

CIVIL SERVICES MONTHLY

SEPTEMBER 2020

Contempt of court

National Generic Document Registration System

- **GSTR-2B**

Swanidhi Samvaad

- **Global Economic Freedom Index 2020**

- **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)**

Nasha Mukta Bharat Abhiyan

- **Quantum state Interferography**

- **"My Stamp" on India's First Anti Satellite Missile A-SAT**

First India-France-Australia Trilateral Dialogue

- **Climate Smart Cities Assessment Framework (CSCAF) 2.0**

Committee to study ancient Indian culture

- **Autumnal Equinox in Northern Hemisphere**

Question Hour and Zero Hour

Global Innovation Index 2020

Ethical Code for Electronic Media

- **Summary of Kurukshetra - OCTOBER - 2020**

Summary of Yojana OCTOBER - 2020



INDEX

PRELIMS

POLITY AND GOVERNANCE

Contempt of court	1
International Day of Democracy	2
"Jammu and Kashmir- Integrated Grievance Redress and Monitoring System" (jk i-grams)	2
Amnesty International	3
National Generic Document Registration System	4

ECONOMY

GSTR-2B	4
Start-Up Village Entrepreneurship Programme (SVEP)	5
Swanidhi Samvaad	6
Global Economic Freedom Index 2020	6
'SAROD-Ports'	8
First-ever Special Economic Zone (SEZ) in Tripura	8
"YSR Aasara" scheme	9

SOCIETY AND HEALTH

Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)	10
Rashtriya Poshan Maah	10
Helpline "KIRAN"	11
Nasha Mukht Bharat Abhiyan	13
World Rabies Day	13

SCIENCE AND TECHNOLOGY

Quantum state Interferography	14
Robot Rakshak	15
National Biopharma Mission	16
Jigyasa programme	16
"My Stamp" on India's First Anti Satellite Missile A-SAT	17
i-ATS (Automatic Train Supervision)	18

The square kilometre array (SKA)	19
----------------------------------	----

Missile target vehicle ABHYAS	20
-------------------------------	----

Himalayan Chandra Telescope	21
-----------------------------	----

INTERNATIONAL RELATIONS

Kyushu Island	22
---------------	----

First India-France-Australia Trilateral Dialogue	23
--	----

India becomes member of UN's Commission on Status of Women	24
--	----

International Day for Universal Access to Information (IDUAI)	25
---	----

GEOGRAPHY, ENVIRONMENT AND ECOLOGY

Ukai dam	25
----------	----

International Day of Clean Air for Blue Skies	26
---	----

Climate Smart Cities Assessment Framework (CSCAF) 2.0	27
---	----

Biodiversity index map	28
------------------------	----

The International Coastal Clean-Up Day	28
--	----

HISTORY, ART AND CULTURE

Teacher's Day	29
---------------	----

Hindi Diwas	30
-------------	----

Committee to study ancient Indian culture	31
---	----

MAINS

GENERAL STUDIES – I

Rogan art	32
-----------	----

Medicines	34
-----------	----

Autumnal Equinox in Northern Hemisphere	35
---	----

Harijan Sevak Sangh	35
---------------------	----

GENERAL STUDIES – II

Question Hour and Zero Hour	36
-----------------------------	----

Jammu & Kashmir official languages Bill 2020	38
--	----

Intra-Afghan talks in Doha	39
----------------------------	----

Homoeopathy and Indian systems of medicine bills	41
India joins Djibouti Code of Conduct/ Jeddah Amendment	43
Defence Technology and Trade Initiative (DTTI)	44
Taxation and Other Laws (Relaxation & Amendment of Certain Provisions) Bill, 2020	47
The Occupational Safety, Health and Working Conditions Code, 2020	49
The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Ordinance, 2020	51

GENERAL STUDIES – III

India's GDP growth contracts 23.9%	54
Global Innovation Index 2020	56
India-Japan sign Logistics Agreement	58
EASE 2.0 Index Results	58
Indian Brain Templates	61
Multi-dimensional poverty Index 2020	64
Bureau of Indian Standards (BIS) certification	65
2nd Sero Survey report	70

GENERAL STUDIES – IV

Ethical Code for Electronic Media	72
-----------------------------------	----

KURUKSHTRA OCTOBER - 2020	73
----------------------------------	-----------

YOJANA OCTOBER - 2020	81
------------------------------	-----------

POLITY AND GOVERNANCE

Contempt of court

In News

The Supreme Court punished civil rights lawyer Prashant Bhushan with fine of ₹1 for committing criminal contempt by “scandalising the court”.

- ‘Scandalising the Court’ broadly refers to statements or publications which have the effect of undermining public confidence in the judiciary.

Concept of contempt of court

- Contempt refers to the offence of showing disrespect to the dignity or authority of a court.
- The Contempt of Courts Act, 1971 divides contempt into civil and criminal contempt.
 - Civil contempt refers to the wilful disobedience of an order of any court.
 - Criminal contempt includes any act or publication which: (i) ‘scandalises’ the court, or (ii) prejudices any judicial proceeding, or (iii) interferes with the administration of justice in any other manner.

What is not contempt of court?

Fair and accurate reporting of judicial proceedings will not amount to contempt of court. Nor is any fair criticism on the merits of a judicial order after a case is heard and disposed of.

What is the statutory basis for contempt of court?

- When the Constitution was adopted, contempt of court was made one of the restrictions on freedom of speech and expression.
- Article 129 of the Constitution conferred on the Supreme Court the power to punish contempt of itself.
- Article 215 conferred a corresponding power on the High Courts.
- The Contempt of Courts Act, 1971, gives statutory backing to the idea.

Punishment under contempt of court

The punishment for contempt of court is simple imprisonment for a term up to six months and/or a fine of up to ₹. 2,000.

Rashtriya Khel Protsahan Puruskar 2020

In News

Air Force Sports Control Board was conferred with ‘Rashtriya Khel Protsahan Puruskar 2020’ for the outstanding contribution in helping sportsperson to excel in their respective disciplines and implement robust sports welfare measures.

Details

- The award is for sustained efforts towards encouragement and promotion of sports in the country and IAF in particular.
- Air Marshal MSG Menon, Air Officer-In-Charge Administration and President, Air Force Sports Control Board received the award from Hon’ble President of India.

Rashtriya Khel Protsahan Puruskar

- The award scheme was introduced by the government in 2009 to encourage involvement of corporates and sports promotion boards in the development of sports in the country.
- The Union Ministry of Youth Affairs & Sports has revised the Scheme of Rashtriya Khel Protsahan Puruskar in the year 2015.

This award is given in the following four categories:

1. Identification and nurturing of budding/young talent.
2. Encouragement of sports through Corporate Social Responsibility (CSR).
3. Employment of sportspersons and sports welfare measures.
4. Sports for Development.

Tenzing Norgay Adventure Award

In News

Para-swimmer Satyendra Singh Lohia of Madhya Pradesh, the first Divyanga Indian sportsperson, has been awarded with the Tenzing Norgay Adventure Award.

- He was also conferred with the Best Sportsperson National Award by Vice President Venkaiah Naidu on World Divyanga Day.
- He has also been awarded the highest sports award of Madhya Pradesh as well as many other national and international honours.

Kesavananda Bharati

In News

Kesavananda Bharati Swamiji, passed away on 06th of September.

- He was the sole unwitting petitioner in the historic "Fundamental Rights" case.
- The ruling is considered among the most consequential decisions by the Supreme Court as it set out the "basic structure" of the Constitution that Parliament cannot amend.

Kesavananda Bharati

- Kesavananda Bharati was the head seer of the Edneer Mutt in Kasaragod district of Kerala since 1961.
- He left his signature in one of the significant rulings of the Supreme Court when he challenged the Kerala land reforms legislation in 1970.
- The Kesavananda Bharati judgement, is a landmark decision of the Supreme Court of India that outlined the basic structure doctrine of the Constitution.
- Justice Hans Raj Khanna asserted through the Basic Structure doctrine that the constitution possesses a basic structure of constitutional principles and values.
- The doctrine forms the basis of power of the Indian judiciary to review and override amendments to the Constitution of India enacted by the Indian parliament.

"Jammu and Kashmir- Integrated Grievance Redress and Monitoring System" (jk i-grams)

In News

Jammu and Kashmir Lieutenant-Governor (L-G) launched the Jammu and Kashmir Integrated Grievance Redress and Monitoring System (JK-IGRAMS), to create an interface with the public and focus on governance issues in the Union Territory.

Details

- The system is being launched on a pilot basis in three districts — Jammu, Srinagar, and Reasi — and will gradually be rolled out in the remaining districts by October 2.
- District Collectors and Deputy Commissioners will be the primary nodes for receiving, disposing and monitoring grievances.
- It replaces the portal that was launched in 2018 for the same purpose. This would make the existing mechanism more efficient by providing regular update of the grievances on the portal.

International Day of Democracy

In News

International Day of Democracy is being observed on 15 September.

- In 2020, the theme is: COVID-19 - A Spotlight on Democracy.
- Democracy is a form of government in which the people have the authority to choose their governing legislation.

Details

- The idea behind the declaration of the democracy day was to promote and uphold the principles of democracy across the world.
- The International Day of Democracy provides an opportunity to review the state of democracy in the world.
- The link between democracy and human rights is captured in article 21(3) of the Universal Declaration of Human Rights.
- On 15 September, 1997, the "Universal Declaration on Democracy" was adopted by the Inter-Parliamentary Union (IPU), an international organisation of national parliaments.
- In 2007 the United Nations General Assembly resolved to observe 15 September as the International Day of Democracy.

Association of World Election Bodies (A-WEB)

In News

The Election Commission of India is going to organize an International Webinar on 21st September 2020, on the Theme ‘Issues, Challenges and Protocols for Conducting Elections during COVID-19 : Sharing Country Experiences’ on its completion of one year of Chairmanship of the Association of World Election Bodies (A-WEB).

Details

- This is the first Webinar being held by the India A-WEB Centre.
- Over 120 delegates from 45 countries across the world are going to participate in the Webinar.
- The India A-WEB Centre, is going to bring out a number of publications and documents, including a world class quarterly ‘A-WEB India Journal of Elections’.

A-WEB

- The Association of World Election Bodies (A-WEB) is largest association of Election Management Bodies (EMBs) worldwide.
- At present A-WEB has 115 EMBs as Members & 16 Regional Associations/ Organisations as Associate Members.
- Election Commission of India (ECI) has been very closely associated with the process of formation of A-WEB since 2011-12.
- ECI hosted the 4th General Assembly of A-WEB on 03 Sep 2019 at Bengaluru and took over as Chair of A-WEB for 2019-2021 term

International Equal Pay Day

In News

International Equal Pay Day is being celebrated for the first time ever on 18 September, 2020.

- It can be seen as the achievement of equal pay for work of equal value.
- It also builds on the United Nations commitment to human rights and against all forms of discrimination, including discrimination against women and girls.

Details

- On November 15, 2019, the UN General Assembly adopted a resolution proclaiming September 18 as International Equal Pay Day.

- The resolution was introduced by the Equal Pay International Coalition (EPIC), with the support of Canada, Australia, Germany, Panama, New Zealand, South Africa and Switzerland. EPIC is led by the International Labour Organization, UN Women and partners. Its goal is to achieve equal pay for women.
- On the occasion of the first International Equal Pay Day, the Equal Pay International Coalition (EPIC) will host a virtual global Call to Action to encourage all labour market actors to take the necessary steps to ensure that equal pay is at the heart of recovery efforts worldwide.

Amnesty International

In News

Amnesty International (AI) India has decided to shut its operations in India.

- The decision came after the recent move by the Enforcement Directorate to freeze the organisation’s accounts.

Details

- An FIR was filed by CBI in 2019, on charges of an alleged violation of the Foreign Contribution Regulation Act (FCRA).
- The ED has now converted the preliminary inquiry into an ECIR (the equivalent of an FIR) alleging money laundering charges and froze all of AI India’s bank accounts.
- The ED has invoked the Prevention of Money Laundering Act.

Amnesty International

- Amnesty International (AI) is a non-governmental organization with its headquarters in the United Kingdom focused on human rights.
- The mission of the organization is to campaign for a world in which every person enjoys all of the human rights enshrined in the Universal Declaration of Human Rights and other international human rights instruments.
- Amnesty draws attention to human rights abuses and campaigns for compliance with international laws and standards.
- Amnesty International was founded in London in 1961.

- The organization was awarded the 1977 Nobel Peace Prize for its "defence of human dignity against torture," and the United Nations Prize in the Field of Human Rights in 1978.

National Generic Document Registration System

In News

Lieutenant Governor of Jammu and Kashmir launched the National Generic Document Registration System for the union territory.

- Marking a major shift from the existing manual registration system to **online registration for transactions in sale-purchase/ transfer of land** and the stamp papers have been replaced by e-stamps which have been incorporated in coordination with Stockholding Corporation of India.
- This is a big step towards national integration and a leap towards **"One Nation One Software."**

National Generic Document Registration System

- The system was generated by the **National Informatics Centre (NIC)** to address the diversity and variations that prevails across the states on account of formats, languages, processes and formulae.
- The software enables "anywhere access" to information and data to both the Enforcement Agencies and to common man.
- The system has so far been adopted in three states namely, Punjab, Rajasthan and Maharashtra. Six more states and union territories such as Andaman and Nicobar Islands, Goa, Bihar, Manipur, Jharkhand and Mizoram are moving towards the system.

ECONOMY

GSTR-2B

- It is a new static auto-drafted statement for regular taxpayers which is introduced on the GST portal.
- It provides eligible and ineligible Input Tax Credit (ITC) for each month, similar to GSTR-2A but remains constant for a period.

Importance and benefits of GSTR 2B

The data in GSTR-2B is reported in a manner that allows taxpayers to conveniently reconcile ITC with their own books of accounts and records. It will help them in easier identification of documents to ensure the following:

- The input tax credit is not availed twice against a particular document.
- The tax credit is reversed as per the GST law in their GSTR-3B, wherever required.
- GST is correctly paid on a reverse charge basis for the applicable documents, including import of services.

GSTR-2A vs. GSTR 2B

Points of Comparison	GSTR-2A	GSTR-2B
Nature of Statement	Dynamic, as it changes from day to day, as and when the supplier uploads the documents.	Remains static or constant, as the GSTR-2B for one month cannot change based on future actions of the supplier.
Frequency of Availability	Monthly	Monthly
Source of Information	GSTR-1, GSTR-5, GSTR-6, GSTR-7, GSTR-8	GSTR-1, GSTR-5, GSTR-6, ICEGATE system
ITC on Import of Goods	Does not contain these details	Contains ITC on import of goods as obtained from ICEGATE system (available from GSTR-2B of August 2020 onwards)

SVAYEM Scheme

In News

The Assam government re-launched a scheme to provide self-employment to around 2 lakh youths of the state, known as Swami Vivekananda Assam Youth Empowerment (SVAYEM).

- It would provide 50 thousand rupees each as seed money to selected youths to start business ventures.
- The scheme announced by the Hon'ble Finance Minister of Assam in his budget speech on 7th February, 2017

- It is a flagship program to provide financial support to the youths of Assam to take up income generating activities in the manufacturing, trading and service sector.

Objectives

- To generate employment opportunities
- To provide financial assistance to micro and small business entities
- To provide financial assistance for enhancement of income level

Start-Up Village Entrepreneurship Programme (SVEP)

In News

Start-Up Village Entrepreneurship Programme (SVEP) is building rural entrepreneurs. It has extended business support services and capital infusion to 153 blocks of 23 States.

- SVEP is implemented by Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM), Ministry of Rural Development, as a sub-scheme since 2016.

Objectives

- Support the rural poor come out of poverty
- Providing self-employment opportunities with financial assistance
- Providing Training in business management and soft skills
- Creating local community cadres for promotion of enterprises

SVEP

- SVEP addresses three major pillars of rural start-ups namely - finances, incubation and skill ecosystems.
- Activities under SVEP are strategically designed to promote rural enterprises.
- One of the key areas is to develop pool of community resource persons – enterprise promotion (CRP-EP) who are local and support entrepreneurs setting-up rural enterprises.
- Another key area is to promote the block resource center (BRC) in SVEP blocks, to monitor and manage the community resource persons, appraise SVEP loan application and acts as the repository of enterprise related information in the concern block.

International Literacy Day

In News

International Literacy Day is celebrated on September 8 across the countries. The day is celebrated to spread awareness about the importance of literacy. It emphasises on the need for intensified efforts towards more literate societies.

Highlights

- This day is celebrated in an effort to combat these problems and to provide a quality education for all.
- Ranging from ‘Literacy and Health’, ‘Literacy and Epidemics’, which focused on communicable diseases such as HIV, to ‘Literacy and Empowerment’ and ‘Literacy and Peace’ a few years later.
- Theme for 2020: “Literacy teaching and learning in the Covid-19 crisis and beyond.”

Gareeb Kalyan Rozgar Abhiyan

In News

Railways generated over 8 lakh man-days of work in six states under Gareeb Kalyan Rozgar Abhiyan. These States are Bihar, Jharkhand, Madhya Pradesh, Odisha, Rajasthan and Uttar Pradesh.

Garib Kalyan Rojgar Abhiyaan

- It is an employment cum rural public works campaign.
- It provides livelihood opportunities for returnee migrant workers affected by the CoVID-19.
- This Abhiyaan of 125 days, is being undertaken in mission mode, and involves focused implementation of 25 categories of works and activities in 116 districts.
- These 25 works or projects are related to meet the needs of the villages like rural housing for the poor, Plantations, provision of drinking water through Jal Jeevan mission, Panchayat Bhavans, community toilets, rural mandis, rural roads, other infrastructure like Cattle Sheds, Anganwadi Bhavans etc.
- The Abhiyaan is a convergent effort between 12 different ministries or departments.

- The Ministry of Rural Development is the nodal Ministry for this campaign.

Swanidhi Samvaad

In News

Prime Minister will hold Swanidhi Samvaad with street vendors from Madhya Pradesh.

- The Swanidhi scheme was launched on 1st June this year to help poor street vendors, impacted by COVID-19, to resume their livelihood activities.

PM Swanidhi Scheme

- The Pradhan Mantri Street Vendor's Atmanirbhar Nidhi Scheme is aimed at benefiting over 50 lakh vendors who had their businesses operational on or before March 24.
- The scheme was announced by Finance Minister as a part of the economic package for those affected by the COVID-19 pandemic and lockdown.
- The loans are meant to help kick-start activity for vendors who have been left without any income since the lockdown was implemented on March 25.
- The scheme is valid until March 2022.

Kisan Rail

In News

Inaugural run of South India's 1st and country's 2nd Kisan Rail between Anantapur (Guntakal) and New Delhi was flagged off by Union Minister of Agriculture & Farmer Welfare.

- Kisan Rail is conceptualized to provide priority to the farming sector and facilitate transportation of perishable agricultural products to various market places across the country.
- Anantapur is fast becoming the Fruit Bowl of Andhra Pradesh.
- On 7th August, the first Kisan Rail was flagged off between Devlali in Maharashtra and Danapur in Bihar as a weekly service.

Revamp of India's defence PSUs

In News

Chief of Defence Staff called for revamping India's defence public sector undertakings and ordnance factories with a focus on improving their work culture and enhancing quality control.

Defence Public Sector Undertakings

There are nine public sector undertakings (PSUs) under the Department of Defence Production and Supplies. These are:

1. Hindustan Aeronautics Ltd. (HAL)
2. Bharat Electronics Ltd. (BEL)
3. Bharat Earth Movers Ltd. (BEML)
4. Mazagon Dock Ltd. (MDL)
5. Garden Reach Shipbuilders and Engineers Ltd. (GRSE)
6. Goa Shipyard Ltd. (GSL)
7. Bharat Dynamics Ltd. (BDL)
8. Mishra Dhatu Nigam Ltd. (MIDHANI)
9. Hindustan Shipyard Ltd. (HSL)

Of the eight defence PSUs, five PSUs, namely, HAL, MDL, GRSE, BDL and MIDHANI are wholly owned by the Government of India.

Global Economic Freedom Index 2020

In News

India has fallen 26 spots to the 105th position on the Global Economic Freedom Index 2020.

- The Economic Freedom of the World: 2020 Annual Report by Canada's Fraser Institute has been released in India in conjunction with New Delhi-based think tank Centre For Civil Society.
- The country was at the 79th spot in last year's rankings.

Findings

- Hong Kong and Singapore topped the index, continuing their streak as first and second ranked, respectively.
- India has been ranked higher than China, which stands at the 124th position.
- New Zealand, Switzerland, US, Australia, Mauritius, Georgia, Canada and Ireland round out the top-10.
- India reported marginal decrease in size of government (from 8.22 to 7.16), legal system and property rights (from 5.17 to 5.06), freedom to trade internationally (6.08 to 5.71) and regulation of credit, labour and business (6.63 to 6.53).
- The 10 lowest-rated countries are African Republic, Democratic Republic of Congo, Zimbabwe, Republic of Congo, Algeria, Iran, Angola, Libya, Sudan and Venezuela.
- Other notable rankings include Japan (20th), Germany (21st), Italy (51st), France (58th), Mexico (68th), Russia (89th) and Brazil (105th).

Corporatisation of Ordnance Factory Board

In News

The government has constituted an Empowered Group of Ministers (EGoM) under the Chairmanship of Defence Minister to oversee the corporatisation of Ordnance Factory Board (OFB).

Empowered Group of Ministers (EGoM)

- EGoM is a Group of Ministers (GoM) of the Union Government who, after being appointed by the Cabinet, a Cabinet Committee or the Prime Minister for investigating and reporting on such matters as may be specified, are also authorised (empowered) by the appointing authority to take decisions in such matters after investigation.
- While a GoM investigates and reports to the Cabinet, which takes the decision, an EGoM additionally takes decisions on matters it is authorised for, and such decisions have the force of the Government decision.

Corporatization

- Corporatization is the process of transforming state assets, government agencies, or municipal organizations into corporations. It refers to a restructuring of government and public organizations into their administration.
- The difference between privatization and corporatization is that privatization is the transfer of a company or organization from government to private ownership and control while corporatization is the privatization of a publicly-owned organization.

Chief Compliance Officers

In News

Reserve Bank of India lays down guidelines for Banks to appoint Chief Compliance Officers (CCO) to ensure uniform approach with regard to compliance and risk management culture across the banking industry.

- The CCO should be appointed for a minimum fixed period of three years in the rank of a general manager or not below two levels of the rank of CEO.

Details

- The CCO, should be a senior executive of the bank, preferably in the rank of a general manager or an equivalent position.
- The CCO could also be recruited from the market.

- A CCO 'may be transferred/ removed before completion of the tenure only in exceptional circumstances.
- The CCO 'shall not be given any responsibility which brings elements of conflict of interest, especially the role relating to business'.
- Roles which do not attract direct conflict of interest like role of anti-money laundering officer can be performed by the CCO.
- The CCO should not be a member of any committee which brings his/her role in conflict with responsibility as member of the committee.
- In case the CCO is member of a committee, he/she may have only advisory role.
- No vigilance case or adverse observation from the RBI should be pending against the candidate identified for appointment as the CCO.

Delhi's Master Plan 2041

In News

The Delhi Development Authority is holding public consultations for the preparation of the Master Plan for Delhi 2041.

- It is a vision document for the city's development over the next two decades.
- New plan will primarily focus upon the development of water bodies and the land around it, which is referred to as the "Green-Blue policy".

What is Green-Blue infrastructure?

- The concept refers to urban planning where water bodies and land are interdependent, and grow with the help of each other while offering environmental and social benefits.
- 'Blue' infrastructure refers to water bodies like rivers, canals, ponds, wetlands, floodplains, and water treatment facilities.
- 'Green' stands for trees, lawns, hedgerows, parks, fields, and forests.

Delhi master plan 2041

- The DDA, in partnership with the National Institute of Urban Affairs (NIUA), is currently preparing the Master Plan for Delhi 2041.
- The Master Plan shall be a strategic enabling plan.

- Sustainability, inclusivity and equity are the underlying core principles.
- The policies would majorly focus towards having quality living for the citizens of Delhi and establish its potential at global economic level and cultural powerhouse.
- Five issues which the new MPD-2041 is likely to address: Air pollution, Walkability, Unauthorised colonies, Pandemic resilience, Blue-green Policy.

'SAROD-Ports'

In News

Union Minister of State for Shipping launched 'SAROD-Ports' (Society for Affordable Redressal of Disputes - Ports) through virtual ceremony in New Delhi.

Objectives

SAROD-Ports is established under Societies Registration Act, 1860 with the following objectives:

- Affordable and timely resolution of disputes in fair manner
- Enrichment of Dispute Resolution Mechanism with the panel of technical experts as arbitrators.

Highlights

- SAROD-Ports will become the pivotal mechanism of ummeed (hope), vishwas (trust) and nyaya (justice) in the Port sector of India.
- SAROD-Ports will resolve the disputes in fair and just manner while saving huge amount of legal expenditure and time.
- SAROD-Ports will inspire confidence in the private players and will ensure right kind of environment for our partners. It will promote ease of doing business in the maritime sector.
- SAROD-Ports consists members from Indian Ports Association (IPA) and Indian Private Ports and Terminals Association (IPTTA).
- SAROD-Ports will advise and assist in settlement of disputes through arbitrations in the maritime sector, including ports and shipping sector in Major Port Trusts, Non-major Ports, including private ports, jetties, terminals and harbours.

Three projects related to Petroleum in Bihar

In News

Prime Minister dedicates 3 projects related to Petroleum sector in Bihar.

- The projects include the Durgapur-Banka section of the Paradip-Haldia-Durgapur pipeline augmentation project and two LPG bottling plants in east Champaran and Banka.
- The Bottling Plants will empower the 'Atmanirbhar Bihar' by meeting the rising demand for LPG in the state.

Highlights

- LPG Bottling Plants in East Champaran and Banka have a combined bottling capacity of 80 thousand cylinders per day.
- The two plants were envisaged under Pradhan Mantri Ujjwala Yojana.
- The 193-kilometre long Durgapur-Banka pipeline section is a part of the Paradip-Haldia-Durgapur Pipeline Augmentation Project.
- Durgapur-Banka section is the extension of the existing 679-kilometre long Paradip-Haldia-Durgapur LPG pipeline to the new LPG bottling plant at Banka in Bihar.

First-ever Special Economic Zone (SEZ) in Tripura

In News

Tripura -Chief Minister laid the foundation stone of the state's first ever Special Economic Zone (SEZ) at Sabroom, the southernmost tip of Tripura before Bangladesh, 130 Km from Agartala.

Highlights

- With this SEZ, Sabroom will become the commerce capital of NE India and gateway to South Asia.
- This SEZ will generate employment, contribute in developing Atmanirbhar Tripura.
- The SEZ will be set up at Paschim Jalefa village of Sabroom.
- The SEZ, would specially focus on four sectors including agro-based processing including food processing, rubber, bamboo sectors and textile sector.
- Farmers and traders would derive benefits from the SEZ as it would facilitate export and import.
- SEZ is expected to generate nearly 5,000 jobs.

- The SEZ is being developed by the Tripura Industrial Development Corporation.
- It is located at close proximity to Chittagong Port in Bangladesh and an Indo-Bangla bridge being built over River Feni at Belonia.
- 100 percent Income Tax exemption would be provided on export income for SEZ units under Section 10 AA of the Income Tax Act for the first 5 years after setting up the SEZ.
- 50 percent exemption would be provided for the next 5 years and 50 percent of the ploughed back export profit for next 5 years.

National Highways Excellence Awards 2020

In News

Ministry of Road Transport and Highways has invited proposals for the National Highways Excellence Awards for the year 2020.

- The aim is to recognise companies which are performing exceptionally well in the construction, operations, maintenance and tolling stages of highway development as well as in the arena of road safety.

Details

- **The awards were instituted in the year 2018.**
- The motive behind starting an annual awards program is to create a spirit of healthy competitiveness among all stakeholders involved in the development of highway infrastructure in the country and to contribute to the goal of expanding the road network in the country.

The awards are given every year in seven categories:

1. Excellence in Project Management
2. Excellence in Operation and Maintenance
3. Green Highway
4. Innovation
5. Excellence in Highway Safety
6. Excellence in Toll Management
7. Outstanding Work in Challenging Conditions

Kosi Rail Mahasetu

In News

Prime Minister will dedicate **Kosi Rail Mahasetu (mega bridge) in Bihar** on September 18.

- The "Kosi Rail Mahasetu" (mega bridge) is a watershed moment in Bihar as it will connect the region to the northeast.

- Indian Railways has successfully completed the trial run for train traffic on Kosi bridge.
- The bridge is located on the Nirmali-Saraigharh section of the ECR's **Samastipur division**.
- The Kosi Rail Mahasetu is 1.9 KM long

Atal Beemit Kalyan Yojana

In News

Employees' State Insurance Corporation, ESIC has issued instructions for submission of claims by the affected workers to claim relief under recently expanded Atal Beemit Kalyan Yojna. Under the scheme, relief is to be paid to those ESI members who lost their job.

Atal Beemit Kalyan Yojana

- ABKY is a welfare measure being implemented by the Employee's State Insurance (ESI) Corporation.
- It offers cash compensation to insured persons when they are rendered unemployed.
- The Scheme was introduced w.e.f. 01-07-2018.
- The scheme is implemented on pilot basis for a period of two years initially.
- The scheme provides relief to the extent of 25% of the average per day earning during the previous four contribution periods (total earning during the four contribution period) to be paid up to maximum 90 days of unemployment once in lifetime of the Insured Person.
- The claim for relief under the Atal Beemit Kalyaan Yojana will be payable after the three months of his/her clear unemployment.

"YSR Aasara" scheme

In News

Andhra Pradesh launched the YSR AASARA scheme. It is a part of implementation of "Nava Ratnalu".

- The scheme has been launched with the commitment of alleviating the poverty in both rural and urban areas and to improve the productivity.
- The state government has also signed a Memorandum of Understanding (MoU) with Amul, Proctor, and Gamble, ITC and HUL so as to strengthen rural economy armed with YSR Aasara.
- The government will reimburse outstanding bank loans of self-help groups as on April 11, 2019, in four instalments.

Scrapping of LTCG tax on startups

In News

A Parliamentary panel has proposed tax incentives for start-ups including scrapping long term capital gains (LTCG) tax on investments in new age firms.

- The committee said that the abolition of long-term capital gains tax should be for at least the next two years to encourage investments during the pandemic period.
- In last year's Budget, the FM had reintroduced a tax on capital gains from stocks and equity mutual funds if held for more than a year. Now, stock investors have to pay 10 per cent LTCG tax, but earlier there was none.

SOCIETY AND HEALTH

Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)

In News

Government launches eight immunity boosting products under PMBJP for sale through Janaushadhi Kendras across country.

- The launch of new nutraceuticals is significant in view of the Corona-19 pandemic. These products will help in boosting immunity of the people.
- The products are comparable in quality and are cheaper by over 26 per cent than the market price.
- This scheme is becoming a boon for patients who are supposed to take medicines for chronic ailments like diabetes, blood pressure and psychotropic.

PMBJP

Pradhan Mantri Bharatiya Janaushadhi Pariyojana (PMBJP) is a campaign launched by the Department of Pharmaceuticals, Government of India, to provide quality medicines at affordable prices to the masses through special kendras known as Pradhan Mantri Bharatiya Janaushadhi Pariyojana Kendra.

Pradhan Mantri Bharatiya Janaushadhi Pariyojana Kendra (PMBJP) have been set up to provide generic drugs, which are available at lesser prices but are equivalent in quality and efficacy as expensive branded drugs.

Aim

Jan Aushadhi Scheme to make available quality generic medicines at affordable prices to all through Jan Aushadhi Centres, so as to reduce out of pocket expenses in healthcare.

Vision

To bring down the healthcare budget of every citizen of India through providing Quality generic Medicines at Affordable Prices.

Implementing agency

Bureau of Pharma PSUs of India (BPPI)

Wolbachia Bacteria

In News

World Mosquito Program's Wolbachia method dramatically reduces dengue incidence in randomised controlled trial in Yogyakarta, Indonesia.

Wolbachia

- Wolbachia are natural bacteria present in up to 60% of insect species, including some mosquitoes.
- It is not usually found in the Aedes aegypti mosquito.
- It is safe for humans, animals and the environment.
- The Aedes aegypti mosquito spreads Dengue and other diseases such as chikungunya, Zika and yellow fever
- However, it cannot spread the disease when it is artificially infected with Wolbachia.

Rashtriya Poshan Maah

In News

The 3rd Rashtriya Poshan Maah is being celebrated this month to address malnutrition among young children and women.

- The objective of the Poshan Maah is to encourage Jan Bhagidaari to ensure health and nutrition for everyone.
- Poshan Maah is celebrated every year under POSHAN Abhiyaan, which was launched in 2018.

Background

- 'National Council on India's Nutrition Challenges' in 2018 decided to celebrate the month of September as Rashtriya Poshan Maah.

- During this month activities related to nutrition awareness will be carried out by all the states/UTs up to the grass root level.

