OCTOBER

2019

PT-MAINS

Copyright © **Aspire IAS** All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Aspire IAS.

Aspire (IAS The name associated with excellence

Office No - 5, Below Ground Floor, Apsara Arcade Building, Near Karol Bagh Metro Station, New Delhi - 110060 WWW.ASPIREIAS.COM 9999801394,8010068998





S.No.	Topics	Page No.
	GS-1	
1.	Scientists have discovered an "ancient buried river"	01
2.	Another plan to repatriate Mizoram Bru refugees fails	02
3.	Nehru Memorial Museum and Library (NMML)	03
4.	Baul Music	04
5.	Khon Ramlila	05
6.	PettaThullal	06
7.	Col. Chewang Rinchen Setu	07
8.	A.P. likely had a flourishing port 2,000 years ago	08
9.	Second round of Smart Cities, AMRUT may roll out in 2020	09
10.	Ik Onkar	10
11.	Kyarr	11
12.	Two-child policy	12
13.	Modern Humans came from Botswana	13
14.	Bhaona	14
15.	Chhath puja	15
16.	Amaravati start-up area pact cancelled	16
	GS-2	
1.	Kerala on top place in SEQI	18
2.	Development In Kashmir – A Hope For Peace	19
3.	Election Commission Order on Skkim CM's Disqualification	20
4.	U.S. warns partners of sanctions risk	22
5.	Launch of 'Mo Sarkar'	23
6.	Launch of Inter-State portability for ration cards	24
7.	Jagan launches Village Secretariat system in Andhra Pradesh	25
8.	Cabinet approves Bill to set up 'India's first' Sports University	26
9.	Indo-Chinese educational tie-ups	28
10.	Nitaqat law	29
11.	Citizenship amendment bill	30
12.	Informal Summits	33
13.	China's role in Bangladesh	34
14.	'Assam tea estates violating labour laws'	36
15.	SURAKSHIT MATRITVA AASHWASAN (SUMAN)	38
16.	Modi and Xi discuss investment, unbalanced trade	39
17.	Nobel Peace Prize	42
18.	RTI violations go unpunished	43
19.	Summit will usher in 'new era' in India-China ties, says Modi	44



20.	With 9 cases a day, Mizoram is top State with HIV prevalence rate	45
21.	Education of mothers directly linked to better nutrition for children	46
22.	Many denied PDS rice due to non-seeding of Aadhaar	47
23.	'FASTags will work as Aadhaar to track vehicles'	48
24.	SC seeks reply from Centre on RTI portals	49
25.	'Cataract major cause of blindness above 50'	51
26.	Mother tongue for preschool: NCERT	53
27.	India's share of river water will no more go to Pakistan: Modi	54
28	Russia moves to fill .void left by U.S. withdrawal in north Syria	56
29.	Gujarat, Tamil Nadu top performers under PM-JAY health scheme	57
30.	Govt. to probe 'irregularities' in M.P. Swachh survey	59
31.	Global Hunger Index	60
32.	Centre to issue 'negative' list to streaming sites	61
33.	U.S. House passes Hong Kong Rights Act	62
34.	China leases an entire Pacific island for 75 years	64
35.	Britain clinches Brexit deal with EU	66
36.	FATF may keep Pak. on grey list	67
37.	Legislative Council abolished in J&K	69
38.	Venezuela wins seat on UN human rights council despite opposition	70
39.	CJI names Justice Bobde as successor – Appointment of CJI	71
40.	'37.7% of processed milk samples unsafe'	73
41.	U.K. Parliament votes to force Brexit delay	75
42.	India decides to put off PM Modi's visit to Turkey	76
43.	Uneasy ceasefire takes hold in Syria	77
44.	IMF members delay quota changes, agree to maintain funding	78
45.	DNA regulation Bill referred to House panel	79
46.	'Help make CGHS more beneficiary friendly'	80
47.	Anthrax	81
48.	Liver Transplant Surgery	82
49.	Indian Penal Code (IPC)	83
50.	India – Maldives	84
51.	Bhashan Char island	85
52.	Regulation of Social Media	86
53.	Freedom of Press	87
54.	Rabi crop MSP to be hiked	88
55.	Peritoneal dialysis under Pradhan Mantri National	89
56.	19th Non Aligned Movement (NAM) summit	90
57.	Kartarpur Sahib Corridor Agreement	91
58.	Commission for Protection of Child Rights	93







59.	RTI Rules	95
60.	Brazil intends to allow Indians without visas	96
61.	Manipur, Arunachal wants to be kept out of Naga peace deal	97
62.	India, Saudi to form strategic council	98
63.	Mountain gorillas	99
64.	Chile pulls out from hosting climate and trade	100
	GS-3	
1.	Green energy target lacks deadline	102
2.	No MAT credit for 'Firms opting for new lower tax'	103
3.	Excess rain washes out IMD's methods	105
4.	Drone cameras threatening Nilgiris wildlife	107
5.	IRDAI working group to revisit title insurance structure	108
6.	Fourth bi-monthly monetary policy statement, 2019-20	109
7.	India's first e-waste clinic will come up in Bhopal	110
8.	Electric Vehicle (EV) Charging Guidelines	111
9.	Green Crackers	113
10.	Sanitization of Hindon River	114
11.	Army Battle Casualties Welfare Fund (ABCWF)	115
12.	(MOSAiC) expedition	116
13.	National e-Assessment Centre (NeAC)	117
14.	Information Fusion Centre-Indian Ocean Region (IFC-IOR)	118
15.	India received first Rafale fighter jet	119
16.	Hindu-Kush-Himalayan (HKH) Region	120
17.	2019 Noble Prize For Physics	121
18.	2019 Noble Prize In Medicine	122
19.	Zero budget natural farming	123
20.	Data localisation plans hang in the balance	126
21.	India slips 10 places in global competitiveness index	127
22.	Chemistry Nobel to trio for work on batteries	129
23.	Highest no. of wildlife roadkills on NH 766	131
24.	GEMINI system to warn fishermen of danger	132
25.	Annual Ganges river dolphin census begins	133
26.	Invasive weeds threatening tiger habitats in Adilabad	134
27.	Industrial output shrinks by 1.1% in August 2019	135
28.	Saturn has the most numbers moons in our Solar System	136
29.	Sikkim sees surge in butterfly biodiversity	137
30.	GM cottonseeds approved as food by U.S. regulators	138
31.	'Foreign' plastic invades Great Nicobar Island	139







32.	Project Beehive	140
33.	Delhi's air quality slips to 'very poor' category	141
34.	'Foreign' plastic invades Great Nicobar Island	143
35.	Govt. yet to decide on exempting 2-wheelers from odd-even	145
36.	Indigenous breeds record marginal rise	147
37.	Army mulls over Joint Services Act	148
38.	Malaria parasite jumped from gorillas to humans	149
39.	Scientists find clues to how brain controls pain	150
40.	Zomato, BioD Energy tie up for cooking oil-to-biodiesel	151
41.	Spectroscopy	152
42.	Centre clarifies on definition of forest	153
43.	RBI Dy. Governor post vacant for 3 months	154
44.	How insects, pests wipe off Ajanta cave paintings	155
45.	National Tiger Conservation Authority(NTCA)	156
46.	Annual Crime in India Report 2017	157
47.	Many hydropower projects could face closure	158
48.	Rht14 & Rht18: Dwarfing genes in wheat mapped	159
49.	2019 ozone hole is the smallest on record	160
50.	Ramgarh dam	161
51.	Rise in stubble burning cases in Punjab	162
52.	Hover-taxis	163
53.	Van Allen Probes mission	164
54.	Air Quality Index (AQI), Ambient Air Quality Standards and SAFAR	165
55.	ISRO's PSLV missions	167
56.	Doing Business Report 2020	168
57.	2 out of 3 wild poliovirus strains have been eradicated	169
58.	PMO tells States to address stubble burning issue	170
59.	IndiGen initiative	171
60.	Sycamore	172
61.	Doxxing	173
62.	Nurture the Future	174
63.	Weavers will soon sell products directly online	175
64.	Kudankulam Power Plant	176
65.	Anti-Trust	177
66.	Flood risk	178
67.	Government to work on relief package for Telecom sector	179
68.	Graded Response Action Plan (GRAP)	180
69.	Unnat Bharat Abhiyan	182
70.	Kudankulam plant&'dtrack' malware	183





71.	Submarine propulsion system test a success	184

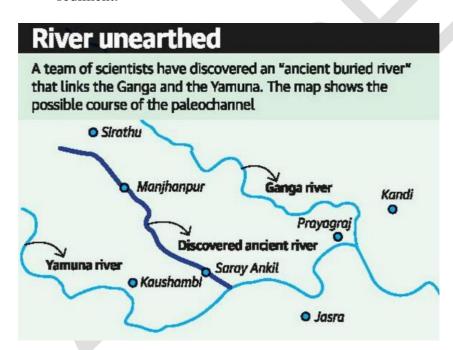


Scientists have discovered an "ancient buried river"

About

- The Union Water Ministry has excavated an old, dried-up river in Prayagraj (formerly Allahabad) that linked the Ganga and Yamuna rivers.
- Paleochannels typically act as pathways for groundwater movement and provide a potential source of groundwater. Their presence can be helpful in identifying areas suitable for recharge.
- The discovery was made last December by a team of scientists from the CSIR-NGRI (National Geophysical Research Institute) and the Central Groundwater Board.
- palaeochannel is a remnant of an inactive river or stream channel that has been filled or buried by younger sediment.

Ganga. Knowledge on subsurface connectivity between Ganga and Yamuna rivers will play a very crucial role in planning of Ganga cleaning and protecting safe groundwater resources.



Significance of the discovery:

According to officials at the National Mission for Clean Ganga (NMCG), the aim is to develop it as a potential groundwater recharge source. NMCG is a body under the Union Jal Shakti Ministry that coordinates the cleaning of the







Another plan to repatriate Mizoram Bru refugees fails

About:

Another initiative to repatriate the Mizoram Bru refugees stranded in the camps in North Tripura has failed to receive response from the inmates.

Historical Perspective:

- The Ministry of Home Affairs brought the stakeholders to the talks in 2015, and a **financial package** of Rs. 435 crore was arrived at.
- The package covers 32,876 members of 5,407 Bru families. It includes a one-time assistance of Rs. 4 lakh in a fixed deposit within a month of repatriation, monthly assistance of Rs. 5,000 through direct benefit transfer, free rations for two years, and finally, Rs. 1.5 lakh in three installments for building houses.
- Many Bru villages were burnt down and scores allegedly raped and killed, which led to the displacement of 40,000 Bru people.
- A large number of Bru families fled to North Tripura.
- The first phase of repatriation started in November 2010, when 1,622 Bru families with 8,573 members were resettled in Mizoram.
- The process was stalled in 2011, 2012 and 2015 amid protests by Mizo NGOs.
- settled in Tripura also expressed fears for their security in Mizoram.
- In 1995, following a clash between Mizos and Brus, the Young Mizo Association and Mizo Students' Association demanded that Brus be removed from the state's electoral rolls, contending that the tribe was not indigenous to Mizoram.
- This led to an armed movement led by the militant outfit Bru National Liberation Front (BNLF), and a political one by the Bru National Union (BNU).

Challenges in addressing their issue:

- While a few families have accepted the package offered by the Centre and returned, but most of the internally displaced refugees have refused to budge unless they get a better deal.
- In the latest effort to repatriate the refugees, the authorities could manage to send only 40 families to Mizoram after the refugee leaders refused to return citing mainly security reasons in their home State.
- For a long time, helping the tribe return from relief camps to Manipur has been a task for the state government as well as the
- Brus began demanding relief on a par with that of Kashmiri Pandit and Sri Lankan Tamil refugees.





Nehru Memorial Museum and Library (NMML)

About:

- It is Located in the majestic Teen Murti
- It aims to foster academic research on modern and contemporary history
- NMML established in the memory of Jawaharlal Nehru is an autonomous institution under the Ministry of Culture

Context:

- Design for PMs' museum likely to be finalised
- The proposed museum will be located at Teen Murti Estate, the former residence of late Prime Minister Jawaharlal Nehru that houses the NMML today, and will include exhibits on all Prime Ministers of India.

Is it right to turn NMML into a museum for PMs?

Yes

- The NMML and Teen Murti house the library and other related units, all established after Nehru's death.
- A substantial portion of the Teen Murti Estate has been diverted to other public uses
- Teen Murti was selected in 1948 as the residence of the PM, not of Nehru.
- So the claim that introducing other PMs, and making provision for future ones, would detract from Nehru's legacy does not stand scrutiny, and does not do justice to Nehru himself.
- The Nehru Memorial Museum and Library (NMML) is focused more on India's freedom struggle than Nehru's life.
- The NMML is famous globally because its library, and manuscript reprography sections house the best collection of journals, books, photos and personal papers of individuals and institutions. It is invaluable to researchers on modern and contemporary Indian history.

No

- Lal Bahadur Shastri was offered the opportunity to move into Teen Murti Bhavan, which was where Nehru lived throughout his prime ministerial years, he declined as a mark of respect, and set in motion the process of converting it into a memorial to Nehru.
- It was built with an explicit aim of honoring India's first Prime Minister and the national movement. So any idea of bringing in other PM's will belittle the legacy of India's most impactful Prime Minister Nehru and his journey for India's Independence

It's complicated

- The museum tells the story of the freedom **struggle** through a display of documents since the late 19th century till 1950.
- Therefore, any symbolism notwithstanding, substantively NMML is not about Nehru. All the four components — library, archive, research centre and the museum — have their own dynamism and relevance, which go far beyond any individual. All the four components need to grow.
- It is a vibrant research institution. A large number of fellowships were offered to young and senior scholars to work on a various social science themes.
- The NMML became perhaps the best repository of research documents on the British period of India's history, consisting of government records, newspapers, private collections of important individuals and papers of political parties.





BAUL MUSIC

- The lyrics and music are soul searching, quite comparable to the genre of Sufi music.
- In 2005, the Baul tradition of Bangladesh was included in the list of Masterpieces of the Oral and Intangible Heritage of Humanity by UNESCO.
- A three day long festival of Baul songs named Indo-Bangla Baul Music Festival concluded in Dhaka which was organised to observe the 129th death anniversary of Baul saint Fakir Lalon Shah.
- Baul Music is a form of folk music, unique to Bangladesh and West Bengal of India.
- The word Baul means "afflicted with the wind disease" and the Baul singers are traditionally wandering minstrels singing their particular form of folk music.







KHON RAMLILA

- The Culture Department of Uttar Pradesh government is going to organise the country's first training and performance programme of world famous KHON Ramlila in collaboration with Thailand government.
- KHON Ramlila is a masked form of Ramlila art of Thailand.
- It is a form of masked dance depicting the scenes of Ramlila. It has no dialogues and background voices narrate the whole story of Ramayana. It is also famous for its beautiful attire and golden masks.
- It is included in the list of UNESCO's Intangible cultural heritage.
- The **Ramakien** (literally 'Glory of Rama') is Thailand's national epic, derived from the Hindu epic Ramayana.







PettaThullal

- A study by the Kerala State Pollution Control Board (PCB) has pointed to the presence of hazardous metals, including lead, arsenic, and cadmium, in this powder.
- Besides causing skin troubles, it pollutes the soil and often gets washed into the waterbodies where the chances of these potent chemicals entering the human body are very high
- Plans are afoot to promote organic varieties of the brightly coloured powder as an alternative to chemical powder.
- PettaThullal, the ritualistic sacred dance to celebrate the victory of good over evil in the legend of Lord Ayyappa who killed the demon princess Mahishi, which denotes the beginning of the last leg of the annual Sabarimala pilgrimage season.
- Blanket ban has been mooted on chemical powder, the bespattering of which constitutes an indispensable part of the PettaThullal ritual.





