR to study which genes are targeted by particular antibiotics, providing clues on how to improve the existing drugs or develop new ones. Resistance to current antibiotics by disease-causing pathogens is a growing problem, one estimated to endanger millions of lives and cost over USD two billion each year in the US, according to the study published in the journal Nature Microbiology. **What we need to do is to figure out new weaknesses in these bacteria,” said Jason Peters**, a professor at the University of Wisconsin-Madison in the US. The technique, known as Mobile-CRISPRi, allows scientists to screen for antibiotic function in a wide range of pathogenic bacteria.

What

1. Using a form of bacterial sex, the researchers transferred Mobile-CRISPRi from common laboratory strains into diverse bacteria, even including a little-studied microbe making its home on cheese rinds.
2. This ease of transfer makes the technique a boon for scientists studying any number of bacteria that cause disease or promote health.
3. Peters worked with colleagues at the University of California, San Francisco (UCSF) in the US and other institutions to design and test Mobile-CRISPRi.
4. The system reduces the production of protein from targeted genes, allowing researchers to identify how antibiotics inhibit the growth of pathogens. That knowledge can help direct research to overcome resistance to existing drugs, researchers said. They took advantage of the increasingly popular molecular tool CRISPR, but in a unique way.

5. Normally, the CRISPR system gets targeted to a gene where it cuts the DNA in two. The gene can be edited while the cell repairs the damage. However, the researchers worked with a defanged form of CRISPR known as CRISPRi which has been engineered to be unable to cut DNA.
6. Instead, it just sits on the DNA, blocking other proteins from gaining access to and turning on a particular gene. The result is lower expression of the gene and a reduced amount of the protein it codes for.
7. The researchers showed that if they decreased the amount of protein targeted by an antibiotic, bacteria became much more sensitive to lower levels of the drug — evidence of an association between gene and drug. Thousands of genes at a time can be screened as potential antibiotic targets this way, helping scientists learn how antibiotics work and how to improve them.
8. To make CRISPRi mobile, the researchers developed methods to transfer the system from common lab models like E coli to disease-causing species, which are often harder to study.
9. The team turned to one of the natural ways bacteria link up and exchange DNA, **a kind of bacterial sex called conjugation.** “You basically mix the bacteria together and it happens,” Peters said of conjugation. Using conjugation, the team transferred Mobile-CRISPRi to the pathogens Pseudomonas, Salmonella, Staphylococcus and Listeria, among others.
10. The real test of Mobile-**CRISPRi’s mobility came from cheese.** As cheese ages, it curates its own landscape of microbes. Scientists are just starting to investigate the immense diversity of bacteria and fungi on cheeses, which contribute to their complex flavours.
11. Manipulating genes is simple in established laboratory bacteria such as E coli, but there is often no way to study genes in bacteria recently isolated from the environment, such as V casei.
12. However, Mobile-CRISPRi was easily transferred into the strain, opening up new avenues for understanding how the bacteria colonises and helps age cheese.

TESS DISCOVERS NEW PLANET

NASA’s latest planet-hunting probe has discovered a new world outside our solar system, orbiting a dwarf star 53 light years away. This is the third new planet confirmed by the Transiting Exoplanet Survey Satellite (TESS) since its launch in April last year. The planet, named HD 21749b, orbits a bright, nearby dwarf star about 53 light years away, in the constellation Reticulum, and appears to have the longest orbital period of the three planets so far identified by TESS.

What

1. HD 21749b journeys around its star in a relatively leisurely 36 days, compared to the two other planets — Pi Mensae b, a **“super-Earth” with a 6.3-day orbit**, and LHS 3844b, a rocky world that speeds around its star in just 11 hours. All three planets were discovered in the first three months of TESS observations.
2. The surface of the new planet is likely around 300 degrees Fahrenheit — relatively cools, given its proximity to its star, which is almost as bright as the sun.
3. The planet is about three times the size of Earth, which puts it in the category of a “sub-Neptune.” **Surprisingly, it is also a whopping 23 times as massive as the Earth.**
4. **However, it is unlikely that the planet is rocky and therefore habitable; it’s more likely made of gas, of a kind that is much denser than the atmospheres of either Neptune or Uranus.**
5. Researchers have also detected evidence of a second planet, with a shorter, 7.8-day orbit in the same planetary system, though it is yet to be confirmed.
6. If it is confirmed as a planet, it could be the first Earth-sized planet discovered by TESS.

HUBBLE'S MOST ADVANCED CAMERA SHUT DOWN

The operations of the **Hubble Space Telescope's most technologically advanced** camera have been suspended after it encountered a hardware problem, NASA said. However, the telescope will continue to perform science observations with its other three active instruments, while the Wide Field Camera 3 anomaly is investigated, the U.S. space agency said in a statement. The Hubble Wide Field Camera 3 was installed by space-walking astronauts during Servicing Mission 4 in 2009.