Poshan Abhiyan/ National Nutrition Mission

- Rashtriya Poshan Abhiyan launched (2018) to improve nutritional status of children up to 6 years, adolescent girls, pregnant women and lactating mothers to achieve specific targets for reduction in low birth weight babies, stunting growth, under nutrition and prevalence of anemia over next three years.
- It is not a programme but a Jan Andolan, and Bhagidaari, meaning “People’s Movement”.
- This programme incorporates inclusive participation of public representatives of local bodies, government departments of the state, social organizations and the public and private sector at large.
- Under Poshan Abhiyan states/UTs need to achieve convergence through the close coordination between the department of women and child welfare; health and family welfare; drinking water and sanitation; rural development; panchayati raj; education; food and other concerned departments.
- The implementing departments /agencies like women and child development department through anganwari workers, health and family welfare department through ASHA, ANM, primary health centres, community health centres, school education and literary department through schools, panchayati raj department through panchayat, and rural development through self-help groups will carry out the activities and spread the message during the month.

'Back to Village' programme (B2V)

In News

In the Union Territory of Jammu and Kashmir, the government announced the third phase of ambitious Back to Village (B2V) programme.

- Phase-I of the B2V was an introductory and interactive programme to understand the people’s grievances and demands.
- Phase-II focused on the devolution of powers to panchayats and tried to understand how these panchayats are functioning and what are the grievances and demands.
- Phase-III has been designed on the format for grievance redressal.

Government has decided to hold a three-week “pre-Back to Village Jan Abhiyan”, starting September 10, which will have three components.

1. The redressal of public grievances (Jan Sunvaiyee)
2. Public service delivery (Adhikar Abhiyan)
3. The delivery of development at Gram Panchayat level (Unat Gram Abhiyan)

Goals of B2V

The ambitious programme has four main goals:

- Energising panchayats.
- Collecting feedback on delivery of government schemes and programmes.
- Capturing specific economic potential.
- Undertaking assessment of needs of villages.

Helpline “KIRAN”

In News

The 24x7 Toll-Free Mental Health Rehabilitation Helpline “KIRAN” was launched by Union Minister for Social Justice and Empowerment through virtual mode.

- The Kiran Helpline will offer mental health rehabilitation services with the objective of early screening, first-aid, psychological support, distress management, mental wellbeing, promoting positive behaviours, psychological crisis management etc.
- It aims at serving people experiencing stress, anxiety, depression, panic attacks, adjustment disorders, post-traumatic stress disorders, substance abuse, suicidal thoughts, pandemic induced psychological issues & mental health emergencies.
- It will function as a lifeline to provide 1st stage advice, counseling and reference in 13 languages.
- The 13 languages covered in the Helpline are: Hindi, Assamese, Tamil, Marathi, Odia, Telugu, Malayalam, Gujarati, Punjabi, Kannada, Bengali, Urdu and English.
- The Helpline is being coordinated by the National Institute for the Empowerment of Persons with Multiple Disabilities (NIEPMD), Chennai and National Institute of Mental Health Rehabilitation (NIMHR), Sehore.
- Professional support for the Helpline is being provided by the Indian Association of Clinical Psychologists (IACP), Indian Psychiatrists Association (IPA) and Indian Psychiatric Social Workers Association (IPSWA).

'eSanjeevani'

In News

The Union Health Ministry's telemedicine service platform 'eSanjeevani' has completed three lakh tele-consultations recently.

- The platform supports two types of telemedicine services - doctor-to-doctor through eSanjeevani and patient-to-doctor through eSanjeevani OPD.
- The eSanjeevani is a telemedicine service which is implemented under Ayushman Bharat health initiative for doctor-to-doctor interaction.
- It aims to connect all the 1.5 lakh health and wellness centre which has been established under Ayushman Bharat.
- eSanjeevani has been implemented by 23 states so far and others are in the process of rolling it out.
- eSanjeevaniOPD is the second tele-consultation service that enables patient-to-doctor interaction ensuring the physical distancing amidst COVID-19.
- The OPD have provided essential healthcare at a critical time when conventional medicine is perceived to be risky because of the nature of the infectious disease.

YSR Sampoorna Poshana scheme

In News

Andhra Pradesh government has launched YSR Sampoorna Poshana and YSR Sampoorna Poshana Plus schemes to provide nutritious food to pregnant women, lactating mothers and children.

- It focuses on malnutrition and anaemia in pregnant and lactating mothers and children aged between 6-72 months.

Key Features

- About 30.16 lakh mothers and children will be benefited from the two schemes.
- The scheme will bring down malnutrition among the vulnerable section of state.
- YSR Sampoorna Poshana scheme will be implemented in the Anganwadi centres to provide supplementary nutrition to newborn babies, including pregnant women suffering from anaemia.
- The government aims to distribute hot milk, rice, pulses, vegetables or greens, and eggs.

- The 'take-home' nutrition kit, 2 kg of multi-grain oatmeal, half a kilo of peanut butter, half a kilo of flour, half a kilo of jaggery, and half a kilo of dried dates will be distributed.
- YSR Sampoorna Poshana Plus is intended to supply nutritious food exclusively in 77 Tribal areas.
- As part of the scheme, pregnant and women under postpartum will be provided with hot milk, rice, pulses, vegetables or greens, and eggs for 25 days a month.
- The 'take-home nutrition' Kit provides 250 grams of peanut butter, 250 grams of jaggery, another 250 grams of dried dates, and 1 kg of sajja flour per month.
- For children between 36-72 months, rice, pulses, greens or vegetables, milk, eggs, and snacks will be given for 25 days a month.
- Newborn babies of 6-36 months will be provided with 2.5 kg of infant formula, 25 cr eggs, and 2.5 litres of milk per month.
- The Department of Women Development and Child Welfare has developed a comprehensive mobile application to assess the service delivery and satisfaction levels of the beneficiaries.

"GARIMA" Welfare Scheme for Sanitation Workers

In News

Chief Minister of Odisha launched "GARIMA" welfare scheme.

- The department has signed an MOU with not-for-profit organisation Urban Management Centre for providing the technical support to implement the scheme.

Details

- It is a Scheme to ensure Safety and Dignity of Core Sanitation Workers of the State.
- It will also provide social security and financial benefits to the workers and their families.
- Under the scheme, a survey will be undertaken to identify sanitation workers across the state engaged in core sanitation jobs and to register them under a database on the Swachh Sahar Odisha portal.
- Registration of private sanitation service organisations (PSSOs) with ULBs for authorisation will also be facilitated, to render sanitation services through certified sanitation workers.

- This includes introduction of risk and hardship allowance, priority in educational institutions, provision of health and life insurance, 90 percent grant as housing assistance, 90 percent grant for buying two wheelers, mandatory provision of personal protective equipment and safety devices.
- The working hours of sanitation workers will be limited to 6 hours per day.
- They along with their family members, will also be covered under a health insurance scheme and would get periodic health check-ups.
- The corpus fund will also ensure ex-gratia payment to compensate sanitation workers in case of partial and permanent disability due to accidents and injury.

Nasha Mukht Bharat Abhiyan

In News

The National Action Plan for Drug Demand Reduction has been formulated and is being implemented by the Ministry of Social justice and empowerment under the programme. The scheme is being implemented between 2018 and 2025.

- “Nasha Mukht Bharat: Annual Action Plan (2020-21) for 272 Most Affected Districts’ was e-launched by Minister of State for Social Justice and Empowerment on the occasion of “International Day Against Drug Abuse and Illicit Trafficking”.
- The National Plan for Drug Demand Reduction aims to reduce consequences of drug abuse.

The Action Plan has the following components:

- Awareness generation programmes
- Focus on Higher Educational institutions, University Campuses and Schools
- Community outreach and identification of dependent population
- Focus on Treatment facilities in Hospital settings
- Capacity Building Programmes for Service Provider

World Alzheimer's Month

In News

World Alzheimer's Day takes place on 21 September and is part of World Alzheimer's Month.

- The day is meant to raise awareness about the neurological condition, its causes, symptoms and management.

- World Alzheimer's Month is the international campaign every September to raise awareness and challenge the stigma that surrounds dementia.
- September 2020 will mark the 9th World Alzheimer's Month. The campaign was launched in 2012.

Alzheimer's disease

It is a neurological disorder which causes problems with memory, thinking skills, and behaviour. Memory loss is one of the earliest symptoms, along with a gradual decline of other intellectual and cognitive functions leading to change of behaviour. The early signs of the disease may be forgetting recent events or conversations. As the disease progresses, a person with Alzheimer's disease will develop severe memory impairment and lose the ability to carry out everyday tasks.

There is no treatment that cures Alzheimer's disease or alters the disease process in the brain. In advanced stages of the disease, complications from severe loss of brain function — such as dehydration, malnutrition or infection — result in death.

World Rabies Day

In News

Every year, World Rabies Day is celebrated on September 28 by the Global Alliance for Rabies Control. The day is also celebrated by the World Health Organization and other international organizations.

- It is celebrated to raise awareness about rabies prevention and to highlight progress in defeating this horrifying disease.



- 28 September also marks the anniversary of Louis Pasteur's death, the French chemist and microbiologist, who developed the first rabies vaccine.
- The first World Rabies Campaign took place in 2007. In 2009, it reached to more than 100 countries. By then the message had reached 100

million people and more than 3 million dogs were vaccinated.

- Theme for 2020: Vaccination and Collaboration

SCIENCE AND TECHNOLOGY

Quantum state Interferography

In News

Scientists from Raman Research Institute, autonomous institute under the Department of Science & Technology, experimenting with new ways to manipulate quantum states so that they can be harnessed for computing, communication, and metrology. This method of characterisation called Quantum State Interferography (QSI).

Details

- Research team said that without changing any settings in the experimental setup, it is possible to infer the unknown quantum state of a higher dimensional system.
- The setup requires only two interferometers from which many interferograms can be obtained to reconstruct the state.
- This provides a 'black box' approach to quantum state estimation -- between the incidence of the photon and extraction of state information, conditions within the set-up are not changed, thus providing a true single-shot estimation of the quantum state.

Quantum State Tomography

- The determination of an unknown quantum state is usually done by a method known as Quantum State Tomography (QST).
- This involves measuring projection of the quantum state on various directions in state space and reconstructing the quantum state from the information obtained.
- However, in particular, scenarios where the dimensions are large, the operations needed to perform tomography increase quadratically. The experimental settings often need to be changed many times, thus making the process very cumbersome.

World's Largest Solar Tree

In News

CSIR-Central Mechanical Engineering Research Institute (CMERI), Durgapur has developed the World's Largest Solar Tree.

- Solar Trees available for widespread usage in Agricultural activities such as High Capacity Pumps, e-Tractors and e-Power Tillers.



Highlights

- The installed capacity of the Solar Tree is above 11.5 kWp.
- It has the annual capacity to generate 12,000-14,000 units of Clean and Green Power.
- There are a total of 35 Solar PV Panels in each tree with a capacity of 330 wp each.
- The solar tree has the capability to incorporate IOT based features, i.e. round-the-clock CCTV surveillance in agricultural fields, real-time humidity, wind speed, rainfall prediction and soil analytics sensors.

Early Galaxy "AUDFs01"

In News

One of the earliest galaxies called AUDFs01 has been discovered using AstroSat.

Details

- A team of astronomers detected extreme-Ultraviolet (UV) light originating from a galaxy called AUDFs01 that is 9.3 billion light-years away from Earth.
- There are three subdivisions of ultraviolet radiation: near-ultraviolet (NUV), middle ultraviolet (MUV), far-ultraviolet (FUV), and extreme ultraviolet (EUV).
- Discovered by a team of Scientists from the Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune.

- The team comprises scientists from India, Switzerland, France, USA, Japan and Netherlands.

The galaxy AUDFs01

- The galaxy AUDFs01 is located in the Hubble eXtreme Deep Field (XDF).
- The XDF was assembled by combining 10 years of photographs captured of a patch of sky at the centre of the original Hubble Ultra Deep Field by the Hubble Telescope.

Robot Rakshak

In News

In the fight against the spread of Covid 19 pandemic, the Railways has designed a health assistant Robot Rakshak which can remotely communicate between doctor and patient.

Details

- The medical aid robot is able to measure health parameters such as temperature, pulse, oxygen percentage.
- It can also provide medicines, food to the patients and make a two-way video communication between the doctor and the patient.
- It can move in all directions at all levels with a range of remote operations up to 150 meters.
- With a full charge battery, the Rakshak robot can work continuously for 6 hours and can carry up to 10 kg of weight in its tray.
- It is based on Wi-Fi and therefore does not require any mobile data. It also operates with an Android mobile application.

Hypersonic Technology Demonstrator Vehicle (HSTDV)

In News

The Defence Research and Development Organisation (DRDO) successfully flight tested a Hypersonic Technology Demonstrator Vehicle (HSTDV).

- Hypersonic speeds are five times (or more) higher than the speed of sound.



About HSTDV

- The HSTDV is an unmanned scramjet demonstration aircraft for hypersonic speed flight.
- The HSTDV tests the indigenously developed hypersonic air-breathing scramjet technology.
- The scramjets are a variant of air breathing jet engines and have the ability to handle airflows of speeds much higher than the speed of sound.
- It will work as a carrier vehicle for hypersonic and long-range cruise missiles
- It also has several applications such as low-cost launch of small satellites.
- It is a long air vehicle having a flattened octagonal cross section. It contains mid-body stub-wings and raked tail fins.

First World Solar Technology Summit

In News

The International Solar Alliance (ISA) is going to organise the first World Solar Technology Summit (WSTS). The virtual summit will focus on bringing the light on affordable and sustainable clean energy.

- The objective of the event is to bring the spotlight on state-of-the-art technologies as well as next-generation technologies which will provide impetus to the efforts towards harnessing solar energy more efficiently.
- International Solar Alliance (ISA) aims to create a World Solar Bank to fund projects.
- The ISA is an alliance of 121 countries to create a global market system to tap the benefits of solar power and promote clean energy applications.

Importance of Summit

- This summit assumes significance in view of India's ambitious target of having 100GW of solar energy by 2022.
- India's installed solar power generation capacity stood at over 35 GW, according to the central electricity authority data.

The summit will focus on

- Global Session of CEOs,
- Vision 2030 and beyond
- Establishing decarbonised Grid
- Disruptive Solar Technologies
- Solar Beyond power sector

National Biopharma Mission

In News

The National Immunogenicity and Biologics Evaluation Centre (NIBEC) for assessing clinical immunogenicity of viral vaccines, especially for Covid-19, has been inaugurated.

- The facility is jointly established by the Department of Biotechnology (DBT) and Bharati Vidyapeeth University (BVU), Pune through National Biopharma Mission.
- The facility has been established through BVU's constituent unit Interactive Research School for Health Affairs (IRSHA) and BIRAC.

Features of NIBEC

- It has state of the art one BSL (biosafety level) -3+, 4 BSL-2 and 10 BSL-1 laboratories.
- Key immunogenicity evaluation tests like Plaque Reduction Neutralisation Test (PRNT), microneutralisation assay, IgM and IgG ELISA have been developed, standardised and validated for dengue, chikungunya and SARS-CoV-2 viruses.

About National Biopharma Mission

The Industry-Academia Collaborative Mission of Department of Biotechnology (DBT), for accelerating discovery research to early development for Biopharmaceuticals approved by the Cabinet and 50% co-funded by the World Bank is being implemented at Biotechnology Research Assistance Council (BIRAC).

This program is dedicated to deliver affordable products to the nation with an aim to improve the health standards of India's population. Vaccines, medical devices and diagnostics and biotherapeutics are few of its most important domains, besides, strengthening the clinical trial capacity and building technology transfer capabilities in the country.

Prof Govind Swarup

In News

Prof Govind Swarup, father of Indian Radio Astronomy, passes away.

- He was Emeritus Professor at the National Centre for Radio Astrophysics (NCRA), Tata Institute of Fundamental Research (TIFR), and a pioneering figure in the field of radio astronomy.
- He was the prime mover behind the concept, design and installation of the Ooty Radio Telescope and the Giant Metrewave Radio Telescope near Pune.
- Under his leadership, a strong group in radio astrophysics has been built at Tata Institute of Fundamental Research that is comparable to the best in the world



Jigyasa programme

In News

A webinar is hosted by CSIR-CMERI Durgapur yesterday, in association with Samagra Siksha, Department of School Education, Jammu & Kashmir on Scientific & Technological Interventions by CSIR-CMERI combating COVID-19 as a part of the 'Jigyasa' programme.

Jigyasa: A Student Scientist Connect Programme (2020-2025)

- CSIR-Central Mechanical Engineering Research Institute has launched a student-scientist connect
- programme 'JIGYASA' in collaboration with Kendriya Vidyalaya Sangathans (KVS), State Government schools, NVS etc.
- The sole objective to increase scientific inclination of the students so that they are groomed towards scientific research work.

- The “JIGYASA” would inculcate the culture of inquisitiveness on one hand and scientific temper on the other, amongst the school students and their teachers. The Programme is expected to connect 1151 Kendriya Vidyalayas with 38 National Laboratories of CSIR targeting 100,000 students and nearly 1000 teachers annually.
- The program will also enable the students and teachers to practically live the theoretical concepts taught in science by visiting CSIR laboratories and by participating in mini-science projects.

Flying V Aircraft

In News

A team of researchers from the Dutch-based Technical University of Delft (TU Delft) have successfully conducted the first real test flight of the scaled model of the ‘Flying V’, a futuristic and fuel-efficient long-distance aircraft that could carry passengers in its wings.

- The Flying-V was conceived by Justus Benad in 2014 during his thesis project at Airbus Hamburg.
- The Flying-V design, which derives its name from its noticeable ‘V’ shape, integrates the passenger cabin, the cargo hold and the fuel tanks in the wings.

Illegal software “Real Mango”

In News

In a nationwide operation, the Railway Protection Force (RPF) has busted an illegal software operation called “Real Mango” — used for cornering confirmed train reservation during the coronavirus pandemic.

- The software has now been fully decimated which is developed for booking Tatkal tickets.

Features of the illegal software

- The illegal Real mango software bypasses V3 captcha as well as V2 captcha
- With the help of a mobile app, it synchronizes bank OTP and automatically feeds it to the requisite form
- The passenger details and payment details are auto-filled in the forms by the software
- The illegal Real mango software logs in to the official website of IRCTC through multiple IRCTC Ids
- This illegal software is sold through a 5-tiered structure (system admin of the software along with his team, maven, super sellers, sellers as well as agents)
- The payment is received by the system admin in bitcoins

Project 17A

In News

Vice Admiral of the Indian Navy laid the keel of the third ship (Yard- 12653) of the prestigious P17A class stealth frigates.

- Seven frigates under P17A series will be constructed of which four are being constructed in MDL and three in GRSE with MDL as the lead yard.
- The P17A class frigates are being built using indigenously developed steel and fitted with weapons and sensors along with Integrated Platform Management System.
- These ships are having stealth features.
- Construction of P17A ships differ in the very concept of warship building by way of adoption of the modern technology ‘Integrated Construction (IC)’ where the blocks are pre-outfitted before joining to reduce the build period of warships.
- When commissioned the platforms will enhance the combat capability of the Indian Naval fleet.

"My Stamp" on India's First Anti Satellite Missile A-SAT

In News

A Customized “My Stamp” on India’s First Anti Satellite Missile, A-SAT launch was released by the Department of Posts on the occasion of **Engineers Day**.

Details

- "My Stamp" is the brand name for personalized sheets of Postage Stamps of India Post.
- "My Stamp" was first introduced in India during the World Philatelic Exhibition, ‘INDIPEX-2011’.
- Customized My Stamp is a personalized sheet of Postage Stamps wherein the corporate, organizations and institutions can get their customized sheets printed from India Post.

A-SAT Missile

- **DRDO developed A-SAT Missile** successfully engaged an Indian orbiting target satellite in **Low Earth Orbit (LEO) in a ‘Hit to Kill’ mode**.
- **The interceptor missile was a three-stage missile with two solid rocket boosters.** The mission met all its objectives.

Two types of A-SATs: Kinetic and Non-Kinetic A-SATs.

- **Kinetic A-SATs**, like ballistic missiles physically strike an object in order to destroy it.

- **Non-Kinetic A-SATs**, A variety of nonphysical means can be used to disable or destroy a space object. These include frequency jamming, blinding lasers or cyberattacks.

Zhenhua data leak

In News

The Ministry of External Affairs (MEA) raised the issue of alleged spying carried out by Chinese company Zhenhua Data Information Technology with the Chinese Ambassador.

- It is reported the Shenzhen-based technology firm was tracking over 10,000 prominent Indians from diverse fields including politics, business and civil society.
- This includes the President, Vice-President, Prime Minister, Opposition leader, Army Chief and MPs.

Details

- External Affairs Ministry said it has taken up the matter of Zhenhua data leak with the Chinese side.
- According to the Chinese side, the company is a private entity and there is no connection between it and the Chinese government.
- The Indian government has constituted an Expert Committee under the National Cyber Security Coordinator to study reports, evaluate their implications, assess any violations of law and submit its recommendations within thirty days.

Kalinga Cricket Frog

In News

Indian scientists have reported a first-of-its-kind discovery of morphological phenotypic plasticity (MPP) in the Kalinga cricket frog.

- MPP is the ability of an organism to show drastic morphological (physical features) variations in response to natural environmental variations or stimuli.
- In the Eastern Ghats, the species is found on the higher-elevation hill ranges of Odisha and Andhra Pradesh.

Kalinga Cricket Frog

- Scientific Name: *Fejervarya kalinga*.
- It is a recently identified species which was documented in 2018.
- It was thought to be endemic only to the higher-elevation hill ranges of the Eastern Ghats in Odisha and Andhra Pradesh.

- Cricket frogs are indicators of a healthy ecosystem and live in wide habitat ranges in agricultural fields, streams, swamps and wetlands.

Indian Navy aircraft carrier 'Viraat'

In News

Viraat, the decommissioned aircraft carrier of the Indian Navy, will begin its last journey today from Mumbai's Naval Dockyard to Alang in Gujarat.

INS Viraat

- INS Viraat (Giant) was a Centaur-class aircraft carrier of the Indian Navy.
- INS Viraat was the flagship of the Indian Navy before INS Vikramaditya was commissioned in 2013.
- The ship was completed and commissioned in 1959 as the Royal Navy's HMS Hermes, and decommissioned in 1984.
- It was sold to India in 1987. INS Viraat was commissioned into the Indian Navy on 12 May 1987, and served for almost 30 years.
- The last British-built ship serving with the Indian Navy, she was the oldest aircraft carrier in service in the world.

i-ATS (Automatic Train Supervision)

In News

The Delhi Metro Rail Corporation (DMRC) launches first indigenously-built communication-based train control with the launch of i-ATS — the first Made-in-India signalling system.

- The ATS (Automatic Train Supervision) is a computer-based system, which manages train operations, including basic functioning such as running and halting.
- The i-ATS will significantly reduce the dependence of Indian Metros on foreign vendors dealing with such technologies.
- It can work with train control and signalling systems of different suppliers, which ensures that in case of a snag, the operators will not have to depend on foreign manufacturers.
- The i-ATS can also work with different levels of technology of train control and signalling systems.

- Technology systems such as the CBTC, which are also currently in use in the Delhi Metro corridors, are primarily controlled by the European countries and Japan.

Vaishvik Bhartiya Vaigyanik (VAIBHAV) Summit

In News

Prime Minister will inaugurate the virtual global summit of NRI Researchers called VAIBHAV on 2nd October 2020 on the birth anniversary of Mahatma Gandhi.

- Summit will reflect in-depth on the collaboration and cooperation instruments between NRI and resident academia and researchers.



Aim

- Developing mechanisms for involving Indian Diaspora working in top universities and R&D organizations across the world, to further enhance the knowledge-base of Indian Research and Academic Institutions.
- The goal is to create an ecosystem of Knowledge and Innovation in the country through global outreach.

The square kilometre array (SKA)

In News

The square kilometre array also called the SKA, an international initiative building the world's largest radio telescope is to have control systems designed and built by Tata Consultancy Services, India.

Details

- The National Centre for Radio Astrophysics (NCRA) of the Tata Institute of Fundamental Research (TIFR) is the lead Telescope Manager (TM) of the project, while other institutes like Raman Research Institute (RRI) and the Indian Institute of Astrophysics (IIA) in Bengaluru, Inter-University Centre for Astronomy and Astrophysics (IUCAA) in Pune, multiple IITs, among other Indian institutes are scientific partners.
- The NCRA-TIFR is developing the central nervous system of the telescope, that is, the control systems that will power the telescope.

- Funded by 15 member countries, including India and China, SKA will feature two sets of instruments — in Australia and South Africa — and will be run from the project headquarters in the UK.

Square Kilometre Array

- The Square Kilometre Array (SKA) is an intergovernmental radio telescope project being planned to be built in Australia and South Africa.
- SKA will have an approximately one square kilometer collecting area.
- It would operate over a wide range of frequencies and its size would make it 50 times more sensitive than any other radio instrument.
- The headquarters of the project are located at the Jodrell Bank Observatory in the UK.

Chendamangalam Saree

In News

The government identified Chendamangalam sari/saree for a Geographical Indication (GI) tag.

Background

- In floods of 2018, the tiny handloom village of Chendamangalam was left reeling from the deluge that devastated Kerala.
- Looms, yarns and finished goods had been destroyed and in handloom society.
- Since then, **Care 4 Chendamangalam (C4C)**, which works with weavers in Kerala, brings the eponymous GI-tagged sari for a fund-raiser exhibition.
- C4C has two objectives: the first is to revive the cluster, the second is to train the next generation.
- C4C started interactions with the society of woman weavers in January 2019 and hopes to help them reap benefits by 2021.

Details

- Chendamangalam is a small town near Ernakulam, Kerala.
- The town was part of the ancient port complex of **Muziris** and known for its fine **cotton spun** here by the Devanga Chettiars, a community of weavers originally from Karnataka.
- The GI-tagged Chendamangalam sari is recognisable by its **puliyilakara border**, a thin black line that runs abreast with the sari's selvedge.

- It has extra-weft chuttikara and stripes and checks of varying width.
- The saris made from the fine-count cotton yarn of 120s, 100s and 80s take between two to four days of painstaking labour, depending on the design vocabulary.
- **Other GI Tagged Products from Kerala: Kasaragod Sarees, Pokkali Rice, Nilambur Teak, Wayanad Robusta Coffee, Tirur Betel Leaf, etc.**

DRDO conducts successful flight test of ABHYAS

In News

The Defence Research and Development Organisation (DRDO) successfully conducted a flight test of ABHYAS - High-speed Expendable Aerial Target (HEAT) from the Interim Test Range, Balasore in Odisha.



Details

- ABHYAS is designed and developed by Aeronautical Development Establishment (ADE), DRDO.
- ABHYAS-HEAT is an air vehicle. It uses twin underslung boosters.
- It is powered by a small gas turbine engine and has an Inertial Navigation System (INS) along with a Flight Control Computer (FCC) for guidance and control.
- The vehicle has been programmed for fully autonomous flight.

Missile target vehicle ABHYAS

In News

DRDO conducts second successful flight-test of missile target vehicle Abhyas, indigenously-designed **High-speed Expendable Aerial Target (HEAT)** in Balasore. The first successful test was in May 2019.

Features

- The vehicle is a drone that will be used as a target for various missile systems.
- It can also be used as a decoy aircraft.
- The test vehicle met the user requirement of 5 km flying altitude, vehicle speed of 0.5 mach, endurance of 30 minutes and 2G turn capability.
- It is designed and developed by the Aeronautical Development Establishment (ADE) of DRDO.
- Abhyas is capable of fully-autonomous flight and runs on a gas turbine engine.
- Its inertial navigation system is based on micro-electromechanical systems (MEMS) and it uses a flight control computer for guidance and control.

Defence India Startup Challenge (DISC 4)

In News

Defence Minister launched the Defence India Startup Challenge (DISC 4) during the iDEX event.

- The initiatives aimed at expanding the horizons of Innovations for Defence Excellence (iDEX) ecosystem
- Defence Minister also launched the iDEX4 Fauji initiative and Product Management Approach (PMA) guidelines during the event.

iDEX

- iDEX (Innovations for defence excellence) is an ecosystem that fosters Innovation and Technology Development for Defence and Aerospace.
- iDEX would be a decisive step towards achieving self-reliance in the spirit of the AtmaNirbhar Bharat campaign.

Objectives

- Facilitate rapid development of new, indigenized, and innovative technologies for the Indian defence and aerospace sector, to meet needs for these sectors in shorter timelines.
- Create a culture of engagement with innovative startups, to encourage co-creation for defence and aerospace sectors.
- Empower a culture of technology co-creation and co-innovation within the defence and aerospace sectors.

iDEX4Fauji

- iDEX4 Fauji is a first of its kind initiative, launched to support innovations identified by members of the Indian Armed Forces and will bolster frugal innovation ideas from soldiers and field formations.
- There are more than 13 Lakh service personnel working in the field and on borders, handling extreme conditions and equipment and would be having many ideas and innovations to improve such equipment.
- There was no mechanism to support such innovations.
- iDEX4 Fauji would open this window and allow our Faujis to become part of the innovation process and get recognised and rewarded.
- Services Headquarters will provide support to the soldiers and field formations all over the country to ensure maximum participation.

ASTROSAT

In News

India's first multi-wavelength space-based observatory, Astrosat, completed five successful years of operation.

- The ASTROSAT was the first multi-wavelength satellite launched by Indian Space Research Organization (ISRO) in September 2015.

ASTROSAT

- The ASTROSAT explored stars, star clusters and mapped large and small galaxies of Milky Way galaxy called "Magellanic Clouds", an energetic phenomenon in the Universe such as the ultra-violet counterparts to gamma-ray bursts, supernovae, active galactic nuclei.
- ISRO's Astrosat has onboard a wide range of payloads – Ultra Violet Imaging Telescope (UVIT), Large Area X-Ray Proportional Counters (LAXPC), Soft X-Ray Telescope (SXT), Cadmium Zinc Telluride Imager (CZTI), Scanning Sky Monitor (SSM) and Charged Particle Monitor (CPM).
- Astrosat has proved to be an important satellite capable of carrying out simultaneous observations over a range of wavelengths from the far ultraviolet to the hard X-ray band.
- The Ultra-Violet Imaging Telescope, or the UVIT, is a remarkable 3-in-1 imaging telescope simultaneously observing the visible, the near-ultraviolet (NUV), and the far-ultraviolet (FUV) spectrum.
- ASTROSAT was the first dedicated Indian Mission that studied celestial sources in X-ray, UV and optical spectral bands simultaneously with its five UV Telescopes and X-ray telescopes.

- The ground command and control centre of ASTROSAT is located in ISRO Telemetry Tracking and Command Network (ISTRAC), Bangalore

ISTRAC

- The Indian Space Research Organisation (ISRO), over the years, has established a comprehensive global network of ground stations to provide Telemetry, Tracking and Command (TTC) support to satellite and launch vehicle missions.
- These facilities are grouped under ISRO Telemetry, Tracking and Command Network (ISTRAC) with its headquarters at Bangalore, India.

GALEX

- GALEX is Galaxy Evolution Explorer. It was launched by NASA in 2003 and it operated till 2012.
- The mission was to observe hundreds of thousands of galaxies.
- It aimed to determine the distance of each galaxy from the earth.
- It also found the rate at which star formation occurs in each galaxy.

Himalayan Chandra Telescope

In News

The Himalayan Chandra Telescope, housed within the Indian Astronomical Observatory, Mt. Saraswati, Hanle, Ladakh, completes 20 years in operation.

- It has been scanning the night sky in search of comets, stellar explosions, exo-planets and asteroids.

Details

- It is remotely operated using a dedicated satellite communication link from the **Centre for Research & Education in Science & Technology (CREST), Indian Institute of Astrophysics, Hosakote**, about 35 km northeast of Bangalore.
- **The Himalayan Faint Object Spectrograph Camera (HFOSC)** and the Near-infrared camera are available for regular observations.
- The telescope is remotely operated by INSAT-3B satellite link that allows operation even in sub-zero temperatures.
- It generated 1000 GB of data in a year.

INTERNATIONAL RELATIONS

Kyushu Island

In News

A powerful typhoon was blowing over Japan's southernmost Kyushu Island.



About Kyushu Island

- It is the most southern and third largest island of Japan's five main islands.
- The island is mountainous, and Japan's most active volcano, Mt Aso, is on Kyushu.
- Besides the volcanic area of the south, there are significant mud hot springs in the northern part of the island, around Beppu.
- The island is separated from Honshu by the Kanmon Straits.
- Being the nearest island to the Asian continent, historically it is the gateway to Japan.
- Parts of Kyushu have a subtropical climate, particularly Miyazaki prefecture and Kagoshima prefecture.
- Major agricultural products are rice, tea, tobacco, sweet potatoes, and soy; also, silk is widely produced.

Yoshihide Suga

In News

Yoshihide Suga, the chief Cabinet secretary who has been Prime Minister Shinzo Abe's right-hand man for nearly eight years, emerged as a leading candidate to take over the nation's highest political position.



Elections in Japan

The Japanese political process has three types of elections:

1. General elections to the House of Representatives held every four years (unless the lower house is dissolved earlier)
2. Elections to the House of Councillors held every three years to choose half of its members
3. Local elections held every four years for offices in prefectures and municipalities.

Indra 2020

In News

India and Russia are scheduled to hold Indra 2020 in the Andaman Sea on September 4 and 5, close to the Strait of Malacca instead of the Indian Ocean Region (IOR).

- Andaman Sea was also the location where frontline warships of the Indian Navy conducted a Passage Exercise (PASSEX) with the USA Navy's USS Nimitz carrier strike group in July this year.



