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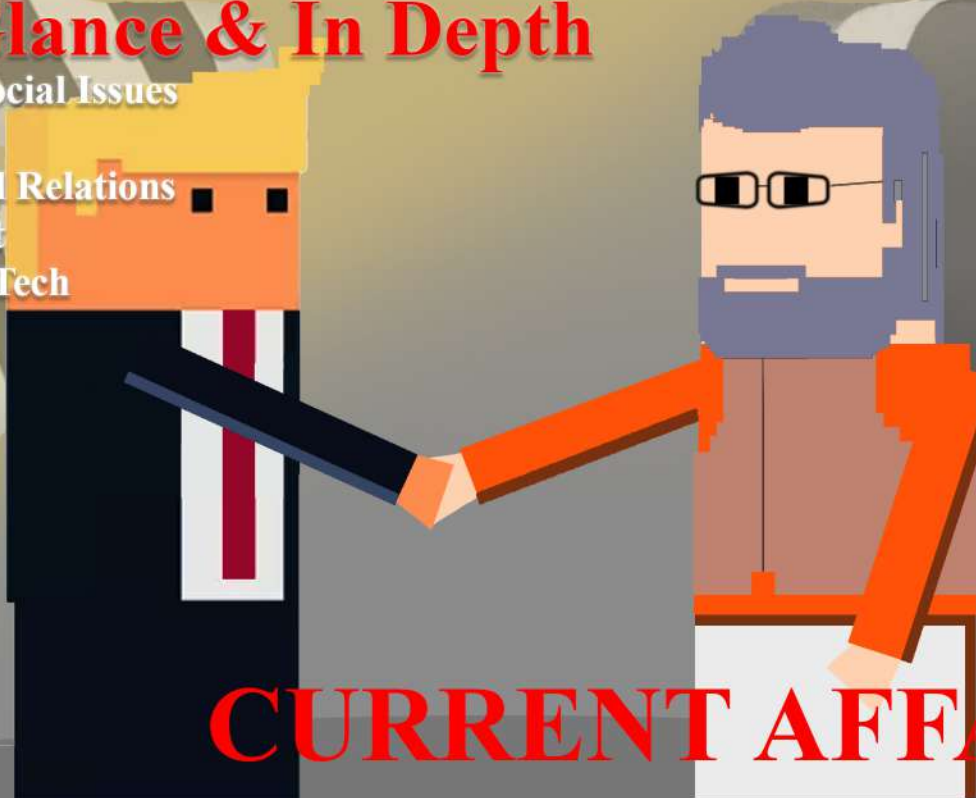
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News @ a glance

News in Depth

News @ a glance

POLITY

1) Cannabis high for Manipur's start-up dream

Why in news?

- The State government of Manipur is considering legalizing Cannabis for its medicinal properties which will boost the start-up sector of the state.
- Arunachal Pradesh, Uttar Pradesh and Uttarakhand that have legalised cultivation and harvest of cannabis for medicinal purposes.
- Cannabis competes with opium across large swathes of land in Arunachal Pradesh, Manipur and Nagaland.

What is Cannabis?

- Cannabis is a drug that comes from Indian hemp plants such as Cannabis sativa and Cannabis indica. The main active chemical in cannabis is THC (delta-9 tetrahydrocannabinol).Cannabis is a depressant drug. They slow down the activity of the central nervous system and the messages going between the brain and the body. When large doses of cannabis are taken it may also produce hallucinogenic effects. Marijuana is the most common and least potent form of cannabis. Marijuana is the dried leaves and flowers of the plant.

Cannabis in India

- In India, cannabis, also known as *bhang, ganja, charas* or *hashish*, is typically eaten (*bhang golis, thandai, pakoras, lassi,* etc.) or smoked (chillum or cigarette).
- Its potency depends on the content of its principal active constituent, tetrahydrocannabinol, though cannabis contains more than 500 other chemicals.
- There is a tradition of using cannabis in many religious contexts. Ayurvedic texts refer to cannabis as a treatment for several maladies, *Upavisha Varga* (sub poisonous), and its recreational use has been described as toxic.

- The cannabis grown in remote areas of Manipur is considered the "best weed" across the country.
- Manipur is on the edge of the Golden Triangle of drug trade, comprising Thailand, Myanmar, Laos and China.

Way forward:

- As the north eastern region is more prone to drug trafficking and higher rates of drug abuse, it is necessary to carefully devise systems for commercial use or Cannabis for medicinal and industrial.
- https://www.thehindu.com/news/national/other-states/cannabis-high-for-manipurs-start-up-dream/article29484057.ece

2)   One card for all utilities

Why in news?

- The Home Minister has pitched the idea of one card for all utilities like Aadhaar, Driving license, passport, voter ID etc. It was revealed on the occasion of foundation stone laying ceremony for construction of a new building of Registrar General of India (RGI) that conducts the census exercise.
- The decennial Census exercise will be undertaken in 2021 and for the first time, will move from paper to digital format.

National Population Registrar

- The National Population Register (NPR) is a Register of usual residents of the country.
- It is being prepared at the local (Village/sub-Town), sub-District, District, State and National level under provisions of the Citizenship Act 1955 and the Citizenship (Registration of Citizens and issue of National Identity Cards) Rules, 2003.
- It is mandatory for every usual resident of India to register in the NPR.

Definition –

- A person who has resided in a local area for the past 6 months or more or a person who intends to reside in that area for the next 6 months or more.

Objective –
- NPR is to create a comprehensive identity database of every usual resident in the country.
- The database would contain demographic as well as biometric particulars and link it thus making it a comprehensive database of residents.
- It will be updated on a priority basis as it helps in tracking criminal activities and better planning and execution of government scheme.

Demographic Particulars
- The following demographic details of every individual are required for every usual resident:
- Name of person
- Relationship to head of household
- Father's name
- Mother's name
- Spouse's name (if married)
- Sex
- Date of Birth
- Marital status
- Place of birth
- Nationality (as declared)
- Present address of usual residence
- Duration of stay at present address
- Permanent residential address
- Occupation/Activity
- Educational qualification
- Present Status
- The data for National Population Register was collected in 2010 along with the house listing phase of Census of India 2011.
- The updating of this data was done during 2015 by conducting door to door survey. The digitisation of the updated information has been completed.
- Now it has been decided to update the National Population Register along with the House listing phase of Census 2021 during April to September 2020 in all the States/UTs except Assam.
- https://www.thehindu.com/news/national/amit-shah-suggests-one-card-for-all-utilities/article29487526.ece
- http://censusindia.gov.in/2011-Common/IntroductionToNpr.html

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3) Ramanujan prize for U.K. mathematician

Why in news?
- The SASTRA Ramanujan prize for 2019 will be awarded to mathematician Adam Harper, Assistant Professor with the University of Warwick, England.
- Mr. Harper was awarded the prize "for several outstanding contributions to analytic and probabilistic number theory." Harper's recent brilliant proof of a conjecture of Helson and a related paper to appear in Algebra and Number Theory.
- The prize also recognizes Harper's seminal work using the Riemann Hypothesis to determine the correct order upper bound for the higher moments of the Riemann zeta function on the critical line

The award
- The prize carries a citation and an award of $10,000 and is conferred annually on mathematicians from across the world who is less than 32 years of age, working in an area influenced by the genius Srinivasa Ramanujan.
- This is amongst the top five awards of this type for mathematics.
- Many previous winners, including Manjul Bhargava and Akshay Venkatesh, went on to win the Fields Medal.
- The Fields Medal is a prize awarded to two, three, or four mathematicians less than 40 years of age at the International Congress of the International Mathematical Union (IMU), a meeting that takes place every four years.
- The Fields Medal is regarded as one of the highest honors a mathematician can receive, and has been described as the mathematician's Nobel Prize.

Srinivasa Ramanujan,
- He was (born December 22, 1887, Erode, India—died April 26, 1920, Kumbakonam), Indian mathematician whose contributions to the theory of numbers include pioneering discoveries of the properties of the partition function.
- Ramanujan's knowledge of mathematics (most of which he had worked out for himself) was startling. Although he was almost completely unaware of modern

developments in mathematics, his mastery of continued fractions was unequaled by any living mathematician. He worked out the Riemann series, the elliptic integrals, hypergeometric series, the functional equations of the zeta function, and his own theory of divergent series.

- https://www.britannica.com/biography/Srinivasa-Ramanujan
- https://www.thehindu.com/news/cities/chennai/ramanujan-prize-for-uk-mathematician/article29504949.ece

4)   Global goalkeeper award

Why in news?

- The PM was conferred Global Goalkeeper award by Bill and Melinda Gates Foundation.
- PM received the international award for Swachh Bharat Abhiyan
- The award was to Indians and people made the cleanliness mission a success.

About Goal keeper award

- The Goalkeeper awards felicitate change makers around the world for their contributions toward meeting the UN's Sustainable Development Goals (SDGs), which the UN General Assembly set in 2015 for the year 2030.
- There are five categories of awards at the Goalkeepers event:
1. Progress Award (age 16-30)
2. Change maker Award (age 16-30)
3. Campaign Award (age 16-30)
4. Goalkeepers Voice Award (any age)
5. The Global Goalkeeper Award (any age)

Swachh Bharat Abhiyan

- Government launched the "Swachh Bharat" movement to solve the sanitation problem and waste management in India by ensuring hygiene across the country.
- The objectives of the Swachh Bharat Abhiyan include the following
1. Construct individual, cluster and community toilets.
2. Eliminate or reduce open defecation. Open defecation is one of the main causes of deaths of thousands of children each year.
3. Construct latrines and work towards establishing an accountable mechanism of monitoring latrine use.
4. Create Public awareness about the drawbacks of open defecation and promotion of latrine use.
5. Recruit dedicated ground staff to bring about behavioral change and promotion of latrine use.
6. Change people's mind set towards proper sanitation use.
7. Keep villages clean.
8. Ensure solid and liquid waste management through gram panchayats.
9. Lay water pipelines in all villages, ensuring water supply to all households by 2019.

- https://www.mapsofindia.com/my-india/society/swachh-bharat-abhiyan-making-india-clean-more#
- https://indianexpress.com/article/explained/explained-what-is-the-global-goalkeepers-award-given-to-pm-modi-6031676/

ENVIRONMENT

1) India water week- 2019

Why in news?

- President Ram Nath Kovind inaugurated the sixth "India Water Week-2019" being organised at Vigyan Bhawan in New Delhi.

Theme:

- "Water cooperation-coping with 21st-century challenge'

Who organises?

- It is being organised by the Department of Water Resources, River Development and Ganga Rejuvenation, the Ministry of Jal Shakti.

About India water week;

- Conceptualized and organized for the first time in 2012
- The India Water Week is a regular forum where the Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India discusses, talks, strategizes with eminent stakeholders through seminars, exhibitions and sessions to build public awareness, to get support to implement key strategies for conservation, preservation and optimum use of available water.
- The fifth event namely, India Water Week 2017 was organised with the theme "Water and Energy for Inclusive Growth" with European Union as an International partner and The Netherlands as International Sponsor.
- https://www.ndtv.com/india-news/president-ram-nath-kovind-inaugurates-india-water-week-2019-2106618
- http://www.indiawaterweek.in/pages/about

2) More than double India's non-fossil fuel target

Why in news?

- India's renewable energy target will be increased to 450 GW, Prime Minister Narendra Modi said at the United Nations Climate Action Summit.

Highlights from PM Modi's speech:

- World not doing enough to overcome serious challenge of climate change.
- Need a global people's movement to bring about behavioural change.
- India will spend $50 billion on water conservation in the next few years.
- India will increase the share of non-fossil fuel, will increase renewable energy capacity to beyond 175 GW by 2022 and take it to 400 GW.
- India will inaugurate on Tuesday solar panels on the roof of the U.N. building, built at a cost of $1 million.
- 80 countries have joined the International Solar Alliance initiated by India.
- Called for a people's movement to end the use of single use plastic and hoped that it will create an awareness at a global level about the harmful effects of single use plastic.
- Need is a global people's movement to bring about behavioural change.
- India will spend $50 billion on his government's ambitious 'Jal Jeevan Mission' for water conservation, rainwater harvesting and for the development of water resources.
- India and China, which faced the highest burden of death from air pollution, will reap the biggest health benefits of a robust climate policy aimed at reducing carbon emissions.
- Calls for comprehensive approach which covers everything from education to values, and from lifestyle to developmental philosophy.
- https://economictimes.indiatimes.com/industry/energy/power/pm-modi-vows-to-more-than-double-indias-non-fossil-fuel-target-to-400-gw/articleshow/71263568.cms

3) Forest plus 2.0

Why in news?

- US Agency for International Development (USAID) and India's Ministry of Environment, Forest and Climate Change (MoEF&CC) officially launched Forest-PLUS 2.0

About Forest 2.0

- It is a five-year programme initiated in December 2018 that focuses on developing tools and techniques to

bolster ecosystem management and harnessing ecosystem services in forest landscape management.