What

1. The camera is equipped with back-up electronics that can be called to action should they be needed to recover the instrument.
2. Hubble is the first major optical telescope to be placed in space, providing an unobstructed view into the universe.
3. Launched in 1990, the **world's first space** telescope helped confirm the theory that the universe is expanding, lending credence to the Big Bang theory.
4. Hubble has made more than 1.3 million observations since its mission began in 1990, taking pictures of stars and galaxies of as it whirls around the Earth.
5. Astronomers using Hubble data have published more than 15,000 scientific papers, making it one of the most productive scientific instruments ever built.

Flashback

1. The Hubble Space Telescope (HST) is a space telescope that was launched into low Earth orbit in 1990.
2. Hubble is one of the largest and most versatile and is well known as both a vital research tool and a public relations boon for astronomy.
3. The HST is named after the astronomer Edwin Hubble and is one of NASA's Great Observatories, along with the Compton Gamma Ray Observatory, the Chandra X-ray Observatory and the Spitzer Space Telescope.

NEW SINGLE-DOSE EBOLA DRUG DEVELOPED

Scientists have developed an experimental drug that in one dose successfully protected nonhuman primates against a lethal infection of all strains of the deadly Ebola virus. Thomas Geisbert from The University of Texas Medical Branch in the US said that previous therapeutics typically was of the **“one bug, one drug”** variety. However, because of the unpredictable nature and variety of the Ebola virus, scientists have been seeking a way to protect against different strains of the virus.

What

1. The study, published in the journal Cell Host & Microbe, found that a two-antibody cocktail called MBP134 could fully protect nonhuman primates and ferrets against lethal Ebola virus infections caused by the Bundibugyo and Sudan strain as well as the deadliest Zaire strain that

What is Ebola?

1. Ebola is a deadly disease caused by a virus. There are five strains, and four of them can make people sick.
2. After entering the body, it kills cells, making some of them explode. It wrecks the immune system, causes heavy bleeding inside the body, and damages almost every organ.
3. The virus is **scary, but it's also rare**. You can get it only from direct contact with an infected **person's body fluids**.
4. Ebola virus disease (EVD) first appeared in 1976 in 2 simultaneous outbreaks, one in what is now, Nzara, South Sudan, and the other in Yambuku, Democratic Republic of Congo.
5. The latter occurred in a village near the Ebola River, from which the disease takes its name.

- caused the 2013-16 epidemic in West Africa and the current outbreak in the Democratic Republic of Congo.
2. Further studies exploring even lower doses could open the door to treatment via auto-injectors like the kind used for allergic reactions.
 3. The ability to quickly and efficiently provide protection against all Ebola viruses in a single dose would reduce the burden on health care workers in the field during outbreaks, especially in regions that have a less-developed infrastructure.

GIANT PATTERN DISCOVERED IN CLOUDS OF VENUS

Japanese scientists have identified a giant streak structure among the clouds covering the planet Venus, based on observation from the spacecraft Akatsuki. The researchers from Kobe University in Japan also revealed the origins of this structure using large-scale climate simulations. **Venus is often called Earth's twin** because of their similar size and gravity, but the climate on Venus is very different. It rotates in the opposite direction to Earth, and a lot more slowly — about one rotation for 243 Earth days.

What

1. About **60 kilometres (km) above Venus' surface** a speedy east wind circles the planet in about four Earth days (at 360 km/hour), a phenomenon known as atmospheric superrotation.
2. The sky of Venus is fully covered by thick clouds of sulphuric acid that are located at a height of 45-70 km, **making it hard to observe the planet's surface** from Earth-based telescopes and orbiters circling Venus.
3. Surface temperatures reach a scorching 460 degrees Celsius, a harsh environment for any observations by entry probes. Due to these conditions, **there are still many unknowns regarding Venus' atmospheric phenomena.**
4. To solve the **puzzle of Venus' atmosphere, the Japanese spacecraft Akatsuki** began its orbit of Venus in December 2015. One of the observational **instruments of Akatsuki is an infrared camera "IR2" that measures** wavelengths of two micrometres (µm).
5. This camera can capture detailed cloud morphology of the lower cloud levels, about 50 km from the surface.
6. Optical and ultraviolet rays are blocked by the upper cloud layers, but thanks to infrared technology, dynamic structures of the lower clouds are gradually being revealed. Before the Akatsuki mission began, the research team developed a programme called **AFES-Venus for calculating simulations of Venus' atmosphere.**
7. On Earth, atmospheric phenomena on every scale are researched and predicted using numerical simulations, from the daily weather forecast and typhoon reports to anticipated climate change arising from global warming.
8. For Venus, the difficulty of observation makes numerical simulations even more important, but this same issue also makes it hard to confirm the accuracy of the simulations.