Indra Exercise

- The Indra series of exercises began in 2003 and was conducted as a bilateral naval exercise alternately between the two countries.
- The exercise is tasked with boosting cooperation and interoperability between the Russian and Indian navies.
- The word INDRA is a portmanteau of the participants' respective countries.
- The exercise involves live firing drills, as well as air defence and anti-submarine operations. Additionally, counterpiracy, terrorism and drug smuggling operations are carried out.

G-20 Meet

In News

Saudi Arabia hosted the G-20 foreign ministers' virtual meeting with focus on cross-border movement amid the pandemic. This virtual meeting was convened in the backdrop of the COVID-19 pandemic crisis.

- India proposed development of voluntary 'G20 Principles on Coordinated Cross-Border Movement of People' with three elements:
 - (a) Standardisation of testing procedures and universal acceptability of test results.
 - (b) Standardisation of 'Quarantine procedures'.
 - (c) Standardisation of 'movement and transit' protocols.
- The discussions centred on strengthening international cooperation across borders in the wake of COVID-19 crisis.
- Nations also exchanged national experiences and lessons learned from the cross-border management measures taken in response to the COVID-19 pandemics.

India-Bangladesh inland waterways

In News

The trial run from Sonamura in Tripura to Daudkandi in Bangladesh started.

- The MV Premier sailed from Daudkandi (on 3rd september) with 50 metric tonne of cement cargo and scheduled to arrive in Sonamura in Tripura on 5th of september after covering a distance of 93 kilometers through river Gumti.

Highlights

- The route will connect Tripura with Bangladesh using the inland waterways for the first time.
- The new connectivity between Bangladesh and the North Eastern states of India will boost bilateral trade.

First India-France-Australia Trilateral Dialogue

In News

India, France, Australia hold first trilateral dialogue (virtually) with focus on enhancing cooperation in the Indo-Pacific region has been witnessing increasing Chinese military assertiveness.

- The three sides agreed to hold the dialogue on an annual basis.

Objective

Building the strong bilateral ties that the three countries share with each other and synergise their respective strengths to ensure a peaceful, secure, prosperous and rules-based Indo-Pacific Region.

Highlights

- The three sides discussed economic and geostrategic challenges and cooperation in the Indo-Pacific, particularly in the context of the COVID-19 pandemic and domestic responses to it.
- Cooperation on Marine Global Commons and potential areas for practical cooperation at the trilateral and regional level were also discussed, including through regional organisations such as ASEAN, IORA and the Indian Ocean Commission.
- The three countries also had an exchange on the priorities, challenges and trends in regional and global multilateral institutions, including the best ways to strengthen and reform multilateralism.

India becomes member of UN's Commission on Status of Women

In News

India has been elected as a member of the United Nation's **Commission on Status of Women (CSW)**, a body of the Economic and Social Council (ECOSOC), permanent representative of India to the United Nations.

- India will be a member of the United Nation's Commission on Status of Women **for four years - 2021 to 2025.**

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World Maritime Day

In News

World Maritime Day is observed on September 24 to mark the contribution of international maritime industries towards the economy of the world especially shipping.

- Every year the **International Maritime Organization (IMO)** celebrates World Maritime Day.

Aim

- World Maritime Day focuses on the importance of shipping safety, maritime security, and the marine environment.
- It aims to raise awareness about the importance of shipping safety, maritime security, and the marine environment.

Theme

- **World Maritime Day 2020 theme is "Sustainable shipping for a sustainable planet".**
- This theme is to focus on providing an opportunity to raise awareness of the United Nations' Sustainable Development Goals (SDGs).
- The shipping industry, with the support of the IMO regulatory framework, has already started the transition towards this sustainable future.
- Shipping has continued to transport more than 80% of world trade, including vital medical supplies, food, and other basic goods that are critical for the Covid-19.

International Day of Peace

In News

Each year the International Day of Peace is observed around the world on 21 September.

- The UN General Assembly has declared this as a day devoted to strengthening the ideals of peace, through observing 24 hours of non-violence and cease-fire.
- 2020 Theme: Shaping Peace Together



Details

- The International Day of Peace was established in 1981 by the United Nations General Assembly.
- Two decades later, in 2001, the General Assembly unanimously voted to designate the Day as a period of non-violence and cease-fire.
- To inaugurate the day, the United Nations Peace Bell is rung at UN Headquarters (in New York City).

World Tourism Day

In News

Since 1980, the United Nations World Tourism Organization has celebrated World Tourism Day as international observances on September 27.

- The theme of the day for 2020 is "Tourism and Rural Development"

Details

- This date was chosen as on that day in 1970, the Statutes of the UNWTO were adopted. The adoption of these Statutes is considered a milestone in global tourism.

- Government also emphasised that micro zones should be formed for effective management of the coronavirus disease.
- More than 63 per cent of the active cases of the country are concentrated in six States and a Union Territory, i.e. Andhra Pradesh, Maharashtra, Karnataka, Punjab, Tamil Nadu, Uttar Pradesh and Delhi.

State Disaster Response Fund

- **The SDRF, constituted under Section 48 (1) (a) of the Disaster Management Act, 2005**, is the primary fund available with State Governments for responses to notified disasters.
- The Central Government contributes 75% of SDRF allocation for general category States/UTs and 90% for special category States/UTs (NE States, Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir).
- The annual Central contribution is released in two equal installments as per the recommendation of the Finance Commission.
- SDRF shall be used only for meeting the expenditure for providing immediate relief to the victims.

Disaster(s) covered under SDRF

- Cyclone
- Drought
- Earthquake
- Fire
- Flood
- Tsunami
- Hailstorm
- Landslide
- Avalanche
- Cloudburst
- Pest attack
- Frost and cold waves

World Coconut Day

In News

September 2 is observed as World Coconut Day. The main objective of celebrating this day is to create awareness across the globe about the importance of the coconut and its benefits.

- The theme of World Coconut Day this year is – ‘Invest in Coconut to save the world’.

- The day is especially marked in countries under Asian and Pacific regions by the Asian and Pacific Coconut Community (APCC) as they house most of the world’s coconut growing production centres.

International Day of Clean Air for Blue Skies

In News

The very first International Day of Clean Air for blue skies will be held on September 7th, 2020. Environment Minister will chair a webinar.

- India is committed to create a clean environment and pollution free air and water.

Background

The General Assembly of the United Nations on 19th December last year had adopted a resolution to observe the International Day of Clean Air for Blue Skies on 7th September every year starting from this year.

Aim

- Raise public awareness at all levels—individual, community, corporate and government—that clean air is important for health, productivity, the economy and the environment.
- Demonstrate the close link of air quality to other environmental/developmental challenges such as – most and foremost – climate change and the global Sustainable Development Goals.
- Promote and facilitate solutions that improve air quality by sharing actionable knowledge best practices, innovations, and success stories.
- Bring together diverse international actors working on this topic to form a strategic alliance to gain momentum for concerted national, regional and international approaches for effective air quality management.

Himalayan Day

In News

September 9 has been celebrated since 2010 as "Himalayan Day".

- Theme for this year's day is ‘Himalayas and Nature’.

- Last year, Himalayan Day was celebrated in Mussoorie where 11 Himalayan states participated in the festivities.

Uttarakhand's 'Sanskrit grams'

In News

Uttarakhand had been running a pilot project to teach the residents of two villages Sanskrit. The programme resulted in significant progress, and it led to the state government giving its approval to authorities to develop Sanskrit Grams across the state.

- Now, the state government has selected villages from Uttarkashi, Dehradun, Chamoli, Rudrapur, Nainital, Haridwar, Champawat, Garhwal, Tehri Garhwal, Pauri Almora, Udham Singh Nagar and Pithoragarh districts for the extension of the programme.
- Earlier two Sanskrit villages: Kimothi in Chamoli district and Bantola in Bageshwar district.
- It is also decided to rename 'Uttarakhand Sanskrit Academy' as 'Uttaranchal Sanskrit Sansthanam'.

Climate Smart Cities Assessment Framework (CSCAF) 2.0

In News

Minister of State for Housing and Urban Affairs has launched the Climate Smart Cities Assessment Framework (CSCAF) 2.0, along with the 'Streets for People Challenge' in a virtual event.

- The Climate Centre for Cities under National Institute of Urban Affairs (NIUA) is supporting MoHUA in implementation of CSCAF.

Objective

CSCAF is to provide a clear roadmap for cities towards combating Climate Change while planning and implementing their actions.

World Ozone Day 2020

In News

World Ozone Day is observed on September 16, every year. The day is celebrated to create awareness among people about the depletion of the Ozone Layer and search for possible solutions to preserve it.

- "Ozone for life" is the theme for World Ozone Day 2020.



Hilsa/ Ilish Fish

In news

The Bangladesh Government granted permission to India so as to export Hilsa fish. Bangladesh imposed a ban on the export of Hilsa in 2012.

- However, India continues to export fish during the Durga Puja with the government's permission.
- Bangladesh has a share of close to 75 percent in the production of Hilsa fish in the world.

Why did Bangladesh ban the export?

- The Construction of dams and dumping of domestic and industrial wastes in to water bodies was affecting the population of the fish.
- Gradual oil spills from the old boats carrying fish from Bangladesh to India had also affected the fish ecosystem.
- Another reason was overexploitation of the fish.
- As per a report, more than 4 million fishermen were involved in Hilsa fishing alone.
- Further, the required amount of plankton was reduced.

Hilsa Fish

- It is a very popular and sought-after food fish in the Indian Subcontinent. The most famous hilsa fish comes from Chandpur District, Bangladesh.
- It is the national fish of Bangladesh and state symbol in the Indian states of West Bengal and Tripura.
- The fish is categorised as Threatened species under the IUCN red list.

- Sundarbans is the natural habitat of the fish. Apart from it, the fish is also found in Godavari river of Andhra Pradesh.
- Bengalis offer the fish to goddess Lakshmi during Durga Puja.
- The fish is found in 11 countries namely, Bangladesh, Iran, Iraq, India, Myanmar, Pakistan, Kuwait, Bahrain, Thailand, Indonesia and Malaysia. However, Bangladesh accounts for 75% world Hilsa fish production.

World Bamboo Day

In News

World Bamboo Day is celebrated on 18th September every year. It is a day of celebration to increase the awareness of bamboo globally.

- The theme for 11th edition of WBD 2020 is **‘BAMBOO NOW.’**

Background

- World Bamboo Day was established on September 18 at the 8th **World Bamboo Congress** held in Bangkok in 2009 and declared by the **Thai Royal Forest Department**.
- The World Bamboo Organization aims to bring the potential of bamboo to a more elevated exposure – to protect natural resources and the environment, to ensure sustainable utilization, to promote new cultivation of bamboo for new industries in regions around the world, as well as promote traditional uses locally for community economic development.

Blue Flag international eco-label

In News

Eight Indian beaches have been recommended for the coveted **‘Blue Flag’ international eco-label**.

- **Blue Flag beaches are considered the cleanest beaches in the world.**
- The eight beaches are - Shivrajpur in Gujarat, Ghoghla in Daman and Diu, Kasarkod and Padubidri beaches in Karnataka, Kappad in Kerala, Rushikonda in Andhra Pradesh, Golden Beach in Odisha and Radhanagar beach in Andaman and Nicobar.
- The announcement came on the eve of International Coastal Clean-Up Day, which is being celebrated with 100 countries since 1986.

Biodiversity index map

In News

Kochi became the first city in the state to be included in the biodiversity index.

- The index is part of the ‘INTERACT-Bio’ project implemented with the help of the Centre for Heritage, Environment and Development through ICLEI-Local Governments for Sustainability.
- INTERACT-Bio: Integrated Subnational Action for Biodiversity (Interact-Bio)

Aim

It aims at developing the city’s biodiversity index and estimating the green cover in urban areas. The results will help the Kochi Corporation to plan and better conserve urban biodiversity.

Details

- The project was executed with the help of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and Ministry of Environment, Forest and Climate Change.
- The index took into account 18 biodiversity indicators that measure the city’s native biodiversity, the ecosystem services provided and biodiversity governance to give the city a score of 45 out of 72.
- The preparation of the index was mentioned in the corporation’s 2019-20 budget.
- Only about 1.8% of the city’s total budget allocation for 2019-20 was for biodiversity. This includes canal rejuvenation and fisheries and animal husbandry projects.

The International Coastal Clean-Up Day

In News

The International Coastal Clean-Up Day is being celebrated on September 19, 2020 around the world.



Details

- International Coastal CleanUp Day encourages people to rid beaches of the garbage plaguing beaches.
- According to estimates, there are 5.25 trillion pieces of plastic debris in the ocean. While some of these plastics were dumped directly into the sea, some of it was swept into the sea from the coastline. By ridding beaches of plastic and other garbage, it lessens the likelihood of it ending up in the ocean.

World Rhino Day

In News

World Rhino Day is celebrated on September 22 every year to raise awareness and build a safe natural habitat for this incredible species.

- The World Rhinoceros Day was announced by the World Wildlife Fund (WWF) in 2010.

Highlights

- One of the five rhinoceros species living in Africa and Asia have been declared 'critically endangered'. These species are- Javan Rhinos, Sumatran rhinos and black rhinos.
- The White Rhinos have been declared 'near threatened'.
- The one-horned rhinos are said to be vulnerable to extinction.
- The main reason for the loss of the rhino population is poaching, climate change, and the destruction of their natural habitat.
- The horns are in great demand as they have medicinal properties.

HISTORY, ART AND CULTURE

Teacher's Day

In News

Teachers' Day is celebrated every year on the 5th of September, which also marks the birth anniversary of Dr. Sarvepalli Radhakrishnan, who was an Indian philosopher and the second President of India.

- World Teachers' Day is celebrated on October 5, but every country celebrates the day on different dates.

Dr. Sarvapalli Radhakrishnan

- Dr Radhakrishnan was the first Vice President of India (1952–1962) and went on to become the second President of India (1962-1967).
- He was born in the erstwhile Madras Presidency near the Andhra Pradesh and Tamil Nadu border.
- After completing his MA in Philosophy in 1908, Dr Radhakrishnan taught the subject at Madras Presidency College.
- He then held the post of Vice-Chancellor of Andhra University from 1931 to 1936, followed by Vice-Chancellor of Banaras Hindu University (BHU) in 1939, succeeding Madan Mohan Malviya.
- He was knighted in 1931, and was awarded the Bharat Ratna - the highest civilian award in India in 1954.
- He was made an honorary member of the British Royal Order of Merit in 1963.

Indira Gandhi peace prize

In News

Former Prime Minister Manmohan Singh conferred the Indira Gandhi Prize for Peace, Disarmament and Development for the year 2019 on British broadcaster David Attenborough at a virtual event.

- Former PM Manmohan Singh described British broadcaster Sir David Attenborough, as the "human voice of nature."
- Sir David Attenborough is a naturalist and broadcaster.

- He was selected for the prize because he spent a lifetime of doing research to reveal wonders of natural world to people.

About the award

- The Indira Gandhi Prize for Peace, Disarmament and Development was instituted in the memory of the former prime minister by a trust in her name in 1986.
- It consists of a monetary award of ₹ 25 lakh along with a citation.
- The award is given to individuals or organisations who work towards ensuring international peace and development.

Hindi Diwas

In News

Hindi Diwas is being celebrated across the country on 14th September every year.

- It was on this day in 1949 that the constituent assembly adopted Hindi written in Devanagari as the official language of the country.
- Hindi is one of the widely spoken languages in the world and the first language of more than 520 million people.
- Hindi was adopted as one of the two official languages of the Republic of India by Constituent Assembly of India.
- Under Article 343 of the Indian Constitution, Hindi written in Devanagari script (a script that is used by over 120 languages) was adopted as the official language (of a country with a history of rich linguistic diversity).
- In all, there are 22 Scheduled languages of India, of which, two are officially used at Union level: Hindi and English.

Committee to study ancient Indian culture

In News

The government has formed an expert committee for conducting a study on the origin and evolution of Indian culture.

- The 16-member committee will include K.N. Dikshit, Chairman, Indian Archaeological Society and former Joint Director General, Archaeological Survey of India, among others.

Mandate

- A committee has been set up for conducting a holistic study of origin and evolution of Indian culture since 12,000 years before present and its interface with other cultures of the world.

International Translation Day

In News

International Translation Day is observed on 30th September every year.

- The day aims to celebrate the work of language translation professionals which facilitates dialogue, understanding and cooperation, contributing to the development and strengthening world peace and security.
- 30 September celebrates the feast of St. Jerome, the Bible translator, who is considered the patron saint of translators.



Mahalaya

Prime Minister Narendra Modi has greeted the people on the occasion of **Mahalaya**.

- **Mahalaya is celebrated at the end of Shradh or Pitru Paksha, a 16-day period when Hindus pay homage to their ancestors.**
- It is believed that goddess Durga descended the Earth on Mahalaya which is celebrated by the Bengalis across the globe with much fervour and zeal.
- Bengali people traditionally wake up early in the morning on Mahalaya to recite hymns from the Devi Mahatmya (Chandi) scripture. Offerings to the ancestors are made in homes and at puja mandaps (temporary shrines).

Bhagat Singh

In News

Nation pays homage to the revolutionary freedom fighter Bhagat Singh on his 113th birth anniversary (September 28).

- Bhagat Singh was born (28 September 1907) in Banga village of Lyallpur district of undivided Punjab province.
- He fought against British rule for the country's independence and was hanged in Lahore jail at the age of 23, along with Rajguru and Sukhdev.

Hind Swaraj

In News


Hind Swaraj or Indian Home Rule is a book written by Mahatma Gandhi in 1909.

- In 1909 in his book 'Hind Swaraj', Gandhiji cautioned Indians against unrestricted industrialism and materialism.

- Gandhi believed that India, with its large population and western model of development may exhaust the resources of mother earth.

Details

- He wrote this book in his native language, Gujarati.
- In it he expresses his views on Swaraj, modern civilization, mechanisation etc.
- The book was banned in 1910 by the British government in India as a seditious text.



Festivals **WhatsApp**

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ARVIND	ROHIT	VISHAL	JAYESH	DINESH	TECHI	GAURAV	NETIN	SHAIKENDRA	SANTOSH	NAVODIT	MEET
KRUTI	ANUKRITI	ASHEESH	ANITA	ANUJ	NAVNEET	TORAL	PARAG	MANISH	RAVI	KIRKENDU	AVINASH
RITU	ISHAN	RIDDHI	ROHIT	DIMPLE	MEENA	ANITA	NISHA	MANISH	RITU	KHUSHBU	DARSHAN
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YOU MAY BE NEXT.....

Mains Oriented Current Affairs

General Studies-I Indian Heritage and Culture, History and Geography of the World and Society

Rogan art

In News

The centuries old tradition of Rogan art (hand painting on cloth), is facing an unprecedented challenge due to pandemic.

- Initially, Rogan graced mainly ghaghra-cholis, bridal trousseaus, bedsheets and tablecloths, it now adorns more contemporary items.



About Rogan Art

- Rogan is a 300-year-old craft tradition that once flourished in Gujarat's Kutch region.

- In this craft, paint made from boiled oil and vegetable dyes is laid down on fabric using either a metal block (printing) or a stylus (painting).
- The word Rogan comes from Persian, meaning varnish or oil.
- The process of applying this oil-based paint to fabric began among the Khattris, a Muslim community who came to India from Sindh, Pakistan.

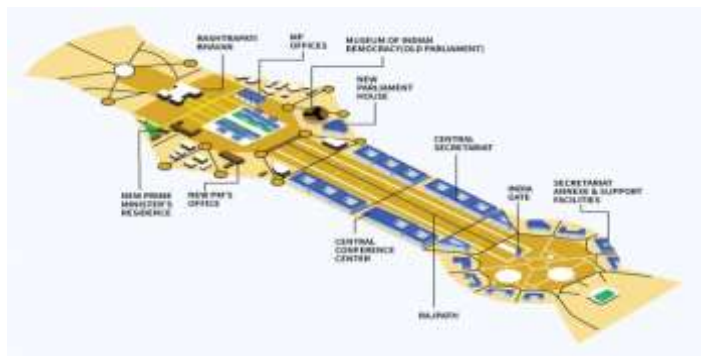
Process of Rogan painting

- Rogan paint is produced by boiling castor oil for about two days and then adding vegetable pigments and a binding agent. The resulting paint is thick and shiny.
- The cloth that is painted or printed on is usually a dark color, which makes the intense colors stand out.
- In rogan printing, the pattern is applied using metal blocks with patterns carved into them. In rogan painting, elaborate designs are produced freehand, by trailing thread-like strands of paint off of a stylus.
- Frequently, half of a design is painted, then the cloth is folded in half, transferring a mirror image to the other half of the fabric.
- The designs include floral motifs, animals, and local folk art.

New Parliament Building

In News

The TATA Group of Companies have won the bid to construct a new Parliament building.



Construction plan

- The redevelopment project of Central Vista, the nation's power corridor, envisages a new triangular parliament building.
- The central chamber will be enlarged in order to accommodate 1400 members.
- The project will also revamp the three-kilometre-long Rajpath that extends from Rashtrapati Bhawan to India Gate.
- The entire project will be maintained by The Central Public Works Department.
- The new building will have spacious seating arrangements for around 1,400 MPs.
- Once the new building is built, the existing parliament building will be used for other purposes.
- The total plinth area of the proposed building is approximately 65,000 sqm.
- The building will be ground plus two storeyed with one basement.
- Gujarat-based architecture firm HCP Designs has designed the Central Vista Redevelopment Project.
- The firm has the responsibility of preparing the master plan of the project, including designs landscape and traffic integration plans, and parking facilities among others.
- The government is likely to demolish buildings such as Udyog Bhawan, Krishi Bhawan and Shastri Bhawan to facilitate new Central Secretariat which will house offices of several ministers.

Current Parliament House

- The Sansad Bhavan (Parliament House) is the seat of the Parliament of India, which contains the Lok Sabha and the Rajya Sabha located in New Delhi.
- Originally called the House of Parliament, it was designed by the British architects Sir Edwin Lutyens and Sir Herbert Baker in 1912-1913 as part of their wider mandate to construct a new administrative capital city for British India.
- Construction of the Parliament House began in 1921 and it was completed in 1927.

Kakatiya Dynasty

In News

Kakati Devi temple, which was built by Kakatiya ruler Ganapati Deva in Dharanikota (Andhra Pradesh) has been converted into an abode of local Goddess 'Balusulamma' (Goddess Durga).

- The presiding deity at this 13th century temple was Kakati Devi, the tutelary deity of Kakatiya rulers.
- Due to ravages of time and for no upkeep, the presiding deity got damaged.
- The villagers, who had no knowledge about the hoary past of the temple, installed Balusulamma idol and started worshipping.

Details

- Ganapati Deva is the first king who introduced the worship of Kakati Devi into the coastal region of Andhra and outside the dominions of his kingdom.
- Later, the abode was developed under the patronage of Ganapamba.
- The goddess sculpture is gracefully seated in Padmasana with eight hands.
- Her facial physiognomic features are oval, distinguished with slender cheeks, wide open eyes, an elongated nose and closed tender pair of lips. She has eight hands and poses eight different special attributes.
- Her lower right hand is benevolently blessing the devotees.

- The temple architecture, the ceiling bears decorations of lotus medallions and no sikhara on its top.
- Currently, the idol is placed in a small shelter on the southern side of the temple, locally known as Gollabhama Gudi.

Kakatiya dynasty

- Kakatiyas is an Andhra dynasty that flourished in the 12th century CE.
- The Kakatiya dynasty ruled from Warangal (Telangana) from CE 1083-1323.
- They were known for the construction of a network of tanks for irrigation and drinking water and thereby gave a big boost to the overall development of the region.
- Telangana has launched a massive rejuvenation movement in the form of "Mission Kakatiya" which involves the restoration of irrigation tanks and lakes/minor irrigation sources built by the Kakatiya dynasty.

Medicanes

In News

Recently, a medicane named "Ianos" made landfall along the coast of Greece and caused heavy rainfall and flooding on the islands of Zakynthos, Kefalonia and Ithaca. The wind speeds reached upto 100 kilometres per hour (km / hr).

- Extra tropical storms in the Mediterranean Sea, known as 'Medicanes' or 'Mediterranean Hurricanes'.
- Medicanes could become more frequent due to human-induced climate change.

Medicanes

- Medicanes occur more in colder waters than tropical cyclones, hurricanes and typhoons.
- They occur in colder regions as compared to tropical cyclones. The cores of these storms are also cold.
- The medicanes are usually formed during winter season. They occur once or twice a year.
- They are also smaller in diameter.

Increase in Medicanes

- They have increased in number lately because of global warming.
- The increased sea surface temperature of the Mediterranean sea paves way for these cyclones to take more of tropical appearances.

- The increase in SST is also increasing the wind speed of these storms and causing heavy rainfall.
- Earlier medicanes were common only in Mediterranean sea. However, in the past two decades they are even formed over the Black Sea.

Unusual in Mediterranean sea

- The Mediterranean is a generally dry, evaporative sea and therefore, cyclonic storms don't grow as much rain and can be hard to detect.
- However, the Mediterranean cyclones have increased lately due to increase in Sea Surface temperature of the sea. This has caused severe flooding in Italy, France and Spain.



Additional Information

Tropical Cyclone

- Tropical cyclones are violent storms that originate over oceans in tropical areas and move over to the coastal areas bringing about large scale destruction caused by violent winds, very heavy rainfall and storm surges.
- Tropical Cyclones are one of the most devastating natural calamities in the world.
- Cyclones are formed over slightly warm ocean waters. The temperature of the top layer of the sea, up to a depth of about 60 meters, need to be at least 28°C to support the formation of a cyclone.

Classification of Tropical Cyclones

The criteria followed by Meteorological Department of India (IMD) to classify the low pressure systems in the Bay of Bengal and in the Arabian Sea as adopted by World Meteorological Organisation (WMO) are as

under:

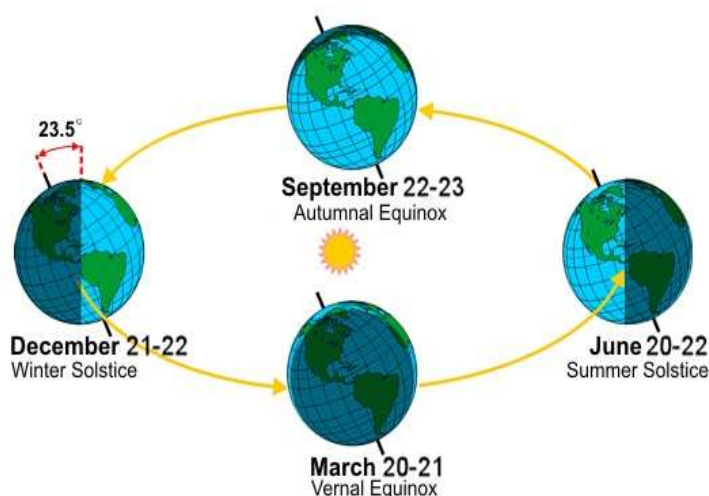
Type of Disturbances	Associated Wind Speed in the Circulation
Low pressure Area	Less than 17 knots (<31 kmph)
Depression	17 to 27 knots (31 to 49 kmph)
Deep Depression	28 to 33 knots (50 to 61 kmph)
Cyclonic Storm	34 to 47 knots (62 to 86 kmph)
Severe Cyclonic Storm	48 to 63 knots (89 to 116 kmph)
Very Severe Cyclonic Storm	64 to 119 knots (119 to 221 kmph)
Super Cyclonic Storm	119 knots and above (221 kmph and above)

Autumnal Equinox in Northern Hemisphere

In News

Autumn equinox occurs each September and marks the first day of Autumn.

- Autumn equinox on **September 22**, 2020 is the day when the sun passes directly over Earth's **Equator**.
- For the other half of the planet, September 22 is the **vernal equinox**, signalling the beginning of spring.



Equinox

- The word “equinox” comes from Latin *aequus*, meaning “equal,” and *nox*, “night.” On the equinox, day and night are roughly equal in length.
- During the equinox, the Sun crosses the “**celestial equator**” —an imaginary extension of Earth’s equator line into space. The equinox occurs precisely when the Sun’s center passes through this line.

- When the Sun crosses the equator from north to south, this marks the autumnal equinox; when it crosses from south to north, this marks the vernal equinox.
- After the autumnal equinox, the Sun begins to rise later and nightfall comes sooner. This ends with the December solstice, when days start to grow longer and nights shorter.

Why does fall equinox happen?

- The Earth rotates along an imaginary line that runs from North Pole to South Pole. It's called the **axis**, and this rotation gives us day and night.
- The axis tilts at 23.5 degrees. That positions one hemisphere of the planet to get more sunlight than the other for half of the year's orbit around the sun.
- The effect is at its maximum in late June and late December. Those are the solstices, and they have the most extreme differences between day and night, especially near the poles. That's why it stays light for so long each day during the summer in places such as Scandinavia and Alaska.
- But since the summer solstice three months ago in June, our days have been progressively becoming shorter in the Northern Hemisphere and the nights longer.

Harijan Sevak Sangh

In News

Harijan Sevak Sangh is a non-profit organisation **founded by Mahatma Gandhi** on September 30, 1932 to eradicate untouchability in India, working for Harijan or Dalit people and upliftment of Depressed Class of India.

- Harijan means children of God, it was Gandhi Ji's name for the untouchables.

History

- After the **Second Round Table Conference**, British government agreed to give **Communal Award** to the depressed classes on the request of B. R. Ambedkar.
- Gandhi opposed the government's decision which he considered it would divide the Hindu society and subsequently went on to the indefinite fast in **Yerwada Jail**.

- He ended his fast after signed **Poona Pact with Ambedkar** on 24 September 1932.
- On 30 September, Gandhi founded **All India Anti Untouchability League**, to remove untouchability in the society, which later renamed as Harijan Sevak Sangh ("Servants of Untouchables Society").
- The Sangh is headquartered at Kingsway Camp in Delhi. Its headquarter Gandhi Ashram, Kingsway Camp is listed as Gandhian Heritage Site by the Ministry of Culture, Govt. of India.
- The Sangh helped the depressed classes to access public places such as temples, schools, roads and water resources, also conducted inter dining and inter caste marriages. It constructed and maintains several schools and hostels across the country.

General Studies-II

Governance, Constitution, Polity, Social Justice and International Relations

Question Hour and Zero Hour

In News

Recently, government has decided to suspend the Question Hour in the upcoming monsoon session. While the Zero hour would be curtailed. The 60-minute-long Zero Hour will now be reduced to 30 minutes.

Question hour

- Question Hour is the first hour of a sitting session of India's Lok Sabha devoted to questions that Members of Parliament raise about any aspect of administrative activity.
- The concerned Minister is obliged to answer to the Parliament, either orally or in writing, depending on the type of question raised.
- Questions are one of the ways Parliament can hold the Executive accountable.

There are four types of question:

1. Starred Questions

Starred Questions are those for which an oral answer is expected. The member is allowed to ask a supplementary question, with the permission of the Speaker, after the reply is obtained from the Minister concerned.

- These questions are printed in green colour and are marked with asterisk sign '*', in order to distinguish from other questions.

2. Non-starred questions

Non-starred questions are those for which a written reply is expected. After the reply has been provided, no supplementary question can be asked. A notice period is to be given to the minister to reply to a question.

- These questions are printed in white colour and not more than 230 questions can be listed for a day in lok sabha.

3. Short notice questions

Short notice questions are those which are asked on matters of urgent public importance and thus, can be asked on a shorter notice i.e. less than 10 days. These questions can be answered orally and supplementary questions can be asked.

- These questions are printed in yellow-pink colour.

4. Questions to private members

Questions to private members are those which are asked to members who are not ministers. These questions are related to private member bill, parliamentary committees, private member resolutions.

Recent changes

- A 15-day notice period is now to be given to the minister to respond to a question in Parliament (concept of minimum and maximum notice duration has been removed). The notice duration used to be a minimum of 10 days or maximum of 21 days.
- The Speaker now has the authority to direct answers to a starred question asked by a member in case of his or her absence on the day their name was called.
- A member is now required to make a statement in the House correcting the reply given by him or her earlier, irrespective of whether the reply given pertained to a starred or unstarred or a short notice question.
- The maximum questions, starred or unstarred, a member is now entitled to give is 10 per day.

Zero Hour

Zero Hour is the time when Members of Parliament (MPs) can raise Issues of Urgent Public Importance. For raising matters during the Zero Hour, MPs must

give the notice before 10 am to the Speaker/ Chairman on the day of the sitting. The notice must state the subject they wish to raise in the House. However, Speaker, Lok Sabha / Chairman, Rajya Sabha may allow or decline a Member to raise a matter of importance.

Vikas Battalion

In News

The Special Frontier Force (SFF) unit, referred to as Vikas Battalion, had been said to be instrumental in preventing Chinese occupation on the Line of Actual Control (LAC) in Ladakh.

Special Frontier Force (SFF)

- SFF was raised in the immediate aftermath of the 1962 Sino-India war.
- It was a covert outfit which recruited Tibetans (now it has a mixture of Tibetans and Gorkhas) and initially went by the name of Establishment 22. It was named so because it was raised by Major General Sujan Singh Uban, an Artillery officer who had commanded 22 Mountain Regiment.
- He, therefore, named the new covert group after his regiment. Subsequently, the group was renamed as Special Frontier Force and it now falls under the purview of the Cabinet Secretariat where it is headed by an Inspector General who is an Army officer of the rank of Major General.
- The units that comprise the SFF are known as Vikas battalions.

Are SFF units part of the Army?