- Tetra Tech ARD, a consulting and engineering company headquartered in the US, was given the contract to implement the programme and IORA Ecological Solutions, a New Delhi-based environmental advisory group, is its implementation partner.
- Forest-PLUS 2.0, the second set of pilot projects, is meant to enhance sustainable forest landscape management after Forest-PLUS completed its five years in 2017.
- Forest-PLUS 2.0 comprises pilot project in three landscapes — Gaya in Bihar, Thiruvananthapuram in Kerala and Medak in Telangana. The choice of these sites was driven by the contrast in their landscapes – Bihar is a forest deficit area, Telangana is a relatively drier area where there is ample scope for community livelihood enhancement and Kerala is rich in biodiversity.

Targets
- The targets of this set are –
o 1,20,000 hectares of land under improved management
o New, inclusive economic activity worth $12 million
o Measurable benefits accrued to 800,000 households
- Three incentive mechanisms demonstrated in managing landscapes for ecosystem services

Focal points of action to achieve this target
- To achieve these targets, the programme has three focal points of action –
- Developing tools for multiple services in forests management. The tools consist innovative apps for automating forest planning processes, model forest management plans. These tools are expected to result in enhanced water flow and quality, improved livelihoods and resilience of forest-dependent communities.
- Developing incentive-based instruments for leveraging finance. For example, a payment mechanism where a municipality or industry would pay upstream forest communities to use

water flowing down because of improved forest management.
- Unlocking economic opportunities for forest-dependent people by modelling and setting up conservation enterprises and mobilising investment from the private sector.

Background:
- The programme's first set focused on capacity building to help India participate in Reducing Emissions from Deforestation and forest Degradation (REDD+). It included four pilot projects in Sikkim, Rampur, Shivamogga and Hoshangabad.
- Under these, field tests, innovative tools and approaches for Indian forest management were developed. Promotion of bio-briquettes in Sikkim, introduction of solar heating systems in Rampur and development of an agro-forestry model in Hoshangabad were some of the achievements of this programme.
- https://www.downtoearth.org.in/news/forests/centre-us-agency-launch-forest-plus-2-0-66951

4) National water mission
Why in news?
- NWM, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti has initiated the 'National Water Mission Awards' to recognize excellence in water conservation, efficient water use and sustainable water management practices.

About National Water Mission
- **National Water Mission is one of the eight missions under** National Action Plan on Climate Change (NAPCC) for combating threats of global warming.
- The National Action Plan on Climate Change (NAPCC) describes the features of National Water Mission as under: "A National Water Mission will be mounted to ensure integrated water resource management helping to conserve water, minimize wastage and ensure more equitable distribution both across and within states.
- The Mission will take into account the provisions of the National Water Policy and develop a framework to optimize water use by increasing water use

efficiency by 20% through regulatory mechanisms with differential entitlements and pricing.

- It will seek to ensure that a considerable share of the water needs of urban areas are met through recycling of waste water, and ensuring that the water requirements of coastal cities with inadequate alternative sources of water are met through adoption of new and appropriate technologies such as low temperature desalination technologies that allow for the use of ocean water.

Goals of NWM

- Comprehensive water data base in public domain and assessment of impact of climate change on water resources
- Promotion of citizen and State action for water conservation, augmentation and preservation
- Focused attention to vulnerable areas including overexploited areas
- Increasing water use efficiency by 20%
- Promotion of basin level integrated water resources management

About National Water Mission awards:

- NWM has 5 goals and 39 strategies prescribed in the Mission Document.
- One of the strategies of NWM under Goal IV is to incentivize the organization/ companies through awards for water conservation and efficient use of water.
- Hence, the NWM has initiated the 'National Water Mission Awards' to recognize excellence in water conservation, efficient water use and sustainable water management practices.
- The awards are given in ten categories defined under five goals of NWM. The categories are as follow:
1. Comprehensive Water Data Base in Public Domain.
2. Assessment of the impact of Climate Change on Water Resources.
3. Promotion of citizen and state action for water conservation, augmentation and
4. Focused attention to vulnerable areas including over-exploited area.
5. Increasing Water use efficiency by 20% (Local Individuals/Farmers/Citizens)
6. Increasing Water use efficiency by 20% (Water Users Associations/ Self Help Groups/ Resident Welfare Associations).

7. Increasing Water use efficiency by 20% (Public Agencies –ULBs/Cities, Govt Organisations).
8. Increasing Water use efficiency by 20% (Industries/Corporate).
9. Increasing Water use efficiency by 20% (Small and Medium Enterprises).
10. Promotion of basin level integrated water resources management.
- http://nwm.gov.in/?q=objective-national-water-mission
- https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1586176

5) World Maritime Day

Why in news?

- World maritime day is celebrated worldwide on september 26th this year.

About the World Maritime theme for 2019

- The World Maritime Day theme for the year is "Empowering Women in the Maritime Community".
- This provides an opportunity to raise awareness of the importance of gender equality, in line with the United Nations' Sustainable Development Goals, and to highlight the important - yet under-utilized - contribution of women within the maritime sector.
- Empowering women fuels thriving economies across the world, spurs growth and development, and benefits everyone working in the global maritime community in the drive towards safe, secure, clean and sustainable shipping.
- http://www.imo.org/en/About/Events/WorldMaritimeDay/Pages/WMD-2019.aspx

6) Black carbon

Why in news?

- Black carbon have been found in placenta of women who had breathed these particles in during their pregnancies has been found out in a study that raised concern about the effects of airpollution on babies even before they are born.

Highlights of the finding:

- **The study, conducted by a team of Belgian researchers, has been published in the journal Nature Communications.**

- The study found tiny particles of black carbon accumulating on the side of the placenta that faces the foetus.
- The particles were embedded in the placentas, implying that this had happened before the babies were born.
- The finding is a signal of the health effects that air pollution could have even before birth.

About Black Carbon:
- Black carbon particles are a key part of particulate matter. It is one of the byproducts from the burning of fossil fuels such as coal, oil, petrol and wood.
- Because of their small size, particulate matter, including black carbon particles, can be easily inhaled and can pass through the throat and into the rest of the body.
- They are commonly referred to as Soot particles.

Reason for concern:
- The placenta is an organ attached to the wall of the uterus. It allows life-sustaining oxygen and nutrients to pass from the mother to the foetus. It lies on either end of the umbilical cord and has two sides, the maternal and foetal side.
- The placenta is the sole point of contact between the mother and the foetus, carrying oxygen and nutrients from the mother's blood supply to the foetus. Essentially, it is a temporary organ that keeps separate the mother's and the baby's blood supply, while also being a link between the two.
- Since the particles are at the foetal side of the placenta and this side interacts directly with the foetal blood flow, it is very reasonable to assume that the foetus is directly exposed
- Soot particles may cause DNA damage and air pollution in general can impact cellular ageing, cognitive development and can lead to lower birth weight.

How can it be controlled?
- Lower exposure to air pollution is the only way that the foetus can be protected.
- https://indianexpress.com/article/explained/explained-soot-found-in-placenta-is-foetus-at-risk-6035028/

ECONOMY

1) India, U.S. trade deal falls through

Why in News?

- India and U.S. **failed to conclude a trade package** despite long negotiations.

News in Detail

- The prospects of an agreement unravelled due to **the failure to reach an agreement on Information and communications technology (ICT) products.**
- The U.S. has wanted India to **eliminate tariffs (20%) on ICT products**, but India is concerned that this could open up the market **to flooding by Chinese technology**.
- The **U.S. wanted greater access** to Indian markets for **medical devices, such as stents** and **knee implants, ICT, dairy products** and some other categories of agricultural goods sought the removal of price caps ("Trade Margin Rationalization" or TMR).
- Some of the larger issues for the U.S. include **digital trade** (for instance **regulations around data localization and FDI in e-commerce**).
- India also continued to appear on U.S.'s "**Priority Watch List**" this year along with 10 other countries. The annual list identifies countries which, according to the U.S., **pose challenges to American intellectual property rights**.
- On its part, India wanted the reinstatement of preferential market access to U.S. markets under the **Generalized System of Preferences (GSP)** program, which was revoked in early June.
- It had also wanted **facilitation of processes in agricultural product markets** where it already had access (such as easier certification of food product irradiation facilities) and greater access in some agricultural markets (table grapes, pomegranates for instance).
- However, the two sides were optimistic in terms of reaching some kind of a trade agreement in the near future.

> - **Generalized System of Preferences (GSP)** is a preferential tariff system **extended by developed countries** to developing countries (also known as preference receiving countries or beneficiary countries). It is a preferential arrangement in the sense that it **allows concessional low/zero tariff imports from developing countries.**

Source

- https://www.thehindu.com/news/national/prime-minister-narendra-modi-and-us-president-donald-trump-meets-on-sidelines-of-united-nations-general-assembly/article29502305.ece
- https://www.indianeconomy.net/splclassroom/generalized-system-preferences-gsp-significance-india-us-trade/

2) India accepts RCEP tips on investments

Why in News?

- While India has **not yet signed the Regional Comprehensive Economic Partnership** agreement, it has **accepted suggestions of other countries regarding rules on investments**.

News in Detail

- India and the other RCEP countries are currently in the **final phase of negotiations** in Vietnam.
- India has so far agreed to several provisions that bring it in line with the investment rules applicable in most comparable countries, including **banning host countries from mandating that the investing companies transfer technology** and training to their domestic partners, and **removing the cap on the quantum of royalties domestic companies can pay their foreign partners**.
- If the RCEP agreement is signed, these rules are expected to attract greater investment in India from the other 15 RCEP countries (the 10 ASEAN countries, China, Japan, South Korea, Australia and New Zealand).

Major hindrance to investments

- Indian laws currently have the provision wherein companies investing in the country can be made to transfer technology or know-hows to their domestic counterparts.
- The government and the Reserve Bank of India also currently impose a cap on the royalties a domestic company can pay to its foreign parent or partner, for certain kinds of investments.
- These restrictions have been seen as major hindrances to investing in India, and other RCEP countries have argued strongly for their removal.

Concerns

- There are apprehensions in industry that removing the cap on royalty payments **would lead to increased outflow in foreign exchange and deplete the ability of domestic firms to pay dividends** to shareholders.

Source

- https://www.thehindu.com/business/Economy/india-accepts-rcep-tips-on-investments/article29502359.ece

3) Senior citizens savings scheme needs full tax break, says SBI report

Why in News?

- A **report by the State Bank of India (SBI)** suggested **full tax breaks for senior citizens savings scheme** to protect returns.

Background

- Some banks are **planning to link deposit rates with external benchmark**, after linking retail floating lending rate to repo rate (refer *Officer's Pulse Issue No. 13*).
- When interest rates come down and if deposit rates are linked to repo rate similar to loan rates, this will impact private final consumption expenditure.

Suggestion by the report

- Under the **Senior Citizens Savings Scheme (SCSS)**, a senior citizen **can deposit Rs. 15 lakh** and the current **interest rate is 8.6%.** However, the interest on such SCSS is **fully taxable**.
- Estimates suggest that there are about 41 million senior citizen term deposit accounts in the country with total deposits of Rs. 14 lakh crore or **7% of India's GDP**.

- The average deposits size per account is about Rs. 3.3 lakh and **interest income from such deposits formed 5.5% of private final consumption expenditure** in FY19.
- If the SCSS amount is given full tax rebate, the revenue foregone by the government could be only Rs. 3,092 crore, which will have the **minimal 2 bps impact on government fiscal deficit** while boosting consumption expenditure.

Source

- https://www.thehindu.com/business/Industry/senior-citizens-savings-scheme-needs-full-tax-break-says-sbi-report/article29502366.ece

4) Centre mulling stock limits for onions

Why in News?

- As onion prices are on the rise despite several measures taken by the central government, the Centre is mulling imposing stock limits on onion traders.

Causes of onion price rise

- The retail prices of the key kitchen staple have shot up to Rs 70-80 per kg in the national capital and other parts of the country.
- The **recent floods** in the major producing States have **affected the storage and transportation** of the winter crop which was harvested earlier this year, resulting in supply disruptions to mandis.
- The onions planted in the summer come to the market by November, but excess rains are likely to hit production.
- **Hoarders** are exacerbating the situation and a stock limit would help prevent "speculative behaviour by traders.
- But this would **affect the remuneration to farmers**. So the Centre hopes that its 50,000 tonne buffer stock will help to calm down prices for now.
- Hence the decision on imposing a stock limit on traders will be taken once the buffer is exhausted.

Steps taken so far

- The Centre is offloading onion from its buffer stock through agencies like **NAFED** and **NCCF** which are selling at around Rs 22/kg and state-run **Mother Dairy** at Rs 23.90 per kg in the national capital.

- The state governments have been asked to boost supply in their states lifting central buffer stock. Some states like Delhi, Tripura and Andhra Pradesh have shown interest so far.
- The Centre has **discouraged export** of onion by **increasing the minimum export price** and **withdrawing incentives**.
- It is also **cracking down on black-marketeers**.

National Agricultural Cooperative Marketing Federation of India Ltd.(NAFED)
- NAFED was established in **1958** and is registered under the **Multi State Co-operative Societies Act, 2002.**
- Its objective is to **promote Co-operative marketing of agricultural produce** to benefit the farmers.
- **Farmers are the main members** of NAFED, who have the **authority to say** in the form of members of the **General Body** in the working of NAFED.