END-TO-END PREDICTION FOR PREDICTING LIGHTNING

Last year during the premonsoon season a series of thunderstorm/dust storm affected the northern states and claimed about 200 lives. In view of this the India Meteorological Department will be implementing an end-to-end prediction system for predicting thunderstorms/lightning by April 2019. Union Minister of Science and Technology, Earth Sciences and Environment and Forests and Climate Change, Dr. Harsh Vardhan told in New Delhi that Indian Institute of Tropical Meteorology (IITM) and IMD are developing prediction tools for thunderstorm/lightning. IITM Pune has already installed 48 lightning sensors around the country which can locate the thunderstorm/lightning activities on real time. IITM Pune also developed a Mobile App called **"DAMINI" to give alerts on impending lightning activity over the area.**

What

1. Currently IITM Pune and IMD is developing a new website for IMD along with the Mobile Apps for Farmers and City Forecasts.
2. These new tools will help IMD to disseminate forecasts and warnings on time and more effectively to the users and the new website and mobile Apps will be ready for launch by June 2019.
3. **Focusing on IMD's** Observational Network the Union Minister said that IMD is strengthening the observational network and by end of this year, 10 new X-band weather radars will be installed over NW Himalayas (J &K, Himachal Pradesh and Uttarakhand).
4. 11 more C-band radars will be installed by IMD by 2020 over the plains of India including one over Andaman Nicobar Islands and one over Lakshadweep Islands.
5. In addition, IMD is installing 200 Automated Weather Stations at District Agromet Units for providing weather services to farmers and another 200 AWS will be installed over major cities and towns for providing City Specific Weather information and forecasts.
6. All these observatories are expected to be established by end of 2020. On the specific request from Kerala Government, IMD will be installing 100 new Automated Weather Stations including rain-gauges to monitor weather activities in the state.
7. IITM Pune with the help of IMD and Mumbai Municipal Corporation is installing a new dense rain-gauge network over Mumbai City with 200 rain-gauges.
8. In addition 4 X-band radars will be also installed so that a merged rainfall data set at 2 km resolution will be prepared and made available to public on real time.
9. This facility will help the city administration and general public to know the prevailing rainfall situation in the city on real time basis. For this purpose, already a mobile App has been developed.
10. In another initiative the existing 130 Agro Meteorological Field Units, have an addition of 8 new District Agro Meteorological Field Units (DAMUs) which have been established and also Block level Agro Meteorological forecasts have been started in 200 blocks.

About IMD

1. India Meteorological Department was established in 1875. It is the National Meteorological Service of the country and the principal government agency in all matters relating to meteorology, seismology and allied subjects.
2. It is an agency of the Ministry of Earth Sciences of the Government of India. IMD is headquartered in Delhi and operates hundreds of observation stations across India and Antarctica. Regional offices are at Mumbai, Kolkata, Nagpur and Pune.
3. IMD is also one of the six Regional Specialised Meteorological Centres of the World Meteorological Organization.
4. It has the responsibility for forecasting, naming and distribution of warnings for tropical cyclones in the Northern Indian Ocean region, including the Malacca Straits, the Bay of Bengal, the Arabian Sea and the Persian Gulf.

INITIATIVE TO SELL ITEMS ON GEM

The commerce ministry said Government eMarketplace (GeM) has launched an initiative to enable women entrepreneurs and self-help groups to sell different products at the platform. GeM is an online platform of the ministry for procurement of goods and services by government departments, public sector units, and other agencies.

What

1. The initiative - Womaniya on GeM - seeks to develop women entrepreneurship on the margins of society to achieve gender-inclusive economic growth.
2. The initiative would enable women entrepreneurs and women self-help groups to sell handicrafts and handloom, jute and coir products, home décor and office furnishings, directly to various government ministries, departments and institutions.
3. Womaniya homepage will inform procurement officers in various government ministries, departments and CPSEs about the drive to promote procurement of common use goods and services from women entrepreneurs.
4. So far, 1,80,862 sellers and service providers are registered with the portal to sell 7,31,431 products and services.

Flashback

1. Government e-Marketplace (GeM) is a one stop portal to facilitate online procurement of common use Goods & Services required by various Government Departments / Organizations / PSUs.
2. GeM aims to enhance transparency, efficiency and speed in public procurement. It provides the tools of e-bidding, reverse e-auction and demand aggregation to facilitate the government users achieve the best value for their money.
3. The purchases through GeM by Government users have been authorized and made mandatory by Ministry of Finance in the General Financial Rules, 2017.