- The SFF units are not part of the Army but they function under operational control of the Army.
- The units have their own rank structures which have equivalent status with Army ranks.
- They are highly trained special forces personnel who can undertake a variety of tasks which would normally be performed by any special forces unit.
- They have their own training establishment where the recruits to SFF are imparted special forces training.

Major operations by SFF

They took part in operations in the 1971 war, Operation Blue Star in Golden Temple Amritsar, Kargil conflict and in counter-insurgency operations in the country.

"Mission Karmayogi"- National Programme for Civil Services Capacity Building (NPCSCB)

In News

The Union Cabinet has approved launching of a National Programme for Civil Services Capacity Building (NPCSCB) with the following institutional framework:

- (i) Prime Minister's Public Human Resources (HR) Council.
- (ii) Capacity Building Commission.
- (iii) Special Purpose Vehicle for owning and operating the digital assets and the technological platform for online training.
- (iv) Coordination Unit headed by the Cabinet Secretary.

Objectives

It is proposed to set up a Capacity Building Commission, with a view to ensure a uniform approach in managing and regulating the capacity building ecosystem on collaborative and co-sharing basis.

Aim

- Mission Karmayogi aims to prepare the Indian Civil Servant for the future by making them more creative, constructive, imaginative, innovative, proactive, professional, progressive, energetic, enabling, transparent and technology-enabled.
- Empowered with specific role-competencies, the civil servant will be able to ensure efficient service delivery of the highest quality standards.

Features

NPCSCB has been designed for civil servants so that they remain entrenched in Indian Culture and sensibilities and remain connected, with their roots, while they learn from the best institutions and practices across the world.

The Programme will be delivered by setting up an Integrated Government Online Training-iGOT Karmayogi Platform.

The core guiding principles of the Programme will be:

- Supporting Transition from 'Rules based' to 'Roles based' HR Management. Aligning work allocation of civil servants by matching their competencies to the requirements of the post.
- To emphasize on 'on-site learning' to complement the 'off-site' learning.

- To create an ecosystem of shared training infrastructure including that of learning materials, institutions and personnel.
- To calibrate all Civil Service positions to a Framework of Roles, Activities and Competencies (FRACs) approach and to create and deliver learning content relevant to the identified FRACs in every Government entity.
- To make available to all civil servants, an opportunity to continuously build and strengthen their Behavioral, Functional and Domain Competencies in their self-driven and mandated learning paths.
- To enable all the Central Ministries and Departments and their Organizations to directly invest their resources towards co-creation and sharing the collaborative and common ecosystem of learning through an annual financial subscription for every employee.
- To encourage and partner with the best-in-class learning content creators including public training institutions, universities, start-ups and individual experts.
- To undertake data analytics in respect of data emitted provided by iGOT- Karmayogi pertaining to various aspects of capacity building, content creation, user feedback and mapping of competencies and identify areas for policy reforms.

Apex body

A Public Human Resources Council comprising of select Union Ministers, Chief Ministers, eminent public HR practitioners, thinkers, global thought leaders and Public Service functionaries under the Chairmanship of Hon'ble Prime Minister will serve as the apex body for providing strategic direction to the task of Civil Services Reform and capacity building.

iGOT-Karmayogi

- iGOT-Karmayogi platform brings the scale and state-of-the-art infrastructure to augment the capacities of officials in India.
- The platform is expected to evolve into a vibrant and world-class market place for content where carefully curated and vetted digital e-learning material will be made available.
- Besides capacity building, service matters like confirmation after probation period, deployment, work assignment and notification of vacancies etc. would eventually be integrated with the proposed competency framework.

Jammu & Kashmir official languages Bill 2020

In News

The government of India is about to introduce a Bill in the upcoming monsoon session of the parliament for the adoption of Hindi, Kashmiri, Dogri, Urdu and English as official languages in the union territory of Jammu and Kashmir.

- Only English and Urdu were official languages in the former State,
- Part XVII of the Indian Constitution deals with the official languages in Articles 343 to 351.

Opposition

- The Jammu & Kashmir Re-Organisation Act empowers the J&K legislative assembly to decide on the adoption of official languages.
- The Centre's decision will end the 131-year-old status of Urdu as the sole official language in J&K.
- Peoples from J&K also triggered the demands for the inclusion of more languages in the proposed legislation.
- Different political and ethnic groups in J&K have demanded the inclusion of Gojri, Pahari and Punjabi in the proposed Bill.
- Under the sixth schedule of the constitution of the erstwhile state of J&K, Kashmiri, Dogri, Balti (Pali), Dardi, Punjabi, Pahari, Ladakhi and Gojri were regional languages of the state.

Languages of India

Part XVII of the Indian constitution deals with the official languages in Articles 343 to 351.

- Article 343 of the Indian constitution stated that the official language of the Union is Hindi in Devanagari script instead of the extant English. Later, a constitutional amendment, The Official Languages Act, 1963, allowed for the continuation of English alongside Hindi in the Indian government indefinitely until legislation decides to change it.

The Constitutional provisions related to the Eighth Schedule are:

- Article 344: Article 344(1) provides for the constitution of a Commission by the President on expiration of five years from the commencement of the Constitution.

- Article 351: It provides for the spread of the Hindi language to develop it so that it may serve as a medium of expression for all the elements of the composite culture of India.

22 Official Languages

- The Eighth Schedule to the Constitution consists of the following 22 languages:
 - (1) Assamese, (2) Bengali, (3) Gujarati, (4) Hindi, (5) Kannada, (6) Kashmiri, (7) Konkani, (8) Malayalam, (9) Manipuri, (10) Marathi, (11) Nepali, (12) Oriya, (13) Punjabi, (14) Sanskrit, (15) Sindhi, (16) Tamil, (17) Telugu, (18) Urdu (19) Bodo, (20) Santhali, (21) Maithili and (22) Dogri.
 - Of these languages, 14 were initially included in the Constitution.
 - Sindhi language was added in 1967.
 - Konkani, Manipuri, and Nepali were included in 1992.
 - Bodo, Dogri, Maithili, and Santhali were added in 2004.

NSO's Report on digital divide in education

In News

A report based on National Statistical Office (NSO) survey highlighted the immense digital divide across the states, villages and income groups.

- The report on "Household Social Consumption: Education in India" was part of NSO 75th round of National Sample Survey conducted from July 2017 to June 2018.
- The report also stated significant disparity in access to online education during COVID-19.

Digital divide

Digital divide means uneven distribution of access and use of internet and technologies among the group. This term was first used by Lloyd Morrisett.

Key Findings

- Kerala has the best literacy rate of 96.2% followed by Delhi 88.7%, Uttarakhand 87.6%, Himachal Pradesh 86.6% and Assam 85.9%.
- Rajasthan is the worst performer with literacy rate at 69.7% followed by Bihar at 70.9%, Telangana at 72.8%, Uttar Pradesh at 73% and Madhya Pradesh at 73.7%.
- Across India only one in ten household have computer/desktop/laptop or tablet.
- Almost all homes have internet facility accessed via mobile phone network, in cities 42% have internet access whereas in rural areas 15% are accessed with internet facility.
- The national capital has the highest internet access with 55% household access.

- One in ten household in Odisha have internet access, there are ten states with less than 20% internet penetration including software hubs like Karnataka and Tamil Nadu.
- In Odisha almost 63% top urban quintile have internet access but in the poorest quintile of Odisha the figure dropped to 2.4%.
- 20% of Indians above age of 5 had basic digital literacy doubling to 40% in the age group of 15-29.
- Over the last decade the literacy rate among women in rural area have increased from 71.7% to 77.7%.

Internet access a fundamental right

- The Supreme Court has declared access to internet a fundamental right.
- A government cannot deprive the citizens of fundamental rights except under certain conditions explicitly mentioned in the Constitution.
- The ruling came on hearing of a plea in connection with Internet blockade in Jammu and Kashmir in the view of revoking of Article 370 in the Union Territory.
- Indian constitution makes the right to freedom of speech and expression a fundamental right for all citizens. It has been listed in Article 19 (1)(a) of the Constitution. The Supreme Court has on many occasions expanded the scope of the right to freedom of speech and expression.
- The latest expansion makes the constitutional provision keep pace with innovation of technology. Internet is the primary source of information to millions of Indian citizens. A non-citizen can avail the same benefits but cannot claim it as her fundamental right.
- The Supreme Court ruling is also in sync with the United Nations recommendation that every country should make access to Internet a fundamental right. In India, Kerala had become the first state in 2017 to declare access to Internet "a basic human right".

Intra-Afghan talks in Doha

In News

India's external affairs minister joined the inaugural session of the intra-Afghan negotiations in Doha through video conference.

Details

- All the countries that border Afghanistan have been invited which includes Iran, Pakistan and many central Asian countries.
- It starts the process of negotiations between the Afghan government and the Taliban.
- At the conference on Afghan peace negotiation, India's external minister conveyed that the process must:
 - Be Afghan-led, Afghan-owned and Afghan-controlled.
 - Respect national sovereignty and territorial integrity of Afghanistan.
 - Promote human rights and democracy.
 - Ensure interest of minorities, women and the vulnerable.
 - Effectively address violence across the country.

Afghan-Taliban

- Afghanistan has seen four decades of conflict, with tens of thousands of civilians killed.
- These are the first direct talks between the Taliban and representatives of the Afghan government.
- The two sides are aiming for political reconciliation and an end to decades of violence, which began with the 1979 Soviet invasion.
- US-led troops have been present in Afghanistan for nearly two decades, after launching air strikes to oust the Taliban in 2001 following the deadly 9/11 al-Qaeda attacks in New York.
- At the conference Taliban leader called for Afghanistan to have an "Islamic system in which all tribes and ethnicities.. live their lives in love and brotherhood".

India-Afghanistan Relations

- Earlier this year, India was present at the signing of US Taliban deal which was signed on 29th February in Doha.
- India is Afghanistan's major development partner and has built number infrastructure projects such as India Afghanistan friendship dam & the Afghan Parliament.

For more details on India-Afghan Relation:
<https://eoi.gov.in/kabul/?0354?000>

Logistics support agreements with Russia, the U.K. and Vietnam

In News

India is now working on three military logistics support agreements with Russia, the U.K. and Vietnam.

- The agreement with Russia is expected to be signed in October, while the agreements with the U.K. and Vietnam are under discussion.
- The agreement with Russia gives India access to Russian facilities in the Arctic region which is seeing increased global activity as new shipping routes open up.

Logistics agreements

Logistics agreements are administrative arrangements facilitating access to military facilities for exchange of fuel and provisions on mutual agreement simplifying logistical support and increasing operational turnaround of the military when operating away from India.

Background

- Recently, India and Australia signed the Mutual Logistics Support (MLSA), and also announced a joint declaration on a shared vision for maritime cooperation in the Indo-Pacific.
- The logistics pact with Japan, Reciprocal Provision of Supplies and Services between armed forces, was signed recently.
- India and Japan have already signed an implementing arrangement for deeper cooperation between the Navy and the Japan Maritime Self-Defence Force (JMSDF).
- India has signed several logistics agreements in recent years beginning with the Logistics Exchange Memorandum of Understanding (LEMOA) with the U.S. in 2016, and the Navy has been the biggest beneficiary of them.

Why India is focusing more on Logistics agreements?

- Increase in India's maritime interactions with the Quad countries on a bilateral basis centred around information sharing for improved Maritime Domain Awareness (MDA) in the Indian Ocean Region and Indo-Pacific.

- The Andaman and Nicobar islands located close to the strategic Strait of Malacca have been of interest to several countries including Australia and Japan.
- These logistics pacts will significantly improve India's interoperability.

Advantages

- After India signed foundational agreement Communications Compatibility and Security Agreement (COMCASA) with the U.S., it got access to encrypted communication systems for seamless communication.
- Indian and US navy also signed a loan agreement and installed two Pacific fleet provided CENTRIXS (Combined Enterprise Regional Information Exchange System) kits at the Indian Navy headquarters.

Homoeopathy and Indian systems of medicine bills

In News

The National Commission for Indian System of Medicine Bill 2019 and The National Commission for Homoeopathy Bill, 2019, were passed in Lok Sabha.

- The bills were passed in Rajya Sabha earlier last year to regulate **alternative systems of medicine** on the lines of the National Medical Commission Bill, and create a new regulatory body for homoeopathy in the country.
- The National Commission for Homoeopathy, Bill, 2018, **aims to replace the Central Council for Homoeopathy**, which is the current regulatory body for homoeopathy. It proposes a teacher's eligibility test to assess the standard of teachers before appointment and promotions.

Key Highlights

- For better transparency and quality, the Indian System of Medicine bill proposes a **common entrance exam and an exit exam** for all graduates to obtain their license to practice Indian medicine.
- The bill will replace the Central Council for Indian Medicine that regulates alternative systems of medicine.
- A provision for constituting four autonomous boards dedicated to providing Ayurveda education under **Board of Ayurveda**, and training in Unani, Siddha and Sowaigpa under **Board of Unani, Siddha and Sowaigpa**.
- Two common boards, which are, the board of assessment and rating to grant permission to educational institutions of Indian systems of medicine, and the board of ethics and registration of practitioners of Indian systems to maintain a national register and address ethical issues, will relate to practice under the National Commission for Indian Medicine.

- The National Commission will have three autonomous boards entrusted with conducting overall education of homoeopathy by homoeopathy education board.
- The board of assessment and rating will grant permission to educational institutions, while the board of ethics and registration of homoeopathy practitioners will maintain the national register and address ethical issues.

Assisted reproductive technology (ART) Bill

In News

The health minister introduced the assisted reproductive technology (ART) Bill in the Lok Sabha.

- The ART Bill makes it **mandatory for all fertility clinics and banks in India to register themselves** with a national registering authority and periodically report all procedures undertaken.
- The bill also laid down age bar for men and women who can avail themselves of assisted reproductive technology services.

Key Highlights

- Assisted reproductive technologies can be availed of by **any woman above marriageable age but less than 50 years and any man above marriageable age but less than 55 years**.
- **Only married women with a child of three years can be an egg donor** and can do it only once in her lifetime.
- The Bill has put in place stringent processes to be followed by clinics and banks. It provides for the setting up of national and state boards to ensure that clinics follow the rulebook.
- After the enactment of the legislation, a national registration authority would be set up and all clinics and banks would have to mandatorily register within sixty days.
- The Bill lays down the responsibilities of clinics and penalties for flouting the rules.
- Any clinic or bank promising or advertising facilities of sex selective assisted reproductive technology would face cancellation of registration and owners could face 5-10 years of imprisonment and a fine of Rs 10-25 lakh.

- Any medical geneticist, gynaecologist or medical practitioner indulging in trading of human embryos or exploitation of surrogate mothers or commissioning couple would face an imprisonment of 8-12 years and a fine of Rs 10-20 lakh.

ART in India

- India has the highest growths in assisted reproductive technology centres.
- ART, including in vitro fertilisation, has given hope to a multitude of persons suffering from infertility but it has also introduced a plethora of legal, ethical and social issues.

Additional Information

What is Assisted Reproductive Technology?

- ART includes all fertility treatments in which both eggs and embryos are handled.
- ART procedures involve surgically removing eggs from a woman's ovaries, combining them with sperm in the laboratory, and returning them to the woman's body or donating them to another woman.
- They do NOT include treatments in which only sperm are handled (i.e., intrauterine—or artificial—insemination) or procedures in which a woman takes medicine only to stimulate egg production without the intention of having eggs retrieved.

In vitro fertilisation

- IVF is a type of assisted reproductive technology used for infertility treatment and gestational surrogacy.
- IVF is a process of fertilisation where an egg is combined with sperm outside the body, in vitro ("in glass").
- The process involves monitoring and stimulating a woman's ovulatory process, removing an ovum or ova (egg or eggs) from the woman's ovaries and letting sperm fertilise them in a liquid in a laboratory.
- After the fertilised egg (zygote) undergoes embryo culture for 2–6 days, it is implanted in the same or another woman's uterus, with the intention of establishing a successful pregnancy.

National Commission for Homeopathy Bill, 2019

In News

National Commission for Homeopathy Bill, 2019 has been passed by the Lok Sabha. The bill is aimed at ensuring availability of high-quality medical professionals for homeopathic treatment.

- Earlier, the bill was passed by the Rajya Sabha in March 2020 during the Budget Session.
- This Bill seeks to repeal the **Homoeopathy Central Council Act, 1973** and to set up a National Commission for Homoeopathy.

Key Highlights

- The Bill sets up the National Commission for Homeopathy (NCH) which consist of 20 members, who will be appointed by the central government.
- State governments will establish State Medical Councils for Homeopathy at the state level within 3 years after the bill is passed.
- The bill proposes the constitution of an advisory council for Homeopathy, by the central government. The council will advise the NCH on measure to determine and maintain minimum standards of medical education.
- Bill also proposes to conduct a National Eligibility-cum-Entrance test. It also proposes a common final year National Exit Test.
- The Bill also suggests for a National Teachers' Eligibility Test for postgraduates of homeopathy who want to make career in teaching homeopathy.

Constitution of Commission

The commission will consist of 20 members, including, the Chairperson, the President of the Homoeopathy Education Board, the President of the Medical Assessment and Rating Board for Homoeopathy, the Director General, National Institute of Homoeopathy, Advisor or joint secretary in-charge of Homoeopathy (Ministry of Ayush), four members (part-time) to be elected by the registered homoeopathic medical practitioners from amongst themselves from the prescribed regional constituencies under the bill.

The non-elected members will be appointed by the central government, based on a recommendation made by a Search Committee of six members, including the cabinet secretary and three experts nominated by the central government.

Function of the commission

- It will frame policies for regulating medical institutions and homoeopathic medical professionals, and assess the requirements of healthcare related human resources and infrastructure.
- It will also coordinate the autonomous boards set up under the bill and ensure compliance of the regulations, made under the bill, by the state medical councils of homoeopathy.

India joins Djibouti Code of Conduct/ Jeddah Amendment

In News

India has joined the **Djibouti Code of Conduct/ Jeddah Amendment**, DCOC/JA, as Observer.

- The move came following the high level meeting of the Djibouti Code of Conduct/ Jeddah Amendment held virtually on 26th of August.
- As an observer at the DCOC/JA, India is looking forward to working together with DCOC/JA member states towards **coordinating and contributing to enhanced maritime security in the Indian Ocean Region**.



Djibouti Code of Conduct/ Jeddah Amendment

- DCOC/JA is a grouping on maritime matters comprising 18 member states adjoining the **Red Sea, Gulf of Aden, the East Coast of Africa and Island countries in the Indian Ocean Region**. India has joined Japan, Norway, the UK and the US as Observers to the DCOC/JA.

- The DCOC, established in January 2009, is aimed at repression of **piracy and armed robbery** against ships in the Western Indian Ocean Region, the Gulf of Aden and the Red Sea.

Jeddah Amendment to the Djibouti Code of Conduct 2017

- The Djibouti Code of Conduct has been instrumental in repressing piracy and armed robbery against ships in the **western Indian Ocean and the Gulf of Aden**.
- A high-level meeting of signatories to the Djibouti Code of Conduct, held in Jeddah, Saudi Arabia (10 to 12 January 2017) has adopted a revised Code of Conduct, which will be known as the “Jeddah Amendment to the Djibouti Code of Conduct 2017”.
- The Jeddah Amendment recognizes the important role of the “blue economy” including shipping, seafaring, fisheries and tourism in supporting sustainable economic growth, food security, employment, prosperity and stability.
- The Jeddah Amendment calls on the signatory States to cooperate to the fullest possible extent to repress transnational organized crime in the maritime domain, maritime terrorism, illegal, unregulated and unreported (IUU) fishing and other illegal activities at sea.
- This will include information sharing; interdicting ships and/or aircraft suspected of engaging in such crimes; ensuring that any persons committing or intending to commit such illicit activity are apprehended and prosecuted; and facilitating proper care, treatment, and repatriation for seafarers, fishermen, other shipboard personnel and passengers involved as victims.
- The transnational organized crime referred to in the Code includes arms trafficking; trafficking in narcotics and psychotropic substances; illegal trade in wildlife; crude oil theft; human trafficking and smuggling; and illegal dumping of toxic waste.

DCOC/JA Members

The DCOC/JA Member Nations include Ethiopia, Eritrea, Egypt, Jordan, Comoros, Djibouti, Kenya, Maldives, Madagascar, Mozambique, Mauritius, Oman, Saudi Arabia, South Africa, Somalia, Seychelles, United Arab Emirates, United Republic of Tanzania and Yemen.

Institute of Teaching and Research in Ayurveda Bill, 2020

In News

Parliament has passed the Institute of Teaching and Research in Ayurveda Bill, 2020.

- The bill seeks to establish an Institute of Teaching and Research in Ayurveda and declare it an **Institute of National importance**.
- The Bill seeks to merge three Ayurveda institutes into one institution by the name of Institute of Teaching and Research in Ayurveda.

Merger

The existing institutes which will be merged into the Institute are:

- (i) The Institute of Post Graduate Teaching and Research in Ayurveda, Jamnagar
- (ii) Shree Gulabkunverba Ayurved Mahavidyalaya, Jamnagar
- (iii) The Indian Institute of Ayurvedic Pharmaceutical Sciences, Jamnagar.

The proposed Institute will be situated in the campus of Gujarat Ayurved University, Jamnagar.

Objective of Institute

The Bill states that the object of the Institute will be to:

- (i) Develop patterns of teaching in medical education in Ayurveda and pharmacy.
- (ii) Bring together educational facilities for training of personnel in all branches of Ayurveda.
- (iii) Attain self-sufficiency in postgraduate education to meet the need for specialists and medical teachers in Ayurveda.
- (iv) Make an in-depth study and research in the field of Ayurveda.

Functions of Institute

The functions of the Institute will include:

- (i) Provide for undergraduate and postgraduate teaching in Ayurveda (including pharmacy).
- (ii) Prescribe courses and curricula for both undergraduate and postgraduate studies in Ayurveda.
- (iii) Provide facilities for research in the various branches of Ayurveda.

(iv) Hold examinations and grant degrees, diplomas and other distinctions and titles in education in Ayurveda and pharmacy.

(v) Maintain well-equipped colleges and hospitals for Ayurveda supporting staffs such as nurses and pharmacists.

Defence Technology and Trade Initiative (DTTI)

In News

As part of the Indo-US Bilateral Defence Cooperation, the 10th Defence Technology and Trade Initiative, DTTI Group Meeting was held virtually.

- DTTI Group Meetings are normally held twice a year, alternating between India and the United States.

Aim

- To bring sustained leadership focus to the bilateral defense trade relationship and create opportunities for co-production and co-development of defence equipment.
- Four Joint Working Groups focused on land, naval, air, and aircraft carrier technologies have been established under DTTI.

Highlights

- Since the last DTTI Group Meeting which was in October 2019, a DTTI Standard Operating Procedure for the development and identification of cooperative projects under DTTI has been completed.
- The SOP has also been serving as the framework for DTTI and allows both sides to reach and document a mutual understanding of how to define success.
- The projects under DTTI will be identified as the near, medium and long term projects.
 - The near-term projects included so far are Air-launched Small Unmanned Systems, Light Weight Small Arms Technology and Intelligence-Surveillance-Targeting & Reconnaissance (ISTAR).
 - The medium-term projects identified are Maritime Domain Awareness Solution and Virtual Augmented Mixed Reality for Aircraft Maintenance or VAMRAM.
 - The two long term projects are Terrain Shaping Obstacle and Counter-UAS, Rocket, Artillery & Mortar (CURAM) system for the Indian Army.

Defence Technology and Trade Initiative

- The Defence Trade and Technology Initiative (DTTI) was formed in 2012 between the US and India, to enhance the bilateral relations in defence by venturing into the field of advanced defence research and development and manufacturing.
- The aim was to strengthen the US and India's defence industrial base by moving away from the traditional "buyer-seller" dynamic toward a more collaborative approach.
- Co-development of a defence products between two nations an ambitious innovation.
- The enabling agreements which have been signed between the two countries are GSOMIA, LEMOA and COMCASA.
- These agreements along with BECA, enhance cooperation and interoperability between the armed forces of the two democracies.
- Signing of GSOMIA and up-gradation of India to the STA-1 status for trade by the US provides a framework for exchange and protection of classified military information between the U.S industry and the public and private Indian defence companies.

Standard Operating Procedure (SoP)

- A Standard Operating Procedure (SoP) to harmonize the processes for identification, development, and execution of projects under the DTTI has been formulated and ratified.
- The inclusion of Indian private industries and fostering the power of innovators has been a major step in this direction.
- Joint Working Groups (JWGs), which are now service-specific, has identified around eight to ten projects each, which will be executed under the umbrella of DTTI.

Meeting of the BRICS National Security

In News

Recently, 10th Meeting of the BRICS High Representatives on National Security chaired by Russia through video conference.

- This year Russia is chair of BRICS and SCO.

Key Highlights

- BRICS nations will deliberate upon the issues related to strengthening political security and cooperation among the five countries.

- India, Russia and China are members of BRICS, SCO and RIC and act as platform for mutual trust building and cooperation.

- The five countries had in-depth exchange of views on international security, biosafety, cooperation on counter-terrorism and cybersecurity.

BRICS

- BRICS is the group composed by the five major emerging countries - Brazil, Russia, India, China and South Africa.
- BRICS together represent about 42% of the population, 23% of GDP, 30% of the territory and 18% of the global trade.
- In 2006, BRIC countries started their dialogue, which since 2009 takes place at annual meetings of heads of state and government.
- In 2011, South Africa joined the group.
- At the Fortaleza Summit (2014), in Brazil, important institutions were created: the New Development Bank (NDB) and the Contingent Reserve Arrangement (CRA).
- The CRA is operational and is an important financial stability mechanism for countries affected by crises in their balance of payments.
- Since 2012, the BRICS countries are planning to construct an optical fibre submarine communications cable system. The system would be used to carry telecommunications between the BRICS countries. The cable to be known as the BRICS Cable.

Why BRICS matters for INDIA?

- Geo-Politics

Global geopolitics today represents the case of a tug of war and India finds itself in the middle of it. This has made difficult for India to carve a middle path for balancing its strategic interests between the U.S and the Russia-China axis. Therefore, BRICS platform provides an opportunity for India to balance Russia-China axis.

- Global Economic Order

BRICS countries shared a common objective of reforming the international financial and monetary system, with a strong desire to build a more just, and balanced international order. To this end, BRICS community plays an important role in the G20, in shaping global economic policies and promoting financial stability.

- Voice of Developing Nations

As the western countries are raising challenges on issues ranging from World Trade Organisation to climate change, the developing countries are crippling under the onslaught of these policies. In recent period, BRICS has emerged as the voice of developing countries, or the global south and playing a significant role in protecting the rights of developing countries.

- Terrorism

BRICS also provides a platform for India to galvanize its efforts against terrorism and has worked within the grouping to take a strong stand against terrorism and bring about focused consultations on specific aspects relating to terrorism.

- Global Grouping

India is actively pursuing its membership for United Nation Security Council (UNSC) and Nuclear Supplier Group (NSG). China forms the major roadblock in pursuing such goals. Therefore, BRICS provides an opportunity to actively engage with China and resolve the mutual disputes. It also helps in garnering support of other partner countries.

Abraham Accord

In News

Israel, UAE and Bahrain sign Abraham Accord, which is the first Arab-Israeli peace deal in 26 years.

- As per the agreements, the UAE and Bahrain will establish embassies, exchange ambassadors, cooperate and work together with Israel across a range of sectors, including tourism, trade, healthcare and security.
- The Abraham Accords also open the door for Muslims around the world to visit the historic sites in Israel and to peacefully pray at Al-Aqsa Mosque in Jerusalem, the third holiest site in Islam.
- The UAE and Bahrain have now become the third and fourth gulf countries to normalise relations with Israel after Egypt and Jordan. The others are Egypt and Jordan, since 1979 and 1994, respectively.

ABRAHAM ACCORDS PEACE AGREEMENT:
TREATY OF PEACE, DIPLOMATIC RELATIONS AND FULL NORMALIZATION
BETWEEN
THE UNITED ARAB EMIRATES
AND
THE STATE OF ISRAEL

The Government of the United Arab Emirates and the Government of the State of Israel (hereinafter, the "Parties")

Aspiring to realize the vision of a Middle East region that is stable, peaceful and prosperous, for the benefit of all States and peoples in the region;

Background

- In 1971, the UAE became an independent country, and first president of the UAE had referred to Israel as "the enemy."
- The UAE and the United States had a strategic relationship since the 1990 Gulf War, growing to a significant US Air Force presence at Al Dhafra Air Base after the September 11 attacks.
- In November 2015, Israel announced that it would open a diplomatic office in the UAE, which would be the first time in more than a decade that Israel had an official presence in the Persian Gulf.
- On August 13, 2020, UAE announced the UAE's agreement to normalize relations with Israel.
- UAE and Israel agreed to cooperation and setting a roadmap towards establishing a bilateral relationship. The treaty was signed on September 15, 2020.

Strategic Agenda for the Middle East

- Further to the Abraham Accords, the Parties stand ready to join with the United States to develop and launch a "Strategic Agenda for the Middle East" in order to expand regional diplomatic, trade, stability and other cooperation.
- They are committed to work together, and with the United States and others, in order to advance the cause of peace, stability and prosperity in the relations between them and for the Middle East as a whole, including by seeking to advance regional security and stability; pursue regional economic opportunities; promote a culture of peace across the region; and consider joint aid and development programs.

Concern

- 86% of Palestinians believe the normalization agreement with the UAE serves only Israel's interests and not their own.
- There is a possibility that the Palestine quest is further ignored.
- Saudi Arabia (Sunni) and Iran (Shia) have a long history of enmity. For decades, one of the main sources of instability in West Asia has been the cold war between Saudi Arabia and Iran.
- The Sunni-Shiite schism may also provoke violence between Muslims in such places as Pakistan, Nigeria and Indonesia.

Taxation and Other Laws (Relaxation & Amendment of Certain Provisions) Bill, 2020

In News

FinMin introduced the Taxation and Other Laws (Relaxation and Amendment of Certain Provisions) Bill, 2020 in the Lok Sabha for consideration.

- The bill will replace the ordinance which was promulgated to provide relaxations related to compliance by extending the time limit and waiving penalty in relation to certain specified laws.
- These laws include **the Income Tax Act, 1961 (IT Act), some Finance Acts, the Central Excise Act, 1944, the Customs Act, 1962, and the Prohibition of Benami Property Transactions Act, 1988.**
- The ordinance which was brought earlier also extended the deadline for filing declaration and due amount under the **Vivad Se Vishwas Scheme.**
- The bill provides these relaxations in view of spread of the coronavirus pandemic in India.
- The bill proposes amendment in the IT Act to provide that donations made by a person to the **PM CARES Fund** will be eligible for 100 per cent deduction in the taxable income.

The Bill seeks to achieve the aforesaid objectives:

- Clause 4 of the Bill seeks to amend certain provisions relating to Income-Tax Act, 1961.
- The proposed amendment to clause (4D) of section 10 provides for calculation of income of non-resident in the prescribed manner.
- The proposed amendment of the clause (23C) of section 10 empowers the Board to prescribe form and manner for application for approval to funds or trust or institution or any university or other educational institutions or any hospital or other medical institutions.

- The proposed insertion of new section 12AB relating to procedure for fresh registration empowers the Board to provide by rules the form and the manner in which the order under the said sub-section shall be passed.
- The proposed amendment to section 35 seeks to insert new proviso to sub-section (1) which empowers the Board to provide by rules the form and manner of giving intimation by the research association, university, college or company, to the prescribed authority.
- The proposed amendment to sub-section (5) of section 80G empowers the Board to provide by rules the statement, time period, form and manner of verification, particulars and time for delivery of correction statement for rectification of any mistake in the information furnished in the said statement. It further proposes to empower the Board to make rules with regard to the manner, particulars and time for certificate of donation.
- The proposed insertion of sub-section (1A) in section 115AD provides for calculation of income that is attributable to units held by non-resident in the prescribed manner.
- The matters in respect of which rules may be made are matters of procedure and administrative detail and it is not practicable to provide for them in the Bill itself. The delegation of legislative power is, therefore, of a normal character.

Additional Information

Vivad Se Vishwas Scheme

- This is a direct tax scheme announced in Budget 2020, for settling tax disputes between individuals and the income tax department.
- Earlier, the scheme offered complete waiver on interest and penalty to the taxpayers with a full and final settlement of the dispute if the scheme was availed by March 31, 2020.

- An individual opting for settlement after March 31, 2020 was required to pay additional 10 per cent penalty on the disputed tax amount.

Objectives of Vivad Se Vishwas Scheme 2020:

- Reduce income tax pending litigation
- Generate timely revenues for the Government
- Help taxpayers end their tax disputes with the department by paying disputed tax and get waiver from payment of interest and penalty. Also get immunity from prosecution.

Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020

In News

The Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020 (CAROTAR, 2020), shall come into force from 21st September, 2020.

- These rules "shall apply to import of goods into India where the importer makes a claim of preferential rate of duty in terms of a trade agreement.
- Under such agreements, two trading partners significantly reduce or eliminate import/customs duties on the maximum number of goods traded between them.

Key Highlights

- CAROTAR, 2020 implements to protect the domestic industry from misuse of Foreign Trade Agreements.
- CAROTAR, 2020 supplement the existing operational certification procedures prescribed under different trade agreements (FTA/ PTA/ CECA/ CEPA).
- An importer is now required to do due diligence before importing the goods to ensure that they meet the prescribed originating criteria.
- An importer would now have to enter certain origin related information in the Bill of Entry, as available in the Certificate of Origin.
- The new rules will support the importer to correctly ascertain the country of origin, properly claim the concessional duty and assist customs authorities in smooth clearance of legitimate imports under FTAs.