National Cooperative Consumers' Federation of India Limited (NCCF)
- NCCF is an organisation to **promote consumer cooperative movement** in the country, aspires to facilitate the voluntary formation and democratic functioning of cooperatives, based on self-reliance and mutual aid for overall economic betterment and financial autonomy.
- NCCF was established in **1965** to function as the **apex body of consumer cooperatives** in the country.
- It is registered under the **Multi-State Co-operative Societies Act, 2002**.
- It functions under **Ministry of Consumers' Affairs, Food and Public Distribution.**

Mother Dairy
Mother Dairy was commissioned in 1974 and is a wholly owned subsidiary of the National Dairy Development Board (NDDB).
- It was an **initiative under Operation Flood**, the world's biggest dairy development program launched to make India a milk sufficient nation.
- Mother Dairy manufactures markets & sells **milk and milk products** including cultured products, ice cream, paneer and ghee under the Mother Dairy brand.
- The Company also has a diversified portfolio with products in **edible oils, fruits & vegetables, frozen vegetables, pulses, processed food** like fruit juices, jams, etc. to meet the daily requirements of every household.

Source
- https://economictimes.indiatimes.com/news/economy/agriculture/onion-prices-surge-to-rs-70-80/kg-centre-mulls-imposing-stock-limits/articleshow/71242912.cms
- https://www.thehindu.com/news/national/centre-mulling-stock-limits-for-onions/article29502600.ece
- http://www.nafed-india.com/
- http://nccf-india.com/
- https://www.motherdairy.com/Category/about-us

5) Direct tax code panel for DDT removal
Why in News?
- The **task force on Direct Tax Code (DTC)** has recommended abolishing **Dividend Distribution Tax (DDT)** with a view **to promote investment**.

News in Detail
- The task force on the new Direct Tax Code, which seeks to replace the existing Income Tax Act, submitted its report in August.
- The dividend distribution tax **hinders foreign direct investment inflows**.
- Dividends paid by a domestic company are subject to dividend distribution tax at **15 per cent** of the aggregate dividend declared, distributed or paid.
- The **effective rate is 20.35 per cent**, including a **12 per cent surcharge and a 3 per cent education cess.**

- There will be hardly any revenue loss by removing dividend distribution tax, since it **will be offset by the taxes paid by shareholders.**

Dividend Distribution Tax
- A **dividend** is a **return given by a company to its shareholders** out of the profits earned by the company in a particular year.
- Dividend **constitutes income** in the hands of the shareholders which ideally should be subject to income tax.
- However, the income tax laws in India provide for an **exemption of the dividend income** received from Indian companies by the investors by levying a tax called the **Dividend Distribution Tax (DDT) on the company paying the dividend.**

Other suggestions by the panel
- One of the main recommendations was **reduction of corporate tax**, on which decision was already taken (refer *Officers Pulse Issue No. 15* for more details).
- The task force has suggested providing relief to the middle class by **slashing personal income tax rates.**
- The panel also suggested **strengthening compliance** to shore up revenue collections.

Source
- https://economictimes.indiatimes.com/news/economy/policy/direct-tax-code-panel-for-ddt-removal-to-promote-investment/articleshow/71297618.cms
- https://www.thehindu.com/news/national/centre-mulling-stock-limits-for-onions/article29502600.ece
- https://cleartax.in/s/dividend-distribution-tax

6) PM's economic advisory council reconstituted

Why in News?
- Government of India has reconstituted the **Economic Advisory Council to the Prime Minister (EAC-PM)** for a period of **two years** with effect from September 26, 2019.

News in Detail
- **Dr. Bibek Debroy** and **Shri Ratan P. Watal** will continue to be the chairman and member secretary, respectively, of the reconstituted EAC-PM.

- The EAC-PM would have **two part-time members** apart from the two full-time members.

More about EAC-PM
- It is an **independent body** constituted to give advice on economic and related issues to the Government of India, specifically to the Prime Minister.
- The Terms of Reference of EAC-PM include analyzing any issue, economic or otherwise, referred to it by the Prime Minister and advising him thereon, addressing issues of macroeconomic importance and presenting views thereon to the Prime Minister.
- These could be **either suo-motu or on reference** from the Prime Minister or anyone else.
- They also include attending to any other task as may be desired by the Prime Minister from time to time.

Source
- https://www.thehindu.com/business/Economy/pms-economic-advisory-council-reconstituted/article29511739.ece
- http://eacpm.gov.in/

7) RBI releases report on review of liquidity management framework

Why in News?
- The **Reserve Bank of India (RBI)** has released a report on **liquidity management framework** submitted by an **internal working group** that was set up to help the central bank manage system liquidity more effectively.

Context
- The RBI's management framework was **last reviewed in 2014.**
- The central bank had decided to initiate a fresh review in June, 2019 with a **view to simplifying** it and suggest measures to clearly communicate the objectives and the toolkit for liquidity management.
- The RBI has invited public feedback on the working group's recommendations by October 31, 2019.
- The framework, if revised, will have an **impact on the flow of credit to various sectors** in the economy. This includes the **transmission of policy rate changes** to the money market rates.

Key recommendations of the report

- The framework should be guided by the **objective of maintaining the target rate** — that is, the rate in the inter-bank market for reserves — **close to the policy rate.**
- The report said the target rate is usually the **rate at which reserves are borrowed or lent among banks,** that is, the **call money market rate** in India.
- The framework should enable the central bank to be equipped with the required **tools to inject and absorb liquidity at either fixed or variable rates**, on an overnight basis as well as for longer tenors.
- The current liquidity management framework **should largely continue in its present form** — a **corridor system with the call money rate as the target rate**.
- Suggesting that the liquidity framework should be **flexible**, the report said while the corridor system would normally require the system liquidity to be in a small deficit, if financial conditions warrant a situation of liquidity surplus, the framework should be adaptable.
- The current provision of assured liquidity — up to 1% of NDTL (Net Demand and Time Liabilities) — is no longer necessary since the proposed liquidity framework would entirely meet the system's liquidity needs.
- In case build-up of a large liquidity deficit or surplus is expected to persist, it should be offset through appropriate durable liquidity operations.
- In addition to **OMOs** and **forex swaps**, the group recommended **longer term repo operations** at market related rates.

Policy rate

- The policy rate is the **key lending rate of the central bank** in a country.
- It is a **monetary policy instrument** under the control of the Central Bank **to regulate the availability, cost and use of money and credit**.
- In India, **the fixed repo rate** quoted for government securities in the overnight segment of Liquidity Adjustment Facility (LAF) is considered as the policy rate.

Corridor system

- An **interest rate corridor** or a **policy corridor** refers to the **range** within which the **operating target of monetary policy** - a short term interest rate, say the weighted average call money market rate - moves around the policy rate announced by the central bank.

Liquidity

- Liquidity means how quickly one can get their hands on their cash. In simpler terms, liquidity is to get our money whenever we need it.

Forex swap

- A foreign currency swap is an agreement to **exchange currency between two foreign parties**, in which they swap principal and interest payments on a loan made in one currency for a loan of equal value in another currency.

Source

- https://www.thehindu.com/business/call-money-rates-should-be-close-to-policy-rate-says-liquidity-panel/article29522570.ece
- https://www.rbi.org.in/scripts/BS_Press ReleaseDisplay.aspx?prid=48247
- https://www.moneycontrol.com/news/business/rbi-releases-report-on-review-of-liquidity-management-framework-4479571.html
- http://arthapedia.in/index.php?title=Policy_Rate
- http://www.arthapedia.in/index.php%3Ftitle%3DInterest_rate_corridor
- https://economictimes.indiatimes.com/definition/liquidity
- https://www.investopedia.com/terms/f/foreign-currency-swaps.asp

International Relations

1) Petronet's new MoU with Tellurian Inc.

Why in News?

- Indian Liquefied Natural Gas (LNG) importer Petronet has decided to invest $2.5 billion in American company Tellurian Inc., in an agreement that will give India access to up to five million tonnes of LNG a year.

News in Detail

- The MoU was an updated version of the one signed in February 2019.
- According to the agreement, the finalised deal is due to be completed by 31st March 2020.
- The massive investment from India in Tellurian's $29 billion Driftwood project would "create 50,000 direct and indirect jobs" in the US, and would support manufacturing in 18 U.S. States.

Concerns

- It is unclear whether there is enough demand in India for LNG considering the huge quantity of LNG insulated in the MoU.
- In 2011, GAIL, a stakeholder in Petronet had already entered into a 20-year contract to buy 5.8 million tonnes per year of U.S. LNG, split between Dominion Energy and Cheniere Energy, but India has had to resell much of its American intake due to lower demand.
- https://www.thehindu.com/business/petronets-new-mou-with-tellurian-inc-hailed-at-start-of-pms-us-visit/article29480552.ece

2) Indo-Bangladesh ties – recent developments

Why in News?

- Navy chief Admiral Karambir Singh was on a visit to Dhaka. The visit is intended to enhance the **bilateral maritime relations**.

News in Detail

- India will join Bangladesh to commemorate **100 years of 'Bangabandhu'**, the **founding father Sheikh Mujibur Rahman**, in 2020, and an **International Fleet Review in 2021** to mark **50 years of the Liberation of Bangladesh**.
- Both sides are working on a proposal for a joint boat expedition with veterans from both sides to retrace the voyage of the **Mukti Jodha** from Khulna to Hoshangabad during the Liberation War of Bangladesh in 1971.
- There is a proposal to bring Bangladesh into India's coastal radar chain network which several countries in the region have already joined will be discussed.
- As part of its foreign cooperation initiatives, the Navy already imparts extensive training to Bangladesh at all levels and also provides assistance in hydrography.
- As Bangladesh looks to expand its domestic shipbuilding industry, **India has offered assistance in ship design**.
- The **Chittagong Dry Dock Limited** is looking to build six frigates for which India has offered to build some under the $500-million Line of Credit to boost 'Make in India' efforts and also assist in building some locally.
- This year the two Navies will hold their **second coordinated patrol** and then the first bilateral naval exercise.
- In regional cooperation, **Bangladesh is the Vice Chair** of the **Indian Ocean Rim Association (IORA)** and will take over as the **Chair in 2021.**
- While cooperation has expanded with high-level visits and engagements, **issue of fishermen** and **Dhaka's expanding defence cooperation with China** remain areas of concern for India.

About IORA

- The vision for IORA originated during a visit by late **President Nelson Mandela of South Africa** to India in **1995**.
- The **Indian Ocean Rim Association** (then known as the **Indian Ocean Rim Association for Regional Co-operation**) was created two years later, in **March 1997**.
- Today, IORA is a dynamic organisation of **22 Member States** and **9 Dialogue Partners**, with an ever-growing

momentum for **mutually beneficial regional cooperation** through a **consensus-based**, evolutionary and non-intrusive approach.

- IORA's **apex body** is the **Council of Foreign Ministers (COM)** which meets annually to discuss the developments of IORA.
- The **Republic of South Africa is the current Chair** of IORA for the period from October 2017-2019. The Vice Chair will be the **United Arab Emirates** which would take Chair as from October 2019-2021.

Source

- https://www.thehindu.com/news/national/delhi-dhaka-to-boost-maritime-ties/article29483369.ece
- https://www.iora.int/en/about/about-iora

3) PM inaugurates Solar Park, Peace Garden at UN

Why in News?

- **Prime Minister Narendra Modi**, along with **UN chief Antonio Guterres** and other world leaders, inaugurated the **Gandhi Solar Park** and **Gandhi Peace Garden** at the headquarters of the UN, underlining that his principles act as a moral compass as the world grapples with challenges of climate change, terrorism and corruption.

News in Detail

- Mr. Modi was joined by **South Korean President Moon Jae-in, Singapore Prime Minister Lee Hsien Loong, Bangladesh Prime Minister Sheikh Hasina, Jamaican Prime Minister Andrew Holness** and **New Zealand Prime Minister Jacinda Ardern** in remotely inaugurating the Gandhi Solar Park and the Gandhi Peace Garden at the UN Headquarters on 24 September, 2019.
- The special commemorative event "**Leadership matters: relevance of Gandhi in the contemporary world**" was hosted by Mr. Modi **to mark Gandhiji's 150th birth anniversary**.
- A **special UN Postage stamp** on Gandhiji's 150 birth anniversary was released.

Gandhi Solar Park

- The Gandhi Solar Park is a **first of its kind symbolic Indian effort** at the U.N. that highlights India's willingness to go beyond the talk on climate change and climate action.
- At a contribution of about **$1 million**, India has gifted solar panels that have been installed on the roof of the U.N. Headquarters here, one panel each for every 193 U.N. member states.
- The solar panels are powered up to reach the maximum **50 kW** of generation power.
- Energy generated in the park is equivalent to energy that would have been created through the use of 30,000 kg of coal.
- It also has a carbon sequestration of 1,000 seedlings which will grow into trees over 10 years.