MISCELLANEOUS

PANJ TIRATH SITE AS NATIONAL HERITAGE

The provincial Khyber Pakhtunkhwa government in northwest Pakistan has declared the ancient Hindu religious site of Panj Tirath in Peshawar as national heritage. Panj Tirath, which got its name from the five pools of water present there, also contains a temple and a lawn with date palm trees. The five pools of the heritage site now come under the ambit of Chacha Yunus Park and Khyber Pakhtunkhwa Chamber of Commerce and Industry.

What

1. The KP Directorate of Archaeology and Museums issued a notification under the KP Antiquities Act 2016 declaring the land in the Panj Tirath park as a heritage site.
2. It is believed that Pandu, a mythical king in the Mahabharata, belonged to this area and Hindus used to come to these pools for bathing during the month of Karteek and worship for two days under the trees.
3. The site was damaged during the reign of the Afghan Durrani dynasty in 1747, however it was restored by local Hindus during the period of Sikh rule in 1834 and worship started again.
4. **The government also announced a fine of up to Rs 2 million and five years' imprisonment for anyone found guilty of damaging the historic site.**
5. The archaeology directorate asked the Khyber Pakhtunkhwa government to clear the site of encroachment and allow archaeologists to carry out much needed preservation work. It also asked for the construction of a boundary wall around the site.

CHILDREN SCIENCE CONGRESS

As a part of the on-going five-day Indian Science Congress, Rashtriya Kishore Vaigyanik Sammelan (Children Science Congress) was inaugurated in Jalandhar by Nobel Laureates Avram Hershko from Israel and F.Duncan M.Haldane from USA. While inaugurating the Congress, Avram Hershko called children as the future of scientific India and was sure that some of them may be making some important discoveries which will prove to be good for mankind, and may also win them Nobel Prize someday.

What

1. Appreciating the progress that India has done over the years Prof. Duncan Hardane said that India has to be a part of the technological development of the future.
2. Prof Duncan advised young students to learn mathematics irrespective of the jobs they are going to take up.
3. Rashtriya Kishore Vaigyanik Sammelan (RKVS) is an important part of Indian Science Congress as it focuses on raising the bar of research and innovation in science in our country.
4. The main objective of the RKVS is to provide a platform to the budding scientists to showcase their research work and projects being developed by them.
5. The event will consist of invited talks by renowned scientists and various competitions such as science exhibitions, scientific quizzes.
6. Workshops are being conducted to give the students hands on experience. About 120 projects made by students and finalised by DST are being showcased and students will have the opportunity to listen and interact with the Young Scientists and Nobel Laureates.
7. Students from all parts of the country are participating in this event. Expert lectures, including lectures through video conferences, by eminent scientists will be held every day during the course of three days of Children Science Congress.

WORLD BRAILLE DAY

World Braille Day is marked annually on January 4 after the Day was proclaimed by the General Assembly last November, as a means of realising fully the human rights of visually-impaired and partially-sighted people, and bringing written language to the forefront as a critical prerequisite for promoting fundamental freedoms. The World Health Organisation (WHO) reports that people who are visually impaired are more likely than those with full sight to experience higher rates of poverty and disadvantage which can amount to a lifetime of inequality.

What

1. Around the world, 39 million people are blind, and another 253 million have some sort of vision impairment. For them, Braille provides a tactical representation of alphabetic and numerical symbols so

What is Braille?

1. Braille is a tactile reading and writing system used by blind and visually impaired people who cannot access print materials.
2. It uses raised dots to represent the letters of the print alphabet. It also includes symbols to represent punctuation, mathematics and scientific characters, music, computer notation and foreign languages.
3. Braille is not a language. It is a code by which all languages may be written and read. Through the use of braille, people who are blind are able to review and study the written word.
4. It provides a vehicle for literacy and gives an individual the ability to become familiar with spelling, punctuation, paragraphing and other formatting considerations.

- blind and partially-sighted people are able to read the same books and periodicals printed as are available in standard text form.
2. Six dots represent each letter, number, even musical and mathematical symbols, to allow the communication of important written information to ensure competency, independence and equality.
 3. The UN Convention on the Rights of Persons with Disabilities (CPRD) cites Braille as a means of communication; and regards it as essential in education, freedom of expression and opinion, access to information and social inclusion for those who use it.
 4. To foster more accessible and disability-inclusive societies, the UN launched its first-ever flagship report on disability and development last year, coinciding with the International Day for Persons with Disabilities on which Secretary-General António Guterres urged the international community to take part in filling inclusion gaps.

NATIONAL ENTREPRENEURSHIP AWARDS 2018

National Entrepreneurship Awards 2018, aimed at recognizing and honoring outstanding young first-generation entrepreneurs and those who have contributed immensely in building the entrepreneurship ecosystem, were presented today by the Minister of Commerce and Industry & Civil Aviation Shri Suresh Prabhu and the Minister of state for Skill Development and Entrepreneurship Shri Ananthkumar Hegde.