Why such changes needed?

- Need to protect the domestic industry from misuse of free trade agreements.
- Imports under FTAs are on the rise and undue claims of FTA benefits have posed threat to the domestic industry and such imports require stringent checks.

Significance

- The new Rules would strengthen the hands of the Customs in checking any attempted misuse of the duty concessions under FTAs.
- India has inked FTAs with several countries, including Japan, South Korea, Singapore and ASEAN members. Under such agreements, two trading partners significantly reduce or eliminate import/customs duties on the maximum number of goods traded between them.

Additional Information

Free Trade Agreement (FTAs)

- A free trade agreement (FTA) or treaty is a multinational agreement according to international law to form a free-trade area between the cooperating states.
- It covers trade in goods (such as agricultural or industrial products) or trade in services (such as banking, construction, trading etc.).
- It also covers other areas such as intellectual property rights (IPRs), investment, government procurement and competition policy etc.

Rules of Origin

- The "rules of origin" provision prescribes for the minimal processing that should happen in the FTA country so that the final manufactured product may be called originating goods in that country.
- Under this provision, a country that has inked an FTA with India cannot dump goods from some third country in the Indian market by just putting a label on it. It has to undertake a prescribed value addition in that product to export to India. Rules of origin norms help contain dumping of goods.
- Rules of Origin are the criteria needed to determine the national origin of a product. Countries which offer zero or reduced duty access to imports from certain trade partners often apply a set of preferential rules of origin to determine the eligibility of products to receive preferential access.

Types of origin

(a) Preferential

- Preferential origin is related to trade agreements which grant members access to domestic market at preferential tariffs.
- Preferential rules of origin are used to determine whether the good qualifies for the preferential tariff offered under the agreement.
- The rules are based on the HS Classification and are, in most cases, product specific: each HS code eligible for preferential tariff under a trade agreement has a rule of origin.

(b) Non- Preferential

- Non-preferential origin applies to goods traded between countries not linked by any preferential trade agreement (in the absence of any preferential agreement or when the goods are not covered by an existing FTA).

- Non-preferential origin does not lead to a reduction in tariffs but is used for a number of other purposes such as quotas, anti-dumping and countervailing duties. It is also used for trade statistics and for the purpose of labelling.
- Non-preferential rules of origin are decided by each country.

Harmonised System (HS) Classification

- HS Nomenclature or Classification, is the World Customs Organization's Harmonized Commodity Description and Coding System.
- It is an international customs classification system which allocates a unique 6-digit HS code to each group of products.
- The system was initially adopted by the Customs Cooperation Council in 1983.
- HS codes are in principle harmonised across most countries around the world however some exceptions exist.
- HS codes are used for a number of purposes. They enable the customs authorities to identify the product and apply the appropriate import duty as well as other taxes and trade measures.

The Occupational Safety, Health and Working Conditions Code, 2020

In News

Labour Minister introduced the Occupational Safety, Health And Working Conditions Code, 2020, the Industrial Relations Code, 2020, and the Code On Social Security, 2020.

Details

- Labour falls under the Concurrent List of the Constitution. Therefore, both Parliament and state legislatures can make laws regulating labour.
- The central government has stated that there are over 100 state and 40 central laws regulating various aspects of labour such as resolution of industrial disputes, working conditions, social security and wages.
- The Second National Commission on Labour (2002) found existing legislation to be complex, with archaic provisions and inconsistent definitions.
- To improve ease of compliance and ensure uniformity in labour laws, it recommended the consolidation of central labour laws into broader groups such as: (i) industrial relations, (ii) wages, (iii) social security, (iv) safety, and (v) welfare and working conditions.

The 2020 Labour Codes

- **Appropriate government for Central PSUs:** The bill said that the central government will continue to be the appropriate government for a central PSU even if the holding of the central government in that PSU becomes less than 50% post the commencement of the Bills.

- **Appropriate government for certain specified industries:** The bills said that the central government will also be the appropriate government for any "Controlled Industry" (that the government may specify). A Controlled Industry has been defined (in the Bills on Occupational Safety and Industrial Relations) as an industry on which the control of the Union has been declared by any Central Act in public interest.

- **Compounding of offences punishable with imprisonment:** The bills on Industrial Relations and Social Security state that the offences punishable with imprisonment up to one year or with fine will be compoundable. For offences with fine, compounding is allowed for a sum of 50% of the maximum fine provided for the offence. For offences with imprisonment, compounding is allowed for a sum of 75%. In the Bill on Occupational Safety, 50% may be compounded where a 'penalty' is levied (e.g., for non-maintenance of registers) and 75% for 'offences' (e.g., for falsification of records).

Establishments

- **Factory:** The bill defined a factory as any premises where manufacturing process is carried out and it employs more than: (i) 20 workers for premises where the manufacturing process is carried out using power, and (ii) 40 workers for premises where it is carried out without using power.
- **Establishments engaged in hazardous activity:** The bill includes all establishments (business, trade, or occupation) where any hazardous activity is carried out regardless of the number of workers.
- **Contract workers:** The bill applied to establishments or contractors employing 50 or more contract workers (on any day in the last one year).
- The bill prohibits contract labour in core activities, except where: (i) the normal functioning of the establishment is such that the activity is ordinarily done through contractor, (ii) the activities are such that they do not require full time workers for the major portion of the day, or (iii) there is a

sudden increase in the volume work in the core activity which needs to be completed in a specified time.

- The Bill allows the appropriate government to exempt contractors from the provisions of the Bill in case of an emergency, subject to such conditions as may be notified.

Work hours and employment conditions

- The bill fixes the maximum limit at eight hours per day.
- The bill provides that women will be entitled to be employed in all establishments for all types of work under the Bill. It also provides that in case they are required to work in hazardous or dangerous operations, the government may require the employer to provide adequate safeguards prior to their employment.

The Industrial Relations Code Bill, 2020

In News

Industrial Relations Code, 2020 was introduced in Lok Sabha on 19th September 2020.

- The appropriate government may exempt any new industrial establishment or class of establishments from the provisions of the Code in public interest.

Highlights

- The bill provided that all industrial establishment with 300 workers or more must prepare standing orders on the matters listed in a Schedule to the Code.
- These matters relate to: (i) classification of workers, (ii) manner of informing workers about work hours, holidays, paydays, and wage rates, (iii) termination of employment, and (iv) grievance redressal mechanisms for workers.
- The 2019 Bill provided that the central government may make the provisions related to standing orders applicable to establishments with less than 100 workers through a notification. The 2020 Bill removes this provision.
- The 2019 Bill provided that once an establishment is covered under the provisions related to standing orders, these provisions will continue to apply even if its employee strength reduces below the threshold (100 workers) at any time thereafter. The 2020 Bill removes this requirement.

Negotiating Union and Council

- **Sole Negotiating Union:** Under the 2019 Bill, if there were more than one registered trade union of workers functioning in an establishment, the trade union having more than 75% of the workers as members would be recognised as the sole negotiating union. The 2020 Bill lowers this threshold to 51% of workers.

- **Negotiation Council:** In case no trade union is eligible as sole negotiating union, the 2019 Bill provided that a negotiating council will be formed consisting of representatives of unions that have at least 10% of the workers as members. The 2020 Bill raises this threshold to 20%.

New provision under the Bill

- Disputes relating to termination of individual worker: The bill classifies any dispute in relation to discharge, dismissal, retrenchment, or otherwise termination of the services of an individual worker to be an industrial dispute. The worker may apply to the Industrial Tribunal for adjudication of the dispute. The worker may apply to the Tribunal 45 days after the application for the conciliation of the dispute was made.

The Code on Social Security, 2020

In News

Union Labour Minister introduced Code on Social Security, 2020 bill which will provide social security benefits to gig workers — in Lok Sabha.

- Gig workers refer to workers outside the traditional employer-employee relationship.
- Platform workers are those who access organisations or individuals through an online platform and provide services or solve specific problems.

Social security entitlements

The 2019 Bill mandated social security for certain establishments, based on thresholds, such as the size of the establishment and income ceilings. The 2020 Bill states that the central government may, by notification, apply the Code to any establishment (subject to size-threshold as may be notified).

Social security funds for unorganised workers, gig workers and platform workers:

- The 2019 Bill empowered the central government to set up social security funds for unorganised workers, gig workers and platform workers.
- The 2020 Bill states that the central government will set up such a fund. Further, state governments will also set up and administer separate social security funds for unorganised workers.
- The 2020 Bill also makes provisions for registration of all three categories of workers - unorganised workers, gig workers and platform workers.

National Social Security for gig workers and platform workers:

- The 2019 Bill provided for the establishment of a national and various state-level boards for administering schemes for unorganised sector workers.
- The 2020 Bill states that in addition to unorganised workers, the National Social Security Board may also act as the Board for the purposes of welfare of gig workers and platform workers and can recommend and monitor schemes for gig workers and platform workers.
- In such cases, the Board will comprise of a different set of members including: (i) five representatives of aggregators, nominated by the central government, (ii) five representatives of gig workers and platform workers, nominated by the central government, (iii) Director General of the ESIC, and (iv) five representatives of state governments.

Role of aggregators:

- The 2020 Bill clarifies that schemes for gig workers and platform workers may be funded through a combination of contributions from the central government, state governments, and aggregators. For this purpose, the Bill specifies a list of aggregators in Schedule 7.
- These mention nine categories including ride sharing services, food and grocery delivery services, content and media services, and e-marketplaces. Any contribution from such an aggregator may be at a rate notified by the government falling between 1-2% of the annual turnover of the aggregators. However, such contribution cannot exceed 5% of the amount paid or payable by an aggregator to gig workers and platform workers.

Term of eligibility for gratuity:

- Under the 2019 Bill, gratuity was payable on the termination of employment, if the employee has been in the organisation for at least five years. The 2020 Bill reduces the gratuity period from five years to three years for working journalists.

The Essential Commodities (Amendment) Bill, 2020

In News

The Lok Sabha had passed the Essential Commodities (Amendment) Bill, 2020 that allows the central government to regulate the supply of some food items only under extraordinary circumstances which may include war, famine, extraordinary price rise, and natural calamity of grave nature.

- The Essential Commodities (Amendment) Bill, 2020, which will replace an ordinance, provides that stock limits may be imposed on agricultural produce only if there is a steep price rise.

Regulation of food items

- The Essential Commodities Act, 1955 empowers the central government to designate certain commodities (such as food items, fertilizers, and petroleum products) as essential commodities. The central government may regulate or prohibit the production, supply, distribution, trade, and commerce of such essential commodities.
- The Ordinance provides that the central government may regulate the supply of certain food items including cereals, pulses, potatoes, onions, edible oilseeds, and oils, only under extraordinary circumstances. These include: (i) war, (ii) famine, (iii) extraordinary price rise and (iv) natural calamity of grave nature.

Stock limit

- The Ordinance requires that imposition of any stock limit on agricultural produce must be based on price rise.
- A stock limit may be imposed only if there is: (i) a 100% increase in retail price of horticultural produce; and (ii) a 50% increase in the retail price of non-perishable agricultural food items.
- The increase will be calculated over the price prevailing immediately preceding twelve months, or the average retail price of the last five years, whichever is lower.

The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Ordinance, 2020

Highlights of the Ordinance

- The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Ordinance, 2020 allows intra-state and inter-state trade of farmers' produce beyond the physical premises of APMC markets.
- State governments are prohibited from levying any market fee, cess or levy outside APMC areas.
- The Farmers Agreement Ordinance creates a framework for contract farming through an agreement between a farmer and a buyer prior to the production or rearing of any farm produce.

- It provides for a three-level dispute settlement mechanism: the conciliation board, Sub-Divisional Magistrate and Appellate Authority.
- The ordinance to increase the availability of buyers for farmers' produce, by allowing them to trade freely without any license or stock limit.
- The ordinance aims to liberalise trade and increase the number of buyers, de-regulation alone may not be sufficient to attract more buyers.

India-Denmark Green Strategic Partnership

In News

At the virtual Summit, the Prime Ministers of India and Denmark agreed to elevate India-Denmark relations to a **Green Strategic Partnership**.

- India has launched Green Strategic Partnership for the first time with Denmark as its partner to be at forefront of the global fight against the Climate Change.

Green Strategic Partnership

- The Green Strategic Partnership is a mutually beneficial arrangement to advance **political cooperation, expand economic relations and green growth, create jobs and strengthen cooperation on addressing global challenges and opportunities**.
- It also focusses on an ambitious **implementation of the Paris Agreement and the UN Sustainable Development Goals**.

Summit Details

The two Prime Ministers agreed to elevate India-Denmark relations to a Green Strategic Partnership. This partnership would envisage cooperation within:

- Political field
- Economic and commercial field
- Science and technology
- Environment
- Energy
- Education and culture
- Renewable Energy
- Urban Development
- Environment
- Agriculture and Animal Husbandry
- Food Processing
- Science
- Technology and Innovation

- Shipping
- Labour Mobility
- Digitization

Energy and climate change

- The two partners agreed on addressing global challenges and solutions on green energy transition and climate change.
- The Strategic Sector Cooperation on offshore wind and renewable energy, **the India-Denmark Energy Partnership (INDEP)** on capacity building, knowledge-sharing and technology transfer on wind energy, energy modeling and integration of renewable energy are some of the commitments to address the common global challenges on the path towards global energy transition, green growth and sustainable development.
- India and Denmark agree to be at the forefront in the global fight against climate change.

Environment/Water and Circular Economy

- The two partners agreed to work towards further expanding and strengthening the existing Government-to-Government cooperation on environment/water and circular economy.
- They further agreed to cooperate in water efficiency and non-revenue water (water loss). In this context, the Indian Ministry of Jal Shakti and the Danish Environmental Protection Agency and the Danish Ministry of Environment and Food to **develop a Work Plan for an initial period of three years (2021-23)**.
- The two nations expressed their joint wish to enhance cooperation in the specific areas of water supply, water distribution, waste-water treatment, sewerage systems, re-use of treated waste-water, water management and energy optimization in the water sector through the Indo-Danish Water Technology Alliance.

Sustainable Urban Development including Smart Cities

- Both sides agreed to strengthen bilateral cooperation in sustainable urban development, including in smart cities through the **Urban Living Lab in Goa**.

- Both sides also agreed to strengthen existing **City-to-City cooperation between Udaipur and Aarhus and Tumakuru and Aalborg**.

- Danish companies are contributing to designing infrastructure projects in India and welcomed greater engagement of Danish side in all fields of sustainable urban development.

Business, Trade and Shipping

- The two partners welcomed the idea of developing partnerships between the two countries with special focus on green and climate-friendly technologies.
- Both leaders appreciated the deep cooperation on maritime affairs and noted the potential for enhancing cooperation in ship-building and design, maritime services and Green shipping, as well as port development.
- Both the nations would encourage business delegations, market access activities for SMEs and enhance ease of doing business.
- Both the nations confirmed the emerging cooperation in Intellectual Property Rights, which will help to modernize and strengthen their national intellectual property systems to promote innovation, creativity and technological advancement.

Science, Technology, Innovation and Digitization

- India and Denmark agreed for promoting and facilitating investments in **science, technology and innovation (STI)** via strong public-private partnerships.
- It will accelerate technology development and the implementation of new solutions.
- Collaboration in STI supports the Green Strategic Partnership by promoting and strengthening relations between authorities, small and large companies and research and higher education institutions in India and Denmark.
- The two sides agree to build on existing strong bilateral STI partnerships with joint calls for projects in areas such as energy, water, bio-resources and ICT.
- The two leaders recognized their shared interest in digitization and digital solutions and business models in the green transition and decided to collaborate for enhancement of development, innovation and demonstration in the field of digital technologies to support green sustainable growth.

Food and Agriculture

- The two Prime Ministers research institutions in the sectors of food processing and food safety, as well as animal husbandry and dairying encouraged fostering deeper and closer cooperation between authorities, businesses and

Health and Life Science

- Both sides emphasized the potential and their common desire to strengthen the dialogue and cooperation in the health sector.
- Both confirmed their interest in expanding and sharing best practices on health policy issues, including on epidemics and vaccines, especially to combat Covid-19 and future pandemics.
- They agreed to work on expanding commercial opportunities for businesses by creating more favorable environments for the life science sector, including research collaborations.

Cultural Cooperation, People-to-People contacts and Labour Mobility

- The two Prime Ministers agreed to promote greater awareness and mutual understanding between the peoples of the two countries through cultural cooperation.
- Both sides agreed to examine the possibilities for labour mobility, as well as to consider ease of travel between the two countries to facilitate greater people-to-people interaction and strengthen cooperation in the tourism sector.

Conclusion

- The two leaders expressed their conviction that a decision of the two countries to establish Green Strategic Partnership has opened a new chapter in the friendly and cooperative relations between them.
- Ambitious goals and actions will be identified within the areas and outlined in an Action Plan that will be worked out and endorsed as soon as possible.

National Pharmaceutical Pricing Authority

In News

The National Pharmaceutical Pricing Authority capped the prices of oxygen cylinders and medical oxygen cylinders in a bid to stop their black marketing and hoarding due to surging demand amidst covid-19 pandemic.

- Currently, demand for medical oxygen in the country has increased from 750 metric tonnes per day to 2,800 metric tonnes per day.

Issue

- The present situation of covid-19 has resulted in increased demand of medical oxygen (MO) in the country.
- The demand of MO has gone up almost four times, from 750MT a day to 2,800 MT a day.
- This has caused strain at all levels in the value chain of production and supply.
- As there was no price cap on liquid medical oxygen, the manufacturers in the country hiked the prices of fillers. This is the main reason for the medical oxygen prices to shoot up. Thus, NPPA has capped the prices.

Capping

- The NPPA has decided to cap the ex-factory price of liquid medical oxygen (LMO) at manufacturers' end at ₹15.22/CUM exclusive of GST.
- It has further capped the ex-factory cost of medical oxygen cylinder at fillers' end at ₹25.71/CUM exclusive of GST in suppression of the existing ceiling price of ₹17.49/CUM, subject to transportation cost fixation at state level, for six months.

National Pharmaceutical Pricing Authority

- The National Pharmaceutical Pricing Authority (NPPA) is a government regulatory agency that controls the prices of pharmaceutical drugs in India.
- It was formed on 29 August 1997.
- The NPPA regularly publishes lists of medicines and their maximum ceiling prices.

Functions

- To implement and enforce the provisions of the Drugs (Prices Control) Order in accordance with the powers delegated to it.
- To deal with all legal matters arising out of the decisions of the Authority.
- To monitor the availability of drugs, identify shortages, if any, and to take remedial steps.
- To collect/ maintain data on production, exports and imports, market share of individual companies, profitability of companies etc, for bulk drugs and formulations.
- To undertake and/ or sponsor relevant studies in respect of pricing of drugs/ pharmaceuticals.
- To recruit/ appoint the officers and other staff members of the Authority, as per rules and procedures laid down by the Government.

- To render advice to the Central Government on changes/ revisions in the drug policy.
- To render assistance to the Central Government in the parliamentary matters relating to the drug pricing.

Price monitoring and resource unit (PMRU)

- NPPA under its program called "Consumer awareness, publicity and price monitoring" has set up 12 Price monitoring and resource units in various States and UTs.
- It will help the NPPA and State drug controller to ensure the accessibility of drugs at affordable prices.
- The PMRUs are societies registered under Societies Registration Act, 1860 under the direct supervision of State drug controller with its "board of governors" containing nominees of state and central government apart from other stakeholders.
- They will be funded by NPPA for their recurring and non-recurring expenses.

General Studies-III

Technology, Economic Development, Bio-diversity, Environment, Security and Disaster Management

India's GDP growth contracts 23.9%

In News

India's April to June quarter Gross Domestic Product (GDP) estimates have declined 23.9% according to the data released by the Ministry of Statistics and Programme Implementation (MoSPI).

- The pace of contraction in the output of 8 core sectors has been reducing significantly.

CHART 2: PERCENTAGE CHANGE IN KEY INDICATORS

Indicator	Q1 2019-20	Q1 2020-21
Production of coal	2.6	-15.0
Production of cement	1.0	-38.3
Consumption of steel	5.0	-56.8
Total telephone subscribers	1.5	-2.0
Commercial vehicle sales	-9.5	-84.8
Cargo handled at major sea ports	1.7	-19.8
Cargo handled at airports	-6.5	-57.2
Passengers handled at airports	-0.6	-94.1
Railways, net tonne kilometres	0.7	-26.7

Source: Ministry of Statistics and Programme Implementation

Causes of GDP contraction

- Private consumption, the biggest engine driving the Indian economy, has fallen by 27%.
- Investments by businesses has fallen, it is half of what it was last year same quarter.
- Government's expenditure went up by 16%.
- Construction, manufacturing, trade, hotels, transport, communication & services which account for 45% of the economy were also responsible.
- Manufacturing sector output declined 39.3%.
- Construction sector's output fell 50.3%.
- Mining sector saw a decline of 23.3%.
- Despite all, the agriculture sector has grown 3.4%.

Way out

- It can be possible only when government spend more, either by building roads/ bridges, paying salaries, directly handing out money.
- With increased government spending, the economy revives in the short to medium term.
- If the government does not spend adequately enough then the economy will take a long time to recover.

Why hasn't the government been able to curb it?

- Even before the CoVID crisis, government finances were overextended.
- Government was borrowing more than what it should have. As a result, today it doesn't have as much money.

Gross domestic product

GDP is a monetary measure of the market value of all the final goods and services produced in a specific time period.

Note:

- In January 2015, the government moved to a new base year of 2011-12 from the earlier base year of 2004-05 for national accounts.
- In the new series, the Central Statistics Office (CSO) did away with Gross Domestic Product (GDP) at factor cost and adopted the international practice of valuing industry-wise estimates as gross value added (GVA) at basic prices.

Adjusted Gross Revenue (AGR)

In News

Supreme Court of India has given telecom companies 10 years to clear AGR (adjusted gross revenue) dues.

- It directed the companies to pay the first instalment of 10% of dues by March 31, 2021.

AGR

- Adjusted Gross Revenue (AGR) is the usage and licensing fee that telecom operators are charged by the Department of Telecommunications (DoT).
- The AGR is divided into spectrum usage charges and licensing fees, pegged between 3-5 percent and 8 percent respectively.
- As per DoT, the charges are calculated based on all revenues earned by a telco – including non-telecom related sources such as deposit interests and asset sales.

Background

- The telecom sector was liberalised under the National Telecom Policy, 1994 after which licenses were issued to companies in return for a fixed license fee.
- To provide relief from the steep fixed license fee, the government in 1999 gave an option to the licensees to migrate to the revenue sharing fee model.
- Under this, mobile telephone operators were required to share a percentage of their AGR with the government as annual license fee (LF) and spectrum usage charges (SUC).
- License agreements between the Department of Telecommunications (DoT) and the telecom companies define the gross revenues of the latter. AGR is then computed after allowing for certain deductions spelt out in these license agreements.

Dispute

- The dispute between DoT and the mobile operators was mainly on the definition of AGR.
- The DoT argued that AGR includes all revenues (before discounts) from both telecom and non-telecom services.
- The companies claimed that AGR should comprise just the revenue accrued from core services and not dividend, interest income or profit on sale of any investment or fixed assets.

Supreme Court

- In 2005, Cellular Operators Association of India (COAI) challenged the government's definition for AGR calculation.
- In 2015, the TDSAT (Telecom Disputes Settlement and Appellate Tribunal) stayed the case in favour of telecom companies and held that AGR includes all receipts except capital receipts and revenue from non-core sources such as rent, profit on the sale of fixed assets, dividend, interest and miscellaneous income.
- Setting aside TDSAT's order, Supreme Court on October 24, 2019 upheld the definition of AGR as stipulated by the DoT.

Why is it important?

- The definition of AGR has been such a contentious issue because it has huge financial implications for both telcos and the government.
- The revenue shared by telcos with the government goes into the consolidated fund of India. It was estimated, after the SC's judgment, that the telecom operators owe the government about ₹92,000 crore (as on November 2019) in back charges, interest and penalties on license fee alone.

Global Innovation Index 2020

In News

India secured 48th rank in the global innovation index, keeping the top position among the nations in central and southern Asia.

- The Global Innovation Index (GII) list, 2020 released jointly by the World Intellectual Property Organization (WIPO), Cornell University and INSEAD Business School.
- A total of 131 countries were analysed under the GI before arriving at the rankings.
- The metrics include institutions, human capital and research, infrastructure, market sophistication and business sophistication, knowledge and technology outputs and creative outputs.

Highlights

- India has become the third most innovative lower middle-income economy in the world
- India ranks in the top 15 in indicators such as ICT (Information and Communication Technology) services exports, government online services, graduates in science and engineering, and R&D-intensive global companies.
- India is the lower middle-income economy with the highest innovation quality.
- India increased the most in three pillars: Institutions (61st), business sophistication (55th), and creative outputs (64th).
- Asian economies like China, India, the Philippines and Vietnam have advanced considerably in the innovation ranking over the years.
- China, which is the only middle-income economy among the top 30, now holds the 14th place.
- Switzerland bagged the first spot in the GI ranking followed by Sweden, United States of America, United Kingdom and Netherlands.

Global Innovation Index

- It is an annual ranking of countries by their capacity for, and success in, innovation.
- The index was started in 2007 by INSEAD and World Business, a British magazine.
- The GI is commonly used by corporate and government officials to compare countries by their level of innovation.

World Intellectual Property Organization (WIPO)

- WIPO is the global forum for intellectual property (IP) services, policy, information and cooperation. We are a self-funding agency of the United Nations, with 193 member states.
- Its mission is to lead the development of a balanced and effective international IP system that enables innovation and creativity for the benefit of all.

Intellectual Property

- Intellectual property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce.
- IP is protected in law by, for example, patents, copyright and trademarks, which enable people to earn recognition or financial benefit from what they invent or create.

UNEP launches “Green Nudges” programme

In News

The UN Environment Programme (UNEP) launched a new publication, “The Little Book of Green Nudges”, which aims to inspire up to 200 million students around the globe to adopt environment friendly habits and greener lifestyles.

What Are Nudges?

Nudges are positive and gentle persuasions that are meant to influence behaviour and decision-making. Such interventions include choice architecture, default setting, social influence and increased salience.

What is the Little Book of Green Nudges?

The Little Book of Green Nudges is a quick guide to reducing campus' environmental impact through behavioural change in the form of a concise and user-friendly publication.

Details

- The book is UNEP's first on behavioural science and nudge theory.
- It was drafted with The Behavioural Insights Team and GRID-Arendal.
- It contains 40 ready-made nudges which university campuses can deploy to encourage students and staff to embrace more sustainable behaviours.
- These are the simple measures that make it easier to make green choices.
- The Little Book of Green Nudges contains evidence-based guidance on implementing nudges, centered around techniques such as resetting default options, changing the framing of choices, and harnessing social influence.
- It also includes case studies of nudging interventions rolled out at universities from Thailand to Kenya, Finland and Colombia.

Examples of nudges recommended in the book include:

- Food: Using appealing descriptions for plant-based dishes, for example “spicy chickpea curry”. A study in a university cafeteria found that describing vegetables in indulgent terms resulted in 25 per cent more diners choosing them.
- Recycling: Making recycling bins eye-catching and easy to use. One study found that bins with specialized lids increased the recycling rate for beverage containers by 34 per cent.
- Waste: In cafeterias, offering smaller plates and no trays, to discourage food waste. A study conducted in a university dining hall found that going trayless led to a significant decrease in solid waste.
- Transport: Encouraging cycling by making it easier to park bicycles, while at the same time making it more of a hassle to park cars, for instance by requiring people to frequently reapply for car parking permits.
- Sharing: Setting up a system to share leftover food from meetings or events. A group of students at one university set up a food-sharing group that has prevented more than 7,000 kg of food from going to waste.

UN Environment Programme

- UNEP is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system, and serves as an authoritative advocate for the global environment.
- UNEP was founded in 1972 by Canadian businessman and philanthropist Maurice Strong, its first director, following the United Nations Conference on the Human Environment (Stockholm Conference).
- Its mandate covers a wide range of areas, including the atmosphere, marine and terrestrial ecosystems, environmental governance, and green economic development.

India-Japan sign Logistics Agreement

In News

India and Japan signed a logistics agreement on September 10, 2020. The agreement on 'Reciprocal Provision Supplies and Services' will allow the Armed Forces of India and Japan to coordinate closely in services and supplies.

Details

- The agreement provides for creation of an framework for closer cooperation and interoperability.
- It allows militaries of the two countries to use each other's bases and facilities for repair and replenishment of supplies
- India is also expanding overall strategic cooperation with Japan in the Indo-Pacific region under the framework of four nation coalition 'Quad'.
- The maritime space around the Malacca Strait, one of the world's busiest shipping lanes, is very critical for China's supply chain through sea routes.
- The agreement seeks to further the engagements in bilateral training activities, United Nations Peacekeeping Operations, Humanitarian International Relief and other mutually agreed activities.
- Agreement will also help both sides to coordinate on medical requirements, supplies, maintenance, airlifting and communication.

Background

- India and Australia sealed a similar Mutual Logistics Support Agreement (MLSA) while resolving to scale up their overall defence cooperation.
- India has already signed similar agreements with the US, France and Singapore.

Significance

- India has been signing MLSAs with countries primarily eyeing deeper maritime cooperation which is important considering China's rapid military expansionism in the Indo-Pacific, Indian Ocean and South China Sea.
- The pacts signed with the US and France provide for accessing various crucial bases by Indian military in Djibouti, Guam and the Reunion Islands among others.

EASE 2.0 Index Results

In News

Union Minister of Finance & Corporate Affairs inaugurated Doorstep Banking Services by Public Sector Banks (PSBs) and participated in the awards ceremony to felicitate best performing banks on EASE Banking Reforms Index.

- The EASE (Enhanced Access and Service Excellence) Banking Reforms Index 2.0 is framed by the Indian Banking Association (IBA).

- EASE Agenda is aimed at institutionalizing clean and smart banking.

Highlights

- As per EASE Banking Reforms Index 2.0, Bank of Baroda has marked the top position in the ranking list.
- The State Bank of India and Oriental Bank of Commerce has marked the Second and Third rank position respectively.
- The index is prepared with an aim to achieve and analyse the positive changes in PSBs by having a healthy competition among them so that they can learn from each other and adapt to positive values so as to retain customer trust and be on the top position as trustworthy banks.
- The overall score of PSBs increased by 37% between March-2019 and March-2020, with the average EASE index score improving from 49.2 to 67.4 out of 100.
- Significant progress is seen across six themes of the Reforms Agenda, with the highest improvement seen in the themes of 'Responsible Banking', 'Governance and HR', 'PSBs as Udyamimitra for MSMEs', and 'Credit off-take'.

Top 3 banks in each theme

Top 3 banks for EASE 2.0 Index: <ul style="list-style-type: none">• Bank of Baroda• State Bank of India• Oriental Bank of Commerce	Theme 1: Responsible Banking <ul style="list-style-type: none">• Bank of Baroda• State Bank of India• Punjab National Bank	Theme 4: Udyammitra for MSMEs <ul style="list-style-type: none">• Oriental Bank of Commerce• State Bank of India• Union Bank of India
Top 3 banks in improvement from March baseline <ul style="list-style-type: none">• Bank of Maharashtra• Central Bank of India• Corporation Bank	Theme 2: Customer Responsiveness <ul style="list-style-type: none">• State Bank of India• Oriental Bank of Commerce• Bank of Baroda	Theme 5: Deepening FI & Digitalisation <ul style="list-style-type: none">• Bank of Baroda• Citibank• Punjab National Bank
	Theme 3: Credit Off-take <ul style="list-style-type: none">• Oriental Bank of Commerce• Union Bank of India• State Bank of India	Theme 6: Governance and HR <ul style="list-style-type: none">• State Bank of India• Bank of Baroda• Punjab National Bank

Note: Only banks with 50% or more of total weight for a theme applied for the theme are considered for ranking.

Major Reform achievements between March 2018 to March 2020

- Most PSB customers now have access to 35+ services such as IMPS, NEFT, RTGS, intra-bank transfer, account statement, cheque book request on mobile/ Internet banking and 23 services such as chequebook issuance, cheque status, issuance of form 16A, block/activate debit card on the call centre.

- Nearly 4cr active customers on mobile and internet banking with 140% increase in financial transactions through mobile and internet banking channels and almost 50% of financial transactions through digital channels.
- Call centers now offer services in 13 regional languages such as Telugu, Marathi, Kannada, Tamil, Malayalam, Gujarati, Bengali, Odia.

Alternatives for stubble burning by PEDA

In News

Punjab government's agencies, the Punjab Energy Development Agency (PEDA) alongwith the science and the technology department are creating alternatives for paddy stubble utilisation.

- This includes setting up biomass power plants and producing Bio CNG from the paddy stubble biomass.

What is PEDA doing in this regard currently?

- PEDA is working towards promotion and development of renewable energy.
- In past three decades, PEDA has set up 11 biomass power plants where 97.50 mega watts (MW) of power is generated.
- In these plants, 8.80 lakh metric tonnes of paddy stubble, which is less than 5 per cent of the total 20 million tonnes paddy stubble generated in Punjab, is used annually to generate power.
- Two more biomass power projects with 14 MW capacity are under execution and will be commissioned from June 2021.
- These projects are environmentally friendly due to relatively lower CO₂ and particulate emissions and displace fossil fuels such as coal.