Col. Chewang Rinchen Setu

About

- From Siachen Base Camp to Kumar Post, the entire area has been opened for tourism purposes
- There is already an army-facilitated civilian trek from the Siachen Base Camp to the Kumar post located at about 15,500 feet. While it was supposed to be annual, it was cancelled on several occasions due to weather and border tensions.
- The Siachen glacier is "now open" for tourists and tourism, after government inaugurated strategically important bridge on the Shyok river in Eastern Ladakh.
- The 'Col. Chewang Rinchen Setu' was constructed by the **Border** Organisation (BRO) at an altitude of 14,650 feet in the forward area of Ladakh region
- This bridge has been completed in record time. It will not only provide all-weather connectivity in the region but also be a strategic asset in the border areas,

More:

- Colonel Chewang Rinchen (1931 1997) was a highly decorated officer in the Indian Army from the Ladakh region. He was one of only six Indian service personnel to have twice won the Maha Vir Chakra (MVC), the second highest Indian gallantry decoration.
- Functioning under the control the Ministry of Defence since 2015, the BRO is engaged in road construction to provide connectivity to difficult and inaccessible regions in the border areas of the country.
- The highly-skilled **BRO** personnel undertook and successfully completed construction of the Delaram-Zarani Highway in Afghanistan in 2008.







A.P. likely had a flourishing port 2,000 years ago

- A four-armed 2-metre tall sculpture of Vishnu was unearthed at the site that can be dated back to the Pallava period (8th Century CE), looking at its features like head gear and drapery.
- The excavation also unearthed a series of broken terracotta pipes that fit into each other, pointing towards a form of drainage.
- ASI had excavated about 10% of the site and would start on the second round of excavations in November or December, when more evidence was likely to be unearthed.
- The first round of excavation at the site near the banks of the Swarnamukhi river in Andhra Pradesh's Gottiprolu, about 80 km from Tirupati and Nellore, unearthed a huge settlement surrounded by a brick enclosure (fortified settlement)
- A maritime trade centre based out of a fortified settlement may have had a trade guild with its own army to protect its around 2,000 years according to Archaeological Survey of India officials involved in the excavation of the site.
- The excavation unearthed brick-built structures in elliptical, circular and rectangular shapes. The size of bricks (43 to 48 cm) can be compared to those in Satavahana/Ikshvaku structures in the Krishna valley, according to the ASI. This means the site may date back to 2nd century to 1st century BCE.







Second round of Smart Cities, AMRUT may roll out in 2020

About:

- 35% The remaining of the urban population will be covered under the AMRUT-2.
- The Smart Cities Mission covers 100 cities with a total population of 9,96,30,069 with projects worth a ₹2,05,018 crore and is a project designed till 2022
- AMRUT, a five-year scheme, started in June 2015. Many of its water and sewage management projects would get completed towards the end of the scheme — June 2020
- In AMRUT scheme, there were 500 cities and the criteria was a population of 1,00,000, which gave a coverage of nearly 65% of urban population.

Atal Mission for Rejuvenation and **Urban Transformation (AMRUT)**

- AMRUT adopts a project approach to basic infrastructure relating to water supply, sewerage, storm water drains, transport and development of green spaces and parks with special provision for meeting the needs of children.
- Implementation of this mission be linked to promotion of urban reforms such e-governance, as constitution of professional municipal cadre, devolving funds and functions to urban local bodies, review of building byelaws, improvement in assessment and collection of municipal taxes, credit rating of urban local bodies, energy and water audit and citizen-centric urban **planning** in cities other than the 100 smart cities.
- Under this project, 10% of the budget allocation will be given to states/union territories as incentive based on achievement of reforms during previous year

Smart city Mission

- Launched on 25 June 2015, Smart Cities Mission's objective is to strengthen urban infrastructure through application of smart solutions and provide a better quality of life to citizens.
- This will be implemented through an 'area based' approach consisting of retrofitting, redevelopment, pan-city initiatives and development of new cities.
- Under retrofitting, deficiencies in an identified area will be addressed through necessary interventions. Pan-city components could be interventions like Intelligent **Transport Solutions**that benefits all residents by reducing the commuting time.
- Smart city aspirants will be selected through a process of competition and with effective citizen participation ending the 'top down' approachand leading to 'people centric' urban development.







IK ONKAR

- In a unique gesture to mark 550th birth anniversary of Sri Guru Nanak Dev ji, Air India has depicted Sikh religious symbol 'Ik Onkar' on the tail of one of its aircraft.
- The national carrier has put the symbol on its Boeing 787 aircraft which will fly on October 31 from Amritsar to Stansted, UK.
- Ek Onkar means "God is One". The symbol is an emblem of the Sikh religion and is found on Gurdwaras (Sikh temples) around the world.
- The gesture is unique as the national carrier has never depicted any religious symbol on its planes







Kyarr

- Indian Ocean Dipole, a natural climate pattern, has given a boost to tropical cyclones in the western portion of the basin this year. It's currently in a positive phase, which creates a warm reservoir of water in the Arabian Sea and elsewhere. Cyclones feed off of this warm water, and it generally spurs more areas of thunderstorms that can be spun up into cyclones.
- It has been a landmark year for cyclones in the North Indian Ocean. In fact, it has been the **Indian Ocean's most energetic cyclone season** on record.
- Thus far, 2019 Accumulated Cyclone Energy, or "ACE," has hit 53.9 units. ACE is a measure of how much kinetic energy a cyclone is dishing out through its winds. The average year-to-date ACE for the North Indian Ocean is no more than 10 units. the previous seasonal record was 46.1 ACE units in 2007.
- Supercyclone 'Kyarr' in the Arabian Sea has moved westwards and away from India's coast,
- Heavy Rainfall to very heavy rainfall very likely in Kerala & Mahe is expected.
- With raging wind speeds of 220-230 kmph gusting to 250 kmph, the Category-4
 Kyarr is thought to be the biggest Arabian
 Sea storm in at least a decade.







Two-child policy

- All India United Democratic Front (AIUDF) political party in Assam- has opposed the Assam government's two-child policy for job eligibility
- In September 2017, the Assam Assembly had passed the 'Population and Women Empowerment Policy of Assam' that specified that job candidates with two children only would be eligible for government employment and the existing government staff were to strictly follow the two children family norm
- The policy will come into effect from January 1st, 2021







Modern Humans came from Botswana

- Modern humans emerged 2,00,000 years ago in a region of northern Botswana, scientists have found.
- While it has long been known that modern humans — Homo sapiens — originated in Africa, scientists have until now been unable to pinpoint the precise location of our species' birthplace.
- A team analysed DNA samples from 200 Khoesan people to arrive at the conclusion.







Bhaona

About:

- Assamese Bhaona to make an English debut in Abu Dhabi
- Bhaona a mythology-based theatrical performance a 500-year old traditional Assamese art form propagated by Vaishnavite saint and reformer Sankardeva.
- It is for the first time that Bhaona would be presented in English for an international audienceto popularise the Vaishnava theatrical performance for global art connoisseurs, and familiarise them with Assamese culture and traditions
- Sankardeva needed to connect with his Assamese masses, who did not expect the divine characters of his plays to speak in the common man's language. So he created the Brajavali, a literary language limited to theatrical usage

More

- Sattriya is one of the eight Indian Classical dance traditions. The dance was introduced in 15th Century by a great Vaishnava Saint MahapurushShankardev in Assam.
- It was primarily a **monastery dance** and later on evolved as a distinctive dance form and spread across Assam.
- It has been for centuries, nurtured and preserved with great commitment by the **Sattras i.e. Vaishnava maths or monasteries**. Because of its religious character and association with the Sattras, this dance style has been aptly named Sattriya.





Chhath puja

- The word chhath means sixth and the festival is celebrated on the sixth day of the month Kartika of the Hindu lunar Bikram Sambat calendar.
- They rituals include holy bathing, fasting, standing in water for long periods of time, and offering prayers and food to the setting and rising sun.
- The festival is observed most elaborately in Mithila Province of Nepal, Terai-Madhesh region of Nepal, Indian states of Bihar, Jharkhand and UP.
- 400 junior policemen in Bihar's Samastipur district, a pledge of honesty is part of the application form for leave to perform Chhath puja.
- Chhath is a Hindu festival dedicated to the Sun god and his wife Usha in order to thank them for bestowing the bounties of life on earth.







Amaravati start-up area pact cancelled

About:

- A.Pgovernment's agreement Singapore consortium for the development of Amaravati start-up area has been cancelled with mutual consent
- The reason given by government is that the Singapore consortium was unable to give a satisfactory explanation to doubts on the financial sustainability of the project when it was asked to reveal its exact plans.
- A.P. government had formed Amaravati Development Partners with the Singapore consortium for the development of a startup area of nearly 1,692 acres over a period of 20 years.
- The bidding was conducted in the Swiss Challenge method in accordance with A.P. Infrastructure Development Enabling Act, 2001.

About Swiss Challenge

- It is a method of bidding, often used in public projects, in which an interested party initiates a proposal for a contract or the bid for a project.
- The government then puts the details of the project out in the public and invites proposals from others interested in executing it. On the receipt of these bids, the original contractor gets an opportunity to match the best bid.
- The Swiss Challenge allows a seller to mix-and-match the features of both an open auction and a closed tender to discover the best price for an asset.
- The method also has other uses. In its original form, a Swiss Challenge allows an infrastructure developer to come up with a suo motu proposal for a new project without waiting for the government to call for bids. This can foster innovation, as contractors or developers may initiate projects that the powers-that-be didn't even think of.









Aspire () IAS The name associated with excellence

9999801394, 8010068998





Kerala on top place in SEQI

About

NITI Aayog, Ministry of Human Resource Development and the World Bank, alongside sectoral experts have released the report, titled 'The Success of Our Schools-School Education Quality Index' (SEQI). It is based on indexing of states and Union Territories on the learning outcomes for school-going children.

Details:

- Among smaller States, Manipur emerged as the **best performer**.
- Among 20 large States, Kerala was the best performer with a score of 76.6%, while Uttar Pradesh came in last with a score of 36.4%.
- Chandigarh topped the list of Union Territories.
- Rajasthan and Karnataka clinched the top second and third spots in the overall performance rankings.
- Haryana, Assam and Uttar Pradesh showed the most improvement in their performance in 2016-17, in comparison to the base year of 2015-16.
 - o Haryana had the best infrastructure and facilities.
 - Tamil Nadu was the top performer in access and equity outcomes.
 - led Karnataka in learning outcomes.

Importance of the study:

A credible system of assessment in this regard is crucial to design necessary remedial actions. The index aims to bring an outcomes focus to education policy by providing States and UTs with a platform to identify their strengths and weaknesses and undertake requisite course corrections or policy interventions.

In line with NITI Aayog's mandate to foster the spirit of competitive and cooperative federalism, the index strives to facilitate

the sharing of knowledge and best practices across States and UTs.

The index recognises that school education is a subject on the Concurrent List and that Statelevel leadership is crucial for improving **outcomes** in a cost-effective manner.

School Education Quality Index:

- The School Education Quality Index assesses States on the basis of learning equity access. and outcomes. infrastructure and facilities, using survey data, self-reported data from States and third-party verification.
- The School **Education Ouality Index (SEQI)** was developed to evaluate the performance of States and Union Territories (UTs) in the **school education**
- SEOI is based on a set of indicators that measure the **overall effectiveness**, quality and efficiency of the Indian school education system.
- Developed through a collaborative process including key stakeholders such as MHRD, the World Bank and sector experts, the index consists of 30 critical indicators that assess the delivery of quality education.

Concerns:

- The findings point out **huge differences in** the quality of school education across the country.
- West Bengal refused to participate in the evaluation process and has not been included in the rankings.





of infiltration by terrorists from across

<u>Development In Kashmir – A Hope For Peace</u>

About

The Jammu & Kashmir administration has announced **polls to 316 Block Development Councils** (BDC) in the State.

Details:

The announcement is seen as the next step to **devolution of power**.

The successful conduct of **Panchayat polls in 2018**, except in certain pockets of south Kashmir **had two positive spin-offs**.

The first was the unlocking of ₹2,700 crore worth of funds for Panchayats, awarded to the State under the 14th Finance Commission, that could not be disbursed earlier as there had been no local body polls in the State since 2010.

The second spin-off is related more to what the government wishes to accomplish in J&K, namely real devolution, empowering local bodies and bringing the administration to the grassroots.

- The government believes that holding BDC polls will provide a second layer of political leadership in the State.
- The government also hopes that these Panchayat leaders could form a level of leadership that could provide a political alternative to the current political parties and their leaders who are believed to have a vested interest in the perpetuation of a conflict economy in Jammu & Kashmir.
- Considering the fact that political activity at the Assembly level — the Jammu & Kashmir Assembly has been under suspended animation since 2018, this could help reach development programmes to the grassroots levels.
- The hope is that with money being available to elected Panchayat leaders, grassroots level development will see a fillip.
- It is opined that the upcoming winter months will see a **natural trough in levels**

the border, as the high mountain passes will be snowed over. To have some **representative body at this time**, is the biggest hope for peace.

Concerns:

- The State is currently undergoing a widespread communications clampdown.
- Panchayat polls conducted in December 2018, were boycotted by the two big regional parties the National Conference and the People's Democratic Party.
- According to figures released by the Jammu & Kashmir government itself, in the Panchayat polls of 2018 itself, there are certain Panchayats that are vacant, nearly 12,776 of them.
- Most of the **political class in the state is behind bars**.

Aspire (1) IAS

he name associated with excellence





Easy to PICK - "UPSC Monthly Magazine" October - 2019 minister Dr. B.R. Ambedkar.

Election Commission Order on Skkim CM's Disqualification

About

Sikkim CM Prem Singh was found guilty of misappropriation of government funds in a cow distribution scheme while he was the minister of animal husbandry in the 1990s.A case was registered in 2003 under the Prevention of Corruption Act. Sikkim CM Prem Singh Tamang's disqualification period of 6 years, which began on August 10, 2018, was to end on August 10, 2024 Tamang's SKM party won the assembly elections held in April, took over as CM in May. He has to contest assembly polls within six months of becoming the chief minister to hold the office. Tamang had requested the poll panel to waive his disqualification period under Section 11 of the Representation of the People Act. The EC reduced Sikkim chief minister Prem Singh Tamang's disqualification period by almost five years under a provision of the electoral law, paving the way for him to contest the state assembly elections.

What EC Savs

The legislature has, in its wisdom, deemed it necessary to vest this Commission with this power with the understanding that socio-economicpolitical factors may, in certain peculiar warrant circumstances, that the disqualification prescribed by statutory rule should be removed/reduced by exercising this extraordinary power."

The Representation of the People Act, 1951

- Article 327 of Indian Constitution
- For the conduct of election of the Houses of Parliament and to the House or Houses of the Legislature of each State,
- The qualifications and disqualifications for membership of those Houses,
- the corrupt practices and other offences at or in connection with such elections
- It was introduced in Parliament by law

The Prevention of Corruption Amendment Act 2018

The Bill incorporates the recommendations given by the 20th Law Commission headed by Justice (retd) AP Shah in its 254th Report.

- The Bill makes bribing a punishable offence.
- It redefines provisions related to criminal misconduct.
- It makes mandatory for taking prior approval of relevant Government or competent authority to conduct any investigation into offence.
- It modifies definitions and penalties for offences related to taking bribe, being habitual offender and abetting offence.

Criticisms:

Morally wrong and a dangerous precedent that may end up reversing the trend towards decriminalising politics. Tamang convicted under the Prevention of Corruption Act for and his one-year prison term was upheld by the High Court and the Supreme Court. Disqualification from contest is a civil disability created by electoral law to keep those convicted by criminal courts from entering elected offices. EC decision also goes against the grain of a series of legislative and judicial measures to strengthen the legal framework against corruption in recent years.(apex court has described corruption as a serious malady and one impinging on the economy.)