What

1. In this third edition of National Entrepreneurship Awards, this year, a total of 43 awards were presented, including 39 awards for Young Entrepreneurs in different sectors and 4 awards for Entrepreneurship Ecosystem Builders.
2. The winners received a trophy, certificate and cash prizes ranging from Rs. 5 to 10 lakhs. The awards are classified into three investment categories- below Rs 1 Lakh, between Rs 1 Lakh to 10 Lakhs and between Rs 10 Lakhs to Rs 1 Crore- covering small to big first-generation entrepreneurs below the age of 40 years.
3. This is to ensure that entrepreneurs from every socio-economic category take part in the award and they are duly recognised for their meaningful contribution to the economy of the nation.
4. In India also, big opportunities are knocking and people should take advantage of it. He said that gone are the days, when licenses, permissions and big-money were required for building an enterprise.
5. All one need is an Idea, which can be converted into an enterprise, and one has to live with it, believe in it and it will flourish. Shri Prabhu said that the Government is fully supportive of new entrepreneurs.
6. Start-up yatras are being taken out in the country to promote entrepreneurship so as to create conducive ecosystem. Talking about the GEM web-portal, which is used by the Government department for procurement of Goods, Shri Prabhu said that start-ups will be given full support from it. He said that efforts are being made to smoothen out the regulatory and financing issues for the enterprises.
7. Ministry of Skill Development and Entrepreneurship had partnered with premier institutes and organizations such as XLRI, Jamshedpur; IIT Bombay, Mumbai; IIT Delhi; IIT Guwahati, Assam; IIT Kanpur; and IIT Madras, Chennai for the selection of awardees.
8. Other national level organizations are TISS, Mumbai; MANAGE, Hyderabad; IRMA, Anand; RSETI, Bangalore; NABARD, Mumbai; National Innovation Foundation, Ahmedabad to ensure due diligence in the nomination and evaluation process.

TEXTILES AWARDS

The Vice President of India, M Venkaiah Naidu conferred awards on 17 persons for their outstanding contribution in different fields of textiles sector in New Delhi. During the ceremony he was presented commemorative stamps on GI registered handicrafts. The Vice President said that the textiles sector is playing a pivotal role in the economy and it needs to be recognized and respected by all. The Textiles Ministry has taken several initiatives during the last 4 and half years, which will yield rich dividends and help India become one of the three largest economies of the world. The felicitation of awardees will inspire others to do more to get recognition.

What

1. There is no dearth of talent in the country and the only thing that is needed is to tap the available talent by proper skilling and encouragement.
2. The Textiles Ministry is for the first time giving awards to people who have made significant contribution to textiles sector.
3. The Textiles Ministry will address the issues flagged during the day long 'National Conclave on Accomplishments and Way Forward for Textiles Sector' **which concluded with award ceremony presided over** by the Vice President of India.
4. Seventeen awards in different categories were given away by the Vice President for outstanding performance and excellence in various spheres of textiles industry.
5. The inaugural session was followed by panel discussions on technical textiles, ease of doing textiles business, handicrafts, access to global markets and supply chains and fashionizing weaves.
6. The two-day outreach programme was launched in the premises of Red Fort with presentation of eight special recognition awards for the excellent work in textiles sector.
7. In addition, 16 artisans were felicitated who have enriched the handloom sector with their creative work in weaving and printing. The event was followed by Textiles Show-Artisan Speak.
8. The last four and half years have been transformational for this sector. Industry specific policies, technological upgradations, focus on research & development, investment in human resources and strategic intervention for market promotion have made Indian textiles most desirable and trusted brand on the global map.

INDIA RECORD MAIDEN TEST SERIES WIN

Virat Kohli on 7 January 2019 became the first captain to lead India to a Test series win in Australia. India and Australia played out a draw in the fourth Test after continuous rainfall on the last two days of the match disrupted proceedings and washed **away Australia's chances of equalising the series. With the anti-climax**, India won the series 2-1. In 11 previous attempts, India had drawn a series in the longest format only twice, while losing nine. Bishan Singh Bedi had led India to a series draw in 1977-78 tour, after which Sourav Ganguly had done the same in the 2003-04 tour.

What

1. Kohli became the first Indian captain to record two overseas series wins with victories in three matches.
2. The 33-year-old had previously led India to a historic whitewash in a Test series against Sri Lanka in 2017.
3. Kohli also became the first Indian skipper to register three Test match wins in a series outside the Asian subcontinent in 50 years.
4. It was Mansur Ali Khan Pataudi who had done the same with a 3-1 series win against New Zealand in 1967-68.
5. With the series win, Kohli also surpassed Ganguly as the most successful Indian captain in overseas conditions in Tests format with 12 wins to his name. He also joined an elite list, comprising of Bishan Singh Bedi and Mushtaq

- Mohammad, in becoming the most successful Asian captain in Tests in Australia with three wins.
- India came into the Sydney Test having retained the Border-Gavaskar Trophy at MCG in the Boxing Day Test and a 3-1 margin seemed likely until the weather turned. Pujara and Rishabh Pant had scored big hundreds, and batted Australia out of the match and series.