Bio CNG

- Eight projects of Bio CNG are under execution in the state. Most of these projects will be commissioned in 2021 and 2022.
- These will need around 3-lakh metric tonnes of paddy stubble annually.
- India's largest Bio CNG project, which will produce 8,000 m cube biogas per day (equivalent to 33.23 tonnes of Bio CNG per day) is under execution at Lehragaga tehsil in Sangrur district. The project is expected to be commissioned by March 2021.

Bioethanol project

- A Bioethanol project of 100 kilolitre is being set up at Talwandi Sabo in Bathinda. This will require 2 lakh metric tonnes of paddy stubble annually.
- Bioethanol can be used to run vehicles after blending with diesel and petrol.

Advantages

After commissioning of all these projects, Punjab will be able to utilise 1.5 million tonnes (7% of the total) paddy stubble.

What are the benefits of a paddy straw-based industry?

- Farmers can benefit hugely if they can sell paddy stubble to the industry instead of burning it.
- Apart from this, fertile soil will be saved from burning every year in which a huge amount of organic matter also gets burnt.
- Educated unemployed youth in rural Punjab where such projects will be set up can get big job opportunities.

Way ahead

- The government must help the youth in setting start-ups for stubble utilization by getting sanctioned loans and providing a market.
- Joint efforts are required on the part of the state, Centre and industries, including public and private participation, to convert all of Punjab's stubble into farmers' income.

Punjab Energy Development Agency

- PEDA was formed in September 1991 as a state nodal agency for promotion and development of Renewable Energy Programmes/ Projects and energy conservation programme in the state of Punjab.
- PEDA is registered as a Society under the Societies Act of 1860. Punjab Energy Development Agency under the Department of New and Renewable Energy, Govt. of Punjab.

Krishna-Godavari (KG) Basin as source of methane

In News

A recent study conducted at the Agharkar Research Institute revealed that the Krishna-Godavari (KG) Basin holds a massive reserve of methane hydrate, which is a rich source of clean fuel.

- Methane present in the Methane hydrates in KG Basin is twice that of all fossil fuel reserves available worldwide.
- The team has further identified the methanogens that produced the biogenic methane trapped as methane hydrate, which can be a significant source of energy.
- The KG basin is known to be a rich source of hydrocarbons.

Background

The study was conducted as a part of the DST-SERB (Science and Engineering Research Board) young scientist project titled 'Elucidating the community structure of methanogenic archaea in methane hydrate'.

Methane hydrate

- Methane hydrate is formed when hydrogen-bonded water and methane gas come into contact at high pressures and low temperatures in oceans.
- Methane hydrate is an "ice" that only occurs naturally in subsurface deposits where temperature and pressure conditions are favorable for its formation.
- By lowering the pressure or raising the temperature, the hydrate simply breaks down into water and methane - a lot of methane.

Clean Fuel

- Methane is a clean and economical fuel and it is estimated that "one cubic meter of methane hydrate contains 160-180 cubic meters of methane".
- Methane's clean burning process makes it a very attractive fuel. When burnt in the presence of Oxygen, its one molecule releases two molecules of water and one of Carbon Dioxide.
- Methane is found both below ground and under the seafloor, and is formed by both geological and biological processes. The largest reservoir of methane is under the seafloor in the form of methane clathrates.

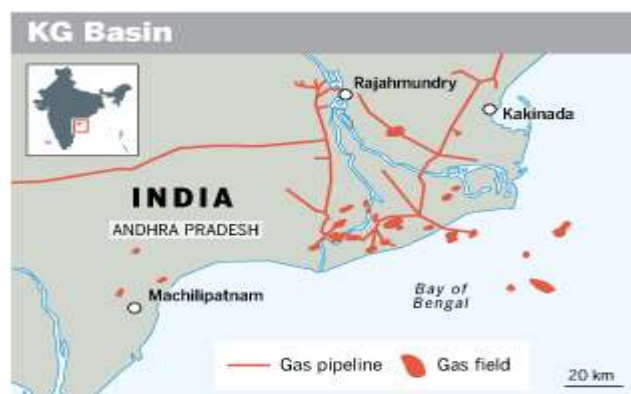
Uses

- Methane is used as a fuel for ovens, homes, water heaters, kilns, automobiles, turbines, and other things.

- Refined liquid methane is used as a rocket fuel, when combined with liquid oxygen, as in the BE-4 and Raptor engines.
- Methane is used in industrial chemical processes and may be transported as a refrigerated liquid (liquefied natural gas, or LNG).
- Methane is important for electricity generation by burning it as a fuel in a gas turbine or steam generator.

KG Basin

- Krishna Godavari Basin is a peri-cratonic passive margin basin in India.
- It is spread across more than 50,000 square kilometres in the Krishna River and Godavari River basins in Andhra Pradesh.
- The site is known for the D-6 block where Reliance Industries discovered the biggest natural gas reserves in India in 2003.
- The first gas discovery in the basin was in 1983, when ONGC had a small office in Rajahmundry and Narsapur. Since that discovery Reliance and others have joined the exploration effort.



Agharkar Research Institute

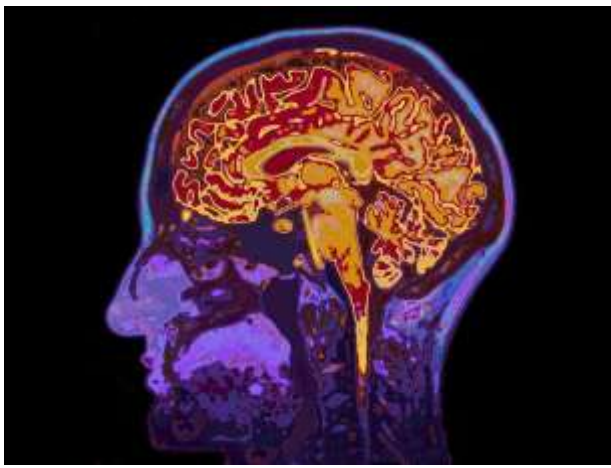
- ARI is located in Pune, Maharashtra.
- It is an autonomous, grant-in-aid research institute of the Department of Science and Technology (DST), Government of India.
- It was established in 1946 by the Maharashtra Association for the Cultivation of Science as MACS Research Institute and renamed as ARI in 1992 in honour and memory of its founder Director, late Professor Shankar Purushottam Agharkar.
- It conducts research activities in animal sciences, microbial sciences and plant sciences.

Indian Brain Templates

In News

A team of neuroscientists from the National Institute of Mental Health and Neuro Sciences (NIMHANS) has developed Indian Brain Templates (IBT) and a brain atlas.

- NIMHANS is a medical institution located in Bangalore, Karnataka. It is the apex centre for mental health and neuroscience education in the country and operates autonomously.
- It is an Institute of National Importance operates autonomously under the Ministry of Health and Family Welfare. NIMHANS is ranked 4th best medical institute in India, having applied for the first time in NIRF ranking of 2020.



Details

- The Montreal Neurological Index (MNI) template that India currently uses is based on Caucasian brains, which are different from Asian brains.
- The MNI template was made by averaging 152 healthy brain scans from just a small slice of the city's population in North America.
- Some countries have their own scale to measure the brain, whereas India is still dependent on the Caucasian brain template.

Significance of Indian Brain templates and Atlas

- The templates and atlas will provide more precise reference maps for areas of interest in individual patients with neurological disorders like strokes, brain tumours, and dementia.
 - These templates and atlas will help pool information more usefully in group studies of the human brain and psychological functions, aiding our understanding of psychiatric illnesses like Attention Deficit Hyperactivity Disorder (ADHD), autism,

substance dependence, schizophrenia, and mood disorders.

Way forward

Previously in India various similar attempts have been made to develop brain templates and are typically focused on young adults and had a significantly smaller number of subjects. IBTs of NIMHANS are based on a comprehensive scan. It can be incorporated in normal protocols of brain imaging in India.

Living Planet Report 2020

In News

The WWF's Living Planet Report 2020 has found that there has been a **reduction of 68 % in the global wildlife population** between 1970 and 2016.

- The report is published by World Wildlife Fund (WWF) and Zoological Society of London.

Key Points

- **75 % of the Earth's ice-free land surface has already been significantly altered**, most of the **oceans are polluted**, and more than **85% of the area of wetlands has been lost** during this period.
- The most important direct driver of biodiversity loss in the last several decades has been land-use change, primarily the conversion of pristine habitats into agricultural systems, while much of the oceans have been overfished.
- The highest biodiversity loss due to land use change globally has been found in Europe and Central Asia at 57.9 %, then in North America at 52.5 %, Latin America and Caribbean at 51.2 %, Africa at 45.9 % and then Asia at 43 %.
- The **largest wildlife population loss**, according to the Living Planet Index, has been **in Latin America** at an alarming 94 %.
- One of the most threatened biodiversity globally has been freshwater biodiversity, which has been declining faster than that in oceans or forests.
- Almost 90 % of global wetlands have been lost since 1700 and global mapping has recently revealed the extent to which humans have altered millions of kilometres of rivers.
- India, a "megadiverse country" with over 45,000 species of plants in only 2.4 % of the world's land area, has already lost six plant species to extinction, according to the IUCN Red List.

- **Humans are now overusing the Earth's biocapacity by at least 56%.**
- Our ocean is also in hot water, with overfishing, pollution, coastal development and climate change causing a growing spectrum of adverse effects across marine ecosystems.



Additional Information

World Wildlife Fund (WWF)

- WWF is an independent conservation organization, with over 30 million followers and a global network active in nearly 100 countries.
- The mission is to stop the degradation of the planet's natural environment and to build a future in which people live in harmony with nature.

Zoological Society of London

- ZSL (Zoological Society of London) is an international conservation charity working to create a world where wildlife thrives.
- They investigate the health threats facing animals to helping people and wildlife live alongside each other, ZSL is committed to bringing wildlife back from the brink of extinction.

Greenland's largest glacier undergoes rapid melting

In News

The Geological Survey of Denmark and Greenland reported that Arctic's largest remaining ice shelf, 79N (Nioghalvfjærdsbrae), in Northeast Greenland, has lost more than 19 square mile chunk of ice for the second consecutive year.

Details

- Average temperatures in the region have increased by 5.4 degrees Fahrenheit since 1980 - with record summer temperatures recorded in 2019 and 2020.
- The Northeast Greenland Ice stream extends 272 miles into the interior of the ice sheet- draining

through Nioghalvfjærdsfjorden and Zachariae Glacier.

- The Nioghalvfjærdsfjorden shelf, also known as 79 N, is 50 miles long and 12 miles wide - it has shattered into many small pieces as a result of a warming climate.

Nioghalvfjærdsbrae

- Nioghalvfjærdsbrae, sometimes referred to as "79 N Glacier", is a large glacier located in King Frederick VIII Land, northeastern Greenland.
- It drains an area of 103,314 km² of the Greenland Ice Sheet with a flux (quantity of ice moved from the land to the sea) of 14.3 km³ per year, as measured for 1996.
- As a consequence of global warming, the glacier detaches a 113 km² area in 2020, as part of a desintegration process.

Why are glaciers important?

- Ice acts like a protective cover over the Earth and our oceans. These bright white spots reflect excess heat back into space and keep the planet cooler.
- In theory, the Arctic remains colder than the equator because more of the heat from the sun is reflected off the ice, back into space.
- Glaciers around the world can range from ice that is several hundred to several thousand years old and provide a scientific record of how climate has changed over time.
- Today, about 10% of land area on Earth is covered with glacial ice. Almost 90% is in Antarctica, while the remaining 10% is in the Greenland ice cap.
- Rapid glacial melt in Antarctica and Greenland also influences ocean currents, as massive amounts of very cold glacial-melt water entering warmer ocean waters is slowing ocean currents. And as ice on land melts, sea levels will continue to rise.

What is the difference between sea ice and glaciers?

- Sea ice forms and melts strictly in the ocean whereas glaciers are formed on land. Icebergs are chunks of glacial ice that break off glaciers and fall into the ocean.

- When glaciers melt, because that water is stored on land, the runoff significantly increases the amount of water in the ocean, contributing to global sea level rise.

Why are glaciers melting?

- Human activities are at the root of this phenomenon.
- Since the industrial revolution, carbon dioxide and other greenhouse gas emissions have raised temperatures, even higher in the poles, and as a result, glaciers are rapidly melting, calving off into the sea and retreating on land.

What are the effects of melting glaciers on sea level rise?

- Melting glaciers add to rising sea levels, which in turn increases coastal erosion and elevates storm surge as warming air and ocean temperatures create more frequent and intense coastal storms like hurricanes and typhoons.
- Specifically, the Greenland and Antarctic ice sheets are the largest contributors of global sea level rise. Right now, the Greenland ice sheet is disappearing four times faster than in 2003 and already contributes 20% of current sea level rise.

RT- PCR testing

In News

Government has allowed **RT- PCR testing at the entry of airport** on pilot basis to facilitate the transfer of international passengers.

- According to the guidelines, airport operator will create sample collection cum waiting lounge facility for RT-PCR testing.
- Passport of the passenger will be retained by the State authority at the Sample Collection cum Waiting Lounge till the test results are available.

The real-time polymerase chain reaction (RT-PCR) test

- RT-PCR is the most commonly used one for **Covid-19**. It is primarily based on PCR, a process that repeatedly copies and amplifies the specific genetic fragments of the virus, ensuring that there is enough of a sample to conduct the analysis.
- The RT-PCR test starts with a simple **swab** taken from inside a person's throat or nose. Coronaviruses have **RNA or ribonucleic acid** as their genetic material. However, swabs from patients yield only a tiny quantity of RNA, which is not adequate for the testing process.

- To overcome this problem, **the RNA — a single-strand molecule — is converted into a two-strand DNA using an enzyme. This is known as reverse transcription.**

- Researchers select specific areas in the genome that do not mutate rapidly as the virus evolves, and create copies of these using the PCR process.
- The next step is the use of primers. These are small pieces of DNA designed only to bind to the selected DNA sequence of the **SARS-CoV-2's viral genome**. Along with primers, the process uses a fluorescent dye, which acts as the probe.
- The patient sample, primer and probe are together left in the PCR machine for the binding process to take place. A fluorescent signal marks the presence of the virus.
- **The time duration for the testing process is around four to eight hours.**

Additional Information

Antigen testing

- The new antigen tests that have been approved for Covid-19 diagnosis in India give results in **30 minutes**.
- These tests are designed to **detect a specific protein in the virus** that elicits the body's immune response. In the case of Covid-19, it is the '**spike protein**' present on the surface of the coronavirus that facilitates its entry into the human cell.
- For this test, professionals collect a nasal swab, which is then immersed in a solution that deactivates the virus.
- A few drops of this solution are then put on a test strip. This has to be done within an hour of the immersion of the swab in the solution.
- The test strips contain **artificial antibodies designed to bind to coronavirus proteins**. If a person is infected with coronavirus, the test lines will appear on the paper strips within 15 minutes.
- Since antigen testing does not involve any amplification process, swab samples may lack enough antigen material to be detectable. This may result in false negative tests.
- For this reason, if a person tests negative through antigen testing, they still need to get an RT-PCR test done for confirmation. If a person tests positive, however, a confirmation RT-PCR is not required.
- The advantage of using this test is that it reduces the burden of relying on just RT-PCR tests to identify

Covid-19 patients.

- Antigen testing is useful because even if it's less sensitive, it is rapid and the results that are positive will be positive. So, patients who test positive can get into isolation faster.

Multi-dimensional poverty Index 2020

In News

According to a new analysis done by the UNICEF and child rights organisation Save the Children, reveals that the number of children living in multi-dimensional poverty – without access to education, health, housing, nutrition, sanitation, or water – has increased by 15 per cent since the start of the CoVID-19 pandemic.

- An additional 150 million children globally have been plunged into poverty since the CoVID-19 pandemic.
- The number of children living in multi-dimensional poverty has soared to approximately 1.2 billion due to the COVID-19 pandemic.

Details

- Multi-dimensional poverty analysis uses data on access to education, healthcare, housing, nutrition, sanitation and water from more than 70 countries.
- Around 45 per cent of children were severely deprived of at least one of these critical needs in the countries analysed before the pandemic.
- UNICEF warns that the situation will likely worsen in the months to come.
- According to analysis, UNICEF said that the poorest childrens are getting more poorer.
- Before the pandemic, the average number of severe deprivations per child were around 0.7 and it is now increased by 15 per cent to around 0.85.
- COVID-19 and the lockdown measures imposed to prevent its spread have pushed millions of children deeper into poverty.
- UNICEF said social protection, inclusive fiscal policies, investments in social services, and employment and labour market interventions to support families are critical to lifting children out of poverty and preventing further devastation.
- This includes expanding access to quality health care and providing the tools and technology needed for children to continue their education remotely; and investing in family-friendly policies such as paid leave and child care.

- Children who lose out on education are more likely to be forced into child labour or early marriage and be trapped in a cycle of poverty for years to come.

Way ahead

- Nations must act now to prevent additional children from being deprived in basic life needs like school, medicine, food, water and shelter.
- Governments must prioritise the most marginalised children and their families through rapid expansion of social protection systems including cash transfers and child benefits, remote learning opportunities, healthcare services and school feeding.
- Making these critical investments now can help countries to prepare for future.

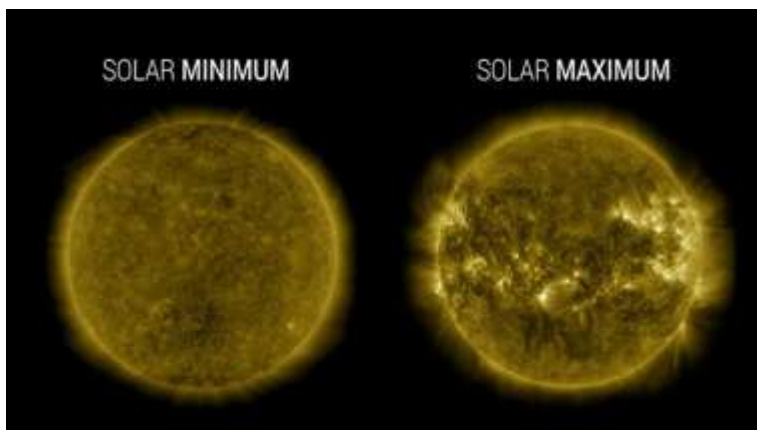
United Nations Children's Fund (UNICEF)

- UNICEF, is a United Nations agency responsible for providing humanitarian and developmental aid to children worldwide.
- UNICEF's activities include immunizations and disease prevention, administering treatment for children and mothers with HIV, enhancing childhood and maternal nutrition, improving sanitation, promoting education, and providing emergency relief in response to disasters.
- UNICEF is the successor of the International Children's Emergency Fund (ICEF), created in 1946 by the U.N. Relief Rehabilitation Administration to provide immediate relief to children and mothers affected by World War II.
- UNICEF relies entirely on contributions from governments and private donors.

Solar Cycle 25

In News

Scientists from NASA and the **National Oceanic and Atmospheric Administration (NOAA)** announced their predictions about the new solar cycle, called Solar Cycle 25, which they believe has begun.



Solar Cycle

- Since the Sun's surface is a very active space, electrically charged gases on its surface generate areas of powerful magnetic forces, which are called magnetic fields.
- Since the gases on the Sun's surface are constantly moving, these magnetic fields can get stretched, twisted and tangled creating motion on the surface, which is referred to as solar activity.
- Solar activity varied with the stages of the solar cycle, which lasts on average for a period of 11 years. Solar cycles have implications for life and technology on Earth as well as astronauts in space.

How do scientists track solar activity?

- Scientists track a solar cycle by using sunspots, which are the dark blotches on the Sun that are associated with solar activity.
- Sunspots are associated as the origins for giant explosions such as solar flares that can spew light, energy and solar material into space.

What are Sunspots?

- A Sunspot is an area on the Sun that appears dark on the surface and is relatively cooler than the surrounding parts.
- These spots, some as large as 50,000 km in diameter, are the visible markers of the Sun's magnetic field, which forms a blanket that protects the solar system from harmful cosmic radiation.
- When a Sunspot reaches up to 50,000 km in diameter, it may release a huge amount of energy that can lead to solar flares.
- The beginning of a solar cycle is typically characterised by only a few sunspots and is therefore referred to as a solar minimum.

- The experts announced that the solar minimum for Solar Cycle 25 occurred in December 2019.
- Scientists predict a solar maximum (middle of the solar cycle) will be reached by July 2025 and that this solar cycle will be as strong as the last solar cycle, which was a "below-average cycle" but not without risks.

Why do scientists track solar activity?

- Scientists track solar activity because it can have effects on Earth.
- For example, when charged particles from coronal mass ejections (CMEs) reach areas near the Earth, they can trigger intense lightning in the skies referred to as auroras.
- When CMEs are particularly strong, they can also interfere with the power grids, which can cause electricity shortages and power outages.
- Solar flares can have a major effect on radio communications, Global Positioning Systems (GPS) connectivity, power grids, and satellites.

Way ahead

Scientists have developed a new model that can successfully predict seven of the Sun's biggest flares from the last solar cycle, out of a set of nine with the help of NASA's Solar Dynamics Observatory.

Bureau of Indian Standards (BIS) certification

In News

Hindustan Organic Chemicals Limited (HOCL), a PSU under the Ministry of Chemicals and Fertilizers has been granted Bureau of Indian Standards - BIS certification for all its products.

Details

- HOCL has been a pioneer in the manufacturing of Chemicals.
- The company is supporting and implementing the Make in India initiative.
- All the products of the company are widely being accepted, especially in Pharmaceutical industry.

Hindustan Organic Chemicals Limited

- HOCL is Government of India owned company based in Mumbai, Maharashtra.

- It was established in 1960 to indigenise manufacture of basic chemicals and to reduce country's dependence on import of vital organic chemicals.
- HOCL is also an ISO 9001 and ISO 14001 certified Organisation.
- HOCL, a leader in chemical industry has manufacturing unit at Kochi in Kerala.
- Its products are Phenol, Acetone, Nitrobenzene, Aniline, Nitrotoluenes, Chlorobenzenes & Nitrochlorobenzenes. Basic Organic Chemicals includes Pesticides, Drugs & Pharmaceuticals, Dyes & Dyestuffs, Plastics, Resins & Laminates, Rubber Chemicals, Paints, Textile Auxiliaries & Explosives.

BIS Certification

BIS has its Headquarters at New Delhi. It is the National Standard Body of India established under the BIS Act 2016 for:

- The harmonious development of the activities of standardization
- Marking and quality certification of goods and for matters connected therewith or incidental thereto.

BIS has been providing traceability and tangibility benefits to the national economy in a number of ways:

- Providing safe reliable quality goods
- Minimizing health hazards to consumers
- Promoting exports and imports substitute
- Control over proliferation of varieties etc. through standardization, certification and testing.

BIS is involved in various activities such as:

- Standards Formulation Product Certification Scheme
- Compulsory Registration Scheme
- Foreign Manufacturers Certification Scheme
- Hall Marking Scheme
- Laboratory Services
- Laboratory Recognition Scheme
- Sale of Indian Standards
- Consumer Affairs Activities
- Promotional Activities
- Training Services, National & International level
- Information Services

Types of BIS Certification Schemes

- Normal Procedure for Domestic Manufacturers

- Simplified Procedure for Domestic Manufacturers
- Tatkal Scheme
- ECO Mark Scheme
- Foreign Manufacturers Certification Scheme

BIS product Certification Scheme is one of the largest in the world. BIS Certification allows the licensees to use the popular ISI mark on their product, which is synonymous with quality products.

Feluda

In News

The Drug Controller General of India (DCGI) has recently approved the gene-based COVID-19 test called Feluda.

- The test was indigenously developed and uses cutting edge CRISPR gene editing technology to detect the COVID-19 virus.
- FELUDA is the acronym of FNCAS9 Editor Linked Uniform Detection Assay. It is a accurate and low-cost paper-based test strip to detect Covid-19 in less than 30 minutes.
- 'Feluda' is the world's first diagnostic test to deploy a specially adapted Cas9 protein to successfully detect the virus.



What is the new Feluda Covid-19 test?

- It uses indigenously developed CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) gene-editing technology to identify and target the genetic material of SARS-CoV2, the virus that causes Covid-19.

- The test matches accuracy levels of RT-PCR tests, has a quicker turnaround time and requires less expensive equipment.
- The Tata CRISPR test, powered by CSIR-IGIB (Institute of Genomics and Integrative Biology) FELUDA, has met high quality benchmarks, with 96 per cent sensitivity and 98 per cent specificity for detecting novel coronavirus

What is CRISPR technology?

- Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) is a gene editing technology and finds its use in correcting genetic defects and treating and preventing the spread of diseases.
- The CRISPR technology can detect specific sequences of DNA within a gene and uses an enzyme functioning as molecular scissors to snip it.
- It also allows researchers to easily alter DNA sequences and modify gene function.

How does Feluda Covid-19 test work?

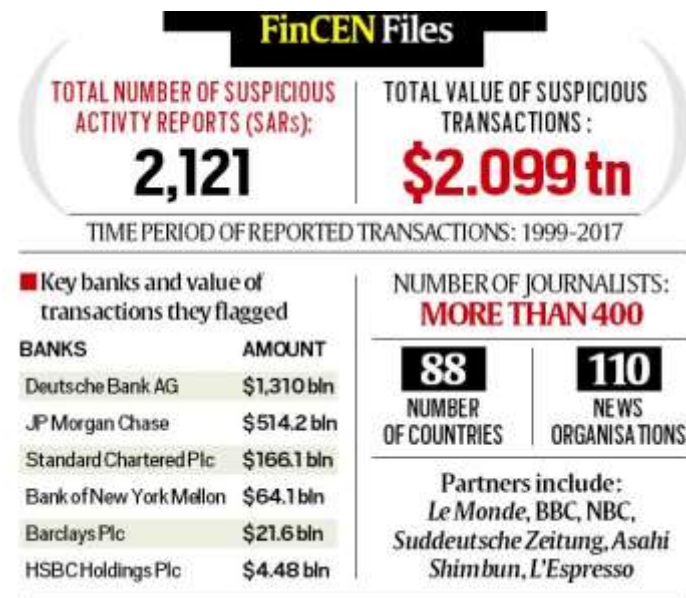
- The Feluda test is similar to a pregnancy test strip that will just change colour upon detection of the virus and can be used in a simple pathological lab.
- The Cas9 protein is barcoded to interact with the SARS-CoV2 sequence in the patient's genetic material.
- The Cas9-SARS-CoV2 complex is then put on the paper strip, where using two lines (one control, one test) makes it possible to determine if the test sample was infected with Covid-19.

FinCEN

In News

Between 2010 and 2017, several transactions went through Indian banks that were flagged as top-secret 'Suspicious Activity Reports' or SARs by the US Treasury Department's Financial Crimes Enforcement Network (FinCEN) for suspected money laundering, terror financing, drug dealing, and financial fraud.

- Such transactions were part of \$2 trillion suspicious transfers flagged by the top US authority in the FinCEN list.
- The International Consortium of Investigative Journalism (ICIJ) traces these global transactions.



SAR or Suspicious Activity Report

- SAR is a document filed by banks and financial institutions to report suspicious activity to US authorities.
- These are confidential, that banks or the account holder is/are not allowed to confirm their existence.
- SARs are filed with FinCEN in a prescribed format, and are meant to red flag, within 30 days of the transaction's occurrence: criminal funds or any form of dirty money; insider trading; potential money laundering; terror financing; any transaction that raises suspicion.
- FinCEN shares SARs with law-enforcement authorities including FBI, US Immigration and Customs.

Who can file SARs?

- Banks, money exchanges, securities brokers, casinos.
- Credit card systems are not required to file SARs.

FIU-IND

- The Financial Intelligence Unit-India (FIU-IND) performs the same functions as FinCEN in the US.
- This was set up in 2004 as the nodal agency for receiving, analyzing and disseminating information relating to suspect financial transactions, under the Ministry of Finance.
- The agency is authorised to obtain cash transaction reports (CTRs) and suspicious transaction reports (STRs).

- Agency also may obtain cross border wire transfer reports from private and public sector banks every month under the Prevention of Money Laundering Act (PMLA).
- It is mandatory for banks in India to furnish a monthly CTR to the FIU on all transactions over Rs 10 lakh or its equivalent in foreign currency or a series of integrally connected transactions that add up to more than Rs 10 lakh or its equivalent in foreign currency.
- The STRs and CTRs are analysed by FIU. Any suspicious or doubtful transactions are shared with agencies like the Enforcement Directorate, the Central Bureau of Investigation and the Income Tax for the purpose of checking the possible instances of money laundering, tax evasion and terror financing.
- FIU's 2017-2018 annual report reveals that it had received a record number of 14 lakh STRs following demonetization which was three times the number of STRs filed in the previous year.
- So far, ICIJ has named these Indian banks in the dubious transactions: State Bank of India, Punjab National Bank, Union Bank of India, HDFC Bank, IndusInd Bank, Axis Bank, ICICI Bank, Kotak Mahindra Bank, YES Bank, Indian Overseas Bank, Canara Bank, Bank of Maharashtra, Karur Vysya Bank, Tamilnad Mercantile Bank, Standard Chartered Bank (India operations), Bank of Baroda, Bank of India, Allahabad Bank, Indian Overseas Bank, Indian Bank, Deutsche Bank (India operations), UCO Bank, Karnataka Bank, RBS, Andhra Bank, and Vijaya Bank.

THE LIST

Top 5 receiver banks	No. of transactions	Received in \$ mn
Indian Overseas Bank	23	162.39
Allahabad Bank	26	144.24
Bank of India	35	130.76
State Bank of India	29	27.88
Canara Bank	37	3.31

Top 5 sender banks	No. of transactions	Sent in \$ mn
HDFC Bank	14	327.99
Deutsche Bank AG	18	53.76
IndusInd Bank	57	8.26
Standard Chartered Bank	1	8.17
State Bank of India	29	5.79

Source: ICIJ

Way Forward

- SAR has in many cases of Indian entities and individuals, mentioned their financial history of alleged irregularities.
- The clear message for agencies in India is that their cases of financial fraud and corruption are being flagged by the FinCEN.
- There is a need to have regular information exchange between financial regulators to track and nullify the efforts for money laundering.

Additional Information

Financial Crimes Enforcement Network

- FinCEN was established on April 25, 1990.
- FinCEN is a bureau of the United States Department of the Treasury that collects and analyzes information about financial transactions in order to combat domestic and international money laundering, terrorist financing, and other financial crimes.

International Consortium of Investigative Journalists

- ICIJ is an independent, Washington, D.C.-based international network of investigative journalists and media organizations in over 70 countries.
- It was launched in 1997 by the Center for Public Integrity.
- The ICIJ is working on "issues such as "cross-border crime, corruption, and the accountability of power."

End tuberculosis by 2025

In News

Health Minister has said that India has accorded high priority for **ending tuberculosis by 2025**, which is five years ahead of **the Sustainable Development Goals (SDGs)**.

Details

- India have significantly reduced the number of missing TB patients from one million in 2016 to less than 0.5 million in 2019, with 2.4 million cases notified during the year.
- TB continues to remain a major global public health problem and the leading infectious killer disease worldwide.

- TB related deaths have declined by 82% in 2018, as compared to the mortality registered due to the disease in 2010.
- India is taking a number of positive steps including the scale up of **fixed dose combinations (FDCs)** for first line TB, active case finding, a scale up of preventive therapy, all aimed at reducing the public health burden of TB.
- The government also plans to roll out an all **oral multi-drug resistant** regimen 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.
- Government also launched the **National TB Prevalence Survey**, work-place policy for TB, a high decibel media campaign, and all oral regimen for multi-drug resistant TB patients.
- TB is one of the top 10 causes of death and the leading cause from a single infectious agent (above HIV/AIDS).
- About one-quarter of the world's population has latent TB, which means people have been infected by TB bacteria but are not (yet) ill with the disease and cannot transmit the disease.

Tuberculosis

- Tuberculosis (TB) is caused **by bacteria (Mycobacterium tuberculosis)** that most often affect the lungs.
- Tuberculosis is curable and preventable.
- TB is spread from person to person through the air.
- Tuberculosis mostly affects adults in their most productive years.
- People who are infected with HIV are 19 times more likely to develop active TB.
- Alcohol use disorder and tobacco smoking increase the risk of TB disease by a factor of 3.3 and 1.6, respectively.
- The risk of active TB is also greater in persons suffering from other conditions that impair the immune system. People with undernutrition are 3 times more at risk.
- Common symptoms of active lung TB are cough with sputum and blood at times, chest pains, weakness, weight loss, fever and night sweats.

Impact of TB

- In 2018, the largest number of new TB cases occurred in the South-East Asian region, with 44% of new cases, followed by the African region, with 24% of new cases and the Western Pacific with 18%.

- In 2018, 87% of new TB cases occurred in the 30 high TB burden countries. Eight countries accounted for two thirds of the new TB cases: India, China, Indonesia, Philippines, Pakistan, Nigeria, Bangladesh and South Africa.