Conclusion:

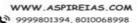
The EC is already battling a perception that its actions are partisan and this action is bound to further strain its credibility.



The name associated with excellence

Office No - 5, Below Ground Floor, Apsara Arcade Building,
Near Karol Bagh Metro Station, New Delhi - 110060

WWW.ASPIREIAS.COM
9999801394, 8010068998







• Today, we have 43% of the people sitting in the Lok Sabha with pending criminal cases. Do you think the EC's act of removing the disqualification of a convict is morally wrong and a dangerous precedent that may end up reversing the trend towards decriminalising politics? Elucidate.



U.S. warns partners of sanctions risk

About:

The U.S. officials have warned India that with the decision to go ahead with the purchase of the Russian S-400 missile defence system, India may risk sanctions.

History

- U.S. officials government have repeatedly asserted, in the Indian context, that countries should not assume that waivers are automatic.
- Sanctions could kick in when the first payment for the equipment made unless the U.S. President grants a waiver.
- India had agreed purchase to the surface-to-air missile system (S-400 missile defence system) from Russia in 2018 for about \$5.2 billion, risking sanctions under the 2017 U.S. CAATSA law.

Details:

- The S-400 'Triumf' is the most advanced long-range air defense missile system that went into service in Russia in 2007.
- It is designed to destroy aircraft, cruise and ballistic missiles. including medium-range missiles, and can also be used against ground installations.
- The S-400 can engage targets at a distance of 400 km and at an altitude of up to 30 km.
- Russia has also signed the contracts for delivery of these with **China** (the first customer) and Turkey.
- The U.S. has urged all their partners to forgo transactions with Russia that risk triggering sanctions under

Countering the America's **Adversaries Through Sanctions Act** (CAATSA).

CAATSA:

- CAATSA, Enacted on August 2, 2017, aims to counter the aggression by Russia and North Iran. Korea through punitive measures.
- The Act deals with sanctions on Russian interests such as its oil and gas industry, defence and security sector. and financial institutions, in the backdrop of its military intervention in Ukraine and its alleged meddling in the 2016 US Presidential elections.
- The Act empowers the US President to impose at least five of the 12 listed sanctions on persons engaged in a "significant transaction" with Russian defence and intelligence sectors.
- Two of the most stringent of these sanctions are the export licence restriction by which the US President is authorised to suspend export licences related to munitions, dualuse and nuclear-related items; and the ban on American investment in equity/debt of the sanctioned person.

The extent to which CAATSA would affect Indo-US defence relations will depend on what sanctions, if any, Washington decides to impose on New Delhi in view of India's continued defence cooperation with Russia.







Launch of 'Mo Sarkar'

About punishment.

The Odisha government has launched a new governance initiative 'Mo Sarkar' on the occasion of Gandhi Jayanti.

What is Mo Sarkar?

- "Mo Sarkar" literally translates to "My Government".
- Under the programme, feedback will be collected on government officers from public.
- The ministers would dial common citizens to seek feedback on the kind of response they get during recent visits to police stations and district headquarters hospitals (DHH).
- All of these government officers will then be graded on the basis of feedback received from people.
- The state government will collect feedback on the behaviour and professionalism of government officers. The government employees will be incentivised or action will be taken against them, based on the feedbacks.

Details:

- The "Mo Sarkar" initiative is an important transformative move under the 5T programme introduced by Chief Minister of Odisha.
- The 5Ts aim at achieving progress through Transparency, Teamwork, Time Technology. and Transformation.
- This is the first such type of programme in the country.
- Any government employee found guilty of misbehaviour or any other wrongdoing will face strict







Launch of Inter-State portability for ration cards

About:

Inter-State portability for ration cards has been launched for Rajasthan and Haryana to facilitate the distribution of foodgrains to beneficiaries of the National Food Security scheme.

One Nation, One Ration card Scheme:

- The 'One nation. One ration card' scheme will make sure that a beneficiary is able to avail the Public Distribution System (PDS) – no matter which part of the country, beneficiary may be in.
- Under the scheme, the food ministry will create a central depository of all the ration cards, which would help in **eliminating duplication**.
- At present, over 75% of Fair Price Shops have been equipped electronic PoS devices.
- Under the scheme, various issues pertaining to efficient implementation of the National Food Security Act, endto-end computerisation, transparency and distribution storage foodgrains, and synergising of all FCI, CWC and SWC depots with the Depot Online System (DOS) would be addressed

Benefits of the Scheme

- The scheme aims to ensure that all beneficiaries can access PDS across the nation from any shop of their choice.
- The biggest beneficiary of this would be migrant labourers who move to other states to seek better job opportunities.
- The scheme would provide freedom to

- the beneficiaries as they will not be tied to any one PDS shop and reduce their dependence on shop owners.
- The objective is to ensure that this is implemented nationally in a timebound manner.
- The process also aims to do away with manual recordings of transactions, thereby ensuring clarity of record keeping.



Jagan launches Village Secretariat system in Andhra Pradesh

About:

Andhra Pradesh has become a role model for other states by setting up village and ward secretariats.

Details:

- the Under Village Secretariat 1.26 programme, lakh new government employees will begin working.
- It is major step decentralisation towards of administration.
- These institutions would act a bridge between the government and the people by rendering over 500 types of services at their doorstep.
- It is opined that the bribing culture prevalent, to get ration cards or pensions or to avail any welfare scheme would be a thing of the past when the village and ward secretariats start functioning in a full-fledged manner from January 1, 2020.
- The idea behind them is to ensure that govt's services reach people on the ground and also to strengthen the existing Panchayat Raj system

Issue:

- The system is in complete contrast to the earlier trajectory of the state, which had been pushing for e-governance or online services instead under the former chief minister.
- The previous government had launched the e-Pragati platform, bringing many of the state government's services online. in partnership with Consultancy.
- The e-Pragati programme enabled citizens to avail over 745 services from

- 34 departments and 336 autonomous organizations of the AP government online.
- Prior to that in 2017, Real Time Government Service at the state secretariat at Amaravati was started. It was launched with the Real Time Governance Society as its functional arm, which directly reported to the then chief minister.



Cabinet approves Bill to set up 'India's first' Sports University

About:

The Delhi Cabinet has approved a bill to set up "India's first" Sports University in Delhi.

Details:

- The Delhi Sports University (DSU) is proposed to be set up as a State university and it will have a fullfledged Delhi Sports School, affiliated to the CBSE, for imparting education with emphasis on sports and to groom the students for a career in sports.
- To ensure that such sportspersons are also equipped in educational and literary skills, the Centre shall besides training towards sporting excellence, have provisions facilities for liberal academics to ensure that the trainees sportspersons also obtain formal academic degrees from Delhi Sports University depending on their sporting talents.
- The **Sports** Delhi University Bill' approved by the Cabinet, grants the university the right to establish constituent schools and colleges.
- The sports university will offer graduation, postgraduation and doctorate degrees in cricket, football, and hockey among other sports.
- The Chancellor of the Delhi Sports University will be the **Governor**.
- **Vice-Chancellor** The would a sportsperson of inter-national eminence with administrative experience national-level in a institution.

- It is a matter of disappointment that many students who have played sports at the national-level are nowhere on the same platform as students with a graduation degree.
- The share of **jobs** under **sports quota** is also **limited**.
- Most of the students have compromise their sports to keep up with their performance in their main subjects.
- Various gaps exist in the national sports environment like sports technology, management and high performance training.

Conclusion:

The move is aimed at **promoting sports in the** city. With the establishment of the Sports University, there is hope that **uncertainty** from the minds of sportspersons can be eradicated. Apart from being a solid back-up in the careers of students interested in sports, proposal will also ensure sportspersons get much-needed respect and dignity to pursue their dreams.

National Sports University Bill, 2018:

- The bill has been passed by both **Lok** Sabha and Rajya Sabha.
- The Bill seeks to establish a National Sports University in **Manipur**.
- National Sports University (NSU), Manipur established in the year 2018, by the Ministry of Youth Affairs and Sports if the first National Sports University in India.
- The National Sports University Bill, **2018** was introduced in Lok Sabha by Minister of Youth Affairs and Sports on July 23, 2018.

Concerns:









- It replaces the National Sports University Ordinance, 2018 that was promulgated on May 31, 2018.
- The university is recognized by the University Grants Commission (UGC).
- NSU offers undergraduate, postgraduate, and doctoral programs in the field of sports and physical education.



Indo-Chinese educational tie-ups

About:

University Grants Commission has issued new guidelines to educational institutions that wish to sign agreements with the Chinese counterparts.

Details:

- The guidelines make it mandatory for educational institutions that plan to collaborate with Chinese counterparts to get clearance from the Ministries of Home and External Affairs before signing any agreements or undertaking student faculty exchange and programmes.
- The UGC letter added that those universities including private universities that have already entered into MoUs must seek clearance from the Home ministry for operating the MoU. Until the clearance is obtained. further activities should performed under the MoU, the letter warned.
- The new guidelines would also apply to existing tie-ups.
- The Centre's directive comes just of Chinese President Jinping's visit to India to hold an informal summit with Prime Minister Narendra Modi.
- A number of Indian universities already have faculty and student exchange programmes, apart from Chinese language centres run in collaboration with universities in China.

India-China Co-operation in the field of education:

Chinese students were also granted scholarships to study Hindi in India.

- India and China signed an umbrella educational agreement for cooperation in 2006, under which government scholarships are awarded to 25 students, by both sides, in recognised institutions of higher learning in each other's country.
- During Prime Minister Narendra Modi's visit to Beijing in May 2015, both countries signed an Education Exchange expanded which Programme agreement provides for enhanced cooperation in the field of vocational education and higher learning.





Nitagat law

Nitagat Law:

- Nitagat is a Saudization program introduced by the Saudi Ministry of Labour.
- Enacted in 2011, the Nitagat law makes it mandatory for all businesses in the private sector to reserve at least 10 percent of jobs for Saudi nationals.
 - The Nitagat law makes it mandatory for local companies to hire one Saudi national for every 10 migrant workers.
- Based on their level of compliance, establishments are categorized into Blue, Green, Yellow and Red groups
 - Blue and Green businesses having the highest localization ratios.
 - Blue and Green establishments rewarded for compliance
 - Yellow falling the in intermediate range
 - Yellow given more time to implement the changes
 - Red the least compliant.
 - companies in the Red zone are under pressure to comply
 - Therefore, the 'Nitagat' law aims to gradually replace the existing expatriate workers with Saudi workers by processes involving quotas and threats punishment and tackles the issue of rising unemployment among Saudi nationals.

category after thev failed implement the Nitagat. Around 600 employees have been in labour languishing camps Dammam without food, medicine, or

+**---left in dire straits as their

companies, mostly in the construction sector, were listed in the 'Red'

Details

wages.

- The employees had submitted a written complaint to Saudi Labour Court with the support of the Indian Embassy help desk and the verdict was in favour of
- But the company was not taking any step to execute the judgement
- Therefore the Union government should take up the issue in the diplomatic-level with the Saudi Ministry to take urgent steps to bring these workers home

About:

These workers, many of them working in Saudi Arabia for 5 to 30 years, were

Aspire@IAS





Citizenship amendment bill

About:

- Citizenship signifies the relationship between individual and state. It begins and ends with state and law, and is thus about the state, not people. Citizenship is an idea of exclusion as it excludes non-citizens.
- There are two well-known principles for grant of citizenship. While jus soli confers citizenship on the basis of place of birth, jus sanguinis gives recognition to blood ties. From the time of the Motilal Nehru Committee (1928), the Indian leadership was in favour of the enlightened concept of jus soli. The racial idea of jus sanguis was rejected by the Constituent Assembly as it was against the Indian ethos.
- Unlike other provisions Constitution, which came into being on January 26, 1950, these articles were enforced on November 26, 1949 itself, when the Constitution was adopted. However, Article 11 itself confers wide powers on Parliament by laying down "nothing in the foregoing provisions shall derogate from the power of Parliament to make any provision with respect acquisition and termination of citizenship and all matters relating to citizenship". Thus Parliament can go against the citizenship provisions of the Constitution.
- The Citizenship Act, 1955 was passed and has been amended four times — in 1986, 2003, 2005, and 2015. The Act empowers the government to determine the citizenship of persons in whose case it is in doubt.
- However, over the decades, Parliament has narrowed down the wider and

- universal principles of citizenship based on the fact of birth. Moreover, the Foreigners Act places a heavy burden on the individual to prove that he is not a foreigner.
- Citizenship is in the Union List under the Constitution and thus under the exclusive jurisdiction of Parliament.
- The Constitution does not define the term 'citizen' but gives, in Articles 5 to 11, details of various categories of persons who are entitled to citizenship.

citizen of India?

- **Article 5**: It provided for citizenship on commencement of the Constitution. All those domiciled and born in India were given citizenship. Even those who were domiciled but not born in India, but either of whose parents was born in citizens. India. considered were Anyone who had been an ordinary resident for more than five years, too, was entitled to apply for citizenship.
- **Article 6:** Since Independence was preceded by Partition and migration, Article 6 laid down that anyone who migrated to India before July 19, 1949, would automatically become an Indian citizen if either of his parents or grandparents was born in India. But those who entered India after this date needed to register themselves.
- **Article 7:** Even those who had migrated to Pakistan after March 1, 1947 but subsequently returned on resettlement permits were included within the citizenship net. The law was more sympathetic to those migrated from Pakistan and called them





refugees than to those who, in a state of confusion, were stranded in Pakistan or went there but decided to return soon.

- **Article 8:** Any Person of Indian Origin residing outside India who, or either of whose parents or grandparents, was born in India could register himself or herself as ab Indian citizen with Indian Diplomatic Mission.
- 1986 amendment: Unlike the constitutional provision and original Citizenship Act that gave citizenship on the principle of jus soli to everyone born in India, the 1986 amendment to Section 3 was less inclusive as it added the condition that those who were born in India on or after January 26, 1950 but before July 1, 1987, shall be Indian citizen. Those born after July 1, 1987 and before December 4, 2003, in addition to one's own birth in India, can get citizenship only if either of his parents was an Indian citizen at the time of birth.
- 2003 amendment: The then NDA government made the above condition more stringent, keeping in view infiltration from Bangladesh. Now the law requires that for those born on or after December 4, 2004, in addition to the fact of their own birth, both parents should be Indian citizens or one parent must be Indian citizen and other should not be an illegal migrant. With these restrictive amendments, India almost moved towards the narrow principle of jus sanguinis or blood relationship. This lays down that an illegal migrant cannot claim citizenship by naturalisation or registration even if he has been a resident of India for seven years.
- Citizenship (Amendment) Bill: The amendment proposes members of six communities

Hindus, Sikhs, Buddhists, Jains, Parsis Pakistan. and Christians from Bangladesh and Afghanistan — to continue to live in India if they entered India before December 14, 2014. It also reduces the requirement for citizenship from 11 years out of the preceding 14 years, to just 6 years. Two notifications also exempted these migrants from the Passport Act and Foreigner Act. A large number of organisations in Assam protested against this Bill as it may grant citizenship to Bangladeshi Hindu illegal migrants

Implication:

If the government goes ahead with its plan of implementing a nation-wide National Register of Citizens, then those who find themselves excluded from it will be divided into two categories:

- (predominantly) Muslims, who will now be deemed illegal migrants,
- all others, who would have been deemed illegal migrants, but are now Citizenship immunised by the Amendment Bill, if they can show that their country of origin is Afghanistan, Bangladesh or Pakistan.