FIRST WOMAN TO JOIN IMF

Mysore-born Gita Gopinath has joined International Monetary Fund as its chief economist, becoming the first woman to occupy the top IMF post. **Gopinath's joined last week at a time, when she believes the world is experiencing a retreat from globalisation, posing challenges to multilateral institutions.** The John Zwaanstra professor of International Studies and Economics at Harvard University, Gopinath, 47, succeeds **Maurice (Maury) Obstfeld as Economic Counsellor and Director of the IMF's Research Department.** Obstfeld retired December 31.

What

- Announcing her appointment on October 1, IMF Managing Director Christine **Lagarde described her as "one of the world's outstanding economists with impeccable academic credentials, a proven track record of intellectual leadership and extensive international experience."**
- The 11th chief economist of the IMF, Gopinath in a recent interview to **The Harvard Gazette described her appointment at the IMF as a "tremendous honour" and said the appointment of the first ever woman for this position speaks highly of IMF's Managing Director Lagarde.**
- Most countries invoice their trade in dollars and borrow internationally in dollars. This is a central part of the international price system and the international financial system and it will be exciting to explore its consequences in greater depth with the IMF.
- The one (biggest issues being faced by the IMF) that is absolutely clear and present is that we are seeing the first serious retreat from globalisation. This has not happened in the past 50 or 60 years, when the world moved toward lower **tariffs and increasing trade across countries," she told the prestigious Harvard publication.**
- Foreign direct investment [FDI] was always viewed very favourably by countries. But because most of the FDI is now in tech-heavy firms, there are growing concerns about national security and international property theft.
- The capital flows to several markets have reversed, putting pressure on their exchange rates and consequently on inflation, and on balance sheets, given that several emerging markets borrow heavily in dollars, said the IMF chief economist.

10% QUOTA CHALLENGED IN SC

A plea challenging the Bill seeking to provide 10% reservation to general category poor in jobs and education was 10 January 2019 filed in the Supreme Court. The petition, filed by Youth For Equality organisation and Kaushal Kant Mishra, sought the quashing of the Bill saying that the economic criterion cannot be the sole basis for reservation.

What

- The plea said the Bill violates basic feature of the Constitution as reservation on economic grounds cannot be limited to the general categories and the 50% ceiling limit cannot be breached.

2. The Rajya Sabha passed the Bill with 165 voting in its favour and 7 against, a day after the Lok Sabha had approved The Constitution (One Hundred and Twenty Fourth Amendment) Bill, 2019.
3. The quota will be over and above the existing 50% reservation to SCs, STs and Other Backward Classes (OBCs).

What is the 50% rule?

1. In Indra Sawhney vs Union of India, 1992, the Supreme Court capped caste-based reservation at 50%, **ruling that** “no provision of reservation or preference can be so vigorously pursued as to destroy the very concept of equality”.
2. Since this Court has consistently held that the reservation under Articles 15(4) and 16(4) should not exceed 50% and the States and the Union have by and large accepted this as correct it should be held as constitutional prohibition and any reservation beyond 50% would liable to be struck down.

WORLD HINDI DAY 2019

World Hindi Day is observed every year on January 10 to promote the greatness of the Hindi language. Hindi is **India's official language** and is spoken by more than 250 million people across the World. On World Hindi Day, the Ministry of External Affairs conducts events through its missions worldwide to spread the greatness of the Hindi language. The Department of Official Language – Rajbhasha also organises several special programmes to mark the day.

World Hindi Day: History

1. The first World Hindi Conference was held on January 10 in 1975. To commemorate this special day, World Hindi Day is celebrated on the same date every year.
2. The first World Hindi Conference was inaugurated by Prime Minister Indira Gandhi in Nagpur. The first conference was attended by 122 delegates from 30 countries where then Mauritius Prime Minister Seewoosagur Ramgoolam was the chief guest.
3. Apart from India, countries like United Kingdom, United States, Mauritius, Trinidad and Tobago, have hosted the World Hindi Conference. Also, Persons of Indian Origin and non-residential Indians in many countries organise events to commemorate the day to spread the greatness of the language.

World Hindi day 2019 important facts and history

1. Hindi is the official Language of India.
2. Hindi as a language is the fourth most spoken in the world.
3. Hindi is adopted as an official language of Pacific Island country Fiji.
4. Adjectives and Nouns in Hindi grammar change according to gender.
5. Hindi is a descendant of Sanskrit.
6. According to the Constitution, Hindi was declared as an official language but not the national language. Under Article 343, the official language of the Union has been prescribed, which includes English and Hindi in Devanagari script.