Multidrug-resistant TB

- **Multidrug-resistant tuberculosis (MDR-TB)** is a form of TB caused by bacteria that do not respond to isoniazid and rifampicin, the 2 most powerful first-line anti-TB drugs.
- MDR-TB is treatable and curable by using second-line drugs. However, second-line treatment options are limited and require extensive chemotherapy (up to 2 years of treatment) with medicines that are expensive and toxic.
- In some cases, more severe drug resistance can develop. **Extensively drug-resistant TB (XDR-TB) is a more serious form of MDR-TB** caused by bacteria that do not respond to the most effective second-line anti-TB drugs, often leaving patients without any further treatment options.

Global commitments and the WHO response

- SDG Target 3.3 includes ending the TB epidemic by 2030.
- The End TB Strategy defines milestones (for 2020 and 2025) and targets (for 2030 and 2035) for reductions in TB cases and deaths.
- The targets for 2030 are a 90% reduction in the number of TB deaths and an 80% reduction in the TB incidence rate (new cases per 100 000 population per year) compared with levels in 2015.
- The milestones for 2020 are a 35% reduction in the number of TB deaths and a 20% reduction in the TB incidence rate.

UN high-level meeting included four new global targets:

- Treat 40 million people for TB disease in the 5-year period 2018–2022;
- Reach at least 30 million people with TB preventive treatment for a latent TB infection in the 5-year period 2018–2022;
- Mobilize at least US\$ 13 billion annually for universal access to TB diagnosis, treatment and care by 2022;
- Mobilize at least US\$ 2 billion annually for TB research.

2nd Sero Survey report

In News

The second sero survey by the ICMR (Indian Council of Medical Research) to assess the real exposure of the Indian population to the Covid-19 virus has shown that over 6.6% of the individuals, or 1 in 15 of those above 10 years, had been exposed to Covid-19 by August.

Key Findings

- Urban slum and urban non-slum areas had higher SARS-CoV-2 infection prevalence than that of the rural areas in the country.
- Of 29,082 people surveyed from August 17 to September 22, 6.6 per cent showed evidence of past exposure to Covid-19.
- Lower infection to case ratio in August compared to May reflects substantial increase in testing, detection.
- 7.1 per cent of the adult population showed evidence of past exposure to Covid-19.
- In the light of the upcoming festivities, winter season and mass gathering, inventive containment strategies need to be implemented by the states.
- The survey was conducted in the same 700 villages/wards (in urban) from 70 districts from 21 states covered during the first survey.
- Since a large proportion of the population is yet susceptible-prevention fatigue to be avoided and 5T strategy (Test, trace, treat, technology) to be followed.

What is sero survey?

- Collection and testing of serum (or proxy such as oral fluid) specimens from a sample of a
- defined population over a specified period of time to estimate the prevalence of antibodies against a given
- specific infectious pathogen as an indicator of immunity.
- The surveillance will be conducted by the Indian Council of Medical Research and the National Centre for Disease Control in collaboration with key stakeholders and state health departments.

Why sero-testing?

- A more focused population-based sero-survey of high and low-risk groups in select districts will be in addition to routine testing.
- The move will not only help the government and its agencies monitor Covid-19 trends but also check for community transmission in any part of the country.

How will it be conducted?

- For the sero-survey, population groups will consist of low- as well as high-risk populations.
- The low-risk group will include outpatient attendees (non-ILI patients) and pregnant women, while healthcare workers will be surveyed among the high-risk population.

Defence Acquisition Council

In News

The Defence Acquisition Council (DAC) approved proposals for various arms and equipment required by the Indian Armed Forces.

Details

- Under the **Buy Indian (IDDM) category**, the DAC approved procurement of **Static HF Tans-receiver sets** and **Smart Anti Airfield Weapon (SAAW)**.
- The HF radio sets will enable seamless communication for the field units of Army and Air Force.
- The Smart Anti Airfield Weapon will add to the fire power of Navy and Airforce.
- DAC also accorded approval for procurement of SIG SAUER Assault Rifles.

Buy Indian (IDDM) category

- 'Buy (Indian-IDDM)' category refers to the procurement of products from an Indian vendor meeting one of the two conditions:
 - (i) Products that have been indigenously designed, developed and manufactured with a minimum of 40% Indigenous Content (IC) on cost basis of the total contract value.
 - (ii) Products having 60% IC on cost basis of the total contract value, which may not have been designed and developed indigenously.
- Apart from overall IC, the same percentage of IC will also be required in:
 - (i) Basic Cost of Equipment
 - (ii) Cost of Manufacturers' Recommended List of Spares (MRLS)
 - (iii) Cost of Special Maintenance Tools (SMT) and Special Test Equipment (STE), taken together at all stages, including FET stage.

DRDO Smart Anti-Airfield Weapon

- The DRDO Smart Anti-Airfield Weapon (SAAW) is a long-range precision-guided anti-airfield weapon

currently being developed by India's Defence Research and Development Organisation (DRDO).

- It is designed to be capable of engaging ground targets with high precision up to a range of 100 kilometres.
- It is a lightweight high precision guided bomb designed to destroy ground targets, such as runways, bunkers, aircraft hangars and other reinforced structures.
- It is India's first fully indigenous anti-airfield weapon.
- The SAAW project was approved by the Indian government in 2013. The first successful test of the weapon was conducted in May 2016.

Present scenario

- Most of the majors systems required by our defence forces are still being imported.
- The focus is now shifting to the Private Sector which is being provided a level playing field; however, they will take time to get into shape to undertake any meaningful Design and Development activity.
- Under the circumstances the 'Buy (Indian-IDDMM)' is a good intent in the overall national interest and needs to be patiently nurtured by all concerned stakeholders.

Additional Information

Defence Acquisition Council

- The Defence Acquisition Council is the highest decision-making body in the Defence Ministry for deciding on new policies and capital acquisitions for the three services (Army, Navy and Air Force) and the Indian Coast Guard. The Minister of Defence is the Chairman of the Council.
- It was formed, after the Group of Ministers recommendations on 'Reforming the National Security System', in 2001, post Kargil War (1999).
- The DAC is responsible to give guidelines to acquisitions, based on long-term procurement plans.
- It also clears all acquisitions, which includes both imported and those produced indigenously or under a foreign licence.

The functions of the DAC include:

- (i) in-principle approval of 15 Year Long-Term Integrated Perspective Plan for Defence Forces;
- (ii) accord of Acceptance of Necessity to acquisition proposals;
- (iii) categorization of the acquisition proposals relating to 'Buy', 'Buy & Make' and 'Make';
- (iv) issues relating to Single vendor clearance;
- (v) decision regarding 'offset' provisions in respect of acquisition proposals above Rs. 300 crores;

- (vi) decisions regarding Transfer of Technology under 'Buy & Make' category of acquisition proposals; and
- (vii) Field Trial evaluation.

Sandalwood Spike Disease (SSD)

In News

The Sandalwood Spike Disease (SSD) has infected several aromatic sandalwood trees in Karnataka and Kerala.

- This was founded based on the study by Institute of Wood Science and Technology.
- **Presently, there is no cure as of now**, hence, there is no option but to cut down and remove the infected tree to prevent the spread of the disease.

Details

- **SSD is caused by phytoplasma** — bacterial parasites of plant tissues — which are transmitted by insect vectors.
- The disease was first reported in Kodagu in 1899. More than a million sandalwood trees were removed in the Kodagu and Mysuru region between 1903 and 1916.
- The devastating impact in natural habitats resulted in sandalwood being classified as **“vulnerable” by the International Union for Conservation of Nature in 1998.**
- Presently, the natural populations of sandalwood are available in Marayoor in Kerala and some patches of reserve forests and adjoining areas in Karnataka — both these stands are now heavily infected with SSD.
- The present rapid spread of the infection is largely due to restrictions on green felling in forests, which has allowed vectors to spread the disease to healthy trees.

Steps taken

- To combat the killer disease, the **IWST (Institute of Wood Science and Technology)** will join hands with the Pune-based National Centre for Cell Sciences for a three-year study, initiated by the Union Ministry of Ayush.
- The study will try to identify the vectors that transmit SSD and also identify alternative plant hosts, their ecological and epidemiological mapping

besides examining optimisation of non-chemical methods of pest-management.

Concerns

- SSD has been one of the major causes of the decline in sandalwood production in the country for over a century.
- About 1% to 5% of sandalwood trees are lost every year due to the disease, scientists warn that it could wipe out the entire natural population if measures are not taken to prevent its spread.

Importance of sandalwood

- India has been the traditional leader of sandalwood oil production for perfumery and pharmaceuticals.
- As early as 1792, Tippu Sultan had declared it a 'Royal Tree' of Mysuru.
- The price of Indian sandalwood and its oil has risen significantly since 1995 at a rate of 20% annually mainly due to depletion in production.

Red Saunder/ Red Sandalwood

- Found in southern Eastern Ghats mountain range of South India.
- This tree is valued for the rich red colour of its wood. The wood is not aromatic.
- The International Union for Conservation of Nature (IUCN) has put it under the category of near threatened from earlier endangered species in the Red List.
- It is listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- The tree is not to be confused with the aromatic Santalum sandalwood trees that grow natively in South India.
- Red sandalwood has been used for making the bridge and also the neck of the Japanese musical instrument Shamisen and in furniture in China for its porch appearance.

Institute of Wood Science and Technology

- IWST is a research institute situated in Bangalore in Karnataka.
- It works under the Indian Council of Forestry Research and Education (ICFRE) of the Ministry of Environment and Forests.
- It is recognized to be a Centre of Excellence for Sandalwood Research and Wood Science.

General Studies-IV

Ethics, Integrity and Aptitude

Ethical Code for Electronic Media

In News

Recently, the News Broadcasters Association (NBA) has asked the Supreme Court (SC) to include its ethical code in the Programme Code of the Cable Television Networks Rules, 1994.

- All news channels, whether they are NBA members or not, will then have to follow the Programme Code containing the proposed amendments.
- The ethical code is against airing malicious, biased and regressive content.
- NBA represents the collective voice of the news and current affairs broadcasters in India. It is an organisation funded entirely by its members.

Background

- A plea was made to stop the telecast of a programme 'Bindas Bol' on Sudarshan TV containing objectionable content against the Muslim entries into the civil services.
- The court said the content was prima facie "plainly hurtful" to the community. It is an affront to the dignity of the community.

NBA's suggestions

- News Broadcasters Services Authority (NBSA) should be granted recognition as an "independent self-regulatory mechanism" to receive and deal with complaints.
- NBSA is an independent body set up by the NBA.
- The orders passed by the NBSA should be made binding and enforceable on the channels.

Summary of Kurukshetra Magazine (October 2020)

Water Conservation: Initiatives and Future Strategies

- India has 18% of the world's population and only 4% of the world's water resources, which are depleting rapidly. The demand for water is expected to grow from 40 billion cubic metres (bcm) currently to around 220 bcm in 2025.
- Water is one of the most important inputs essential for crops. Both its shortage and excess affects the growth and development of the plants, yields and quality of produce.
- There are numerous methods to reduce such losses and to improve soil moisture. These are mulching, cropping, planting of trees, utilization of fog or dew by net-surfacing traps or polythene sheets, contour farming, transfer of water from surplus areas to deficit areas by inter-linking water systems through canals, desalination technologies such as distillation, electro-dialysis and reverse osmosis, use of efficient watering systems such as drip irrigation and sprinklers will reduce the water consumption by plants.
- The most important step in the direction of finding solutions to issues of water and environmental conservation is to change people's attitudes and habits; this includes each one of us.
- The per person disease burden due to unsafe water and sanitation was 40 times higher in India than in China and 12 times higher than in Sri Lanka in 2016.
- The responsibility of planning and implementing water and sanitation projects, primarily lies with the state government.
- The Central Government, playing an advisory role, has formulated several policies and the Model Bills to develop and manage project; and its uses in various sectors of economic development.
- These interventions have brought phenomenal changes in the overall scenario of water and sanitation in the country and also provide a way forward about the needs of the sector which have to be fulfilled in coming future to make India a water secure and hygienic country.
 - India right now is going through the hard times where water scarcity and poor sanitation facilities are bigger challenge than the economic development. With a country generating 140 BCM of waste water annually, mismanagement of waste water which also contaminates groundwater, lacking

liquid waste management, poor sanitation conditions and poor hygiene habits have contributed to a major portion of population suffering from water-borne diseases.

Government initiatives

Jal Jeevan Mission

- Launched by PM of India on 15th August 2019.
- The vision of the JJM is "Every rural household has drinking water supply in adequate quantity of prescribed quality on regular and long-term basis at affordable service delivery charges leading to improvement in living standards of rural communities".
- The Jal Jeevan Mission is based on a community approach to water and will include extensive IEC as a key component of the mission.

Jal Shakti Abhiyan

- Launched by Ministry of Jal shakti on 1st July 2019, in 256 water stressed districts across the country.
- This Abhiyan a mass movement to bring all the stakeholders under one ambit of water conservation drive.
- More than 75 lakh traditional and other water bodies and tanks were renovated and around one crore water conservation and rainwater harvesting structures were created.
- NITI Aayog, as the premier think tank of Government of India, has also developed a mechanism to compare the efforts of various states in water conservation. In pursuit of competitive & cooperative federalism and keeping in view the criticality of water for life, Aayog has developed a Composite Water Management Index (CWMI). The CWMI as a yearly exercise is an important tool to assess and improve the performance of States/ Union Territories in efficient management of water resources.

State level schemes/ Acts/ Initiatives

Some of such schemes are:

- Jalyukt Shivar in Maharashtra
- Mukhya Mantri Jal Swavalamban Abhiyan in Rajasthan

- Neeru Chettu in Andhra Pradesh
- Mission Kakatiya In Telangana
- Sujalam Sufalam in Gujarat
- Integrated Water Resource Management and Artificial Recharge Structures Scheme in Karnataka
- Pani Bachao, Paisa Kamao in Punjab

Technologies for water conservation

There are some states which have deciphered the use of technology in the water sector.

- Water Resources Department of Government of Andhra Pradesh along with the private partner Vssar Labs has developed Andhra Pradesh Water Resources Information and Management System (APWRIMS). APWRIMS is a Smart Water Solution platform targeting overarching objective of sustainable water Management in the State.
- Government of Maharashtra has also taken an innovative step by launching the Draft Maharashtra Water Resources Regulatory Authority Water Entitlement Transfer (WET) and Wastewater Reuse Certificates (WRC) Platform Regulations, 2019. The main aim to the regulations are to encourage wastewater recycle and reuse in large water consuming industrial and urban centers that go beyond the stipulated water reuse targets.

Way Forward

In order to achieve sustainable development in the country, we have to look for solutions which may result in overhauling of the present mode of operations in water sector. Some of the changes suggested are as under:

- Making water as part of economic development.
- Introduction of Water Markets at Large Scale.
- Pollution Tax as the Remedy to Decrease Pollution in Water Bodies.
- New strategies to support Public Private Partnership in Water Sector

Namami Gange Programme

‘Namami Gange Programme’, is an Integrated Conservation Mission, approved as ‘Flagship Programme’ by the Union Government in June 2014 to accomplish the twin objectives of effective abatement of pollution, conservation and rejuvenation of National River Ganga.

Main pillars of the Namami Gange Programme are:

- Sewerage Treatment Infrastructure

- River-Front Development
- River-Surface Cleaning
- Bio-Diversity
- Afforestation
- Public Awareness
- Industrial Effluent Monitoring
- Ganga Gram

Its implementation has been divided into Entry-Level Activities (for immediate visible impact), Medium-Term Activities (to be implemented within 5 years of time frame) and Long-Term Activities (to be implemented within 10 years).

Pollution Abatement (Nirmal Ganga)

Pollution abatement measures comprehensively tackle all sources of pollution such as municipal sewage, industrial effluents, municipal solid waste, rural sanitation, non-point sources of pollution such as agricultural runoff, open defecation, un-burnt dead bodies etc.

Ecology and Flow (Aviral Ganga)

Drastic reduction in flow of river has a huge ecological cost with long term adverse impact. A river is not a river without good flow. NMCG is working on improving flow and overall ecology through a mix of supply as well as demand side management of water.

(a) **Ecological Flow:** For the first time, ecological flow was notified for River Ganga in October 2018, formally establishing the right of river over its own water with far reaching implications for river health. This has become a major component of river rejuvenation study and studies are ongoing for other rivers like Yamuna, Ramganga etc.

(b) **Wetland Conservation:** Wetlands are important for Nirmalta, Aviralta and also for economy, ecotourism, ground water recharge and supporting biodiversity. Mission is working for their protection and conservation and integrating to basin level. Toolkits for urban wetlands protection are also being developed with special attention to flood plain wetlands.

(c) **Afforestation:** For the first time, mission got a scientific plan for afforestation along entire length of Ganga developed by Forest Research Institute

and started its implementation. Natural, urban and agricultural riverscapes are covered in this plan.

(d) **Biodiversity Conservation:** A comprehensive project is under implementation with Wildlife Institute of India (WII) to map biodiversity hotspot for the entire length of Ganga and scientific improvement of habitat, species. NMCG spearheaded campaign for conservation of Gangetic Dolphin, the National Aquatic Animal leading to announcement of Project Dolphin. A comprehensive scientific program for fisheries resource and their conservation has been taken up in association with Central inland Fisheries Research Institute (CIFRI).

(e) **Sustainable Agriculture:** NMCG promotes this through organic farming, eco agriculture and medicinal plantation. Organic farming corridor along Ganga has been proposed at the National Ganga Council meeting for sustainable development. Promotion of cultivation of medicinal plants has been taken up in 10 districts of UP. Ministry of Ayush and National Medicinal Plantation Board is supporting development of herbal corridor along Ganga. Improving water use efficiency in agriculture is aimed through awareness campaign, promoting micro-irrigation, policy interventions for cropping pattern etc.

(f) **Small River Rejuvenation:** A GIS based district wise inventory of small rivers is being created along with district level interventions with convergence with MGNREGA. Small rivers rejuvenation is key to Aviral and Nirmal Ganga.

People River Connect (Jan Ganga)

River Rejuvenation is a continuous process which needs involvement of the people. The people river connect needs to be established so that they feel the need to join these efforts and are committed to maintaining her splendour and cleanliness. Namami Gange mission accords prime importance to this and is taking several steps for making it a people's movement.

(a) **Ghat and Crematoria:** They play a crucial part in people's relation with river Ganga and hence attempt is made to improve amenities and sanitation. 138 Ghats and 38 Crematoria have already been constructed with River Front development at Patna and Haridwar, making them important public space.

(b) **Jan Bhagidari-**Community and stakeholder groups have been developed such as Ganga Vichar Manch, Ganga Praharis, NYK Ganga Doots, Ganga Mitras, Ganga Task Force with ex-serviceman, NCC, NSS etc. They undertake several activities continuously to connect people.

(c) **Ganga Amantran Abhiyan:** This was largest social outreach program through adventure sports connecting people from Deoprayag to Ganga Sagar last year through 35-daylong rafting expedition. A similar successful expedition up to Patna from Haridwar was led by Mountaineer Bachendri Pal in 2018.

(d) NMCG regularly conducts several activities to connect youth and others such as 'Great Ganga Run', a marathon which was attended by around 20,000 people and regular Clean marathons on river banks.

(e) **Ganga Quest:** During lockdown, an innovative online national quiz on Ganga to connect school/college students drew overwhelming response with 11.5 lakh participants. Ganga Utsavs, Ganga Bal Mela, Cultural programmes and other activities are organised suitably connecting different group of people.

(f) **Clean Ganga Fund** is another innovative step to create an avenue for people and corporates to donate and take up specific projects for this national cause.

Research, Policy and Knowledge Management (Gyan Ganga)

Mission has given priority to evidence-based policy decisions and to get authentic data and information backed by scientific research. It started with a comprehensive basin management plan prepared by consortium of IITs followed by setting up of a Centre for Ganga Management and Studies (Ganga) at IIT, Kanpur. Some of the initiatives are outlined.

(a) **LIDAR Mapping:** A landmark project with survey of India is progressing for Generation of high-resolution DEM and GIS ready database for 10 kms on both sides of Ganga using LIDAR which will for the first time provide data on drainage, flood plains etc. This will enable better project formulation, monitoring, regulation and conservation.

(b) **Microbial Diversity Mapping:** Namami Gange in partnership with CSIR-NEERI is studying Water Quality and Sediment Analysis to understand the Special Property of Ganga River and also impact of human intervention on microbial diversity.

(c) **Cultural mapping** of entire length of Ganga for natural, built and intangible heritage, taken up

through INTACH, has the potential for protection of rich heritage and development of tourism and traditional livelihood opportunities.

(d) **Climate Scenario Mapping:** Partnering with IIT, Delhi to map out high resolution long term climate scenarios to improve understanding and scientifically estimate impact of climate change on water resources in the Indo-Gangetic Plain for basin-scale water resources management

(e) **Spring Rejuvenation:** Namami Gange is leading spring rejuvenation projects with IIT, Roorkee and Survey of India to assess the impact of land use-land cover change or impact of natural or anthropogenic precipitation variability and mapping of sources of springs for taking up their rejuvenation. It is likely to be base for a major program for Himalayan Spring Rejuvenation by NITI Aayog.

(f) A project in collaboration with CGWB and National Geophysical Research Institute (NGRI) for **aquifer mapping** has been started with focus on paleo-channels in parts of Ganga-Yamuna doab in Kausambi-Kanpur stretch. This will help in planning for aquifer recharge with potential for increasing the flow of river Ganga during lean season.

(g) New Paradigm of Planning for River Cities Project to mainstream river health in urban planning and develop framework for Integrated Urban Water Management (IUWM) has been initiated with National Institute of Urban affairs. Innovative urban river management plan (URMP) framework is being developed with a template for Kanpur.

(h) Namami Gange is collaborating with different international organisations like India-EU water partnership and German collaboration for the technology and knowledge transfer for River Basin management, E-flow assessment and Policy for Reuse of treated wastewater.

(i) **Arth Ganga:** Namami Gange is now leading to the development of Arth Ganga model linking economic development of Ganga Basin with ecological improvement and Ganga Rejuvenation.

Way forward

- People's participation is key to transformation. Sustainable development increasingly depends upon successful management of urban growth and water resources. Ganga Rejuvenation is critical for implementation of 2030 agenda of Sustainable Development Goals (SDGs).
- Namami Gange has developed a framework for river rejuvenation which is now being followed for several rivers beyond Ganga basin.

Har Ghar Jal

Har Ghar Jal (Water to Every Household) is a scheme initiated by the Government of India in 2019 with the aim to provide tap water to every rural household by 2024. Finance Minister Nirmala Sitharaman announced the scheme in 2019 union budget.

Background

- According to a 2018 National Institute for Transforming India (NITI) Aayog report, India is facing the “worst water crisis in its history” which is threatening “millions of lives and livelihoods”.
- The report highlights that around sixty crore Indians “face high to extreme water stress and about two lakh people die every year due to inadequate access to safe water”.
- It says that the crisis is only going to get worse and by 2030 the country's water demand is projected to be twice the available supply.
- This may further create severe water scarcity for crores of people and may lead to an approximate loss of 6 percent in its GDP point then.
- The National Sample Survey Office's (NSSO) 76" round, July-December 2018, informs that one in every five (21.4 percent) households in India has piped drinking water connections.
- In rural India, just 11.3 percent households receive potable water directly at homes whereas about 42.9 percent of the households in the rural areas use hand pump as the principal source of drinking water.
- In urban India, 40.9 percent households receive piped water into dwelling as the principal source of drinking water.

Water and Government Initiatives

- The government has created a new ministry—the Ministry of Jal Shakti in 2019, to integrate various departments and ministries dealing with water resources and water supply under one roof.
- The key goal of the newly created ministry is to assure “availability of potable water for all.”
- PM Modi announced Jal Jeevan Mission-Har Ghar Jal from Delhi's Red Fort on 15th August 2019.
- The scheme promises piped water in every rural household by 2024 and aims to provide 55 litre per capita per day drinking water, as prescribed,

regularly, to every household through a functional household tap.

- The mission will be implemented in partnership of Central and the State Governments. Its aim is to provide functional household tap connection to every household by 2024.

Salient or Key Features of the Mission

(a) Emphasis is on 'service delivery' rather creating infrastructure; Gram Panchayat and/or its subcommittee, i.e. Village Water & Sanitation Committee (VWSC) / Paani Samiti or user group to plan, implement, manage, operate and maintain their own water supply system.

(b) SHGs/community-based Organizations/NGOs involved as Implementation Support Agencies to enhance community's Capacity to implement the mission making JM, truly a 'people's movement'.

(c) Safe water to be ensured in water quality affected areas on priority. Other priority areas are water scarce areas, aspirational districts, SC/ ST majority villages/habitations, villages under Sansad Adarsh Gram Yojana (SAGY) and PVTG habitations.

(d) Villagers to be skilled as masons, plumbers, electricians, fitters, etc. so as to ensure long- term maintenance of water supply systems.

(e) In order to instill the 'sense of ownership' among the community, communities to contribute five percent of the capital cost in cash/kind /labour in villages of hilly and forested areas/NE and Himalayan States and villages having more than fifty per cent SC and/or ST population: for other areas, the community contribution is ten percent of the capital cost.

(f) GPs/ VWSCs/Paani Samitis to be provided ten percent of the 'in-village infrastructure' cost as performance incentive after completion of the scheme and successful demonstration of O&M.

(g) Strengthening and setting-up of water quality testing laboratories at State, district and block levels to monitor quality of water supply and open those to public.

(h) Five persons, preferably women, in every village to be trained to check quality of water supply using simple ready-to-use test kits.

(i) Public Financial Management System is mandatory to be used for all financial transactions to ensure transparency as well as tracking of funds.

(j) Ministry of Jal Shakti has set up Integrated Management Information System (IMIS) for monitoring of physical and financial progress and the same is linked with dash board.

(k) Rashtriya Jal Jeevan Kosh (RJK) has been set up to mobilise and accept contributions / donations from various sources towards achieving the goal of JJM.

Health and Hygiene Concerns for Rural Women

- Rural women are considered the backbone of Indian rural economy since they play an important role in managing their homes as well as the agri-farms and livestock.

- Women, who need safe sanitation the most, are often left out of crucial sanitation-related decisions at households.

- Women suffer more than men in case of poor access to sanitation that compromises their health, mobility and freedom.

- Since there is a possibility of being sexually assaulted or harassed while answering nature's call in the open, they hesitate to drink enough water to avoid urinating leading to various diseases like urinary tract infections, heat stroke, kidney infections, etc. Some of them avoid having a full meal, putting them at a risk of malnutrition.

- Pelvic inflammatory diseases and reproductive tract infections from a lack of menstrual hygiene are prevalent, too in the absence of access to toilets.

- Indian women's health and well-being is inherently linked to their status in the society. Research studies related to women's status have reported that the contributions made by Indian women towards welfare of the family are often overlooked; and instead, the female gender at all ages is viewed as an economic burden for the household.

- In our country, even in the current scenario, there is a strong preference for sons as they are expected to care for the parents during their old age. This gender discrimination among children coupled with escalating dowry expense for the daughters sometimes lead to maltreatment of the girl-child.

- Further, girls and women often have low levels of education, poor vocational skill training, lack of awareness and poor exposure as well as rather poor participation in organised sector/formal work force and that too very often with low wages or no wages. They typically suffer lack of autonomy; living under

the control of firstly their fathers/brothers, thereafter their husbands and finally their sons. All these factors pose a negative impact on their health status.

- Poor health of women has repercussions not only for them but for their family's health and well-being too. The problem of ill health and malnutrition is complex, multi-dimensional and very often inter-generational in nature. Undernourished and malnourished women are more likely to bear low-birth weight (LBW)/small-for-gestational age (SFGA)/pre-term babies.
- If a malnourished woman with ill health enters pregnancy, not only her body stores are depleted but her foetal's stores also get hampered.

Health

- As defined by WHO 'Health is a state of complete physical, mental and social well-being and not merely the absence of any disease or infirmity'.
- Health is a multi-dimensional aspect; for ensuring good health, it is important to maintain a continuous interaction among its dimensions such as physical, mental, social, emotional, spiritual, vocational and political.
- Women's Health refers to the branch of medicine that focuses on the treatment/diagnosis of diseases or conditions that affect a woman's physical and emotional well-being.

Sustainable Development Goal-3 (SDG-3)

- The Sustainable Development Goal-3 (SDG-3) is to ensure healthy lives and promote wellbeing for all at all ages.
- The highest attainable Standard of health is a fundamental right of every person.
- Fulfilling the right to health requires health systems to become fully responsive to women/girls, offering high quality, comprehensive and readily accessible services. Societies at large must end practices that critically endanger women's health and well-being including all forms of gender-based violence.

'Improved' sanitation facility

- The global definition of an 'improved' sanitation facility is the one that hygienically separates human excreta from human contact.
- United Nations General Assembly Resolution proclaims the period 2018 to 2028 'the International Decade for Action-Water for Sustainable Development' to further improve cooperation, partnership and Capacity development in response to the ambitious 2030 Agenda.

Hygiene

According to the World Health Organization (WHO), Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases. Personal hygiene refers to maintaining the body's cleanliness.

Clean potable water is critical for survival, and its absence or insufficiency can adversely impact the health, food security and livelihoods of families all over the world. While water is vital, sanitation helps to protect both — the human health as well as the environmental safety by ensuring pollution-free atmosphere.

Keeping the Sustainable Development Goals (SDGs) in view, the global community is committed to expand international cooperation and capacity building on water and sanitation related activities/programmes as well as to support the local communities in improving water and sanitation management. For attaining Goal-6, all the nations have resolved to achieve universal access to safe drinking water and adequate hygiene/sanitation for all by the year 2030.

National Health Policy

NHP launched in 1983, was revamped in 2017 with an aim to inform, clarify, strengthen and prioritise the Government's role in shaping the health systems holistically covering all its dimensions — health related investments, organisation of the healthcare services, disease prevention and promotion of good health through appropriate inter-sectoral coordination, use of updated technologies, human resource development, strengthening health-care systems and health assurance.

Further, NHP has identified priority areas for improving health of the people through coordinated action which include:

- Swachh Bharat Abhiyan
- Balanced, healthy diet and regular exercise
- Addressing tobacco, alcohol and substance abuse
- NirbhayaNari—action against gender violence
- Reduced stress and improved safety in the workplace
- Reducing indoor and outdoor air pollution

Health system strengthening programmes include:

- Ayushman Bharat Yojana: Ayushman Bharat adopts a continuum of care approach, comprising of two inter-related components- " Pradhan Mantri Jan ArogyaYojana (PM-JAY)" and Health and Wellness Centres (HWCs)
- Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)
- LaQshya' programme (Labour Room Quality Improvement Initiative)
- National Health Mission

Universal sanitation

- To accelerate the efforts for achieving universal sanitation coverage, the Prime Minister had launched the Swachh Bharat Mission on 2nd October 2014.
- Under this mission, over 100 million toilets have been constructed in rural India; and all villages, Gram Panchayats, Districts, States and Union Territories declared themselves 'open-defecation free' (ODF) by 2nd October 2019, the 150th birth anniversary of Mahatma Gandhi.
- Further, for inculcating sustained open defecation free behaviours, leaving none behind, as well as for providing easily accessible solid and liquid waste management facilities, the Mission has entered Phase II of Swachh Bharat Mission-Grameen (SBMG/ ODF Plus).
- Under this, apart from reinforcing the ODF behaviours, a due focus is being laid on the provision of interventions for safe management of solid and liquid waste in rural areas. To ensure proper waste disposal, dustbins are being placed at every convenient and easily accessible spot, as per requirement of the community.

Several Programmes

- The Swachh Bharat Abhiyan

A country-wide campaign initiated by the GoI in 2014 to eliminate open defecation and improve solid waste management; phase 1 of the mission lasted till October 2019; and phase 2 is being implemented between 2020-21 and 2024-25.

- The National Rural Drinking Water Programme
It aims at improving the coverage of adequate & safe drinking water to the rural population of the country
- Namami Gange
It aims at effective abatement of pollution, conservation and rejuvenation of the sacred River Ganga.
- Jal Jeevan Mission

JJM is envisioned to provide safe and adequate drinking water through individual household level tap connections by the year 2024 to every household in rural India. The programme will also give prime importance to implement various source sustainability measures such as water conservation, rain water harvesting, recharging of the ground water and efficient water management through its reuse/recycling.

Adolescent girls and women

- In the context of adolescent girls and women, their hygiene and cleanliness related practices during menstruation are of prime importance.
- In many rural/remote parts of our country, girls are neither aware nor they are prepared to face menstruation: and hence, they suffer several difficulties/challenges at home, school and work place.
- In a report in 2019 it is found that nearly 23 million girls drop out of school annually due to lack of proper menstrual hygiene management facilities.
- Menstrual health and hygiene are an important objective of the Sustainable Development Goals, particularly SDG 6.2 which aims to achieve access to adequate and equitable sanitation and hygiene for all and end open defecation with special focus on the needs of women and girls and those in vulnerable situations.
- Further, awareness regarding the use of biodegradable sanitary products made from materials like banana fibre, bamboo fibre, sea sponges and water hyacinth needs to be generated.

Menstrual Hygiene Scheme

- MHS was introduced by the Ministry of Health and Family Welfare for promoting menstrual hygiene among adolescent girls (aged between 10-19 years) in rural areas with the aim to increase their awareness regarding menstrual hygiene; improve access and increase the use of high-quality sanitary napkins; and to ensure their safe as well as environment friendly disposal.
- Initially in 2011, the scheme was implemented in 17 states (covering 107 select districts) and a pack of six sanitary napkins (Free- days) costing Rs 6/- per pack was provided to rural adolescent girls.