Criticism:

- Citizenship Amendment explicitly, and blatantly, seeks to enshrine religious discrimination into law, contrary to our long-standing, secular constitutional ethos.
- Lately, the Rohingya community in neighbouring Myanmar, another country, has been subjected prolonged persecution, ethnic cleansing, and potentially genocide. However, the government has been openly hostile towards the Rohingyas











and has even argued for their deportation before the Supreme Court.

- If the objective is the protection of minorities, then there is no explanation for why Jews and atheists (to take just two examples) have been left out.
- There are Muslim religious minorities within these countries who are subjected to grave and serious persecution: Ex: Ahmadis in Pakistan.
- The Bill, will be the first time that religion or ethnicity will be made the basis of citizenship. That would do grave damage to the very idea of India as an inclusive and diverse polity, where religion has no bearing on who can become a full member of society.

Hence it is religious discrimination, plain and simple.







INFORMAL SUMMITS

About:

- By definition, informal summits lack the pomp, protocol and ceremony of formal ones, including delegation-level talks and a pre-set agenda for discussions.
- No agreements are signed, and there is no joint statement or press conference. The two leaders involved hold one-to one discussions, sometimes with only translators present.
- Second Informal India-China Summit scheduled take place to in Mamallapuram, Tamil Nadu on October 11-12.
- The two countries convened their first Informal Summit in central China's Wuhan in April 2018.
- allows for quietly discussing contentious issues away from media glare and publicity.

About Mamallapuram

- It has been declared as a UNESCO World Heritage site.
- Some important structures include: Thirukadalmallai, Descent of the Ganges or Arjuna's Penance, Varaha Cave Temple, Krishna's Butterball, Shore temple and Pancha Rathas (Five Chariots).
- Mamallapuram is also known as Seven Pagodas or Mahabalipuram.
- It was one of two major port cities by the 7th century within the Pallava kingdom.





China's role in Bangladesh

About:

- The just-concluded visit (October 6) to India by Bangladesh's prime minister, Sheikh Hasina.
- Prime Minister Narendra Modi and Chinese President Xi Jinping to meet in two-day India-China informal summit
- The second informal summit between leaders of India and China is scheduled to take place in the coastal town of Mamallapuram, south of Chennai.(first was wuhan)

Wuhan summit:

- Prudence at the highest political level enabled the two nations to arrive at a modus-vivendi in Wuhan, though the long-festering territorial dispute and an unresolved 4,000 km-plus Line of Actual Control are tenaciously alive.
- The first informal summit between the two leaders was held at Wuhan in April 2018, necessitated by the earlier military stand-off between the Asian giants at Doklam.

History:

- Yet, with support from Russia, India achieved what may be described as a spectacular military victory — it liberated Dhaka and handed over power to Mujibur Rahman.
- In the run up to the 1971 Bangladesh war, the US and China, which had begun their own rapprochement, supported Pakistan, and were opposed to Indian assistance to the East Pakistan political leadership — symbolised by Sheikh Mujibur Rahman.

India – China – Bangladesh-Pakistan

- Beijing's response was to invest in Pakistan and, in the intervening decades, a deep and opaque Sino-Pak strategic and security relationship was nurtured
- This in turn emboldened Pakistan, to embark upon a proxy war against India (with terrorism as a tool) that began in 1990 and has continued to-date.
- Bangladesh is an active partner of the Xi Jinping-led BRI (Belt and Road Initiative).
- In the security sector, Bangladesh is also a major recipient of Chinese military inventory, including submarines.
- Indian military victory of 1971 led to a strategic reappraisal in Beijing about its democratic neighbour, whom it had militarily humiliated in October 1962.
- The seeds of the strategic-security anxiety in China about India were sown at that time.

Recent visit of Bangladesh \mathbf{PM} takeaways:

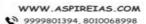
- Provides an instructive cue as to how the strategic ties between India and China have evolved and future lessons to be drawn from this bilateral relationship.
- Despite some missteps and hesitation, the bilateral is currently described as the "best ever" and a template for India's ties with its other neighbours

Way forward:

The maritime domain, and the Bay of Bengal in particular, with Dhaka as the coxswain, ought to be envisioned at Mamallapuram.











India's abiding regional strategic objective ought to be one which ensures that Bangladesh does not morph into a Pakistan, either by way of being compelled into choosing Beijing over Delhi; or nurturing radical Islamic ideologies domestically.



'Assam tea estates violating labour laws'

About:

- A report by Oxfam, a confederation of independent charitable organisations focussing on the alleviation of global poverty, has flagged violation of labour rights in the tea estates of Assam.
- Along with the Tata Institute of Social Sciences, Oxfam India had conducted the research that yielded the report 'Addressing the Human Cost of Assam Tea' through interviews with 510 workers in 50 tea estates of the State.

Concerns:

- Oxfam India's report has found tea plantation workers' poor conditions with no toilets, crumbling houses, poor wages, lack of quality health and education entitlements.
- The report noted that the Assam government's commitment to increasing the minimum wages of tea plantation workers to 351 met with hurdles of financial viability in the sector.
- Tea brands and supermarkets typically capture over two-thirds of the price paid by consumers for Assam tea in

- India with just 7% remaining for workers on tea estates.
- The researchers found that despite working for over 13 hours a day, workers earn between Rs.137-167.

Way forward:

- The tea workers' working and living conditions call for an urgent response.
- The consumers, supermarkets and brands must support the government's move to provide living wages to workers and to ensuring more of the price paid by the consumers trickle down to them.
- It hoped that the proposed **Occupational Health and Safety Bill** would help the struggling Assam tea industry.
- It is hoped that the provisions of the bill would be viable and at the same time "ensure fair living wages and decent working and living conditions for tea plantation workers and their families".

Brewing inequalities

Supermarkets and tea brands take a significant chunk of the end consumer prices, leaving little to pay workers. The table shows the share of the end consumer price required to enable a living wage for tea workers in Assam and in the different countries to which Assam tea is exported:

	Country	Supermarkets and tea brands (%)*	Workers (%)*	Share of end consumer price required by workers to enable a living wage (%)
	India	58.2	7.2	18.7
	U.S.	93.3	0.8	2.1
	Germany	87.5	1.3	3.4
	Netherlands	83.7	2.9	7.6
	U.K.	76.1	4	10.4
	SOURCE: STUDY OF ASSAM TEA VALUE CHAINS, 2019			*END CONSUMER PRICES TAKEN

Office No - 5, Below Ground Floor, Apsara Arcade Building, Near Karol Bagh Metro Station, New Delhi - 110060

WWW.ASPIREIAS.COM 9999801394, 8010068998





Occupational Safety, Health and Working Conditions Bill, 2019:

- The Code repeals and replaces 13 labour laws relating to safety, health and working conditions.
- The central and state governments will set up Occupational Safety and Health Advisory Boards at the national and state level, respectively. These Boards will advise the central and state governments on the standards, rules, and regulations to be framed under the Code.
- The Code applies to establishments employing at least 10 workers, and to all mines and docks.
- It does not apply to apprentices.
- Further, it makes special provisions for certain types of establishments and classes of employees, such as factories, mines, and building and construction workers.
- The Code specifies several duties of employers. These include:
- (i) Providing a workplace that is free from hazards that may cause injury or diseases, and (ii) Providing free annual health examinations to employees, as prescribed. In case of an accident at the workplace that leads to death or serious bodily injury of an employee, the employer must inform the relevant authorities.
 - Work hours for different classes of establishment and employees will be provided as per the rules prescribed by the central or state government. For overtime work, the worker must be paid twice the rate of daily wages.
 - No employee may work for more than six days a week. However, exceptions may be provided for motor transport workers.







SURAKSHIT MATRITVA AASHWASAN (SUMAN)

About:

- Under it, pregnant women, mothers up to 6 months after delivery, and all sick newborns will be able to avail free healthcare benefits.
- The government will also provide **free** transport from home to health institutions.
- The pregnant women will have a zero expense delivery and C-section facility in case of complications at public health facilities.
- Union Minister for Health along with several State Health Ministers launched **SUMAN** initiative for Zero Preventable Maternal and Newborn Deaths.
- initiative aims at The assuring dignified, respectful and quality health care at no cost and zero tolerance for denial of services for every woman and newborn visiting the public health facility in order to end all preventable maternal and newborn deaths.





Modi and Xi discuss investment, unbalanced trade

About:

Chinese president Xi Jinping Mamallapuram (a town famously associated with Pallava rulers) for an informal summit with Indian Prime Minister Narendra Modi.

Historical Perspective:

- In Wuhan, Prime Minister Modi and President Xi discussed a range of subjects, including the India-China boundary question, bilateral trade and investment, terrorism, economic development and global peace, and reached a "broad consensus".
- The Wuhan Summit achieved a "re-set" of the Sino-Indian relationship after the two-month long border standoff at the India-China-Bhutan trijunction Doklam.
- In April 2018, the first summit took place in Wuhan in the wake of the **Doklam crisis**.
- The present meeting is a two-day informal summit. being following China's strong reaction to the Indian government's decision on Article 370 and the bifurcation of Jammu & Kashmir.

Informal Summit:

- Informal Summits allow discussion on wide-ranging issues, they are not particularly purpose-specific, and are sometimes considered to play bigger roles in diplomatic dialogue than formal exchanges.
- Informal **Summits** act supplementary exchanges annual Summits and other formal exchanges such as the G20 Summit, EU-India Summit and the BRICS

Summit among others, and allow for "direct, free and candid exchange of views" between countries, something that may not be possible to do through bilateral and multilateral formal meetings that are agenda driven, where specific issues are discussed, and outcomes are more concretely defined.

- Informal Summits may not take place on a fixed annual or biennial schedule; they are impromptu in the sense that they take place when a need for them is perceived by the concerned nations.
 - For instance. the intergovernmental organisation ASEAN held four Informal Summits in the years 1996, 1997, 1999, and 2000. And in November 2018, Prime Minister Narendra Modi attended the ASEAN-India Informal Breakfast Summit in Singapore.

Details:

- The delegation includes Wang Yi, Foreign Minister and State Councillor, Ding Xuexiang, Member of the Political Bureau of the Communist Party of China (CPC) Central Committee, and Yang Jiechi, Director of the Office of the Foreign Affairs Commission of the CPC Central Committee.
- The two sides will also **issue separate** statements on the outcomes of the two-day informal summit between PM Modi and President Xi.
- Following the one-on-one meeting, India and China will hold delegation level talks including top officials.

Developments:





- They also touched upon issues concerning trade, especially "trade deficit and unbalanced trade."
- They agreed to work together to ensure that "radicalisation and terrorism" did not affect the fabric of the "multi cultural, multi-ethnic and multireligious societies" of their countries
- Prime Minister Narendra Modi and Chinese President Xi Jinping deliberated upon areas of investment that the two countries could encourage.

Why was Mamallapuram chosen as the venue for the meet?

- It is found that were historical and trade links between Tamil Nadu under Pallava and Chola dynasties, and the eastern coast city of Quanzhou in Fujiyan Province.
- Mahabalipuram or Mamallapuram was the capital region during the reign of Pallava Dynasty in the 7th century AD. The Pallavas rulers used to hold the ultimate command in the southern part of India, after the decline of the Gupta Dynasty.
- Pallava rulers were popular for their inclination towards Tamilian art and culture.
- Tamil inscriptions and fragments of architecture, were recently discovered in Quanzhou reflecting a possible temple built by Tamil traders in the 12th Century CE.
- The place was chosen for the informal summit for its historical and cultural significance.
- Mamallapuram is a World Heritage **Site** famed for its rock-cut sculptures.
- Group of Monuments Mamallapuram is a collection of 7th-8th-century and CE religious monuments in the coastal resort town of Mamallapuram, Tamil Nadu.

- It is regarded as the city of Mamalla or Narasimhavarman-I (630-668 CE) of the Pallava dynasty.
- The site has 400 ancient monuments and Tamil religious temples including one of the largest open-air rock reliefs in the world: the Descent of the Ganges or Arjuna's Penance.
- This place has a number of names, such as Mamallapuram, Mahamallapuram, Mallapuram and Mavalipuram.
- The sailors from Europe named Mahabalipuram as the Land of Seven Pagodas because of the seven pinnacles or stupas of its temples.

Other recent India-China meetings:

- The Bishkek meeting was preceded by one in **Qingdao** in June 2018, where India and China signed two bilateral agreements, enabling China to release hydrological data to India, are crucial to which preventing flooding in the Northeast.
- The meeting in Qingdao carried the "Wuhan Spirit", an indication of greater understanding between the two nations.
- The Qindao meeting was followed in November 2018 by the **21st Round of** Special Representatives Talks in China's Chengdu. The meeting was attended by National Security Advisor Ajit Doval and State Councillor and Minister of Foreign Affairs of China, Wang Yi, where they emphasised the importance of strengthening "Closer Developmental Partnership" between India and China.
- Prime Minister Modi and President Xi have met repeatedly over the last few years — their meeting at the **SCO** Summit in Bishkek in June 2019 was, their fifteenth meeting since Modi first came to power in 2014.

Aspire@IAS





Aspire OIAS The name associated with excellence

Office No - 5, Below Ground Floor, Apsara Arcade Building Near Karol Bagh Metro Station, New Delhi - 110060

WWW.ASPIREIAS.COM 9999801394,8010068998





NOBEL PEACE PRIZE

About:

- When Abiy became Prime Minister in
- The peace deal **opened up Eritrean ports for Ethiopian use.**
- In domestic achievements, he lifted Emergency, granted amnesty thousands of political prisoners, discontinued media censorship, dismissed leaders suspected corruption, and increased the influence of women in political and community life.
- Ethiopian Prime Minister Abiy Ahmed Ali was awarded the 2019 Nobel Peace Prize for "his important work to promote reconciliation, solidarity and social justice"
- 2018, **Ethiopia** had been locked in conflict with **Eritrea** for 20 years. In July that year, he stepped across the border in Eritrea and in cooperation with Eritrean President Isaias Afwerki,

- worked out the principles of a **peace** agreement.
- Ethiopia is **landlocked country**, while Eritrea has a sea coast which connects the Middle East.
- Through the years of conflict, Ethiopia had depended heavily on Djibouti for access to the Gulf of Aden and onward to the Arabian Sea.

Do you know?

- Ethiopia is the most populous landlocked country in the world and the second-most populous nation on the African continent.
- Its capital and largest city is Addis Ababa, which serves as the headquarters of the African Union and the United Nations Economic Commission for Africa.







RTI violations go unpunished

About:

- As the RTI Act marks its 14th anniversary on Saturday, a report card analysing its performance showed that government officials face hardly any punishment for violating the law by denying applicants the legitimate information sought by them.
- The report showed that there were 2.18 lakh cases pending with the commissions in March 2019, in comparison with 1.85 lakh pending cases a year earlier.
- Any new appeal would have to wait more than one-and-a-half years for resolution. The backlog is exacerbated by the fact that four out of 11 CIC posts are yet to be filled.
- This destroys the basic framework of incentives and disincentives built into the RTI law, promotes a culture of impunity and exasperates applicants who seek information at a high cost and often against great odds
- The 'Report Card on the Performance of Information Commissions in India' was prepared by the Satark Nagrik Sangathan and the Centre for Equity Studies.
- The State and Central Information Commissions, which are the courts of appeal under the Act, failed to impose penalties in about 97% of the cases where violations took place in 2018-19.
- The State Commissions of Tamil Nadu, Sikkim, Mizoram and Tripura did not impose penalties in any cases at all.