How is it different from Hindi Diwas?

1. National Hindi Divas and World Hindi day are entirely different. National Hindi Diwas was first celebrated on September 14 in 1949 when the Constitution of India declared Hindi written in Devanagari Script as an official language. The day is observed within the country only.
2. On the other hand, the World Hindi Day is observed to promote the greatness of Hindi language at the global level.

HONORARY MEMBERSHIP OF SCG

India skipper Virat Kohli and coach Ravi Shastri on 11 January 2019 received the honorary membership of the Sydney Cricket Ground (SCG) for their contribution to the sport of cricket. The Indian team defeated Australia 2-1 in the four-match Test series, ending the country's 71-year-old wait for a rare series win Down Under.

What

1. The SCG congratulates Team India for securing its first Test series win on Australian soil. It is wonderful to see the world's largest cricketing nation putting its focus firmly on Test cricket - a step that will reinforce the pre-eminence of Tests in the global cricketing landscape.
2. Apart from Kohli and Sashtri, the only other international cricketers to be granted the honorary membership of the SCG are iconic Sachin Tendulkar and Brian Lara of the West Indies.
3. Virat and Ravi have been at the forefront of that and Test cricket is well served having both placing such significance on the five-day format.
4. After the Test series victory, India are now scheduled to play a three-match One-day International (ODI) series against Australia.

9TH INTERNATIONAL CONFERENCE ON MICRO IRRIGATION

Ministry of Water Resources, River Development and Ganga Rejuvenation, Government of India is organizing the 9th International Micro Irrigation Conference on Modern Agriculture at Aurangabad in Maharashtra from January 16–18, 2019, in association with International Commission on Irrigation and Drainage (ICID), Indian National Committee on Surface Water (INCSW) and WAPCOS Limited, a CPSE under the Union Ministry of Water Resources, River Development & Ganga Rejuvenation.

What

1. The event will be a multi-disciplinary dialogue in the form of a conference discussing issues related to micro irrigation for modern agriculture and various related issues like new techniques in micro irrigation for increased crop productivity, micro irrigation in cluster level farming etc.
2. A large group of eminent international and national experts and local farmers will be sharing their experiences in the fields of latest developments in micro irrigation technology to enhance crop production and water management for optimal use in agriculture, technical and sociological interventions for sustainable water, food & agriculture.
3. National and international organizations, Central/State Government organizations, public sector undertakings, industrial organizations, equipment manufacturers, entrepreneurs, financial and funding institutions, consulting and construction organizations will present their technical capabilities in the area.
4. The Conference will provide a forum for discussions and deliberation through seminars, exhibitions and sessions and will serve to build awareness regarding large-scale use of micro irrigation, strategies for water conservation, advanced crop technology, engineering techniques, etc.
5. The event will aim to address problems of developing as well as developed nations in the context of present-day challenges.

FIRST-EVER PHILIP KOTLER AWARD PRESENTED TO PM

Prime Minister Narendra Modi 14 January 2019 received the first-ever Philip Kotler Presidential award in New Delhi. The award focuses on the triple bottom-line of 'people, profit and planet'. It will be offered annually to the leader of a nation, a statement from the Prime Minister's office said. According to the award citation, PM Modi was selected for his "outstanding leadership for the nation".

What

1. His selfless service towards India, combined with his tireless energy has resulted in extraordinary economic, social and technological advances in the country.
2. The citation also states that under his leadership, India is now identified as the centre for innovation and value added manufacturing (Make in India), as well as a global hub for professional services such as information technology, accounting and finance.
3. The statement quoted the citation as saying Modi's visionary leadership has also resulted in the digital revolution (Digital India), including the Unique Identification Number, Aadhaar, for social benefits and financial inclusion.
4. The citation, the statement said, mentions initiatives such as Make in India, Startup India, Digital India and Swachh Bharat, "which have positioned India as one of the most lucrative manufacturing and business destinations in the world".
5. Philip Kotler is a professor of marketing at Northwestern University, Kellogg School of Management. Owing to his ill-health, he deputed Dr. Jagdish Sheth of EMORY University, Georgia, USA, to confer the award.

6TH WOMEN OF INDIA ORGANIC FESTIVAL CONCLUDES

The Ministry of Women and Child Development aims to encourage Indian women **entrepreneurs and farmers to connect with more buyers through organizing 'Women of India Organic Festivals' across the country**. This was stated by Smt. Maneka Sanjay Gandhi, Union Minister for Women and Child Development after visiting various stalls and Food Court on the concluding day of **6th 'Women of India Organic Festival'** held at Leisure Valley, Sector-10, Chandigarh.