Gandhi Peace Garden

- The 'Gandhi Peace Garden' is an innovative initiative under which the **Consulate-General of India in New York**, **NGO Shanti Fund** and the State University of New York-**Old Westbury** have entered into an agreement **to plant 150 trees**.
- It is a **crowd-sourced project**, with **people adopting trees** in memory of their loved ones.
- The garden is in an open site within the 600-acre campus of the university.

Source

- https://www.thehindu.com/news/national/gandhijis-principles-act-as-a-moral-compass-says-modi/article29511959.ece

4) UNGA 2019

Why in News?

- The 74th session of UNGA happened from 17 – 30 September 2019.
- The **General Debate** and high-level meetings took place since 23 September 2019, often called UN Week.
- The theme of the General Debate is "**Galvanizing multilateral efforts for poverty eradication, quality education, climate action and inclusion**".

What is UNGA?

- UNGA is the acronym for the **United Nations General Assembly**, one of the

- six principal organs which make up the UN.
- UNGA is an **annual meeting of world leaders** to discuss and debate the world's most important global issues and how to address them.
- Representatives from all 193 member states attend UNGA. The event is one of the most important meetings of the UN calendar which heads of state from around the world attend.
- Members debate and make decisions on various issues raised during the assembly, on a wide range of topics, from human rights to education to conflicts.
- They all have the **opportunity to vote on issues**, such as new UN member states, budgeting, and resolutions for peace and security.
- Attendees also **elect non-permanent members of the Security Council** and **approve the annual UN budget**.
- Several hundred resolutions will be passed during every UNGA.

Source
- https://www.pmi.com/itstime/the-essential-guide-to-unga-2019

5) High level events during UNGA 2019

UN 2019 Climate Action Summit
About the summit
- UN Secretary-General Antonio Guterres convened the summit to mobilize political and economic energy at the highest levels to advance climate action that will enable implementation of many of the goals of the 2030 Agenda for Sustainable Development.
- The Summit was convened on the theme, **'Climate Action Summit 2019: A Race We Can Win. A Race We Must Win.'**

Developments at the summit
- More than 75 leaders pledged to eliminate their carbon emissions by 2050, though mostly from smaller economies.
- Several wealthier countries also announced more money for programs like the UN's **Green Climate Fund**, a program that helps developing countries reduce their emissions, restore carbon-sequestering ecosystems, and adapt to the unavoidable consequences of warming.

- The Summit will feed into the UNFCCC process by contributing to the 25th session of the Conference of the Parties (**COP 25) to the UNFCCC** in **Santiago, Chile**, December 2019.

- **Green Climate Fund (GCF)** was set up by the 194 countries who are parties to the United Nations Framework Convention on Climate Change (**UNFCCC**) in **2010**, as part of the Convention's financial mechanism. GCF **helps developing countries** limit or reduce their greenhouse gas (GHG) emissions and adapt to climate change.

Source
- http://sdg.iisd.org/events/un-2019-climate-summit/
- https://www.greenclimate.fund/who-we-are/about-the-fund

UN High-Level Meeting on universal health coverage
- The theme of the meeting was '**Universal Health Coverage: Moving Together to Build a Healthier World**.'
- The meeting aimed to **garner financial and political commitments** from countries and sustain health investments.
- The meeting was called for in December 2017 when the UN passed a resolution on global health and foreign policy, addressing the health of the most vulnerable for an inclusive society.

Source
- https://www.who.int/news-room/events/detail/2019/09/23/default-calendar/un-high-level-meeting-on-universal-health-coverage

UN High-level Political Forum on Sustainable Development (HLPF)
- The high level forum was convened at the **level of heads of state and government** under the auspices of the UNGA, from 24-25 September 2019.
- Such meetings **take place every four years**, and the meeting in 2019 – also known as the **SDG Summit** – is the first since the adoption of the 2030 Agenda.
- The SDG Summit resulted in the adoption of the Political Declaration, "**Gearing up for a decade of action and delivery for sustainable development**".
- World leaders called for a decade of action to deliver the SDGs by 2030 and

announced actions they are taking to advance the agenda.

- More than 100 acceleration actions have been announced. "**SDG Acceleration Actions**" are initiatives **voluntarily undertaken by countries** and other stakeholders to contribute to a speeded up implementation of the 2030 Agenda.

Source

- http://sdg.iisd.org/events/un-high-level-political-forum-on-sustainable-development-under-unga-auspices/

6) Coalition for Disaster Resilient Infrastructure

Why in News?

- Prime Minister of India, Shri Narendra Modi announced a global Coalition for Disaster Resilient Infrastructure (CDRI), at the **UN Climate Action Summit 2019** held in New York City, USA, on September 23, 2019.
- It was presented as **practical approach** and roadmap to make infrastructure resilient to disasters and **all member states of the UN were invited to join** the grouping.

About CDRI

- The CDRI is an international partnership that **will support countries- developed and developing**- to **build climate and disaster resilient infrastructure**.
- The Coalition's **secretariat** is **supported by UN Office for Disaster Risk Reduction (UNDRR)** and will be **based in Delhi**.
- A partnership of national governments, UN agencies and programmes, multilateral development banks and financing mechanisms, the private sector, and knowledge institutions that aims to promote the resilience of new and existing infrastructure systems to climate and disaster risks, thereby ensuring sustainable development.
- Developed through consultations with more than 35 countries, CDRI **envisions enabling measurable reduction in infrastructure losses** from disasters, including extreme climate events.
- Established as a **platform for generating and exchanging knowledge**, CDRI will **conduct country-specific and global activities**.

- CDRI will provide member countries technical support and capacity development, research and knowledge management, and advocacy and partnerships to facilitate and encourage investment in disaster resilient infrastructure systems.
- In its formative stage, CDRI will focus on developing resilience in ecological infrastructure, social infrastructure with a concerted emphasis on health and education, and economic infrastructure with special attention to transportation, telecommunications, energy, and water.
- Within 2-3 years, the coalition aims to have a 3-fold impact of achieving considerable changes in member countries' policy frameworks, future infrastructure investments and high reduction in economic losses from climate-related events and natural disasters across sectors.
- CDRI will uphold the UN Agenda 2030 principle of leaving no one, no place, and no ecosystem behind, focusing on the most vulnerable regions and populations, while enabling inclusive and deliberative processes that recognize national and local efforts as primal.

Source

- https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1586051

7) India-Pacific Islands Developing States Leaders' Meet

Why in News?

- The **India-Pacific Islands Developing States (PSIDS) Leaders' Meeting** was held on the sidelines of the 74th session of the UN General Assembly in New York.

News in Detail

- The meeting was attended by the Heads of delegation of Fiji, Republic of Kiribati, Republic of Marshall Islands, Federated States of Micronesia, Republic of Nauru, Republic of Palau, Independent State of Papua New Guinea, The Independent State of Samoa, Solomon Islands, Kingdom of Tonga, Tuvalu and Republic of Vanuatu.
- Prime Minister Narendra Modi has announced a **$150 million line of credit** to the group of Pacific island nations **for**

undertaking **solar, renewable energy and climate related projects** based on their requirement.

- He also announced a total allocation of **$12 million** to the member states towards implementation of **high-impact developmental project** in the area of their choice.
- Leaders of PSIDS were also **invited to join the Coalition for Disaster Resilient Infrastructure (CDRI).**
- PM extended an invitation to all the leaders for the **3rd FIPIC Summit** to be held in **Port Moresby in first half of 2020.**
- The meeting deliberated on a wide range of issues, including implementation of projects under the **India-UN Development Partnership Fund** and a roadmap for future India-PSIDS cooperation.

India-UN Development Partnership Fund

- It is a dedicated facility within the **United Nations Fund for South-South Cooperation (UNOSSC)** established in 2017.
- It is supported and led by the Government of the Republic of India, managed by the UNOSSC, and implemented in collaboration with the United Nations system.
- The Fund **supports Southern-owned and led, demand-driven, and transformational sustainable development projects** across the developing world, with a **focus on least developed countries and small island developing states.**
- United Nations agencies implement the Funds projects in close collaboration with partnering governments.

Background

- India's relationship with Pacific Island nations has deepened with the evolution of **Act East Policy**, resulting in the setting up of the action-oriented **Forum for India—Pacific Island Cooperation (FIPIC).**
- The first and second editions of the FIPIC took place in Fiji (2015) and Jaipur (2016).
- During the FIPIC Summits Prime Minister articulated India's desire to be a close partner of the Pacific Island nations and

its readiness to work closely to advance their developmental agenda.

Source

- https://www.thehindu.com/news/national/pm-modi-announces-150-mn-line-of-credit-to-pacific-island-nations-for-climate-related-projects/article29507764.ece
- https://economictimes.indiatimes.com/news/politics-and-nation/india-announces-12-million-grant-for-pacific-island-states/articleshow/71286204.cms
- https://www.unsouthsouth.org/partner-with-us/india-un-fund/

8) India-CARICOM leaders' summit

Why in News?

- Prime Minister Narendra Modi met the leaders of the **Caribbean Community and Common Market (CARICOM)** during the **first-ever India-CARICOM leaders' summit** in New York, on the sidelines of UNGA 2019, with a **focus on fighting climate change** and increasing India's participation with the grouping.

News in Detail

- Leaders and representatives from Antigua & Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent & the Grenadines, Suriname, Trinidad and Tobago attended the meeting.
- India announced a **$14 million grant for community development projects** in the CARICOM and another **$150 million line of credit for solar, renewable energy and climate- change related projects**.
- A regional centre for excellence in information technology was announced to be set up in Georgetown, Guyana, and a vocational training centre in Belize by upgrading the existing India-funded centres in these countries.

About CARICOM

- The CARICOM grouping has **15 members-states** and **five associate members**.
- CARICOM countries came together in **1973** to form an **economic and political community** that works jointly to shape

policies for the region and encourages economic growth and trade.

- One of CARICOM's current goals is to **establish a free-trade zone** and **single market** for increased trade and economic growth in the region.

Source

- https://www.thehindu.com/national/pm-modi-hosts-caribbean-leaders-announces-14-million-grant-to-caricom/article29516300.ece

SCIENCE and TECHNOLOGY

1) Chandrayaan 2's Vikram lander and Pragyan rover fade into lunar sunset

Details

- Vikram lander of the Chandrayaan-2 mission crashed on the lunar surface on September 7, a few minutes before the scheduled soft landing.
- It was carrying Pragyan rover inside.
- Though the lander was located, it couldn't be brought into contact with the ground stations failed.
- The data is being analysed to find out the reasons for the failure of soft landing of the mission.
- The sun had set on the lunar side where the two crafts of Chandrayaan-2 mission lie.
- Their solar-powered batteries would have died out, putting them both to sleep forever on moon.
- Chandrayaan 2 orbiter has been circling the moon since August 20.
- For more details about the mission, refer *Officer's Pulse Issue No. 13.*

Source

- https://www.thehindu.com/sci-tech/chandrayaan-2s-vikram-lander-pragyan-rover-fade-into-lunar-sunset-their-batteries-likely-dead/article29478844.ece

2) Genetics reveals origin and evolution of blackbuck, chinkara

Why in News?

- Researchers from the Indian Institute of Science (IISc), Bengaluru, studied four genera of 'true antelopes' — *Gazella, Nanger, Eudorcas* and *Antelope* — and found that the **blackbuck's** *(Antilope cervicapra)* **ancestors** came into India from the **Saharo-Arabian region about two million years ago** and then evolved to its current form.

Evolution of Blackbuck

- If the divergence dates of the blackbuck are compared to the biogeographical conditions in India, we find that the antelopes were part of the fauna that came in through the **northwest gateway** into India.
- The very recent formation of the Thar Desert could have a been a barrier to the back-dispersal of a grassland specialist like the blackbucks.
- The lack of blackbuck fossils outside India leads to the speculation that they **diverged from their ancestors only after reaching India**, long after the intensification of aridification in the Indian subcontinent.
- The expansion of grasslands following that period opened up new niches, which could have facilitated the divergence of many taxa.

Evolution of Chinkara

- The chinkara *(Gazella bennetti),* another 'true antelope' of India, **evolved much more recently** about 7,00,000 years ago, probably **after the establishment of the Thar desert**.
- These are also found in the hilly terrains of Iran, and are known as Iranian Gazelle.
- Being facultative drinkers, they were **better adapted to the drier, semi-arid region**.

Source

- https://www.thehindu.com/sci-tech/science/genetics-reveals-origin-and-evolution-of-blackbuck-chinkara/article29477449.ece

3) Ancient DNA reveals the first glimpse of what a Denisovan may have looked like

Why in News?

- Scientists have painted a portrait of a young female who belonged to a mysterious, humanlike population known as Denisovans around 50,000 years ago.

News in Detail

- The reconstructions - based on **complex DNA analysis** of Denisovans, Neanderthals, Chimpanzees and humans - show that the **Denisovan skull was probably wider than that of us or Neanderthals**. They also appeared to have **no chin**.
- The experts predict many **Denisovan traits that are similar to that of Neanderthals** including a **sloping forehead**, **long face** and **large pelvis**, and others that are unique among humans, like a large dental arch.