Summit will usher in 'new era' in India-China ties, says Modi

Abou:

After the second India-China "informal summit", Prime Minister Narendra Modi said this would usher in "a new era" in ties that had seen "increased stability and fresh momentum" after the first summit between him and President Xi Jinping in Wuhan

Details

- Modi referring to the Wuhan summit said, "We had decided that we would prudently manage our differences and not let them become disputes, be sensitive to each other's concerns, and be a reason for peace and stability in the world."
- During talks, India and China agreed to set up a high-level economic and trade dialogue mechanism. It would include Finance Minister Nirmala Sitharaman and China's Vice-Premier Hu Chunhua
- The first informal summit between India and China in Wuhan led to fresh stability in relations between the two countries. It gave a fresh momentum and strategic communication between the two countries

Xi moots 100-year plan to cement ties with India

- President Xi said we should have a plan for next 100 Years from a strategic and long-term perspective, inject impetus into the development of China-India relations, and work together to realise the great rejuvenation of the two great civilizations of China and India
- The Chinese President stressed that "military security exchanges cooperation" between the two countries must be "earnestly" improved.

- This will be promoted by development relations of between the two militaries along correct direction increasing trust and dispelling doubts and friendly cooperation, and carry out activities such as professional cooperation and training, continuously joint enhance mutual trust between the two militaries, strengthen cooperation between law enforcement and security departments, maintain and regional security and stability
- Xi also advocated the relevance of gradually expanding the "China-India plus" cooperation to South Asia, Southeast Asia and Africa.
 - The China-India plus initiative, first proposed at the Wuhan informal summit. mechanism of prior consultation to manage overlapping interests of India and China in Asia, Africa and the Indian Ocean
- Xi also called for" fair and reasonable" solution to the "boundary problem" that is acceptable to both parties based on "Political Guiding Principles Agreement" agreed to by the two countries in 2005.

Aspire () IAS The name associated with excellence





With 9 cases a day, Mizoram is top State with HIV prevalence rate

About:

Mizoram, one of the least populated States in India, reports nine positive cases of Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) a day.

Details:

- Data compiled by the Mizoram State AIDS Control Society (MSACS) show that 67.21% of the positive cases from 2006 to March 2019 have been transmitted sexually, 1.03% of the transmission route being homosexual.
- The virus "strike rate" has made Mizoram top the list of States with an HIV prevalence rate of 2.04% followed by two other north-eastern States — Manipur with 1.43% and Nagaland with 1.15%.
- The next major cause is infected needles shared by intravenous drug users.
 - Mizoram bordering Bangladesh and Myanmar has battled drug trafficking and abuse for a long time.
 - Narcotic substances such as methamphetamine and heroin are smuggled in from Myanmar.

Way forward:

- Greater focus on the treatment and prevention of the disease is the need of the hour.
- The police and the administration must be on high alert to check smuggling of Narcotic substances.
- Focus has to be laid on raising awareness about the virus.

to the subtype of HIV. HIV infection can occur by the transference of blood, breast milk, vaginal fluid, semen or pre-ejaculate.

The average survival period for a

person affected with HIV without

treatment is nine to eleven years subject

- HIV occurs as both free virus particles and as virus inside the infected immune within the above-mentioned bodily fluids.
- HIV or Human Immunodeficiency Virus is a lentivirus, which is a subclassification of the retrovirus.
- It causes the HIV infection which over time leads to AIDS or Acquired Immunodeficiency Syndrome.
- AIDS is a deadly condition in which the affected person's immune system fails leading to the spread of life-threatening infections and cancers in his body.

HIV **Human Immunodeficiency** or Virus:





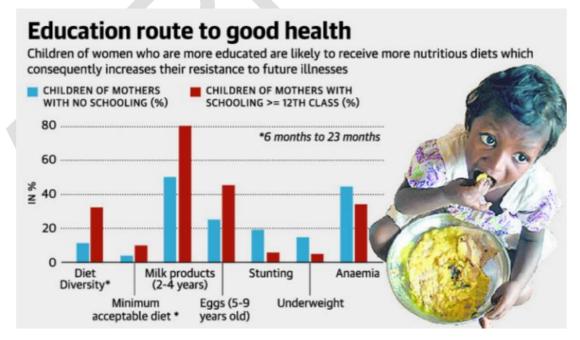


Education of mothers directly linked to better nutrition for children

About:

- Comprehensive The **National** Nutrition Survey studied 1.2 lakh children between 2016 and 2018 and measured food consumption, anthropometric micronutrient data, levels, anaemia, iron deficiency and non-communicable markers of diseases.
- These were charted against population characteristics such as religion, caste, place of residence and the mothers' levels of schooling.
- Data from the study show that with higher levels of schooling in a mother, children received better diets.
- While 31.8% of the children whose mothers finished Class XII received diverse meals, only 11.4% whose mothers with no schooling received adequately diverse meals
- Only 49.8% of the children in 2-4 years age group whose mothers did not go to school consumed dairy products, while

- 80.5% of the children of mothers who completed their schooling did so.
- Levels of stunting, wasting and low weight were higher in children whose mothers received no schooling as opposed to those who studied till Class XII. Stunting among children aged up to four was nearly three times for the former category (19.3% versus 5.9%)
- But on the flip side, a higher level of education among mothers meant that their children received meals less frequently, perhaps because the chances of the women being employed and travelling long distances to work
- Children in the age group of 10-19 showed a **higher prevalence of pre-diabetes** if their mother had finished schooling (15.1% versus 9.6%).
- The prevalence of **high cholesterol levels** was at 6.2% in these children (age group of 10-19) as opposed to 4.8% among those whose mothers never attended school.









Many denied PDS rice due to non-seeding of Aadhaar

About:

- The survey was conducted during the first week of October by the Odisha chapter of the National Right to Food Campaign, an informal network of organisations and individuals working on right to food issues
- The 'One Nation, One Ration Card' scheme seems to be not working in favour of many in Odisha, according to a survey that found that hundreds of people have not been provided rice through the PDS for two months due to non-seeding of Aadhaar.
- The study also found that exclusion due to Aadhaar linking is more prevalent in tribal areas.

One Nation, One Ration card

- This initiative shall be **helpful for the** large migratory population of the country, who migrate from one part of the country to another in search of job or employment, marriage, or any other reason, and find difficulty in accessing subsidised foodgrains in the present system.
- The challenges for this scheme involves that all PDS shops should install ePoS machines and all ration cards have to be seeded with Aadhaar numbers.
- The national portability of Ration cards will ensure all beneficiaries especially the migrants in getting access to PDS across the nation from any PDS shop of their own choice.
- This will provide freedom to the beneficiaries as they will not be tied to any one PDS shop and reduce their dependence on shop owners and curtail instances of corruption.

There will also be creation of a **Central** Repository of all Ration Cards to help national level de-duplication.







'FASTags will work as Aadhaar to track vehicles'

About:

The government has announced that **FASTags** will be mandatory for all vehicles on all National Highways from December 1, 2019.

Details:

- National Highway Authority of India operates FASTags on Electronic Toll Collection System.
- Union Minister of Road Transport and Highways has appealed to all the States to adopt the technology so that the entire system could come under the National Electronic Toll Collection programme of the Ministry.

How does FASTag work?

- A FASTag uses Radio Frequency Identification technology to make cashless payments through a prepaid account linked to it.
- The tag is fixed to the windscreen of a vehicle and an RFID antenna in the canopy of the toll gate scans the QR code and the tag identification number, following which the boom barrier lifts to allow a vehicle to pass through it without the need for a vehicle to stop.
- A FASTag is linked to a bank account.
- When a vehicle passes through a toll, an SMS with date, time and place of transaction will be sent to the owner of the vehicle.
- The master data of all transactions will be with concessionaire of the toll booth concerned, along with the bank which the owner with has registered the **FASTag** and the National Payments Corporation

of India.

RFID:

Radio-frequency identification (**RFID**) is the use of a wireless non-contact system that uses radio-frequency electromagnetic fields to transfer data from a tag attached to an object, for the purposes of automatic identification and tracking.

Benefits of FASTags:

- Cameras at toll booths will take photos of passengers in a vehicle, which will be useful for the Ministry of Home Affairs as there will be a **record of a vehicle's movement**.
- It is likely to reduce the nation's GDP loss by bringing down loss of fuel while waiting at toll plazas.
- FASTags facilitate seamless travel.
- They facilitate quick checkout of the vehicles from the toll lanes.
- They help in **avoiding long queues** at toll booths and hence reduce waiting time.





SC seeks reply from Centre on RTI portals

About:

The Supreme Court has given the Centre and 25 States a month's time to respond to a writ petition seeking a direction to establish Right to Information (RTI) web portals across all States to enable citizens, especially those living abroad, to file RTI applications online.

Background:

- dated December 13, 2013, the various State governments to explore the feasibility of implementing online RTI portals.
- It had even offered to provide technical support for this purpose through the National Informatics Centre (NIC) to the States.
- At present, only states **Delhi and** Maharashtra have the online filing **facilities** of RTI applications.
- In August, the NGO Pravasi Legal Cell, had said that none of the States. except Delhi and Maharashtra, has set up RTI portals.
- The Central government has an online RTI portal whereby any Indian citizen, including Non-Resident **Indians** (NRIs), can apply for information under the RTI Act with the desired Ministry or Department under the Central government.
- An applicant can also pay the requisite fee through online payment in this portal and submit the RTI application.
- The Centre had requested, via a letter

The plea says "Right to Information Act provides a legal mechanism to

- enforce and implement the citizen's right to information guaranteed under Article 19(1)(a) and Article 21 of the Constitution of India.
- The present system of submitting RTI applications and the corresponding reply from the concerned information officer in physical form takes more time which in turn reduces the entire RTI efficiency of the **mechanism** thus defeating the very purpose of the legislation.
- According to the plea, the RTI Act is a Central Act was for all the citizens residing in India and also outside the
- The Indians who live outside the country and want information from different state governments have no means online for to apply information.
- The NRIs have to file physically the **applications** for any information they required from governments.

Details:

- Under the RTI Act, any citizen of India may request information from a public authority which is required to reply within 30 days.
- Section 7(1) of the 2005 RTI Act, for disclosure information if it concerns the life or liberty of a person.
- Such dissemination of the information would be easier sought through an online application.
- The provision of an online web portal will help the Indian citizens, including the Non-Resident Indians speedy dissemination by information
- It would in turn help in achieving the





aim of the RTI laws of bringing transparency in administration.



Aspire () IAS The name associated with excellence

'Cataract major cause of blindness above 50'

Context:

The summary report of the National Blindness and Visual Impairment Survey India 2015-2019 has been released by the Union Health Minister Dr. Harsh the 13th Conference of Central Council of Health and Family Welfare.

Details:

- Other causes included infectious and non-infectious corneal opacity (scarring of cornea), glaucoma and aphakia (absense of lens in the eye).
- India was the first country to launch the National Programme for Control of Blindness in 1976 to reduce blindness prevalence to 0.3 per cent by 2020.
- But, the estimated prevalence of blindness still stands at 1.99 per cent, severe visual impairment at 1.96 per cent, moderate visual impairment at 9.81 per cent and moderate-severe visual impairment at 11.77 per cent, according to the survey released on October 10, 2019.
- The survey was conducted in 31 districts of 24 States.
- The survey was conducted by Dr Rajendra Prasad Centre for Opthalmic Sciences, All India Institute of Medical Sciences, New Delhi, at the behest of Union Ministry of Health and Family Welfare.
- Cataract is the leading cause of blindness in people above 50 years, according to the National Blindness and Visual Impairment Survey India 2015-19.
- Cataract-related surgical complications was the second-highest causable factor for blindness with 7.2 per cent cases in people above 50 years, showed the

survey.

Findings of the survey:

- Cataract is the cause for 66.2% cases of blindness, 80.7% cases of severe visual impairment, and 70.2% cases of moderate visual impairment in the age group above 50.
- The World Vision Report released by the World Health Organization (WHO) also pointed out that high costs involved in accessing eye care, especially, for rural populations was a major driver of visual impairment. It called for expansion of Universal Healthcare Coverage and including eve care services in it.
- What makes this worse for India is the fact that approximately 93% of cases of blindness and 96.2% impairment cases in this age group are avoidable. Of all the avoidable causes, more than half were treatable.
- India has successfully met the WHO target of 25 per cent reduction from **2014-19** in visual impairment from the baseline level of 2010, the survey found.
- Blindness is more pronounced among illiterate (3.23%) than literates (0.43%) and more prevalent in the rural population (2.14%)than urban (1.80%).
- **Barriers** to accessing **treatment** include:
 - No one to accompany [the patient]
 - Seasonal preferences
 - Financial constraints.
- Financial constraint was found to be the biggest barrier in accessing a cataract surgery with this being a







reason for 22.1% blindness cases and lack of awareness was behind 18.4% cases, who did not feel any need of the surgery.

National Programme for Control of **Blindness** and Visual Impairment (NPCB&VI):

- National Programme for Control of Blindness and Visual Impairment (NPCB&VI) was launched in the year 1976 as a 100% centrally sponsored scheme (now 60:40 in all states and 90:10 in NE States).
- It was launched with the goal of reducing the prevalence of blindness to 0.3% by 2020.



Mother tongue for preschool: NCERT

About:

first-ever NCERT's pre-school curriculum states that children between the three and six should begin their educational journey in their own mother tongues, learn through play and not be subjected to tests of any kind.

Background:

- It the proposed that NCERT develop a curricular and pedagogical framework for early childhood education.
- The draft National Education Policy has recommended that the Right to Education Act be extended to students in the three years of preschool before Class I.

Details:

- The NCERT's new curriculum is aimed at all **pre-school education**, defined as the education of 3 to 6-year-olds, anganwadis, nursery whether at schools, kindergartens, playschools or Montessori schools.
- The aim is to lay focus strengthening emotional and social stability.
- Teaching through a child's mother home language or internationally recognised as most appropriate in the early years.
- However, the challenges remain due to language diversity in India.
- It is said that the children need bilingual multilingual or environment for smooth transition.
- NCERT added that all children should also be exposed to sign language.
- The guidelines emphasise that preschools must avoid early formal

- "Rote-based, teacherinstruction. directed learning, which is devoid of context meaningful with undue pressure on the child to perform is harmful".
- It stipulates that children should be assessed individually informal and systematic observations of their play and activities.
- It has emphasised that assessment should provide direction for learning new skills and focus on the child's strengths rather than deficits.
- None of this is binding right now. It is flexible, but the basic principles must not be compromised.

Article 350 A:

- Article 350 A talks about the **facilities** for instruction in mother-tongue at the primary stage.
- It states that "It shall be the endeavour of every State and of every local authority within the State to provide adequate facilities for instruction in the mother-tongue at the primary stage of education to children belonging to linguistic minority groups".
- The President may issue such **directions to any State** as he considers necessary or proper for securing the provision of such facilities.



India's share of river water will no more go to Pakistan: Modi

About:

Prime Minister Narendra Modi has said India would put to use its share of water from the rivers flowing to Pakistan and ensure that every single drop was used for the country's farmers.

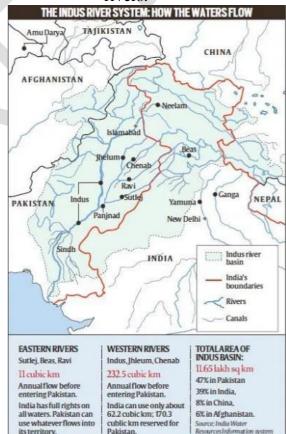
Details:

India shares its water with Pakistan under the Indus Waters Treaty.