National Health Mission

- Under National Health Mission, States/UTs are provided funds for decentralised procurement of sanitary napkins to be provided to rural adolescent girls at subsidized rates (Rs 6/pack containing 6 napkins).
- The ASHA workers are given the responsibility of distribution at a small incentive (Re 1/pack sold + 1 free pack/month for personal use).
- In addition, they are required to convene monthly meetings (at aanganwadi centres/other such platforms) for adolescent girls to address the issue of menstrual hygiene as well as for discussing other relevant sexual and reproductive health issues.
- A range of [EC materials (audio, video & print material) have been developed for creating awareness regarding safe and hygienic menstrual health practices among adolescent girls; and for effective communication, necessary job-aids have been designed for the ASHA workers/other field level functionaries.
- Also, self-help groups have been trained in the making of sanitary napkins.
- Further, for girl students, Swachh Bharat Swachh Vidyalaya campaign ensures proper sanitation/ disposal facilities (place for changing, soap & water availability and appropriate disposal) in every school.
- SABLA program also stresses on awareness regarding health and hygiene among women.

The key components of National Health Mission (NHM) include:

- Anaemia Mukht Bharat
- Organisation of Village Health camp
- Nutrition Days as well as Sanitation & Nutrition days (for providing maternal/ child health services and awareness generation regarding maternal & child care)
- Iron and Folic Acid (IFA) supplementation
- Calcium supplementation and promotion of iodised salt consumption

Janani Suraksha Yojana

JSY is being implemented for reducing maternal and neonatal mortality by Promoting institutional delivery among pregnant women belonging to under-privileged families.

Mother and Child Tracking System

MCTS helps in tracking the health status of pregnant women, nursing mothers and the child: and it aims to provide information regarding various health services (particularly ANC and immunisation) received at the individual level through monitoring all events/services availed by the woman and/or the child under the health programmes.

Numerous programmes have been implemented for addressing the health needs of women, adolescent girls and all other age and gender groups, and thus, the family as a whole.

Programmes relating to Reproductive, Maternal, Neonatal, Child and Adolescent health include:

- Janani Shishu Suraksha Karyakram (JSSK)
- Rashtriya Kishor Swasthya Karyakram (RKSK)
- Rashtriya Bal Swasthya Karyakram (RBSK)
- Mission Indradhanush
- Janani Suraksha Yojana (JSY)
- Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)
- Navjaat Shishu Suraksha Karyakram (NSSK)

Programmes relating to Communicable diseases include:

- Integrated Disease Surveillance Programme (IDSP)
- Revised National Tuberculosis Control Programme (RNTCP)
- National Leprosy Eradication Programme (NLEP)
- National Vector Borne Disease Control Programme
- National AIDS control Programme (NACP)
- Pulse Polio Programme
- National Viral Hepatitis Control Program
- National Rabies Control Programme
- National Programme on Containment of Anti-Microbial Resistance (AMR).

Programmes related to Non-communicable Diseases include:

- National Tobacco Control Programme (NTCP)
- National Programme for Prevention and control of Cancer Diabetes, Cardiovascular Diseases & Stroke (NPCDCS)

- National Programme for Control Treatment of Occupational Diseases
- National Programme for Prevention and Control of Deafness (NPPCD)
- National Mental Health Programme
- National Programme for Control of Blindness & Visual impairment
- Pradhan Mantri National Dialysis Programme
- National Programme for the Health Care for the Elderly (NPHCE)
- National Programme for Prevention & Management of Burn Injuries (NPPMBI)

Swasth Nagrik Abhiyan

It is a social movement for health, recommends setting indicators and their targets as well as the mechanisms for achieving the priority areas mentioned earlier. The policy recognizes and gives due importance to preventive and promotive care along with curative care.

National Health Policy — Targets

Life Expectancy and healthy life

- Increase Life Expectancy at birth from 67.5 to 70 by 2025.
- Establish regular tracking of Disability Adjusted Life Years (DALYs) Index as a measure of disease burden and its trends by major categories by 2022.
- Reduction of Total Fertility Rate (TFR) to 2.4 at national and sub-national level by 2025.

Mortality by Age and/or cause

- Reduce Maternal Mortality Rate from current levels to 100 by 2020.
- Reduce infant mortality rate to 28 by 2019.
- Reduce neo-natal mortality to 16 and still birth rate to single digit by 2025.

Reduction of disease prevalence/incidence

- Achieve by 2020 the global target of 90:90:90 for HIV/AIDS (90% of all people living with HIV know their HIV status; 90% of all people diagnosed with HIV infection receive sustained antiretroviral therapy; and 90% of all people receiving antiretroviral therapy to attain viral suppression.
- To reduce premature mortality from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases by 25% by 2025.

- To achieve and maintain >85% cure rate for new sputum positive patients of TB and reduce the incidence of new cases to attain elimination status by 2025.
- Targeted to achieve and = maintain elimination status of Leprosy by 2018, Kala- Azar by 2017 and Lymphatic Filariasis in endemic pockets by 2017.
- To reduce the prevalence of blindness to 0.25/1000 by 2025.

Health Systems Performance/Coverage under Health Services

- Increase utilisation of public health facilities by 50% from current levels by 2025.
- Sustained antenatal-care coverage above 90%; and skilled attendance at birth above 90% by 2025.
- Meeting the needs for family planning above 90% at national/sub national level by 2025.
- 80% of known hypertensives and diabetics under home care maintain 'controlled disease status' by 2025.

Summary of Yojana Magazine (October 2020)

Evolution of India's Trade Negotiations

India's trade negotiating-approach would need to take a broader long-term view of things to come in future. Increasing volume of trade is more important than trade deficit because trade need not be a zero-sum game. The combination of quality and price determines the staying power of a product in the market. India should consciously develop a wide-angle approach to the evolving global trade dynamics.

Multilateral Trade under GATT

- The term multilateral trade negotiations (MTN) initially applied to negotiations between General Agreement on Tariffs and Trade (GATT) member nations conducted under the auspices of the GATT and aimed at reducing tariff and nontariff trade barriers.
- In 1995 the World Trade Organization (WTO) replaced the GATT as the administrative body.

- The General Agreement on Tariffs and Trade (GATT) of 1948 was the first multilateral agreement under UN aimed at boosting economic recovery by reducing barriers to trade.
- India was one of the 28 founding members of GATT.
- A current round of multilateral trade negotiations was conducted in the Doha Development Agenda round.

Prior to the ongoing Doha Development Round, eight GATT sessions took place:

- 1st Round: Geneva Round, 1947
- 2nd Round: Annecy Round, 1949
- 3rd Round: Torquay Round, 1950-51
- 4th Round: Geneva Round, 1955-56
- 5th Round: Dillon Round, 1960-61
- 6th Round: Kennedy Round, 1963-67
- 7th Round: Tokyo Round, 1973-79
- 8th Round: Uruguay Round, 1986-94

In the eight GATT Rounds held in the later half of 20th century, India and developing countries were primarily concerned about safeguarding their agriculture interests against large- scale agriculture subsidies of developed countries. They feared possible dumping of agricultural produce in international markets would cause market distortions.

World Trade Organization

- India, along with 76 countries, was a founder member of the World Trade Organization (WTO) in 1995 which subsumed the Uruguay Round GATT negotiations from 1986-1994.
- India believes that a fair, equitable, justiciable and predictable rules-based multilateral trading system embodied in WTO is in the best interest of developing and Least Developed Countries (LDCs).
- India sought correction in the highly imbalanced trade Negotiations under the Agreement on Agriculture (AoA). Under AoA, the domestic support policies, subject to reduction commitments, were calculated by the total Aggregate Measurement of Support (AMS) on the base years of 1986-88.
- Accordingly, input subsidies known as 'Amber box' have been calculated for exclusion from reduction commitments at less than 5% of the value of production for developed countries and less than 10% for developing countries.
 - India and other developing countries have argued that developed countries have taken undue advantage of the huge domestic support provided

under other boxes namely, 'Green' and 'Blue' that have been tacitly kept outside the reduction commitments. Efforts to bring balance in AoA negotiations remained unsuccessful till date.

Trade and Development

- It was not until the beginning of the 21st century that WTO recognized the causal link between trade and development. This recognition led (The General Agreement on Tariffs and Trade (GATT) of 1948 was the first multilateral agreement under UN aimed at boosting economic recovery by reducing barriers to trade. Even though India was one of the 28 founding members of GATT, It was not a serious stakeholder in multilateral trade negotiations.) to the launching of the 'Doha Development Round' in 2001 putting 'development' at the center of global trade.
- India articulated the popular view underlining the urgency in lifting millions out of poverty in developing and LDCs, and trade could be an effective catalyst for development.
- India scored a major victory at the Bali Ministerial Conference in 2013 when it successfully negotiated a 'permanent peace' clause on domestic support for agriculture as trade-off for agreeing to WTO Agreement on Trade Facilitation.
- The permanent peace' clause allows India to pursue its agriculture domestic support programs, without the risk of being challenged in the WTO Dispute Settlement Body, until the issue is resolved collectively by all members.
- India's accession to the WTO Trade Facilitation Agreement in April 2017 also proved beneficial to it by improving logistics efficiencies and bringing down trade costs for its exports.

Tariff and Non-Tariff Barriers

- The rationale for high tariffs is to protect domestic industry from external competition and enhance revenue collection for the State.
- WTO member countries had bound their tariff rates for each line of product; developed countries bound 99% of their tariff lines to below 5% rates and developing countries bound their rates to 98% but with varying peak rates, within which they can maintain flexible applied rates.

- Members countries list their commitments in their schedule and offer them on Most Favoured Nation (MFN) basis as GATT Article 1 i.e., “preferences to be offered to all members on an equal basis in a non-discriminatory manner”.
- This flexibility was considered necessary for developing and LDCs to withstand global trade distortions caused by sudden surge in imports of certain products.
- India brought down its applied rates significantly from an average 100% rates in the 90s to currently around average 15% for industrial products and 25% for agriculture products.
- Several lines kept under Open General Licensing system (OGI), not meant for trading in support of MSMEs, were finally abolished in 2005.

India's Share in World Trade

- India's share in the world merchandise exports at the time of our independence in 1947 was 2.2%; it dropped to 0.5% in 1983 and marginally raised to 0.7% in 2000.
- Currently, India's share in global exports is 1.7%.
- Experts attribute India's low share to its decades of insular economic policies but with 1991 economic reforms, leading to integration into the world economy. India's share has picked up.
- In contrast, countries such as Japan, Korea, China and even ASEAN enjoy much greater share in global trade as a consequence of their open economic policies with significant thrust on exports.
- In 2000, India's total trade was about \$103 billion (exports \$43 billion + imports \$60 billion); in 2010, it was \$528 billion (exports \$201 billion + \$327 billion imports) and in 2019-20, it was about \$787 billion.
- India's major trading partners are USA, EU, China, UAE, Germany, Singapore, UK, etc.
- A worrisome factor for India is the ever-widening trade deficit with China, which is feared to be dumping its goods in India indiscriminately through a deliberate state-sponsored unfair trade practices, while insulating its markets through highly cumbersome non-tariff measures.
- In South Asia, India is the most dominant economy with total trade at about \$25.7 billion in 2019-20, of which India's exports were \$22.8 billion.
- The World Bank Group study of 2018 observed that if only regulatory obstacles to trade are minimized in the region, trade in South Asia could increase by three times in few years.

- India's export product profile more or less remained constant for several years; petroleum products. Gems & Jewellery, machinery, organic chemicals, pharmaceuticals, electronics, leather, etc. have been consistently leading the chart. Diversifying exports basket with value added products would help to expand its global market share.
- Trade in services has assumed high importance in global trade. Technology and mobility of skilled manpower across borders have stimulated trade in services sector.
- Services constitute more than 55% of India's GDP, similar to the economic profiles of most developed countries. India's export of services trade has been gradually growing in the last two decades in 2019, services exports were \$214 billion and imports \$128 billion and India supplies 40% of global demand for IT skilled manpower.
- India's share in world services trade is only 2.6%, mostly concentrated in IT and IT-enabled services. With a view to diversifying services trade, Indian identified 12 champion services sectors with emphasis on realizing their potential for employment generation.
- Currently, India's total trade including merchandise and services is \$1129 billion, which constitutes about 42% of the GDP.
- Deeper external engagements are a necessary condition for boosting trade and, in this regard, Global Value Chains (GVCs) and Free Trade Agreements (FTAs) are important tools.

Free Trade Agreements

- Free Trade Agreements (FTAs) create conducive environment for GVC's to operate efficiently. Partner countries take advantage of liberalized investment climate under FTAs to set up production units as part of Supply Chain networks (GVC) to feed into finished products.
- A successful FTA creates a win-win situation for both partner counties, not only in terms of providing market access but also enabling deeper engagement through investments, technology and services.
- GATT Article 24 of WTO allows member countries to enter into bilateral/regional preferential trade arrangements in order to achieve higher level of trade liberalisation, notwithstanding that this

provision amounts to derogation of GATT Most Favored Nation (MFN) that stipulates non-discriminatory treatment on trade preferences to all countries.

- In the last two decades there have been proliferation of free trade agreements globally with about 450 FTAs/PTAs concluded and another 180 FTAs/ PTAs under either negotiation or review, involving about 2/3rd member (India's share in the world merchandise exports at the time of our Independence in 1947 was 2.2%; it dropped to 0.5% in 1983 and marginally raised to 0.7% in 2000. Currently, India's share in global exports is 1.7%. Experts attribute India's low share to its decades of insular economic policies but with 1991 economic reforms, leading to integration into the world economy, India's share has picked up.) countries of WTO.
- India concluded about 16 FTAs/PTAs and another 20 of them are under either negotiation or review, India's most notable bilateral FTAs are with Japan, Korea, Chile, Singapore and regional FTAs are SAFTA, ASEAN, Mescosur, APTA, etc.
- Traditionally, India has been conservative to opening is economy through Free Trade Agreements for fear of exposing domestic industry to external competition. However, trade data of last 10 years suggests that India's volume of trade with its FTA partner countries has significantly grown and trade deficit remained either constant or widened marginally.

Conclusion

- India's trade negotiating approach would need to take a broader long- term view of things to come in future.
- Increasing volume of trade is more important than trade deficit because trade need not be a zero-sum game.
- Ultimately, combination of quality and price determines the staying power of a product in the market.
- Understanding the evolving linkages between trade, investment, services and technology, GVCs is critical.
- Investment brings technology which is crucial for making affordable quality products at competitive prices.
- In the age of servicification of manufacturing, emphasis on providing quality services would have ripple effect on the overall volume of trade.
- Technology will impact trade in big way in near future and staying in niche technologies such as machine learning, 3D printing, robotic engineering, internet-based production; e-commerce, etc. will all impact global trade in a big way.
- India should consciously develop a wide angle approach to these evolving global trade dynamics.

LOOK EAST TO ACT EAST

China in its backdrop actions of an aggressive and assertive has unnerved its both oceanic and land neighbours. The Covid-19 which has its origins in Wuhan has been another game changer in redrawing strategic, economic political or diplomatic relations.

China by its aggressive actions along the LAC has complicated matters for bilateral relations but also has made India to consolidate its views on the future of relations with China.

Opportunity out of a crisis

- The irresponsible actions by china provided a window of opportunity for evaluating India's strategic economic and military options in the pacific area which actions in the Indo pacific are which houses the countries of interest to India's "look east policy".
- The developments appear to have given a fillip to engaging with the powers beyond Malacca straits.
- Some of the recent development post Covid-19 and Galwan intrusions to see how they are likely to impact the trajectory of India in shaping a favorable environment for reshaping relations and alliances with East Asian countries.
- The fact that china apparently hid the outbreak of the virus has not been received well by the countries around the world and notably the most affected including India, US, Europe, brazil etc.
- While India was busy combating the covid-19 menace and the economic downturns. China indulged in an unethical Intrusion along the LAC despite the agreements that go back to 1993.
- China has also made inroads in the neighborhood of India both over land and sea. It has not given up on its claim of Bhutan territory and has also been propping up Nepal against India.
- It has also invested heavily in the china PoK economic corridor (incorrectly learned as CPEC which legitimizes the ownership of Indian territory.)
- India has opposed the BRI and has voiced its concerns about the unilateral nature of this adventure which does not benefit the recipient countries.

Galwan and After

- The Galwan intrusions have been a turning point in the bilateral relations of India and China.
- India has initiated many measures against China which will have a long-term impact on not just the bilateral relations but also the “Act East Policy” of India.
- The engagements with China have been part of the “Look East Policy” of India and the past three decades of liberalization did see enhanced scope of trade and commerce with East Asian economies and more so with China.
- However, the enhanced engagement resulted in the ‘win-win’ situation only for China which was using the market access of India to increase its share and also slowly intrude into many niche areas.
- This not only increased the trade deficit to nearly US \$60 billion but also slowly increased the dependence of Indian enterprise on Chinese funds and technology much to the detriment of India’s long-term interests. It was also rightly observed that the trade deficit is what is being used for many of the economic initiatives of China in Pakistan in addition to military modernization at India’s cost.

Actions in South China Sea and Near Seas

- China’s actions in South China Sea have also angered the maritime neighbours who are not in a position to take on the economic and military might of China which has used economic and military might to subdue the opposition.
- The classic example is of the Philippines which won the arbitration with a favorable verdict in the permanent court of Arbitration in 2016, is illustrative of the use of money power and coercion which has allowed China to get Philippines on its side through temporarily.
- The incidents of sinking of Vietnamese fishing vessel, flying in the exclusive economic zone (EEZ) of contested areas, conversion of reefs and rocks to artificial islands, establishing military garrisons has obviously not endeared China to its land and maritime neighbours.
- The other target is Taiwan which has defied the call for unification and has vowed to fight till the last man should there be any efforts for a cross-strait operation.
- USA, in the recent past has concluded agreements for providing advanced military hardware and this has also angered China no end.

Global Response

- It is obvious that there is palpable anger against China for the acts of discretion both during Covid-19 when it has tried to use the period of distress to indulge in cartographic aggression both overland and in the seas.
- USA has left no stone unturned to target China and has initiated many measures to hurt China. This has resulted in a war on all front which reminds observers of a cold war that has now been set into motion.

Acting East in the Backdrop of China’s Intransigence

- The engagement with East Asian countries both at the strategic and economic levels was constantly being reviewed and some course corrections were applied to increase the share of mutual investment and cooperation.
- The major initiative of the Belt and Road Initiative (BRI) brought China’s money to destinations from Asia to Africa to Europe.
- While initially there was a lot of enthusiasm about the opportunity to use Foreign Direct Investment for local development, as evidenced by Sri Lanka and other smaller nations, it was clear that there was a huge debt trap lying in wait for the countries who fell for the cheque book diplomacy.
- This also happened in many of the ASEAN countries which witnessed some withdrawals from BRI projects and renegotiations.
- Other nations were constantly reminded of the fact that a deep-water port, Hambantota in Sri Lanka had to be given away on a long lease of 99 years to China to repay some of the loans taken by Sri Lanka.

Conclusion

- The recent developments are indicative of the need to break away from past practices of bilateral relations which have not yielded the desired results.
- The recent developments clearly bring out that there would be global readjustments whether it is in terms of the decoupling or having new alliances to take on China which has not behaved with the maturity expected of a nation aspiring to replace USA.

- This is to be viewed as an opportunity for India to redraw the contours of its engagement with other countries and institutions and draw an independent trajectory that would help its growth, prosperity and development.

Indian Diaspora: Major Issues and Challenges

The Diaspora encompasses a group of people who can either trace their origins to India or who are Indian citizens living abroad, either temporarily or permanently. It includes Non-Resident Indians (NRIs), Persons of Indian Origin (PIOs) and Overseas Citizens of India (OCI).

- The overseas community has grown into an energetic and confident diaspora over 25 million.
- The part played by the diaspora is very vital in the success of India and the foreign policy of India has a strong outreach to Indian diaspora.

The United Arab Emirates (UAE) was the top destination of Indian migrants followed by the US, Saudi Arabia, Pakistan and Oman, as per the data set compiled by the UN Department of Economic and Social Affairs Division.

Major Steps taken by the Indian government to handle the Issues of Diaspora

- An online database of emigrants and comprehensive, Missions, Recruiting Agents, Foreign Employers, Insurance Agencies to make the whole emigration process faster and transparent. That allows online authentication/verification of credentials of all the stakeholders.
- Indian Government has signed MoU with six Gulf Countries, Jordan and Malaysia. The major intent is to enhance bilateral cooperation and employment opportunities in the protection and welfare of worker.
- Government has also started 'Madad' portal for online lodging of grievances of the emigrants, which are attended to on priority basis.
- The government recently amended the rules of the PIO card Scheme so that new recipients of PIO cards will receive cards that will be valid for the duration of their life.
- New Embassies in Latin American and African country to help the Diaspora.
- Bilateral engagement with US, UK to address the concern of skilled labour.
- Programmes like 'Bharat Ko Janiye' to help the Indian living abroad learn about India and also an opportunity to visit India.

Significance and Contribution

- It helps the transfer of Knowledge resources expertise and also bridges the markets for the development of the country of origin and the rest of the world.
- The soft diplomacy—a vital role played by the Indian Diaspora—is critical in the success of the Indo-US nuclear deal.
- The country of their residence also has developed due to this Diaspora. Silicon Valley, for example, represents the success of the Indians in the US.
- The development of science and technology is mostly due to the role played by the Indian Diaspora.
- The Diaspora is the major source of trade investment in India.

Government Initiatives

- The 'Pravasi Bharatiya Diwas' is an initiative started in 2003 to mark the contribution of the India community overseas in the development of India.
- The Ministry of Overseas Indian Affairs has been merged with that of the ministry of External affairs and this merger is a huge initiative in the role of Government to encourage the Indian Overseas.
- The Visa on arrival is a facility that India has approved and allowed. Now almost 43 countries have been permitted to have Visa on arrival by the Indian Government. These countries include the United States, Australia and Fiji. This process has made travel and spread of the diaspora much easier.
- The economic and engagement of Indians with India is facilitated by the Overseas Indian Felicitation Centre which was set up by the Government of India with the Consideration of Indian Industry (CII). This partnership and felicitation have promoted the growth of economic engagement of Indians with India.
- The Indian Government has evacuated the Indian diaspora in Yemen in 2015 through Operation "Rahat" and also from South Sudan through operation "Sankat Mochan".
- The "Pravasi Kaushal Vikas Yojana" is another important program taken by the Indian government which promotes the growth and engagement of youth who target employment overseas.

- The Indian government now is very quick to respond to the challenges and problems faced by the Indian diaspora especially because the government has become more digital and active in the social media. Thus, various problems of the Indians abroad have been solved faster and response time much quicker due to the use of this show social media and digitalization.

Issues faced by Indian diaspora

West Asia

- Low oil prices owing to Shale gas boom and slower global growth is resulting in job cuts for Indians.
- One of the most direct threats to the security of Indians is the rising conflicts and instability due to Shia-Sunni conflicts and the radical Islamism.
- Fierce competition from skilled labour from the Philippines and cheap labour from Nepal.
- Regressive and mediaeval policies like employer seizing the travel documents upon arrival known as "Kafala" labour system are exploitative.

US, Canada and UK

- (a) Discriminative practices going to a racist, colonial mindset persists.
- (b) Stricter H-1B visa norms in the US Congress.
- (c) President-elect Donald Trump's call to channel more jobs to Americans.
- (d) Revision of visa norms in UK post-Brexit might hit the Indian diaspora hard, especially the IT professionals.
- (e) The disparity in jobs and racial abuse due to terrorist branding.
- (f) Cultural integration due to various eating preferences, consumerism and nuclear society.

Dual Citizenship

Majority of Indian diaspora want to retain their Indian citizenship along with the citizenship of the country of their residence.

Indian Diaspora: during covid-19

- The Covid-19 pandemic has played Havoc with the lives of Indian Overseas. Some have lost their jobs while others are in fear of losing them. There is already a significant number of people who are seeking to return to India due to financial instability.

- There is a question of belonging that arises on diaspora Indians who have not got permanent resident status if they can stay on in their countries after losing jobs; while the ones who have switched their citizenship have a fear that they could be stopped from traveling to India at any point.
- Many people have reported homesickness, loss of friends, inability to stay beside family during good and bad times, living independently, less availability of authentic Indian food, psychological issues due to smaller social circle, the office environment is different much lessor number of holidays and high cost of living.
- Despite their struggles, Overseas community has grown into an energetic and confident diaspora of over 25 million. The part played by diaspora is very vital in the success of India and foreign policy of India has a strong outreach to Indian diaspora. The many contributions to knowledge transfer and investment cannot be underestimated.
- On the other end of the spectrum, first-generation NRI's do face challenges on coming back to India after naturally acclimatised in their new countries for many years. They are scared of falling sick due to hygiene issues, power outages, security issues, fitting with the crowd, inhalation of heavy airs in the big cities, drinking only bottled water, the nose of honking cars, the frustration of moving in a Chaotic traffic, taxes on strike and traveling on crowded buses.
- The "Vande Bharat" was yet another initiative of a government to organise repatriation flights to bring back the migrant's Indian diaspora especially from Doha, Kuwait, Dammam and Riyadh where more Indians have migrated and wanted to come back home due to this crisis.
- The Basic needs of migrant workers such as food shelter healthcare, fear of procuring disease or spreading it, loss of wages, concern about family and anxiety are more concerning issues. Some also face harassment and negative responses of local community.

Way forward

- The already affected migrants and diaspora need to be ensured to feel welcomed back home on arrival and there need to be an easier process of immigration and Customs clearance.

- The Government needs to address the problem of blue-collar workers working overseas like:
 - (a) Negotiating a standard Labour Export Agreement with the host countries.
 - (b) Monitoring and supervision of overseas workers by our Missions.
 - (c) Compulsory insurance schemes covering the risks faced by the overseas workers.
- There should be a greater focus on promoting tourism among 2nd generation PIOs and frequency of these PIO's to make frequent visits to their home state and visit relatives and family.
- The welfare of Indian Women Married to NRIs / PIOs
- Economic development
 - (a) Diasporic professionals working in senior positions in the manufacturing industry can help promote India as an important destination for outsourcing.
 - (b) The government should also consider setting up of Social Economic Zones, exclusively for projects to be set up by NRIs/ PIOs.
 - (c) The government should also consider issuing special infrastructure bonds for attracting NRI/PIO investments on the lines of the Israel Bonds.
- The diaspora's financial and intellectual capital must be cashed by India and the major challenge before India is how it can tap this for mutual benefits.

National Recruitment Agency

- It is a central agency established by the Indian Government, that will conduct a Common Eligibility Test (CET) for selection to non-gazetted posts in the central government and public sector banks.
- NRA has representatives of Ministry of Railways, Department of Financial Services, the SSC, RRB & IBPS.

Background

- Before the establishment of the National Recruitment Agency, the recruitment exams to the Group B and C (non-technical) posts of the central government jobs under the Indian railway, banks etc were done separately and most of these posts required similar education qualification.
- These multiple recruitment examinations were a burden to candidates as they to pay fee to multiple recruiting agencies and also have to travel long distances for appearing in various exams.

Composition

The National Recruitment Agency will have representatives of:

- Ministry of Railways (India)
- Minister of Finance (India)/Department of Financial Services
- Staff Selection Commission (SSC)
- Railway Recruitment Boards (RRBs)
- Institute of Banking Personnel Selection (IBPS)

Features of Common Eligibility Test (CET)

The Common Eligibility Test (CET) will replace the Tier 1 exam held by Staff Selection Commission, Institute of Banking Personnel Selection (IBPS) and Railway Recruitment Boards for recruitment to Group B and C posts. Separate CETs will be conducted for matriculate level, higher secondary and graduate applicants. The scores received in these exams will be valid for 3 years.

Medium of CET

The Common Eligibility Test (CET) will be conducted in 12 languages that are in the Eighth Schedule of the Constitution of India.

Number of Attempts

The aspirant will be allowed unlimited attempts within a prescribed age limit to better his CET score, with the best being considered.

Venue of Exam

Applicants need not travel outside their respective district to access a test centre, with 1,000 centres proposed countrywide with at least one per district. Also, money spent on fees for multiple recruitment tests will be saved. The CET score, which will be generated immediately, shall be made available to the candidate as well as the individual recruitment agency and can be expected to improve transparency.

Launchpad for NRA

NRA is coming up at an opportunity at time when the conventional government recruitments are transforming with the help of technology. In past few years various Recruitment Agency have embarked upon a number of digital solutions to improve outreach and speed transparency and security of examinations.

Few of such bedrock initiatives and improvements are listed here:

(i) Linguistic inclusion

RRBs had started administering test in 16 Indian languages, facilitating the candidate hailing from different linguistic regions of the country, about a decade ago.

(ii) Digitalization of the recruitment process

- Digitalization of the recruitment processes has already been undertaken by IBPS, RRBs and SSC.
- It speeded up the application process significantly and the Real Time Management Information System reports help in taking dynamic decisions.
- RRBs started computer-based Test-CBT (commonly called as online test) in 2015.
- SSC also changed its Optical Mark Reader OMR based exams to Computer Based Mode exam since June 2016.
- IBPS had already adopted these processes since long ago.

(iii) Geographical outreach

- RRBs took examination to the doorstep of the candidates in far-off region of Kashmir valley, all north-eastern states and Islands of Andaman and Nicobar and Lakshadweep by setting up more than 3000 centres in 311 cities. IBPS also conducts tests in about 200 towns across India.

Outreach Initiatives by NRA

(a) Multiple Languages

Barring RRB examinations, other exams are currently administered only bilingually- in Hindi and English. The CET would be available in 12 Indian languages, including English. This would greatly facilitate people from regional linguistics backgrounds in different parts of the country to take the exam and have an equal opportunity of being selected.

(b) Scores-Access to multiple Recruitment Agencies

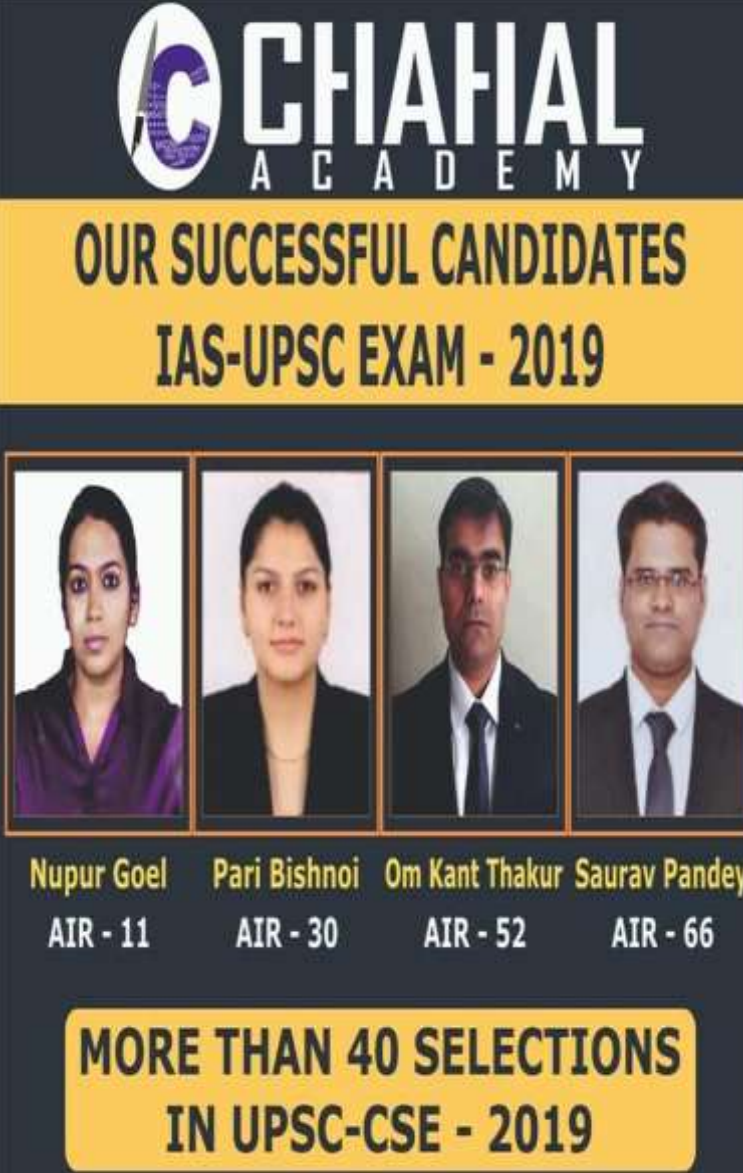
Initially, the scores would be used by the three major recruitment agencies--SSC, RRBs and IBPS. However, over a period of time it is expected that other recruit agencies in the central government would adopt the same. Further, it may be open for other agencies in the public as well as private domain to adopt if they so choose. Thus, in the long run, the CET score could be shared with other recruiter agency in the central government, state government/ Union Territories, public sector undertaking and private sector. This would help such organisations in savings costs and time spend on recruitment. Madhya Pradesh has already shown in interest in using CET scores.

(c) Mock test for candidates from rural and backward areas

NRA will conduct mock tests for facility of such candidates. Besides mock tests, 24*7 helpline and grievance redressal Portal will also be made available.

New century recruitment reform





After about four decades of conventional pen and paper or OMR based organisation-specific recruitment examinations, NRA comes with path-breaking reform, the first in this century, acknowledging. The positive changes happening in New India and its aspirational youth. With NRA, crores of aspiring youth are set to embark on a new career path.



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