More about Denisovans

- Denisovans are an **extinct species of hominid** and a **close relative to modern humans**.
- They're a recent addition to the human family tree—scientists first identified Denisovan remains from a cave in Siberia in 2010.
- Denisovans may have ranged from **Siberia to Southeast Asia** during the last Ice Age.
- DNA evidence suggests Denisovans are **related to both Neanderthals and modern humans**, and may have interbred with both.

- Denisovans share a **common ancestor with both modern humans and Neanderthals**. This common ancestor, called *Homo heidelbergensis*, most likely lived in **Africa.**
- Between 300,000 and 400,000 years ago, one group of *Homo heidelbergensis* left Africa.
- They expanded into Eurasia and then split: Those that moved west into Europe evolved into Neanderthals. The ones that moved east into Asia became Denisovans.
- The human ancestors that remained in Africa evolved into our own species— *Homo sapiens*.
- Modern humans and Denisovans likely met for the first time in Eurasia some 40,000 to 60,000 years ago, after *Homo sapiens* began their own migration out of Africa.
- Scientists have found evidence that the Denisovans lived at high altitudes in Tibet, passing on a gene that helps modern people cope at similar elevations.
- It is **not yet known why they disappeared**.
- So far, the only Denisovan remains discovered are three teeth, a pinky bone and a lower jaw.
- About **5% of the ancestry of people from Oceania** can be traced to Denisovans, according to studies.

Source

- https://www.bbc.com/news/world-49760240
- https://www.history.com/topics/pre-history/denisovans

PIB ANALYSIS

1) Climate Action Summit (UNGA) :

- GS Paper-3 (Groupings & Agreements Involving India and/or Affecting India's Interests)
- At the 74th session of the United Nations (UN) General Assembly, the Prime Minister of India addressed the United Nations (UN) Climate Action Summit as well as the Universal Health Coverage meeting, held in New York on 23rd September, 2019.

About Climate Action Summit:

- It was hosted by the UN Secretary.
- It had the key focus on raising ambition and accelerate action to implement the Paris Agreement.

About the Remarks of Summit:

- By 2022 India will increase renewable energy capacity to beyond 175 GW (capacity as committed under the Paris Climate Agreement).
- India is going to spend approximately $50 billion in the next few years on the Jal Jeevan Mission to conserve water, harvest rainwater and develop water resources.
- On the International forum, almost 80 countries have joined our International Solar Alliance campaign.
- India is also working to considerably increase the proportion of the biofuel blend in petrol and diesel.

Two International Initiatives are to be launched:

- India and Sweden together with other partners are launching the Leadership group within the Industry transition track, this will provide a platform for governments and the private sector with opportunities for cooperation in the area of Technology innovation which in turn will help to develop low carbon pathways for industry.
- In order to make our infrastructure disaster resilient, India is launching a Coalition for Disaster Resilient Infrastructure.

Why in news?

- Recently, UNGA Climate Action Summit was held and our PM Narendra Modi addressed the United Nation Climate Action Summit and Universal Health Coverage meeting.

Source:

-

2) Launch of UMMID:

- GS Paper – 2 -Health (Government Policies & Interventions)

About UMMID:

- UMMID (Unique Methods of Management and Treatment of Inherited Disorders) initiative to tackle inherited genetic diseases of newborn babies.
- Aim: UMMID aims to create awareness about genetic disorders amongst clinicians and establish molecular diagnostics in hospitals so that the fruits of developments in medical genetics reach the patients in India.
- The initiative is designed on the concept of 'Prevention is better than Cure'.
- In India's urban areas, congenital malformations and genetic disorders are the third most common cause of mortality in new-borns.
- To create awareness about genetic disorders amongst clinicians and to establish molecular diagnostics in hospitals.

UMMID Initiative involves :

- Establish NIDAN (National Inherited Diseases Administration) Kendra to provide counselling, prenatal testing and diagnosis, management and multidisciplinary care in Government Hospitals wherein the influx of patients is more.
- To produce skilled clinicians in Human Genetics, and
- To undertake screening of pregnant women and new born babies for inherited genetic diseases in hospitals at aspirational districts.
- UMMID initiative shall work to shift focus from "sick-care" to "wellness" by promoting the prevention of genetic diseases.
- The program implemented (by Department of Biotechnology) at

government hospitals will benefit people who cannot afford expensive care for genetic disorders.

Why in news?

- Recently, UMMID (Unique Methods of Management and Treatment of Inherited Disorders) initiative to tackle inherited genetic diseases of newborn babies has been launched by Department of Biotechnology.

Source:

- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1585920

3) Launch of ISPATI IRADA:

- GS Paper 2 – Economy

About Ispati Irada:

- A new logo named ISPATI IRADA was launched by Ministry of Steel
- The "ISPATI IRADA" campaign aims to increase appropriate usage of steel in the country and bring more strength to society.
- The brand "Ispati Irada "will be allowed to use by entities working on this theme.

About the Launch:

- ChintanShivirwas organized by Ministry of Steel on the theme -Towards a Vibrant, Efficient and Globally Competitive Indian Steel sector.
- The purpose of the event was to bring all stakeholders together to deliberate on a roadmap for making Indian Steel Sector more vibrant, efficient and globally competitive.
- The Ministry urged industry to work towards zero exports of natural resources and focus on value addition.

Why in news?

- ISPATI IRADA- new logo was launched by Ministry of Steel.

Source:

- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1585947

4) NIDM Workshop on Post Disaster Needs Assessment (PDNA):

- GS Paper 3 -Disaster Management

About NIDM:

- National Institute of Disaster Management is a premier institute for training and capacity development

programs for managing natural disasters in India, on a national as well as regional basis.

- The National Centre of Disaster Management (NCDM), constituted under an Act of Parliament in 1995; was re-designated to give the present name of National Institute of Disaster Management (NIDM) by the Disaster Management Act 2005.
- The NIDM works under the government's directives to train and conduct periodic checks to regulate effective earthquake and disaster control policies throughout the country with support from semi-government, private firms and NGOs.

About PDNA:

- The PDNA tool was developed by the UN Development Group, the World Bank and the European.
- The aim was to develop and use common assessment and recovery planning approaches in post-crisis settings.
- The main goal is to assess the full extent of a disaster's impact, define the needs for recovery, and, in so doing, serve as the basis for designing a recovery strategy and guide donors' funding.

Objective:

- A PDNA looks ahead to restoring damaged infrastructure, houses, livelihoods, services, governance and social systems, and includes an emphasis on reducing future disaster risks and building resilience.
- PDNA is the first step towards developing a holistic recovery programme that promotes equity and inclusion.

About Workshop:

- The focus of this workshop is to disseminate the outcome documents of the study to all the relevant stakeholders so that the same may be utilised by them as a reference document while preparing the memorandum for submission to the MHA in post disaster phase.
- The workshop will also discuss the issues and challenges faced by States in assessment of damage and loss along with the capacity gap for undertaking such detailed exercise.

Why in news?

- Recently, a workshop on Post Disaster Need Assessment was conducted.

- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1585785

5) India Water Week 2019:

- GS Paper 3 – Environment and Ecology
- The theme of the India Water Week-2019 is 'Water Cooperation – Coping with 21st Century Challenges' and it is being organised by the Department of Water Resources, River Development and Ganga Rejuvenation, the Ministry of Jal Shakti.

About India Water Week:

- The India Water Week is a regular forum where the Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India discusses, talks, strategies with eminent stakeholders through seminars, exhibitions and sessions to build public awareness, to get support to implement key strategies for conservation, preservation and optimum use of available water.
- This is based on the hypothetical prediction that the likelihood of conflicts due to water related issues might increase as population in the 21st century continues to grow.
- The event is being organised since 2012. In 2017, India partnered with the European Union as international partner.

Why in news?

- India Water Week-2019 was organised by Department of Water resources, River Development and Ganga Rejuvenation, the Ministry of Jal Shakti.

Source:

- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1585981

6) Global Goal Keeper Award for Swachh Bharat Abhiyan:

- GS Paper 3 – Environment and Ecology & GS Paper 2 -Health (Government Policies and Interventions)

About Goal Keeper Award:

- The awards were started by the Bill and Melinda Gates Foundation.
- The year 2019 marks the fourth annual Global Goals Awards.
- The Goalkeepers award seeks to bring together leaders from across the world to accelerate progress for ending poverty and fighting inequality.

About Swachh Bharat Abhiyan:

- The Swachh Bharat Abhiyan or Mission, launched on 2nd of October 2014, is so far the largest programme on sanitation by Indian Government.
- It has two sub-Missions Swachh Bharat Mission (Rural) and Swachh Bharat Mission (Urban).
- The basic objective is to provide sanitation facilities to every family, including toilets, solid and liquid waste disposal systems, village clean line.

About the Ceremony:

- Prime Minister Shri Narendra Modi received the 'Global Goalkeeper' Award for Swachh Bharat Abhiyan.
- The award is given the Bill and Melinda Gates Foundation for the government's initiatives on sanitation, including the Swachh Bharat Abhiyan.
- It was addressed that the success of Swachh Bharat Mission is due to the people of India. They made this their own movement and ensured the desired results were attained.
- Goalkeepers Award is the Bill and Melinda Gates Foundation's campaign to accelerate progress towards sustainable development goals.

Why in news?

- Recently, Prime Minister Shri Narendra Modi received the 'Global Goalkeeper' Award for Swachh Bharat Abhiyan.

Source:

- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1586104

7) INS Tarkash:

- GS Paper 3 Various Security forces and agencies and their mandate

About INS Tarkash:

- It is a state-of-the-art stealth frigate of the Indian Navy.
- It is the 5th Talwar-class frigate constructed for the Indian Navy, built at the Yantar shipyard in Kaliningrad, Russia.
- It is equipped with a versatile range of weapons and sensors capable of addressing threats in all three dimensions.
- The ship is part of the Indian Navy's Western Fleet and under the Operational Command of Flag Officer Commanding-in-

Chief, Western Naval Command, based at Mumbai.

About the Visit:

- INS Tarkash has arrived at Maputo, Mozambique on Sep 19 for a three day visit.
- Professional interactions are planned with the Mozambique Navy towards further enhancing co-operation between the two navies.
- Indian Navy ships are regularly deployed overseas as part of Indian Navy's mission of building 'bridges of friendship' and strengthening international cooperation with friendly countries.

Why in news?

- INS Tarkash, 3-day visit to Mozambique.

Source:

- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1586227

8) Indian Coast Guard Ship "Varaha":

- GS Paper 3 Various Security forces and agencies and their mandate

About Indian Coast Guard Varaha:

- It is the fourth in series of seven 98-m Offshore Patrol Vessels (OPV) of Indian Coast Guard (ICG).
- It has been designed and built indigenously by Larsen & Toubro (L&T) at its Katupalli ship building yard in North Chennai.
- ICGS 'Varaha' will strengthen the Coast Guard fleet in responding to the threats of maritime terrorism, smuggling and challenges of maritime law enforcement.
- ICGS 'Varaha' will enhance the surveillance and patrolling capabilities of Indian Coast Guard and reinforce their role as 'Sentinels of our Seas'.
- ICGS Varaha is capable of operating the indigenously developed advanced light helicopter developed by Hindustan Aeronautics Limited (HAL).
- The ship is well equipped with high speed boats, medical facilities and modern surveillance systems.

Features of Varaha:

- It is fit with latest navigation and communication equipment. It is designed to carry one twin engine helicopter and 4 high speed boats.

- It also has some most advanced sensors and machinery as well as a 33-millimetre (mm) gun.
- It will also be fitted with 12.7 mm gun with fire control system
- It is also equipped with an Integrated Bridge System (IBS), Automated Power Management System (APMS), Integrated Platform Management System (IPMS), and High Power External Fire Fighting (EFF) system.

Why in news?

- ICGS "Varaha" - the fourth in series of seven 98-m Offshore Patrol Vessels (OPV) of Indian Coast Guard.

Source:

- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1586154

9) Exercise MALABAR:

About the Exercise MALABAR:

- Originally begun in 1992 as a bilateral exercise between India and the United States, Japan became a permanent partner in 2015
- Past non-permanent participants are Australia and Singapore.
- Then it got permanently expanded into a trilateral format with the inclusion of Japan in 2015.
- The annual Malabar series includes diverse activities, ranging from fighter combat operations from aircraft carriers through Maritime Interdiction Operations Exercises.
- Malabar 2019 would encompass conduct of complex maritime operations in the surface, sub-surface and air domains, and focus on Anti-Submarine Warfare, Anti-Air, Maritime Interdiction Operations (MIO) including Visit Board Search and Seizure (VBSS) .
- In addition, the partner navies would conduct official protocol visits, professional interactions including Subject Matter Expert Exchanges (SMEE), reciprocal ship visits, sports fixtures and social events during the harbour phase.
- This year is also witnessing the largest participation to date with 16 ships, 2 submarines and over 95 aircraft taking part from the three countries.

- India and Japan defence forces organise a series of bilateral exercises namely, JIMEX, SHINYUU Maitri, and Dharma Guardian.Whereas India and USA conduct Joint Military Exercises namely, Yudha Abhyas.