Indus Water Treaty:

- The Indus Waters Treaty is a waterdistribution treaty between India and Pakistan, brokered by the World Bank to use the water available in the Indus System of Rivers located in India.
- The agreement was signed because the source of all the rivers of the Indus basin were in India (Indus and Sutlei, though, originate in China).
- The rivers flow across the Himalayan ranges to end in the Arabian sea south of Karachi.
- Preceding partition, it was one common network for both India and Pakistan. However, while partition managed to draw terrestrial borders, the question of how to divide the Indus waters was something that needed to be worked
- Since the rivers flowed from India to Pakistan, Pakistan was unsurprisingly threatened by the prospect of being fed by India.
- In 1960, the two countries reached a decisive step with the intervention of the World Bank wherein precise details were laid out regarding the way in which the waters would be distributed.
- The components of the treaty were fairly simple.

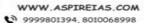
- The three western rivers (Jhelum, Chenab and Indus) were allocated to Pakistan while India was given control over the three eastern rivers (Ravi, Beas and Sutlej).
- While India could use the western rivers for consumption purpose, restrictions were placed on building of storage systems.
- The treaty states that aside of certain specific cases, no storage and irrigation systems can be built by India on the western



What is the issue?

Historically, India has never made full use of its rights, neither on the Eastern nor on the Western rivers.









- On the Western rivers specifically, there has been no pressing demand for creation of new infrastructure on the Indus rivers, either for hydroelectricity or irrigation.
- With a large proportion of farmers in Jammu and Kashmir having moved to horticulture from traditional crops, the demand for irrigation has gone down over the years.
- After the devastating floods of 2014, it was argued that storage infrastructure could have been built on these rivers as a flood-control measure.
- As a result of India's under-utilisation of its share of waters, Pakistan has over the years benefited more than it is entitled to under the Treaty.
- Pakistan's dependence on the waters of the Indus basin cannot be overstated. More than 95% of Pakistan's irrigation infrastructure is in the Indus basin about 15 million hectares of land. It has now become the world's largest contiguous irrigation system, comprising over 60,000 km of canals. Three of Pakistan's biggest dams, including Mangla, which is one of the largest in the world, is built on the Jhelum river. These dams produce a substantial proportion of Pakistan's electricity.

Conclusion:

- For many decades, India has allowed its share of water also to go to its hostile neighbour.
- The Indian government is now keen to reclaim its share.



Russia moves to fill void left by U.S. withdrawal in north Syria

About:

Russia has moved to fill the void left by the United States in northern Syria, deploying troops to keep apart advancing Syrian government forces and Turkish troops, underscoring the sudden loss of U.S. influence in the area and illustrating how the power balance in the region has shifted rapidly.

Historical Perspective:

 Turkish and Syrian troops are racing to control large parts of northern Syria that were run by an autonomous Syrian Kurdish regional government until a Turkish-led invasion began October 9, under the protection of U.S. troops stationed in the region.

Details:

- The battle highlights the fluctuating nature of the Turkish incursion, which began after President Donald Trump ordered the evacuation of U.S. troops from the Turkish-Syrian border, opening the door for Turkish troops and their Syrian Arab proxies to enter Kurdish-held territory in northern Syria.
- Abandoned by the Americans, and quickly losing land to the Turkish force, Kurdish authorities sought protection from the Syrian government and its largest backer, Russia.
- Since Kurdish authorities asked the government of President Bashar Assad for assistance, thousands of Syrian troops have flooded into northern Syria for the first time since the government lost control of the region a few years ago.
- The announcement that Russian forces were now patrolling an area where the

U.S. had maintained two military bases appeared to signal that Moscow was moving to fill a security void left by the withdrawal of both the U.S. military and its partners in an international counterterrorism mission.

• Russia and Turkey will shortly be the only international armies in the area.





Gujarat, Tamil Nadu top performers under PM-JAY health scheme

About:

Gujarat, Tamil Nadu, Chhattisgarh, Kerala and Andhra Pradesh have emerged as the topperforming States under the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PM-JAY),

Details:

- Cardiology, Orthopaedics, Radiation Oncology, Cardio-thoracic and Vascular Surgery, and Urology have emerged as the top tertiary specialities.
- Data suggests that there were 9 hospital admissions every minute across India in the first year.
- Free secondary and tertiary treatment worth nearly Rs.7,901 crore has been availed under the flagship health assurance scheme of the Government in just over a year, across 32 States and Union Territories.
- The scheme has crossed the 50-lakh treatment mark.
- More than 60% of the amount spent has been on tertiary care.

Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY):

- Launched in September 2018, the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) scheme remains one of India's most ambitious health schemes ever.
- It was launched as recommended by the National Health Policy 2017, to achieve the vision of Universal Health Coverage.
- It is a Centrally Sponsored Scheme having central sector component under Ayushman Bharat Mission anchored in the Ministry of Health and Family

Welfare (MoHFW).

- It is an umbrella of two major health initiatives, namely Health and wellness
 - National Health Protection Scheme.
 - 5 lakh existing sub-centers will bring health care system closer to the homes of people in the form of Health and wellness centres. These centres provide comprehensive health including care. for noncommunicable diseases and and child health maternal services.
 - The government aims to provide a health insurance cover of Rs 5 lakh to 500 million Indians free of cost. This includes families from lower-income groups that fall under the socio-economic caste census (SECC) data of 2011.
- States can implement PMJAY either through the insurance route or the trust route or both.
 - The states implementing the scheme through the insurance mode select the insurance companies through an open tender process.
 - The states implementing the scheme through the trust mode engage Third-Party Administrators (TPAs) Implement Support Agencies (ISAs) through an open tender process for implementing the scheme.

Conclusion:

According to the National Health Authority





(NHA), the scheme will continue to focus on reducing catastrophic out-of-pocket health expenditure, improving access to quality health care and meeting the unmet need of the population for hospitalisation care, so that India can move towards the vision of Universal Health Coverage.



Govt. to probe 'irregularities' in M.P. Swachh survey

Context:

The Union Ministry of Housing and Urban Affairs has initiated an inquiry into alleged irregularities during the Swachh Survekshan 2019 for Madhya Pradesh — declared the best in solid waste management, and boasting eight cities in the top 25, the most for any State.

Details:

- The inquiry is based on a complaint filed by a Gwalior resident with the Prime Minister's Office in September which alleges:
 - Fudging of data by urban local bodies (ULBs)
 - Overestimation of performance during field surveys by thirdparty assessors
 - Arbitrary award of ranks despite similar declarations by ULBs
 - Conflict of interest with regard to the role of the Quality Council of India (QCI).
- Gwalior, Singrauli Though Pithampur had applied for just an open defecation-free (ODF) + certification, the latter two secured an ODF++ tag. This is despite their application and advertisement for just an ODF+ tag in according newspapers, complaint.
 - The ODF++ tag, the highest category, is accorded to a ULB not single person defecates/urinates in the open, all public toilets are functional and faecal sludge and sewage is treated there.
 - A third-party agency carries out randomised observations at sampled locations to verify

claims.

- It is said that the third-party agencies didn't accurately represent the true picture and overestimated some ULBs.
- The survey, whose results were declared in March, was undertaken in four parts worth 1,250 marks each.

Cleanliness

The performance of Madhya Pradesh in the Swachh Survekshan 2019:

- Fourth best performing State overall
- Best performing State in solid waste management
- Indore is the cleanest



- Bhopal is the cleanest State capital
- Ujjain is the cleanest 'medium city' (3-10 lakh population)
- Dewas is the best small city in 'Innovation and Best Practices' (1-3 lakh population)
- Madhya Pradesh has 20 cities among the 100 best performing cities, and eight cities in the top 25

SOURCE: SWACHH SURVEKSHAN 2019









GLOBAL HUNGER INDEX

About

- The latest Global Hunger Index (GHI) has ranked India a lowly 102 among the 117 countries it has mapped
- The report, prepared jointly by Irish aid agency Concern Worldwide and German organisation Welt Hunger Hilfe.
- For each country in the list, the GHI looks at four indicators
 - Undernourishment (which reflects inadequate food availability);
 - child Wasting— share of children under the age of five who have low weight for their height which reflects acute undernutrition;
 - Child Stunting that is children under the age of five who have low height for their age -which reflects chronic undernutrition;
 - o Child Mortality mortality rate of children under 5 years (which reflects both inadequate nutrition and unhealthy environment).
- On the whole, the number of hungry people has risen from 785 million in 2015 to 822 million. Multiple countries have higher hunger levels now than in 2010.
- Within South Asia, too, India is behind every other country. Sri Lanka, Nepal, Bangladesh and Pakistan (in that order) are all ahead of India.
- With an overall score of 30.3, India falls in the "serious" category.
- India has the highest percentage of children who suffer from acute

- undernutrition. On other parameters, where India has improved, the pace has been relatively slow
- Among the BRICS grouping, India is ranked the worst, with China at 25 and a score of just 6.5.





Centre to issue 'negative' list to streaming sites

About:

The Information and Broadcasting Ministry is likely to issue a negative list of don'ts for video streaming services or Over-The-Top platforms.

Details:

- The move was to pre-empt any attempt government the impose censorship.
- The Ministry would be issuing a negative list, a few non-negotiables that will be prohibited. It would include basic things like ensuring that the Indian map is depicted correctly, to ensure that women are not depicted in a denigrating manner.
- The ministry made it clear that the list would in no way curtail the freedom of expression or stop the content makers from criticising the government.
- The Ministry is also nudging the platforms to come up with a selfregulatory body on the lines of the News Broadcasting Standards Authority.
- In January 2019, eight video streaming services had signed a self-regulatory code that laid down a set of guiding principles for the content on these platforms.

The code adopted by the Over-The-Top (OTT) platforms in January prohibited five types of content:

- which deliberately Content maliciously disrespects the national emblem or national flag.
- Anything visual or a storyline that promotes child pornography.
- Any content that "maliciously" intends to outrage religious sentiments.

- Content that "deliberately maliciously" promotes or encourages.
- Any content that has been banned for exhibition or distribution by law or a Court.







U.S. House passes Hong Kong Rights Act

About:

The US House of Representatives have passed a bill sought by pro-democracy protesters in Hong Kong that aims to defend civil rights in the semi-autonomous territory.

Background:

- Millions had taken to the streets of Hong Kong, initially against a nowdropped bid by its leaders to allow extraditions to the authoritarian Chinese mainland.
- The months-long movement expanded into a broader pro-democracy push in the territory where activists freedoms are being eroded by Beijing, despite a deal that outlined Hong Kong's 1997 return to China from British colonial rule.
- Beijing promised Hong Kong a "high degree of autonomy" for 50 years when it regained sovereignty over the city in 1997, but protesters say freedoms have been steadily eroded.

Details:

- The US House of Representatives has unanimously passed three pieces of supporting legislation the democracy protests that have engulfed Hong Kong for more than four months.
- The Hong Kong Human Rights and **Democracy** Act, the most consequential of the bills, would put the **British** colony's treatment by the United States under tighter scrutiny.
- The Protect Hong Kong Act, also passed recently, seeks to block the sale to Hong Kong of tear gas and other crowd control items, while a nonbinding resolution condemns Beijing's

- interference in Hong Kong affairs.
- For the two acts to become law, they must pass votes in the Senate and then be signed by President Donald Trump.

What happens if the bill is passed?

- The new Hong Kong Human Rights and Democracy Act is seen as a largely symbolic amendment but it could potentially alter the nature of relations between the United States and Hong Kong.
- Under the 1992 law, the US president an issue executive order suspending elements of Hong Kong's status if the special president determines that the territory is "not sufficiently autonomous" from Beijing.
- The new act requires the US Secretary of State to annually certify to Congress whether Hong Kong "is sufficiently autonomous to justify special treatment by the United States, including the degree to which Hong Kong's autonomy has been eroded due to actions taken by the Government of China.
- If the Secretary of State deems Hong Kong insufficiently autonomous, that could give the president ammunition for suspending any US laws that set Hong Kong apart, leaving it subject to the same rules that apply to the rest of China.
- It could also exacerbate tensions between Washington and Beijing.
- China's foreign ministry accused US lawmakers of "sinister intentions" to undermine Hong Kong's stability and warned that bilateral relations would be damaged should the measures become law.





• The new act is an amendment to a 1992 law that has underpinned US relations with Hong Kong, affording the territory special status as separate from China—in trade, transport and other areas.

What effect might the new law have?

- Trade between Hong Kong and the United States was estimated to be \$67.3 billion in 2018, with the US running a \$33.8 billion surplus, its biggest with any country or territory.
- The American Chamber of Commerce in Hong Kong has said any action to change the status of Hong Kong would have a chilling effect not only on US trade and investment in Hong Kong but would send negative signals internationally about Hong Kong's trusted position in the global economy.
- From a business perspective, one of the most important elements of Hong Kong's special status has been the fact that it is considered a separate customs and trading zone from China.
- That has meant, for instance, that trade war tariffs don't apply to exports from Hong Kong. If Hong Kong becomes just another Chinese port, companies that rely on Hong Kong as a middleman or for trans-shipping are likely to take their business elsewhere.





China leases an entire Pacific island for 75 years

About:

Tulagi, part of the Solomon Islands, is about to move into Chinese hands. Under a secretive deal signed recently, with a provincial government in the South Pacific nation, a Beijing-based company with close ties to the Chinese Communist Party has secured exclusive development rights for the entire island of over 1,000 people and its surroundings.



Tulagi Island:

- Tulagi, an island about two square kilometres (0.8 square miles) with a population of 1,200, is the site of a former Japanese naval base and was the scene of fierce fighting in World War
- The island of Tulagi served as a South Pacific headquarters for Britain and Then Japan.
- During the Second World War, its natural deepwater harbour across from Guadalcanal made it a military gem.

Details:

- The Solomons cut ties to Taipei and allied with Beijing just a few days before the Tulagi deal.
- A second Pacific nation, Kiribati, followed suit.
- Even compared to previous Chinese development deals in nearby countries — including a wharf in Vanuatu — the Tulagi agreement is remarkable for both its scope and the lack of public input.
- The renewable 75-year lease was granted to the China Sam Enterprise Group, a conglomerate founded in 1985 as a state-owned enterprise, according to corporate records.
- The deal reveals both the immediate ambitions of China Sam Enterprise Group and the potential infrastructure that could share civilian and military uses.
- The agreement includes provisions for a fishery base, an operations centre, and the building or enhancement of the airport.
- Though there are no confirmed oil or gas reserves in the Solomons, the agreement also notes that China Sam is interested in building an oil and gas terminal.
- The document also states that the government will lease all of Tulagi and the surrounding islands in the province for the development of a special economic zone or any other industry that is suitable for any development.

Concerns:

The lease agreement has shocked Tulagi residents and alarmed U.S. officials who see the island chains of the South Pacific as crucial to keeping





China in check and protecting important sea routes.

- The South Pacific region is rich in natural resources, and China's investments have provoked worries in the U.S. and Australia that the projects could give Beijing an opening to establish a military foothold for everything from ships and planes to its own version of the GPS.
- China is also pushing to end the region's status as a diplomatic stronghold for Taiwan.
- The fear is that these zones can, in turn, create enclaves of Chinese operations that could then grow over time into some kind of permanent strategic facility.

Conclusion:

- China's efforts in the region echo the period before and during the Second World War when Japan wrested control of island assets, which were won back in turn by American and Australian troops in bloody battles.
- China goes where there is value and interest. It is expanding its military assets into the South Pacific and is looking for friendly ports and friendly airfields just like other rising powers before them.
- With the U.S. pulling back in much of the world under President Donald Trump's America First policy, Beijing is often knocking on doors left open.

Britain clinches Brexit deal with EU

About:

Britain has secured a Brexit deal with the European Union, more than three years after Britons voted to leave the bloc.

Next?

- EU endorsed the deal soon after it was announced.
- Prime Minister Boris Johnson must still win a knife-edge vote in Parliament in an extraordinary session to get the agreement approved.