What

1. The Minister further said that through this festival, the Ministry also aims to educate people about its various initiatives and schemes relating to women and children development.
2. The Women of India Organic Festival has been held annually in New Delhi since 2015 and has made its debut in Chandigarh this year to showcase the varied products of women farmers and entrepreneurs. She said that it would empower them through financial inclusion, while promoting organic farming in India.
3. Over 200 women farmers and entrepreneurs from different parts of the country put up 72 stalls of various farming and organic products in this three day festival besides 15 food stalls in the food court.
4. The Festival showcased over 1,000 varied organic products, including fabric, wellness, grains, seeds, jewellery, bakery items and a lot more.
5. WCD Minister stressed upon the need for promoting organic farming throughout the country for better, healthy and environment friendly lifestyle especially encouraging women farmers and entrepreneurs with a well-knit marketing infrastructure for organic farm products.
6. She informed that the women entrepreneurs have got a very good response of the people during the festival. Visitors showed their keen interest to purchase various products exhibited in the festival.

Flashback

1. Organic food is food produced by methods that comply with the standards of organic farming.
2. Standards vary worldwide, but organic farming, in general, features practices that cycle resources, promote ecological balance, and conserve biodiversity.
3. Organizations regulating organic products may restrict the use of certain pesticides and fertilizers in the farming methods used to produce such products.
4. In general, organic foods are also usually not processed using irradiation, industrial solvents, or synthetic food additives.

INDIA AMONG WORLD'S LEADING EXPORTERS OF CREATIVE GOODS

India's creative goods exports nearly tripled from USD 7.4 billion in 2005 to USD 20.2 billion in 2014, making it one of the world's leading exporters of such products in the top 10 developing economies, according to a UN report. China is the biggest single exporter and importer of creative goods and services. China's trade in creative goods between 2002 and 2015 has been exponential, with average annual growth rates of 14 per cent, the United Nations Conference on Trade and Development (UNCTAD) report said.

What

1. The second edition of the periodic Creative Economy Outlook: Trends in International Trade in Creative Industries examines the global picture and also features 130 country profiles with reported creative goods and services trade data.
2. The data, which covers the period 2002 to 2015, shows the creative economy's contribution to world trade.
3. Over this period, the value of the global market for creative goods doubled from USD 208 billion in 2002 to USD 509 billion in 2015.
4. China, Hong Kong (China), India, Singapore, Taiwan Province of China, Turkey, Thailand, Malaysia, Mexico and the Philippines were the top 10 performing developing economies stimulating global trade in creative goods, the report said.
5. Among developed economies, the US, France, Italy, the UK, Germany, Switzerland, the Netherlands, Poland, Belgium and Japan were the top 10 creative goods exporters.
6. India's creative goods exports nearly tripled from USD 7.4 billion in 2005 to USD 20.2 billion in 2014, the report said.
7. Design goods accounted for the largest share of creative goods exports with a value of USD 17.9 billion in 2014. Jewellery was a key export at USD 13.2 billion followed by fashion accessories at USD 3.2 billion.
8. The US was India's top export partner for creative goods in 2005 but the country slipped to second place in 2014, when the UAE emerged as India's top trading partner, it said.
9. The report noted that India's fashion industry is likely to continue its growth as the country has a large young population. Art crafts (carpet and yarn products) was another dynamic sector with exports at USD 1.5 billion in 2014. India had a positive trade balance in creative goods trade, which stood at USD 15.4 billion in 2014.
10. In 2014, the main destination markets for India's creative goods exports were Asia (58 per cent), the Americas (20 per cent) and Europe (19 per cent).
11. India had become the centre for outsourcing work such as game development, game support services. In the coming years, the country is expected to become the hub for development, porting and dubbing of various games across the globe, due to low costs and the easy availability of game developers with world-class experience.
12. Indian gastronomy is also undergoing rapid growth. Food service sales in the country are growing at about 10 per cent annually, making it one of the fastest growing sellers in the world.
13. These figures are significant on two fronts. The creative economy has both commercial and cultural worth. This dual value has led governments worldwide to focus on expanding and developing their creative economies as part of economic diversification strategies and efforts to stimulate prosperity and well-being.
14. The report said that globally design and visual arts are among the highest performing sectors with fashion, interior design and jewellery accounting for 54 per cent of creative goods exports in developed economies and 70 per cent (including toys) in developing economies.
15. The State governments are implementing favourable policies and Maharashtra, Karnataka, Telangana have announced, or are coming up with, policies in support of the of the animation and VFX industry.
16. These would enable the Indian animation and VFX industry to effectively compete with established markets such as the US, Canada and emerging centres in Republic of Korea, France, China and Malaysia," the report said, citing a KPMG India-FICCI Indian Media and Entertainment Industry Report 2017.