Why in news?

- The 23rd edition of the Trilateral Maritime Exercise MALABAR, is scheduled between the navies of India, Japan and USA off the coast of Japan.

Source:

- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1586112

10) Launch of TB Harega Desh Jeetega Campaign:

- GS Paper 2 -Health (Government Policies and Interventions)

About TB Harega Desh Jeetega Campaign:

- The campaign has three strong pillars:
1. Clinical Approach
2. Public Health Component
3. Active Community Participation
- Campaign aims to improve and expand the reach of TB care services across the country, by 2022.
- The supporting aspect of campaign includes- patient support, private sector engagement, political and administrative commitment at all levels.
- The government will ensure that all patients, at private or public hospitals, receive free-of-cost and high-quality TB care.
- The interventions will be accompanied by a comprehensive, mass media and communications campaign to generate awareness about the disease and the free treatment services available under the government program

About the launch:

- Union Minister for Health and Family Welfare today launched the new TB Harega Desh Jeetega Campaign, along with the National TB Prevalence Survey.
- A 'TB India Report (2019)' was also released by the Dr. Harsh Vardhan. According to the report, 21.5 lakh TB cases were reported in 2018 to the government.

- He also launched an all-oral regimen kit for multi-drug resistant Tuberculosis (TB) patients which does not include injections which are painful and can have side effects.
- He also announced a partnership with the World Bank which is providing a $400 million credit for accelerating TB response in 9 states through private sector engagement and other critical interventions.
- Among states with a large population (>50 lakhs), Himachal Pradesh and Gujarat were awarded as best performers.
- Tripura and Sikkim were recognised for their efforts among medium population (less than 50 lakhs) states.
- Puducherry, and Daman and Diu were judged as the best performers among Union Territories.
- India has also partnered with the Global Fund to launch JEET (Joint Effort for Elimination of TB), a private sector engagement program operating in 45 cities across the country.
- In April 2018, the government launched the Nikshay Poshan Yojana, a direct benefit transfer (DBT) scheme to provide nutritional support to TB patients.
- Under the scheme, TB patients have been receiving Rs. 500 per month for the entire duration of treatment. Since its inception, a total amount of Rs. 427crore has been paid to over 26 lakhs beneficiaries through direct transfers to their bank accounts.

Why in news?

- Recently, Union Minister for Health and Family Welfare today launched the new TB Harega Desh Jeetega Campaign, along with the National TB Prevalence Survey.

Source:

- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1586198

11) First Indigenous Fuel Cell System:

- GS Paper – 3 Indigenization of Technology

About First Indigenous Fuel System:

- On the occasion of the Council of Scientific and Industrial Research (CSIR) Foundation Day, the President of India recently introduced India's first

indigenously developed high-temperature based Fuel Cell System.
- It is developed under the Public-Private Partnership (PPP) model by the Council of Scientific and Industrial Research (CSIR) in partnership with Indian industries.
- It is built under India's flagship programme named 'New Millennium Indian Technology Leadership Initiative (NMITLI)'.
- This system will also meet the requirement of efficient, clean and reliable backup power generator for telecom towers, remote locations and strategic applications as well.
- This development would replace Diesel Generating (DG) sets and help reduce India's dependence on crude oil.
- The technology has placed India in the league of developed nations which are in possession of such a knowledge base.
- In the field of clean energy, Fuel Cell distributed power generation systems are emerging as a promising alternative to grid power.
- The development of fuel cell technology is indigenous and carries immense national importance in terms of non-grid energy security.

Function of Fuel Cell System:
- The Fuel Cells developed are based on High Temperature Proton Exchange Membrane (HTPEM) Technology.
- The 5.0 kW fuel cell system generates power in a green manner using methanol or bio-methane, with heat and water as bi-products for further use.
- This helps to attain an efficiency that is greater than 70%, which is difficult to achieve by other energy sources.

Why in news?
- Recently, the President of India recently introduced India's first indigenously developed high-temperature based Fuel Cell System.

Source:
- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1586349

12) Workshop on 'Outreach of Emerging Technologies' to MSME:
- GS Paper – 3 (Science and Technology) Growth & Development

About MSME:
- Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 which was notified on October 2, 2006, is based on
- Investment in plant and machinery for manufacturing units.
- Investment in equipment for service enterprises.
- MSME is 2nd largest employment provider after agriculture sector.
- It contributes around 45% of the overall exports from India.
- It provides opportunity for budding entrepreneurs to build creative products boosting business competition and fuels growth.

About the workshop:
- The Minister inaugurated the workshop on Outreach of Emerging Technologies to MSMEs in New Delhi.
- The primary objective of this workshop is awareness generation and dissemination of knowledge about some of the emerging technologies, their applications, and the kind of potential they offer, the impact they can have on the sector, challenges faced in adoption and some relevant models from around the world.
- The other aim is to chart a way forward for institution-institution collaboration to make the penetration of these technologies to the MSMEs faster and effective.
- MSMEs should have access to and be able to adopt latest and new technologies and appealed to business associations to help MSMEs in technology upgradation and access to credit.
- 120 new Tool Rooms/Technology centres have been approved and these 153 centres when fully operational will train approximately eight lakh youngsters in various skills.
- The MSME sector has been recognised globally as a major contributor to Gross Domestic Product (GDP).

Why in news?
- Outreach of Emerging Technologies to MSMEs.

Source:
- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1586285

13) India -CARICOM

- GS Paper – 2 (Bilateral Groupings & Agreements)

About CARICOM:

- The Caribbean Community was formed in 1973.
- The CARICOM Grouping has 15 member states and 5 associate members .They came together to form an economic and political community.
- 15 member: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St Lucia, St. Vincent and the Grenadines, Suriname and Trinidad & Tobago.
- The CARICOM Single Market and Economy are intended to benefit the people of the region by providing more and better opportunities to produce and sell goods and services and to attract investment.
- They have primary objectives to promote economic integration and cooperation among its members, to ensure that the benefits of integration are equitably shared, and to coordinate foreign policy.

About the meeting:

- India's historic and warm relations with the countries of the Caribbean witnessed a new momentum with the meeting of Prime Minister of India with 14 leaders of the CARICOM group of countries on the sidelines of the United Nations General Assembly in New York.
- The meeting deliberated on the steadily intensifying and deepening relations between India and partner countries of the Caribbean, not only in the bilateral but also in the regional context.

- India has provided immediate financial assistance of USD 1 million to recover from the destruction caused by Hurricane Dorian in the region and the worst-hit island of Bahamas.
- India also announced a USD 14 million grant for community development projects in the CARICOM and another 150 million Line of Credit for solar, renewable energy and climate- change-related projects.
- The Indian side also expressed support to specialized capacity building courses, training and deputation of Indian experts based on the needs and requirements of the CARICOM countries.

Why in news?

- Recently, PM met the Leaders of CARICOM at the UNGA.

Source:

- https://pib.gov.in/PressReleseDetailm.aspx?PRID=1586334

14) Exercise KAZIND:

- GS Paper 3 Bilateral Military Exercise

About Exercise KAZIND:

- Joint Military Exercise KAZIND- 2019 is a military between India and Kazakhstan will be conducted at Pithoragarh.
- It is the fourth edition of an annual event which is conducted alternatively in Kazakhstan and India.
- The aim of this exercise is to conduct company level joint training with emphasis on counter terrorism operations in mountainous terrain.

Why in news?

- Recently, Joint Military Exercise was conducted between India and Kazakhstan.

Source:

- https://pib.gov.in/PressReleseDetail.aspx?PRID=1586408

News in Depth

AIR NEWS

1) India sign agreement to stop spread of fake news online:

- GS Paper – 3 (Role of Media & Social Networking Sites in Internal Security Challenges)

About Agreement:

- Under UN, India and the other signatories committed to promote independently, diverse and reliable information on the internet under an accord initiated by Reporters without Borders (RSF).
- The agreement underlined the responsibility of internet providers to promote trustworthy content to escape the current information chaos.

About Reporters without Borders:

- Reporters without borders is also Known as Reporters Sans Frontiers (RSF) in other name.
- It helps to conduct political advocacy on issues relating to freedom of information and freedom of the press.
- Key Publications are World Press Freedom Index, Predators of Press Freedom, and Press Freedom Barometer.

Why in news?

- India signed agreement to stop spread of fake news online under guidelines of UN.

Source:

- http://newsonair.com/News?title=20-countries-at-UN-sign-agreement-to-fight-fake-news&id=372172

2) Emergency Response Support System and PRAKHAR street crime patrol van:

- GS Paper 2-Governance(Government policies and interventions for development in various sectors)

About Emergency Response Support System:

- ERSS will provide single emergency response number across the country, provides 24 hours efficient and effective response system which can receive inputs from various voice and data services like voice call, SMS, e-mail and panic buttons in public transport.
- It can also identify the location of persons in distress, connecting through voice or data, and immediate assistance will be provided.
- ERSS will provide standardized and easy to use mobile apps, Internet of Things applications on Pan-India basis.

About PRAKHAR Vans:

- PRAKHAR vans will patrol at vulnerable spots to control street crime.
- A total of 15 vans equipped with modern devices will conduct extensive patrolling on street crime prone areas in Delhi.
- Prakhar street crime control patrol vehicle was conceptualized under 'Safe City Project 'to curb street crime.

Why in news?

- Delhi has launched single emergency helpline number for Police, Fire and Ambulance services.

Source:

- http://www.newsonair.com/News?title=112-single-emergency-helpline-number-launched-in-Delhi&id=372065

3) Pacific Small Island Developing states (PSIDS):

- GS Paper – 2 International Relations (Global groupings)

About the meeting:

- Prime Minister Narendra Modi highlighted the need for development policies to be inclusive and sustainable to reduce inequality and contribute to empowerment and improvement of the quality of people's lives.
- External Affairs Ministry has said, in the spirit of his fundamental Mantra "Sabka Saath, Sabka Vikas aur Sabka Vishwas PM

Modi announced allocation of 12 million US Dollar grant towards the implementation of high impact developmental project in the area of their choice.
- Prime Minister Narendra Modi along with others world leaders also inaugurated the Gandhi Solar Park at the UN headquarters.

About Small Island developing states:
- SIDS - Small Island developing states are islands of the Caribbean Sea and the Atlantic, Indian and Pacific Ocean.
- Small Island developing states are maritime countries which share similar sustainable development challenges.
- Its unique and particular vulnerabilities are highlighted in "The future we want", adopted at the United Nations conference on Sustainable Development.
- Small Island developing states consist of 39 countries.

Why in news?
- PM Narendra Modi announces 12 million dollar grant for high impact development project in Pacific Island countries.

Source:
- http://www.newsonair.com/News?title=India-announces-12-million-dollar-grant-for-high-impact-developmental-projects-in-Pacific-Island-countries&id=372017

4) World First Camel Hospital
- GS Paper-1 Miscellaneous

About:
- World's first camel hospital in Dubai is set to expand its facilities by an additional 50% in response to the increase in demand for its services.
- The camel hospital was built at a cost of 40 million dirhams, opened its doors in 2017 to meet the demand in UAE for an advanced medical facility dedicated to treating camels.
- Camels are an integral part of the United Arab Emirates heritage. Historically, camels, known as the 'Ship of the Desert'

were a source of transport as well as food and milk in the region.
- The camel has continued to be an integral part of the UAE's society and culture to this day, with select breeds used for camel racing, a sport highly popular among Emiratis.
- The hospital also aims to contribute significantly to the research and development of camel medicine as part of enhancing the global body of therapeutic knowledge related to the desert animal.

Why in news?
- Recently World first Camel hospital has been opened in Dubai.

Source:
- http://www.newsonair.com/News?title=World%E2%80%99s-first-camel-hospital-at-Dubai-set-to-expand-its-facilities&id=371969

5) Shondol dance:
- GS Paper-1 (Art and Culture)

About:
- It is a Ladakhi Shondol dance i.e. it is known as the royal dance of Ladakh.
- It is performed by Takshoma or women dancers to praise the King of Ladakh.
- Shondol is famous dance, which used to be performed by artists for King of Ladakh on special occasion.
- This festival was not only focused on Zero usage of Plastic but also sensitize the religious and community leaders on plastic waste management and recycling.
- It was organized by the Live to Love India, Drukpa Charitable Trust and Young Drukpa Association.

Why in news?
- History has been created by Ladakhi Shondol Dance into the Guinness book of World records.

Source:
- http://www.newsonair.com/News?title=Ladakhi-Shondol-dance-created-history&id=371868

Hindu Editorial Analysis

1) The end of smoke without fire

- GS Paper II and III – Social issues; science and technology

Context –

- Recently the Union Cabinet approved the promulgation of the Prohibition of Electronic Cigarettes (production, manufacture, import, export, transport, sale, distribution, storage and advertisement) Ordinance, 2019.
- Any violation will attract imprisonment up to one year or fined up to □1, 00,000 or both for the first offence.
- Storage of electronic-cigarettes shall also be punishable.
- There is a concern that e-cigarettes can "seriously undermine and derail the government's efforts to reduce the prevalence of tobacco use.''