Details:

- For the goods that are at risk of entering the single market from third countries via Northern Island, tariffs will be applied.
- Practically, there will be a customs border between Great Britain and the island of Ireland, with goods being checked at Northern Irish ports.
- Under the deal, the whole of the U.K. will leave the EU but Northern Ireland will stay in the EU's single market for goods.
- The U.K. can impose tariffs on goods entering Northern Ireland from third countries as long as they are not at the risk of entering the EU single market.

What are the issues?

- The Northern Irish party that Mr. Johnson needs to help ratify any agreement, the Democratic Unionist Party (DUP), has refused to support it, saying it is not in Northern Ireland's interests.
- The conundrum is **how to prevent the** frontier becoming a backdoor into the EU's single market without erecting checkpoints that could weaken the 1998 Good Friday

Agreement.

- The agreement will keep Northern Ireland in the U.K. customs area, but tariffs will apply to goods crossing from mainland Britain to Northern Ireland if they are headed to Ireland and into the bloc's single market.
- The agreement scraps the "backstop", a mechanism envisaged earlier to prevent a hard border being introduced on the island of Ireland, and would have bound Britain to some EU rules.

What is Good Friday agreement?

- The Belfast Agreement or the Good Friday Agreement was a major political development in the Northern Ireland peace process of the 1990s and has provided Northern Ireland's divided society with a political framework to resolve its differences.
- The agreement ended decades of conflict in the province.
- Northern Ireland's present devolved system of government is based on the Agreement which has created a number institutions between Northern Ireland and the Republic of Ireland and between the Republic of Ireland and the United Kingdom.

Conclusion:

- The British parliament defeated similar deals struck by Johnson's predecessor, three times.
- Conservatives' With the ally Democratic Unionist Party as well as the opposition Labour refusing to support the deal, its passage is in doubt.
- The possible outcomes still range from an orderly departure to a chaotic exit or even another referendum that could reverse the entire endeavour.





FATF may keep Pak. on grey list

About:

Pakistan could escape being blacklisted by the Financial Action Task Force (FATF), but the international watchdog on terror finance is likely to issue strong warnings to it and keeping the country on the grey list.

Details:

- In the period under review, Pakistan registered 228 TF cases and convicted 58 individuals.
- The latest mutual evaluation report by the Asia Pacific Group (APG) on CFT and AML released on October 14, 2019 assigned a national risk-rating of 'medium' to Pakistan.
- The report said that since February 2018, Pakistan had taken positive actions against these organisations "but UNSCR 1267 is not being fully implemented".
- Pakistan is expected to be kept under significant and sustained" pressure to deliver on the 27-point action plan by February 2020, when the next plenary session will be held.

Why Pakistan may avoid Blacklisting?

- Three votes are mandatory for any country to escape the blacklisting.
- Pakistan is relying on support from China, Turkey and Malaysia.
- China is presiding over the ongoing FATF plenary in France. FATE:
- The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 by the Ministers of its Member jurisdictions. headquartered in Paris.

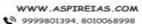
- The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system.
- It is the global standard-setting body anti-money laundering combating the financing of terrorism (AML/CFT).
- In order to protect the international from financial system laundering and financing of terrorism (ML/FT) risks and to encourage greater compliance with the AML/CFT standards. the **FATF** identifies jurisdictions that have strategic deficiencies and works with them to address those deficiencies that pose a risk to the international financial system.
- Jurisdiction subject to a FATF call on its members and other jurisdictions to apply counter-measures to protect the international financial system from the substantial ongoing and money laundering and financing of terrorism risks.

What does getting black listed mean?

- The FATF blacklist means the country concerned is "non-cooperative" in the global fight against money laundering and terrorist financing.
- A black-list would mean enhanced financial scrutiny of its government, possible sanctions against its central bank, and a downgrade of its financial and credit institutions.
- If blacklisted, Islamabad faces financial consequences and economic setbacks











at a time when its economy is facing a balance of payment crisis.

• If Pakistan does avert blacklisting it will be just a temporary relief until the FATF meets again in February 2020.





Legislative Council abolished in J&K

About:

Ahead of the bifurcation of Jammu and Kashmir into two union territories, the 62year-old state legislative council came to an end with the state administration issuing orders for its abolition.

Background:

- The 36-member state council was established in 1957 after an act was passed by the Parliament.
- These legislations created a bicameral legislature for J&K.
- The council functioned as an upper house for the state assembly.
- The Centre had on August 5, 2019 abrogated the provisions of Article 370 of the Constitution which granted special status to Jammu and Kashmir for residency and government jobs.
- Jammu and Kashmir Reorganisation Bill, which was passed in August revoked the special status granted to J&K and bifurcated the state into two Union territories of J&K and Ladakh.

Details:

- Jammu and Kashmir will be a union territory with a state assembly.
- Consequent to the abolition of the and Kashmir Legislative Jammu Council in terms of Section 57 of Jammu and Kashmir Reorganization Act, 2019, it is ordered that all the staff of the state legislative council shall report to the general department.





Venezuela wins seat on UN human rights council despite opposition

About:

Venezuela has won a seat on the United Nations Human Rights Council, despite widespread criticism of its poor human rights record.

Issue:

- Nicolás Maduro's government is accused of jailing, torturing and arbitrarily arresting opposition figures.
- More than 50 countries no longer recognise Mr. Maduro as the country's legitimate leader.

Details:

- The UN's 47-nation human rights group (United Nations Human Rights Council) is an inter-governmental body within the United Nations system responsible for strengthening the promotion and protection of human rights around the globe and for addressing situations of human rights violations and make recommendations on them
- Its seats are reserved for different regions around the world, and countries from those regions must compete to occupy them every three years.
- The 193-member world body elected 14 members to the 47-member council for three-year terms starting in January 2020.
- Under its rules, seats are allocated to regions geographical to ensure representation.
- Venezuela claimed one of the two seats allocated to Latin America with 105 votes.
- Venezuela had originally unopposed for a seat in the Latin American and Caribbean States group

— until Costa Rica, citing Venezuela's poor human rights record jumped into the contest.

Concerns:

- More than 50 groups and many campaigned countries against Venezuela, pointing to Maduro and the country's rights record.
- The election of Venezuela could add even more ammunition to critics of the United Nations, who doubt the global organization's relevance.
- human rights council The has previously been accused of only singling out Israel or other countries without political clout.
- In 2018, the United States withdrew from the council in protest of what it described as an anti-Israel stance and a lack of reform.





CJI names Justice Bobde as successor – Appointment of CJI

About:

Chief Justice of India Ranjan Gogoi has recommended Justice Sharad Arvind Bobde as his successor and the 47th Chief Justice of India in keeping with convention and the seniority norm. The Chief Justice, due to retire on November 17, has sent his recommendation to the government.

Appointment of the Chief Justice of India:

- The Constitution of India does not have any provision for criteria and procedure for appointing the CJI.
- 124(1) Article of the Indian Constitution says there "shall be a Supreme Court of India consisting of a Chief Justice of India".
- The closest mention is in Article 126, which deals with the appointment of an acting CJI.
- In the absence of a constitutional provision, the procedure relies on custom and convention.

What is the convention?

- When the incumbent CJI retires (all Supreme Court judges retire at the age of 65), the senior-most judge in the SC becomes the CJI.
- Seniority, here, is not defined by age, but by the number of years an individual has been serving as a judge of the apex court.
- In an instance where two judges have served for the exact same time, because they were appointed as SC judges on the same day, other factors are considered to determine the seniority of the judges, like which judge has more years of experience in the high court and if either of them were nominated

from the bar directly.

A similar situation had risen ahead of the appointment of Dipak Misra, as Misra Justice and Chelameswar were sworn in on the same day as judges of the SC on October 10, 2011. Despite being four months younger, Justice Misra was anointed as the CJI in August 2017.

What is the procedure?

The procedure to appoint the next CJI is laid out in the Memorandum of Procedure (MoP) between the government and the judiciary:

- The procedure is initiated by the Law Minister seeking the recommendation of the outgoing CJI at the 'appropriate time', which is near to the date of retirement of the incumbent CJI.
- The CJI sends his recommendation to the Law Ministry; and in the case of any qualms, the CJI can consult the collegium regarding the fitness of an SC judge to be elevated to the post.
- After receiving recommendation from the CJI, the law minister forwards it to the Prime Minister who then advises the President on the same.
- The President administers the oath of office to the new CJI.

Does the government get a say?

- Except for the law minister seeking the recommendation from the incumbent CJI, and forwarding it to the Prime Minister, the government has no say in the appointment of the CJI.
- Vis-à-vis the appointment of the CJI and the appointment of SC judges, the key difference is that in the former, the government cannot recommendation of the CJI (or the





- collegium) back to them reconsideration; while in the latter, the government can do so.
- However, if the collegium reiterates those names, then the government cannot object any further.
- The Memorandum of Procedure does not have any provision for the eventuality of the government disagreeing with the incumbent CJI's recommendation on the new one.

Have there been exceptions to the aforementioned procedure?

- Since the establishment of the Supreme Court in 1950, there have been 46 CJIs.
- In all cases, the convention and the procedure were duly followed, except for two - Justice AN Ray and Justice MH Beg. Both exceptions took place when Indira Gandhi was the Prime Minister.
- Justice AN Ray was appointed as CJI in 1973 despite being fourth in terms of seniority after Justices JM Shelat, KL Hegde and AN Grover.
- The reason was the involvement of these three judges in the landmark Kesavananda Bharati case, which had held that Parliament cannot make amendments to the Constitution that would alter its "basic structure".
- Similarly, Justice MH Beg appointed as the CJI in 1977 despite Justice HR Khanna being senior. This was because of Justice Khanna's minority judgment in the Jabalpur case.
- Justice Khanna had pronounced that he did not agree with the government's argument that detention of persons during the Emergency cannot be questioned, even if mala fide and without the authority of law.







'37.7% of processed milk samples unsafe'

About:

National milk sample safety quality survey has been released by the Food Safety and Standard Authority of India (FSSAI).

Key findings of the report:

- The study collected a total 6,432 milk samples from 1,103 towns and cities between May and October 2018 in all States and Union Territories.
- About 40.5% of the total sample was processed milk, while the rest was raw
- The study noted that processed milk, including that of major brands, failed to meet the prescribed quality norm in 37.7% of the total samples tested, because the presence of contaminants such as fats, Maltodextrin and sugar were above permissible limits.
- In the safety parameters 10.4% of the processed milk samples were noncompliant. It failed to comply with the FSSAI norm as contaminants like aflatoxin-M1, antibiotics and pesticides were found.
- In the case of raw milk, noncompliance was at an even higher rate of 47% of the total samples.
- FSSAI has claimed that the quality of milk in the country is largely safe. However. has added it that contamination due to Aflatoxin M1 and Antibiotic residues is a more serious problem than adulteration.

Concerns:

Aflatoxin M1 (AFM1):

Traces of Aflatoxin M1 (AFM1), a deadly carcinogen, were found in some of the milk samples tested.

- It is for the first time that such a detailed survey of the presence of this residue in milk has been done in India.
- Aflatoxin-M1 is more dominant in processed milk than raw milk.
- Tamil Nadu, Delhi and Kerala were the top three States where Aflatoxin residue was found the most, noted the report. In large doses, aflatoxins can be life-threatening. usually through damage to liver.
- Aflatoxins are toxins produced by certain fungi which are generally found agricultural crops like maize, peanuts, cottonseed and others.
- They are carcinogenic in nature, which means they can cause cancer.
- Consumption of food containing aflatoxin concentrations of milligram/kilogram or higher has been suspected to cause aflatoxicosis, the prognosis of which consists of acute liver failure, jaundice, lethargy and nausea, eventually leading to death, World according to a Organization (WHO) study in February 2018.
 - According to the World Health Organisation, exposure aflatoxin M1 in milk and milk products is especially high in areas where the grain quality used as animal feed is poor.
- A study conducted in Nairobi, Kenya in August 2018 stated that AFM1 had potentially severe health impacts on milk consumers, including the risk of cancer and stunting in children under the age of five years.
 - Aflatoxin M1 in milk and milk products is a public health concern especially in infants and





children milk young constitutes one of the major sources of nutrients.

Maltodextrin:

- Maltodextrin, a food additive, was also found in 156 out of 6,432 samples.
- Although it is not lethal, its presence increases the levels of fat and Solidsnot-Fat (SNF).
- Proper feeding of cattle ensures more fat and SNF.
- Maltodextrin and sugar are not unsafe but are added to raise the levels of fat and SNF artificially.

Antibiotics:

- Another issue is the presence of antibiotics in the milk.
- 2 per cent of milk samples had shown the indications of antibiotics, according to the survey.
- In total, seven per cent of the milk samples were found to be unsafe which contained serious health hazard.
- The presence of antibiotics in milk could lead to development of antibiotic resistance.

Way forward:

- The FSSAI survey has clearly shown that while milk is largely safe, contamination due to Aflatoxin M1 and antibiotic residues is a more serious problem than milk adulteration and the quality concerns persist.
- FSSAI has stated that it is committed to zero tolerance for any adulteration and contamination of milk and will intensify efforts for surveillance and enforcement in hotspots identified through the survey.
- There is no proper lab to test this residue of Aflatoxin-M1 in the country. Efforts must be made to invest in

- testing machines that can detect the residue.
- Maltodextrin and sugar are not unsafe, but added to raise the level of fat and SNF. While, these do not represent threat to human health, but stringent action is required to curb this wrong practice.
- Hence all attempts need to taken both before and after food crop harvest to reduce the toxin amount. Improper storage of food harvest in warm and humid conditions leads to aflatoxin contamination that is much higher than what is seen in the field. Equally important is in having facilities to regularly test for aflatoxin M1.

Key Facts:

- India is the world's largest producer of milk.
- The total estimated milk production in the country was 176.35 million tonnes during 2017-18.







U.K. Parliament votes to force Brexit delay

About:

Three years after Britain voted 52-48% to leave the EU, Prime Minister Boris Johnson struck a deal with the EU in Brussels recently to ensure Britain's scheduled departure by 31st October 2019. Parliament has voted to postpone a vote on his Brexit deal. The parliament vote means Mr. Johnson is obliged to write to the EU seeking a delay in Brexit.

Details:

- MPs passed the amendment claiming they fear the risk of a potentially disastrous "no deal" exit by accident on October 31. Business and markets across Europe fear the shock of a sudden **Brexit** that government's own assessment says would cause economic damage. However The Prime minister has insisted that he would not be seeking for a third delay in Brexit.
- The default legal position is that Britain leaves the EU on October 31 unless it asks to delay, and the other 27 member states agree.
- British MPs have again ruptured the Brexit process by withholding their support for Prime Minister Boris Johnson's new divorce deal with the EU.







India decides to put off PM Modi's visit to Turkey

About:

The government has decided to put off a proposed visit by Prime Minister Narendra Modi to Ankara as part of a number of measures showing its displeasure with Turkey.

Issue:

- Turkish President Recip Tayyip Erdogan's speech at the United Nations General Assembly (UNGA) last month, in which he criticised its move on Article 370 in Jammu & Kashmir, India considers it an internal issue.
- India's expected decision to cancel the selection of Turkev's Shipyard for building naval support ships for India. While the sources noted that rules for local procurement and security concerns over Anadolu's work for the Pakistan navy were reasons for the likely cancellation, diplomatic sources said Turkey's recent statements and its support for Pakistan at the Financial Action Task Force on terror financing were also considered.
- India's sharp criticism of Ankara's unilateral military offensive against Syria. However turkey defending its Operation Peace Spring along its border with Kurdish-held parts of northeast Syria claimed that all operations were on "legitimate terrorist targets" and claimed "zero civilian casualties".