What are e-cigarettes and how do they work?

- Electronic nicotine delivery systems (ENDS) or non-combustible tobacco products are known as — vapes, e-hookahs, electronic cigarettes and e-pipes.
- An e-cigarette, which is a battery-operated device, produces aerosol by heating a solution containing nicotine among other things.
- The device contains nicotine and flavors in the form of liquid which is primarily composed of solvents such as glycerol and/or propylene glycol.
- The aerosol containing a suspension of fine particles and gases simulates cigarette smoke. Following a puff, the aerosol is delivered to the user's mouth and lungs and the rest is exhaled.

What are the effects?

- E-cigarettes deliver ultrafine particles and nicotine deep into the lungs, which is then absorbed by the blood.
- A 2018 study found the use of e-cigarette daily was associated with a 79% increase in heart attack risk after other variables were taken into account.
- According to ICMR, depending on the battery output voltage used, nicotine solvents can release in varying amounts potential carcinogens such as acetaldehyde, formaldehyde and acetone.
- The liquid-vaporizing solutions also contain "toxic chemicals and metals that can cause several adverse health effects including cancers and diseases of the heart, lungs and brain". Flavours such as diacetyl used in e-cigarettes are linked to serious lung disease. E-cigarettes also contain volatile organic compounds, heavy metals, such as nickel, tin and lead.
- E-cigarette use among youths and young adults is a public health concern; exposure to nicotine during adolescence can cause addiction and can harm the developing adolescent brain.
- Nicotine harms parts of the brain that control attention, learning, mood, and impulse control. Nicotine also changes the way synapses — connections between brain cells — are formed. This is of concern as more synapses are formed in younger brains.
- In animals, aerosol exposure was found to increase secretion of inflammatory markers induced airway hyper-reactivity and caused lung tissue degradation in chronic exposure.

Do they help smokers to kick the habit?

- At present, compared with nicotine patches and nicotine gum, there is limited evidence to support the claim that e-cigarettes help people to stop smoking.
- The amount of nicotine in each vial varies; so does the amount of nicotine consumed in each puff.
- Nicotine content mentioned in the label and the actual amount has also been found to differ.
- The U.S. Food and Drug Administration (FDA) have not approved e- cigarettes as an alternative to reduce smoking.
- A 2015 survey cited by The Truth Initiative (an anti-tobacco organisation) found that almost 60% of those who used e-cigarettes also smoked cigarettes, called as dual users.
- A meta-analysis of 25 studies found that smokers who used e-cigarettes as a

cessation aid were 27% less likely to quit smoking.

Way forward –

- E-cigarettes are not proving to be an alternative to smoking and when used by adolescents are disposing them to smoking habits further. Passage of the bill and effective implementation is to be focused upon further.
- https://www.thehindu.com/news/why-has-india-banned-e-cigarettes/article29478965.ece

2) The nationalist hindrance to climate actions

- GS Paper II & III – Climate change, environmental diplomacy

Context –

- Global Climate Action Summit convened and energetically backed by the United Nations Secretary General. It seeks to spur national pledges and action to address climate change in the face of increasing lack of concern from some nation and prioritizing economic interest at the cost of environment.
- Incidents like Amazon and Indonesia forest fires.
- The five years since 2015 is set to be the warmest of any equivalent recorded period, sea level rise is accelerating, and oceans have become 26% more acidic since the dawn of the Industrial era.
- The heat wave in France and Germany was made eight to 10 times more likely by climate change.
- Climate action march like extinction rebellion across the globe where our million youth turned out in protest against inaction on climate change around the world and pitching for sustainable development.

The nearing catastrophe

- CO2 Emission: Carbon dioxide concentrations are at a record high of 411 parts per million (ppm)(an increase of over 45% on pre-industrial levels).
- Rise in temperature: Human activities have caused the planet's average surface temperature to rise about 1.1°C since the late 19th century. Most of the warming occurred in the past 35 years.
- Air Pollution: All forms of pollution were responsible in 2015 for an estimated 9

million premature deaths—16% of all deaths worldwide. Pollution is thus the world's largest environmental cause of disease and premature death.

Mass extinction:

- The Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) report produced in 2019 shows the biodiversity crisis is on a par with the threat posed by climate change.

Food insecurity:

- More frequent and severe water extremes, including droughts and floods, impact agricultural production, while rising temperatures translate into increased water demand in agriculture sectors.

Water Stress:

- Water withdrawals grew at almost twice the rate of population increase in the 20th century
- Rise in sea level.

Ocean Acidification:

- The oceans are already become 30% more acidic, as carbon dioxide from the burning of fossil fuels dissolves it alters the chemistry of the sea water.

Paris Agreement pledge

- Paris Agreement is a global agreement committing the nations to lower future emissions. The intention is to provide a platform for climate champions to step up and claim leadership of an important global agenda.
- However there is a rift observed in the direction of interest of these nations.
- A number of small and mid-sized countries, including the United Kingdom, have already committed to achieving the objective of making their economies net carbon neutral by 2050 (that is, the sum of emissions and uptake of carbon through 'sinks' such as forests is zero).
- China and India have issued statements hinting that they are doing quite enough, and India has highlighted the need for enhanced finance if it is to do more.
- The United States, Brazil, Australia, Canada, Japan and Mexico are reportedly not even going to participate in the event at a high level.
- Induce changes in real economies around a set of 'action portfolios'.

1. furthering and accelerating an energy transition toward low-carbon energy
2. making cities more climate friendly and more resilient to climate disruption
3. Starting the process of turning energy intensive sectors such as steel and cement more carbon friendly.
4. promoting solar energy for energy security reasons
5. making cities more loveable
6. making industries more efficient and therefore competitive
- These initiatives serve as a focal point for broader conversations including coalitions of business and researchers.

Path for India
1. India has the potential to show the pathway to accelerating action on climate change even while pursuing its development interests. A notable example is its energy efficiency track record, which helps limit greenhouse gases even while saving the nation energy.
2. India needs domestic energy policies that are more clearly and coherently tuned to a future low carbon world.
3. A domestic message would position India to be a true global climate leader, rather than a leader only among climate laggards.
4. The aim should be to make accelerated climate action congruent with an enlightened notion of national interest by focusing on key actions in rapidly changing areas such as energy and urbanization.
5. Such a pathway holds enticing prospects for India.
6. But it requires that India can build a diplomatic approach on a firm domestic foundation that takes seriously climate change as a factor in its future development pathway.

India's commitment in the Climate Action forum
- The Prime Minister highlighted the country's culture of environmentalism to reassure the international community on its ability to act.
- Comprehensive approach which covers everything from education to values, and from lifestyle to developmental philosophy. global people's movement to bring about behavioral change.

- Plan to increase our renewable energy capacity to much beyond 175 GW, and later till 450 GW.
- Transport sector green through e mobility.
- India is also working to considerably increase the proportion of the biofuel blend in petrol and diesel.
- Clean cooking gas to 150 million families.
- Jal Jeevan mission for water conservation, rainwater harvesting and for the development of water resources.
- India is launching a Coalition for Disaster Resilient Infrastructure.

Way forward –
- There is a need for a strong domestic action plan in order to achieve the climate action goals. The states needs better funding mechanism for handling disasters like cyclones, floods and droughts. The coal energy expansion plan has to be consonant with the emission reduction targets for our country.
- https://www.thehindu.com/opinion/lead/the-nationalist-hindrance-to-climate-actions/article29483225.ece

4) Seeking to Secure
- GS Paper III – Economy; Taxation

Context – linking Aadhaar with GST registration
Why was this initiated?
- Unscrupulous operators have sought to exploit, whereby revenue that ought to have accrued to the Centre and the States has leaked while allowing these elements to derive illicit profits.
- The Directorate General of Revenue Intelligence unearthed a network of exporters and their suppliers who had connived to claim fraudulent refunds of Integrated GST, with more than □470 crore of input tax credit availed being based on non-existent entities or suppliers with fictitious addresses.
- Frauds totaling up to a staggering □45,682 crore have been detected since the roll-out of the tax in July 2017

GST Council's decision
- Council agreed to appraise the possibility of making the biometrics-based unique identifier mandatory for claiming refund.
- The council also took an in principle decision to prescribe reasonable

- restrictions on passing of credit by risky taxpayers in order to tackle the menace of fake invoices and fraudulent refunds
- Relief to the job-creating MSME sector in filing of annual GST composition return (Form GSTR-9A) for fiscal years 2017-18 and 2018-19.
- The mandatory filing of Form GSTR-9 for those MSMEs which have aggregate turnover up to Rs 2 crore has been made optional for the last two fiscals.
- The GST Council also decided that a committee of officers will be constituted to examine the simplification of forms for annual return and reconciliation statement.
- In order to nudge taxpayers to timely file their statement of outward supplies, it was decided to impose restrictions on availment of input tax credit by the recipients in cases where details of outward supplies are not furnished by the suppliers.
- The panel also recommended suitable amendments in CGST Act, UTGST Act, and the corresponding SGST Acts in view of creation of UTs of Jammu & Kashmir and Ladakh.
- The GST Network — the information technology backbone on which the whole tax system runs — has made it mandatory for new dealers registering under the composition scheme for small businesses to either authenticate their Aadhaar or submit to physical verification of their business, starting January 2020.
- https://www.thehindu.com/opinion/editorial/seeking-to-secure/article29483223.ece
- https://economictimes.indiatimes.com/news/economy/policy/in-principle-decision-to-link-aadhaar-with-gst-registration/articleshow/71225347.cms?from=mdr&utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

5) Making the grand Indian PSB mergers work

- GS Paper III – Economy; Banking system; bank merger

Context –

- Recently the government has announced to merge 10 large public sector banks into 4 big banks, while the NPA and poor balance sheet of banks is on the cards. There GDP growth is also slowing down to 5% which requires a very strong banking infrastructure to boost growth.

Challenges to bank merger

1. The turbulence in banks could take toll in the economic slowdown as the merger would take long to show the positive effects.
2. Narasimhan Committee had recommended merging only strong banks while in the current merger, weak banks has also been merged with strong banks.
3. Lack of clear articulation of the rationale behind bringing disparate and weak banks together, some of whom were still under the Reserve Bank of India's Prompt Corrective Action (PCA).
4. Such merger announcements generally trigger confusion, anxiety and insecurity in staff, leading to a slowdown in business.
5. Poor communication within PSBs exacerbates the challenges.
6. There is a fear that the 'merger wave' may sink fresh hiring. While there will be rationalisation of headcount due to voluntary exits spurred by relocation and other compulsions, many staff members moved across their former banks may be less than suitable for the new roles.
7. Decelerating trend in loan approvals by PSBs, as brought out in the last RBI report on Trend and Progress of Banking. More risk aversion on the part of bankers, coupled with their internal preoccupations, could further slacken credit growth

What can be done to make this transition smooth and effective?

- Creating bigger PSBs that can mirror the efficiency parameters of leading private sector banks.
- The chief goal should be to reverse the decline in the PSBs' Return on Equity (RoE) after investing considerable sums in bringing them on a common technology platform
- Introducing better risk management measures.
- Enabling them in meeting the challenges in retail and mass market segments from private players and open banking sources.

- Ensure that there is no leadership vacuum in the anchor banks.
- Mergers require strong skills in thought leadership, results leadership and people leadership.
- The technical skills needed for integration planning, transforming business support functions and value build-up have to be cultivated.
- Revamp Human Resources (HR) practices and culturally integrate the expanded workforce through sustained training initiatives.
- Recruit professionals from the market in key areas of technology, HR and risk management, in all of which PSBs are grossly under-equipped. Such recruitments should obviously be at market pay, which is the norm in joint ventures promoted by PSBs such as SBI.
- Plan steps to offset a possible slow expansion in bank credit in the near term.
- NBFCs are about 15% of the combined balance sheet of all banks. They should be enabled to step in more actively to fill the gap in funding Small and Medium-sized Enterprises, which are facing real issues as regards credit availability.
- The Credit Guarantee Fund Trust for Micro and Small Enterprises managed by SIDBI may be revamped to assist more NBFCs.
- Resolve the tangles in the ownership of the merging PSBs in insurance, asset management and other ventures.
- The government could convert few 'weak' PSBs outside the merger into regional banks. This was one of the recommendations of the Narasimahan Committee. Banks such as Bank of Maharashtra and Punjab and Sind Bank that have spread manpower, network, and resources thin could be turned into vibrant regional institutions to serve agriculture, trade and commerce.
- https://www.thehindu.com/opinion/lead/making-the-grand-indian-psb-mergers-work/article29493069.ece

6) Inequality of another kind

- GS Paper II – Polity and governance
Context –

- Recently, in Faheema Shirin v. State of Kerala, the Kerala High Court declared the right to Internet access as a fundamental right forming a part of the right to privacy and the right to education under Article 21 of the Constitution. While this is a welcome move, it is important to recognise the right to Internet access as an independent right.

Digital inequality: Analysis

- With increasing government services adopting the digital platform, new kind of inequality, digital inequality, where social and economic backwardness is exacerbated due to information poverty, lack of infrastructure, and lack of digital literacy is upcoming.
- Offering services online has cost and efficiency benefits for the government and also allows citizens to bypass lower-level government bureaucracy.
- In the absence of Internet access and digital literacy enabling that access, there will be further exclusion of large parts of the population, exacerbating the already existing digital divide.

Why we need digital literacy?

- We are moving to a global economy where knowledge of digital processes will transform the way in which people work, collaborate, consume information, and entertain themselves
- According to the Deloitte report, 'Digital India: Unlocking the Trillion Dollar Opportunity', in mid-2016, digital literacy in India was less than 10%.
- Creation of digital infrastructure must go hand in hand with the creation of digital skills.

Government programs for digital India

- The Digital India programme is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy.
- The Bharat Net programme, aiming to have an optical fibre network in all gram panchayats, is to act as the infrastructural backbone for having Internet access all across the country
- National digital literacy mission - Digital Saksharta Abhiyan (DISHA) or National Digital Literacy Mission (NDLM) to impart IT training to 52.5 lakh persons, including

Anganwadi and ASHA workers and authorised ration dealers in all the States/UTs across the country so that the non-IT literate citizens are trained to become IT literate so as to enable them to actively and effectively participate in the democratic and developmental process and also enhance their livelihood.

Importance of digital literacy

- Digital literacy allows people to access information and services, collaborate, and navigate socio-cultural networks. In fact, the definition of literacy today must include the ability to access and act upon resources and information found online.
- he right to access Internet in accessing other fundamental rights, it is imperative that the right to Internet access and digital literacy be recognised as a right in itself.
- In this framework the state would have
  i. a positive obligation to create infrastructure for a minimum standard and quality of Internet access as well as capacity-building measures which would allow all citizens to be digitally literate
  ii. A negative obligation prohibiting it from engaging in conduct that impedes obstructs or violates such a right.
- Recognising the right to internet access and digital literacy will also make it easier to demand accountability from the state, as well as encourage the legislature and the executive to take a more proactive role in furthering this right.
- The courts have always interpreted Article 21 as a broad spectrum of rights considered incidental and/or integral to the right to life. A right to Internet access would also further provisions given under Articles 38(2) and 39 of the Constitution.

Way forward –

- We are living in an 'information society'. Unequal access to the Internet creates and reproduces socio-economic exclusions. It is important to recognise the right to Internet access and digital literacy to alleviate this situation, and allow citizens increased access to information, services, and the creation of better livelihood opportunities.
- https://www.thehindu.com/opinion/op-ed/inequality-of-another-kind/article29492512.ece

7) The attack on agroecology

- GS Paper III – Agriculture, economic development, genetic modified crops

Why in news?

- Debate over Zero budget natural farming is on-going to promote climate resilient agriculture. The National Academy of Agricultural Sciences, based on a brainstorming session that included industry representatives, sent a letter to Prime Minister opposing Zero Budget Natural Farming (ZBNF) on the other hand States like Andhra Pradesh is implementing this model. Let us analyse the issue.

What is ZBNF?

- It is a farming practice does not involve any external input for farming and gives equal importance for both natural, climate resistant agroecology as well as is cost effective.
- Zero Budget Natural Farming (ZBNF) is a set of farming methods, and also a grassroots peasant movement, which has spread to various states in India
- It has attained wide success in southern India, especially the southern Indian state of Karnataka where it first evolved. The movement in Karnataka state was born out of collaboration between Mr Subhash Palekar, who put together the ZBNF practices, and the state farmers association Karnataka Rajya Raitha Sangha (KRRS)
- Agroecology is recognized worldwide as a system that enhances fertile landscapes, increases yields, restores soil health and biodiversity, promotes climate resilience and improves farmers' well-being.

Why this practice is needed to be adopted?

- Methods employed in promoting the Green Revolution to gene revolution have led to:
- Massive loss of local agro biodiversity and associated traditional knowledge
- Undermining of seed sovereignty
- increased dependence on credit to purchase proprietary seeds, insecticides and pesticides
- Indebtedness on part of farmers due to low monetary returns from agriculture and farmer suicide.

- Rural distress and climate change affects like water stress and droughts.
- Stagnation in productivity
- Low value of agricultural produce.
- High soil toxicity due to the use of pesticides and fertilisers, thus jeopardising public health.
- Fertilizer subsidies has huge burden on the government exchequer.
- Subsidy-based agricultural system where farm inputs are firmly in the hands of corporations and their elite networks.
- 'Zero budgets' farming promises to end a reliance on loans and drastically cut production costs, ending the debt cycle for desperate farmers. The word 'budget' refers to credit and expenses, thus the phrase 'Zero Budget' means without using any credit, and without spending any money on purchased inputs. 'Natural farming' means farming *with* Nature and *without* chemicals.
- ZBNF is the latest tool for sustainable agriculture and development –
- This method is practiced and supported by bodies like FAO, IPCC etc. In India, lobbies like GM seeds, fertilizers etc are posing a challenge to the implementation of ZBNF practices.
- The opportunity cost incurred from investing only in industrial methods of agriculture is one that has been borne largely by the farming community and the natural systems.
- Therefore adoption of ZBNF is essential to start with in the local level which also serves the purpose of sustaining local agroecology.
- https://www.thehindu.com/opinion/op-ed/the-attack-on-agroecology/article29501822.ece
- http://www.fao.org/agroecology/detail/en/c/443712/

8) The real deal
- GS Paper II and III – international relations, trade deals, WTO etc.

Context –
- India and the United States has not reached a conclusive trade deal.

What is the issue and roadblock?
- The American demand - The deal stumbled over duties imposed by India on ICT (information and communication technology) products — the U.S. wanted the 20% duty on mobile phones and Ethernet switches to be reduced or eliminated. The demand for greater access to the Indian market for medical devices such as stents and knee implants apart from its dairy and agricultural products.
- Indian side - India wanted the Generalised System of Preferences which gives preferential market access for its products in the U.S., restored.

The India – US trade scenario
- India – US trade - The trade relation between India and US is characterized by trade surplus for India. India majorly exports goods like gems and jewellery, textiles, pharmaceuticals, automobiles, agricultural products etc. and imports oil, aircraft, medical equipment etc. Recently frequent trade disputes at WTO and protectionist measures of US have resulted in challenges in the relations.Lack of consensus on the trade front with respect to Indian interest of restoring generalized system of preferences and American interest of greater market access to medical devices, dairy and agricultural products.
- Challenges to the Intellectual property rights, HIB visas, e-commerce etc. The effect of Iranian sanctions weighs heavily on India as the oil imports is shifting towards US supplies which is widening the trade deficit and burdening the government exchequer.
- US approached WTO against the imposition of import duties by India on certain information and communication (ICT) products.
- Recently India won the case against US in solar panel case in WTO.

Way forward
- Both the sides have shown the commitment to work out an effective trade deal which will cater the both the countries' sentiments. This is vital as other global factors like sanctions on Iranian oil imports directly affecting India and US – China trade war affecting the entire global economic order.
- https://www.thehindu.com/opinion/editorial/the-real-deal/article29511626.ece

9) How can the Indian economy ride out the storm?

- GS Paper III – Indian economy; Economic slowdown; low consumption scenario
- Context – an analysis of how to boost up the consumption expenditure in the economy which will pick up the slowing growth rate.

Is the slowdown structural or cyclical?

- With repeated slowing own of growth rate over 2 quarters it is structural crisis. Therefore a need for correction of both medium term and long term solutions is needed. The main problem is lack of aggregate demand. Hence measures to boost demand are required.

What can be done?

- There is a need to focus broadly on government expenditure, private consumption, investment, and exports.
- The most sustainable and long-term solution to come out of the slowdown is when investment demand picks up, especially from private investment spending for which investor's confidence has to be raised so that they take the risk.
- Exports depend on the enthusiasm of foreigners buying Indian goods; hence some supply-side measures like trade facilitation, removing bottlenecks, reducing the GST refund period delay, managing the exchange rate will help to a certain extent. But the challenge is this sphere is from the global slowdown which has lesser demand for our exports.

Fiscal deficit –

- Fiscal deficit is quite high but fastening the refund process in GST, export credit refunds, PM KISAN disbursements, MGNREGA pay-outs etc. only such measures will bring private consumption expenditure to a higher pedestal which has taken the maximum hit. The state governments' finances are also quite low which needs more funding. Therefore relaxing the fiscal deficit targets and increasing the money flow will be the needed step.

Nominal GDP –

- The nominal GDP growth rate has dropped to 8% and this is a very unusual and unprecedented situation of low inflation and low GDP growth in nominal terms, so this is the time when we have to take the risk of cyclical fiscal expansion.

Fiscal expansion –

- Wage growth of the rural sector and automobile industry is vital to sustain the rural agriculture and SME dependent economy. The purchasing power of the rural population is to be increased.

Inflation indexed MGNEREGA –

- Over the years MGNREGA has become a supply-based system from a demand-based system. Inflation indexed pay-out will be useful but the implementation of the scheme and strengthening the state governments fiscal capacity is vital to achieve the desired purchasing power in terms of MGNERGA wage driven consumption. Also involving social audits to ensure effectiveness and focus on the dual objective of asset creation wherever possible.

Female labour participation –

- One of the big structural features of the Indian economy right now is the massive drop in female labour force participation. In the last 10 or 12 years, it has come down by 10 percentage points, from 30-32% to 22%, which means that only one out of five working age women are actually working for a paid job. Hence it is important to increase female labour force participation and curb the phenomena of feminization of agriculture.
- Therefore focusing upon all these demand side aspects as well as the large scale supply side measures like bank reforms, FDI easing norms etc. would but back our economy is growth pedestal.
- https://www.thehindu.com/opinion/op-ed/can-the-indian-economy-ride-out-the-storm/article29521791.ece

RSTV Big Picture

1) Climate: time to act

Context –

- Prime Minister Narendra Modi at the United Nations, gave a clarion call for a "global people's movement" to bring about a behavioural change to deal with climate change as he made a path-breaking pledge to more than double India's non-fossil fuel target to 450 gigawatts.
- It comes a day after Prime Minister Modi and US President Donald Trump shared the stage at a gala event in Houston on Sunday and displayed a close friendship and a common vision on fighting terrorism.
- But the US and India differ on the issue of climate change. Trump withdrew from the Paris climate deal in 2017 and blamed India and China for his decision, saying the agreement was unfair as it would have made the US pay for nations which benefited the most from the deal.

Introduction –

- India's ambitious pledge to more than double its non-fossil fuel target to 450 GW till 2050. India has around 18% population but consume 6% of available resources.
- Former PM- Manmohan Singh committed to a per capita consumption of an Indian will never exceed global average.
- According to a NASA study, India and China are responsible for 1/3rd global increase in green cover for past 20 years.

Analysis-

- Carbon tracker Initiative is an Independent International Organisation which evaluates the adequacy of the climate pledges made by the nations, particularly large countries with respect to their sufficiency or lack of it, in meeting the targets.
- India is the only G20 country, whose pledge when evaluated by Carbon tracker Initiative was considered sufficient.
- It has been in the last 20 years that the awareness regarding climate change has risen and carbon trading was taken up, though the powerful lobbying prevented it from picking up.
- Awareness through Youngsters and Teen Activists like Greta Thunberg is on the rise.

Initiatives by India –

- Though India's Zero casualty approach should be lauded, more can be done with respect to preventing the loss and avoiding extreme weather events.
- Integrated Energy resources of present times, include a blend of renewable and non-renewable energies with emphasis on the renewables should be considered.
- Improved solar & wind energy capacity, and a future capacity target of 175GW (now 450GW). Schemes like Ujjwala and Global Collaborations like International Solar Alliance, which include countries lying between Tropic of Cancer & Capricorn to tap into solar energy are some of the Steps taken by India.
- CDRI can explore research on disaster resilient infrastructure. Integrated energy resources like hybrids, ethanol, e- vehicles need to be emphasised.

Challenges-

- Developed countries-US, Canada, Japan, Australia, China's pledge is highly insufficient according to the carbon tracker initiative.
- At the current rate of climate change going for 3-3.5 degree of temperature rise, better preparedness for extreme climate events, like floods n droughts is the need of the hour.
- Also, more research with ICAR, on the crop varieties with an increased uncertainty in rainfall and designing buildings for a hotter climate and infrastructure which is better equipped with resisting the disasters.
- Research and Development for the replacement of the fossil fuels and expanding India's Energy basket should be the way to go.
- The Recent Fall in prices of renewable energy, may indicate a disruption in the renewable energy market, which could

make it more cheaper and profitable, in the near future.

Way forward–

- Curbing the use of Single use plastic, which contribute to the carbonisation in more than one way, with the transportation costs also inking in carbon footprint can be one way.
- Find Localised, Quantifiable small initiatives which are practical and are easily traceable. In the country, rather than just concentrating on the awareness level, the climate change effects should be tackled at the local level.
- Increase the Water Resources and develop more organic, localised water storage systems. The Emphasis should be on the actions.
- Addressing Climate Change is no longer a environmental challenge, it's a Developmental Challenge. The Younger Generation should take the issue quite seriously and take it up a notch