Uneasy ceasefire takes hold in Syria

Context:

Turkey launched Operation Peace Spring along its border with Kurdish-held parts of northeast Syria in a bid to push Kurdish fighters away from its southern border by establishing a 30 km deep "safe zone" on the Syrian side of the frontier. However following global outrage for its unilateral military offensive and following USA's intervention, Turkey agreed to "pause" the operations for 120 hours to ensure the safety of civilians and to allow those belonging to the Kurdish groups YPG (PKK) to withdraw from the 32-km 'safe zone' along the border.

Issue:

- The withdrawal of Turkish forces from the strategic location of the Ras al-Ain area, has become a sticking point of the deal.
- The Syrian Democratic Forces (SDF), still wished to see a role for the U.S. in Svria to counterbalance Russian influence, while recommitting their forces to countering the Islamic State group in Syria and adjoining areas.
- The offensive has killed dozens of civilians, mainly on the Kurdish side, and prompted hundreds of thousands to their homes in the latest humanitarian crisis of Syria's eightyear civil war
- The deal announced late on Thursday is intended to halt a Turkish-led offensive against Kurdish forces launched on October 9, on condition they pull out of a "safe zone" on the Syrian side of the border. Kurds, meanwhile, accused Turkey of trying to sabotage deal.





IMF members delay quota changes, agree to maintain funding

About:

At a time when multilateral institutions stand on increasingly shaky ground, members of the International Monetary Fund (IMF) agreed to maintain its funding at \$ 1 trillion but postponed changes to its voting structure. The deal is a compromise with the U.S., the Fund's largest shareholder, which has resisted changes to the organisation's voting structure as well as increases in its permanent resource base.

Highlights of the deal:

Resource base

- Deal will allow an extension of nonpermanent, supplementary sources of funds – such as the New Arrangement to Borrow (NAB), a renewable funding mechanism that has existed since 1998, and bilateral borrowings from countries - the IMF had entered into these after the 2008 financial crisis to increase its lending ability.
- The agreement extended the bilateral borrowing facility by a year – to the end of 2020 and a potential doubling of the NAB.

Ouota and vote share

- Specifically, the agreed package will leave IMF quotas (the primary source of IMF funds), which determine voting shares, unchanged. Instead, these will be reviewed before the end of 2023.
- Quotas are supposed to be reviewed every five years although these reviews can be delayed – as was the case with 14th review. That process, completed in 2010, needed approval of the U.S. Congress, and it was not closed out till early 2016. The review's outcomes included a doubling of the

quota total and a shift in some voting underrepresented rights and emerging market countries. India's vote share increased marginally. The quota review is currently 15th underway.

Additional information:

- IMF quotas are distributed according to a four pronged formula that considers a member country's GDP, its economic openness, its "economic variability" and international reserves
- Some IMF members have become frustrated with the pace of governance reforms, as the balance of economic and geopolitical power has shifted, becoming more dispersed across the world, particularly with the emergence of China and India – among the world's largest and fastest growing economies.
- India's quota is 2.76% and China's is 6.41%, while the U.S.'s quota is 17.46 % (translates to a vote share of 16.52%) giving it a unique veto power over crucial decisions at the IMF, many of which require a supermajority of 85%.

Aspire 🙆 l A



DNA regulation Bill referred to House panel

About:

The Bill seeks to control the use and application of the deoxyribonucleic acid (DNA) technology for establishing the identity of certain categories of persons, including offenders, victims, suspects and under-trials. The DNA Technology (Use and Application) Bill of 2019 was introduced in and passed by the Lok Sabha in January this year, but lapsed before it could be taken up by the Rajya Sabha. It was reintroduced in July 2019 and is now pending in the Lok Sabha. It has been referred to a parliamentary standing committee for examination.

Importance of the Bill:

- The Bill seeks to regulate use and application of DNA technology for the purposes of only establishing identity of certain categories of persons, including victims, offenders, suspects, under trials, missing persons and unknown deceased persons and related matters.
- The Bill's Statement of Objects and Reasons explains that DNA technology has the potential of wide application in the justice delivery systems both criminal and civil. In criminal cases, it helps in investigation of crimes through biological evidence, including semen evidence in rape cases, blood evidence in murder cases, saliva evidence in identification of source of anonymous threat letters etc. In civil cases, it helps in investigation relating to victims of disasters like cyclone, air crash etc.

Concerns:

 Regulation is also required to check misuse or improper use of DNA analysis which can harm individuals or

society.

• It seeks to regulate laboratories for DNA testing and analysis by providing for their accreditation, establish national and regional DNA Data Banks to store and maintain DNA profiles and a DNA Regulatory Board for their governance.







'Help make CGHS more beneficiary friendly'

Context:

The "Central Government Health Scheme" (CGHS) provides comprehensive health care facilities for the Central Govt. employees and pensioners and their dependents at the CGHS wellness centres. Started in New Delhi in 1954 it is now available across major cities of India. To improve the services and make the Central Government Health Scheme (CGHS) more beneficiary friendly, the government has beneficiaries invited the and stakeholders to send in their suggestions.

Issues:

- previously The government had under emergency instructed that conditions a beneficiary should get admission in any CGHS empanelled hospital without any prior permission. However, they found that hospitals were denying admission or insisting on referral memo from the CGHS Wellness Centre even in emergency conditions.
- To fix loopholes in the implementation of this scheme it becomes important to involve the stake-holders feedback.





Anthrax

About:

- Veterinarians have confirmed anthrax as the cause of death of two Asiatic water buffaloes in central Assam's Pobitora Wildlife Sanctuary.
- Pobitora Wildlife Sanctuary has the highest concentration of one-horned rhinos in the world.

About Anthrax

- Anthrax is a serious infectious disease caused by gram-positive, rod-shaped bacteria known as Bacillus anthracis which can be found naturally in soil.
- It is characterised by blisters around swellings on the skin, chest pain. diarrhoea vomiting, and fever. However, Anthrax is not contagious.
- It commonly affects domestic and wild animals around the world. Cattle, sheep, goats, antelope, and deer can become infected when they breathe in or ingest spores in contaminated soil, plants, or water.
- People can get sick with anthrax if they come in contact with infected animals or contaminated animal products. Contact with anthrax can cause severe illness in both humans and animals.







Liver Transplant Surgery

- Nearly 2,000 liver transplants are carried out in the country annually, highest in the world, yet there is no India-specific data. This leaves doctors to take help from the evolved U.S. and the U.K. registries.
- Hospitals from Delhi NCR, Kerala, Karnataka and Tamil Nadu have voluntarily reported their transplants to the registry. More hospitals are in various stages of signing up and by December.
- India's first **voluntary liver transplant registry** that started on August 15 has picked up pace.
- Initiated by the **Liver Transplantation Society of India**, the registry aims to collate national data of the procedures and their outcomes.
- In a span of a little over two months, it has received data of 74 transplants carried out by 11 hospitals across six States.







INDIAN PENAL CODE (IPC)

In News

- The Home Ministry has constituted two comprising committees luminaries overhaul the IPC to introduced by the British in 1860.
- After it was framed, the IPC has never been amended in totality. Some additions and deletions have been made.
- Rebooting the code introduced by the British in 1860 was considered as necessary as it is primarily based on the spirit of "master and servant"

Do You Know?

- The Malimath Committee of 2003 is related to the issue of reforms in the IPC.
- The Indian Penal Code (IPC) is the official criminal code of India. It is a comprehensive code intended to cover all substantive aspects of criminal law.
- The code was drafted in 1860 on the recommendations of first commission of India (Chairmanship of Lord Macaulay) established in 1834 under the Charter Act of 1833. The code came into operation from 1862.





<u>India – Maldives</u>

About

- A broad-based humanitarian assistance and disaster relief (HADR) exercise.
- India had gifted the Maldives two Advanced Light Helicopters (ALH) in 2013 and each was operated by the Indian Coast Guard and the Indian Navy. These were of great service to Maldives as it was used extensively for medical evacuation and search and rescue operations.
- In the aftermath of the 26/11 Mumbai terror attacks, India began setting up the coastal radar chain network to monitor the movement of traffic on the high seas. Mauritius, the Seychelles and Sri Lanka have already been part of the network
- India and the Maldives will take forward several pending measures to promote defence cooperation in the next few months, these include
- The agreement for lease of a **Dornier** aircraft for maritime surveillance
- Bringing the Maldives under **India's** coastal radar chain network and

About DORNIER

- The 19 seater HAL DO 228 aircraft is a highly versatile **multi-purpose light transport aircraft**.
- It has been developed specifically to meet the manifold requirements of utility and commuter transport, third level services and air-taxi operations, coast guard duties and maritime surveillance.
- The Dornier Do-228 was designed and developed by Dornier GmbH (Germany-France) in the late 1970s
- Hindustan Aeronautics Limited

holds the license to locally produce the Do-228 aircraft. Since 1983, HAL has produced more than 125 Do-228 aircraft.



ne name associated with excellence





Bhashan Char island

- Dhaka has long wanted to move 1,00,000 refugees to the muddy silt islet, saying it would take pressure off the overcrowded border camps where almost a million Rohingya live.
- Some 7,40,000 Rohingya fled Myanmar in August 2017 in the face of a military crackdown, joining 2,00,000 refugees already in makeshift tent settlements at Bangladesh's Cox's Bazar.
- Thousands of Rohingya living in Bangladesh refugee camps have agreed to move to a Bhashan Char island located in the Bay of Bengal
- Rights groups have warned the island, which emerged from the sea only about two decades ago, might not be able to withstand violent storms during the annual monsoon season.
- In the past half a century, powerful cyclones have killed hundreds of thousands of people in the Meghna river estuary where the island is located.



Regulation of Social Media

- If on the one hand technology has led to economic growth and societal development, on the other hand there has been an exponential rise in hate speech, fake news, public order, antinational activities, defamatory postings, and other unlawful activities using Internet/social media platforms.
- Social media intermediaries like Facebook and WhatsApp have argued that this would lead to loss of individual privacy.
- The Government has stated that Information Technology Intermediaries Guidelines (Amendment) Rules would be notified by January 15, 2020. These would be the new guidelines to regulate social media.
- This is in the light of ever-growing threats to individual rights and the nation's integrity, sovereignty, and security.



Freedom of Press

- Australia's Right to Know coalition includes Nine, News Corp, the ABC, SBS, The Guardian, and journalists' union the Media, Entertainment and Arts Alliance.
- The move was in response to the progressive hardening of national security laws over the past two decades by successive governments that have not only undermined investigative journalism but also criminalised it
- A central demand of the Right to Know coalition is that the government exempts journalists and whistleblowers from a counter-espionage law that was introduced last year
- On 21st Oct 2019, Australian newspaper readers had an unexpected experience no matter which paper they picked up, the front page carried text that was blacked out as if it had been redacted by the government.
- The decision to 'censor' the front page was carried out by a media coalition across print, TV, radio and online portals, called the "Right to Know"







Rabi crop MSP to be hiked

About:

- Union Cabinet decides to hike the minimum support price (MSP) for rabi crops (for 2020-21 marketing season)
- Considered to be one of the important and progressive steps towards doubling farmers' income by 2022 and improving farmers' welfare.

Need to understand

- What is MSP?
- Who announces MSPs?
- MSP List (i.e. crops covered under MSP)

Basics: Minimum Support Price (MSP)

- It is a **market intervention** by the Government to insure agricultural producers against any sharp fall in farm prices.
- MSPs are announced by the Government of India on the basis of the recommendations of the Commission for Agricultural Costs and Prices (CACP).

Major objective -

• To procure food grains for public distribution

Crops covered

- Government announces MSPs for 22 mandated crops and fair and remunerative price (FRP) for sugarcane.
- The mandated crops are 14 crops of the kharif season, 6 rabi crops and two other commercial crops.

14 bhad anns	6 whi owns	2 commercial cone
14 kherif crops	6 rubi crops	2 commercial crops
1. paddy	1. wheat	1. jute
2. jowar	2 barley	2. copra
3. bajra	3. gram	
4. maize	4. masur(lentil)	
6. regi	5. rapeseed/mustard	
6. arhar	6. sattlower	
7. moong		
8. ured		
9. groundnut-in-shell		
10. soyabean		
11. sunflower		
12. sesamum		
13. nigerneed		
14. cotton		

• Support the farmers from distress sales







Peritoneal dialysis under Pradhan Mantri National

About:

- Government to provide kidney dialysis at home under PMNDP.
- In other words, the Centre plans establish peritoneal dialysis services across states to provide doorstep dialysis services for kidney patients.

Aim:

With home-based peritoneal dialysis service, the Centre seeks to -

- bring down the overall cost of treatment
- achieve equity in patient access
- bring in consistency of practice
- develop a clinically-safe and effective programme

Do you know?

- Every year about 2.2 Lakh new patients of End Stage Renal Disease (ESRD) get added in India resulting in additional demand for 3.4 Crore dialysis every year.
- ESRD continues to be a result of existing and emerging burden of noncommunicable disease.
- The burden of Non-Communicable Diseases (NCDs) has been alarmingly increasing and was flagged in the special UN convention for Health.

What aspirants need to know for exam?

- What is Peritoneal dialysis?
- About PMNDP scheme

Peritoneal dialysis

Peritoneal dialysis is a process to remove excess fluid, correct electrolyte problems and remove toxins using the lining of the abdomen, or peritoneum, in patients suffering from renal failure.

About Pradhan Mantri National Dialysis **Program**

It was rolled out in 2016 as part of the National Health Mission(NHM) for provision of free dialysis services to the poor.







19th Non Aligned Movement (NAM) summit

About:

- 19th Non Aligned Movement (NAM) summit to be held in Baku, Azerbaijan.
- PM Modi skips NAM summit again (for 2nd time)
- PM's absence indicates a decisive move away from past practice at the 60-year-old organisation that India was a founding member of.

Do you know?

- Vice-President M. Venkaiah Naidu will represent India at the 19th NAM summit.
- 18th NAM Summit (which was held in Venezuela) was represented by then Vice-President Hamid Ansari.
- Since NAM was inaugurated in 1961, the Indian Prime Minister has always attended the NAM summit, except in 1979, when Chaudhury Charan Singh was the caretaker PM and hence missed it, and in 2016.



Need to understand:

- NAM- past and present
- Five principles of NAM
- NAM: Policies and ideology

NAM: Background

The Non-Aligned Movement is a Movement 115 members of representing the interests and priorities

- of developing countries and against blindly following any power block during the cold war era.
- NAM was a result of the war between the two blocks during the cold war.
- movement began the "Bandung Process" in 1956 by India, Indonesia, former Yugoslavia, Egypt and other countries.
- First meeting of the NAM was held in Belgrade in 1961 by Yugoslavia.

Five principles of NAM

- 1. Mutual respect for each other's territorial integrity and sovereignty.
- 2. Mutual non-aggression.
- 3. Mutual non-interference in domestic affairs.
- 4. Equality and mutual benefit.
- 5. Peaceful co-existence.

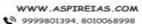
Policies and ideology:

- The Non-Aligned Movement is unified by its declared commitment to world peace and security.
- The Non-Aligned Movement espouses policies and practices of cooperation, especially those that are multilateral and provide mutual benefit to all those involved.
- The Non-Aligned Movement has played a major role in various ideological conflicts throughout its existence, including extreme opposition to apartheid governments and support of guerrilla movements in various locations, including Rhodesia and South Africa.
- The Non-Aligned Movement has become a voice of support for issues facing developing nations and it still contains ideals that are legitimate within this context.

NAM: Present scenario











- India, which clung to non-alignment as its international identity sinceimage Independence, slowly deviated from it after the big LPG reforms, 1991.
- Since the end of the Cold War and the formal end of colonialism, the Non-Aligned Movement has been forced to redefine itself and reinvent its purpose in the current world system.
- India no longer wants to be isolated from the western power blocs.
- India wants its voice to be heard at the global level.
- However, India still maintains that "It remains committed to the principles and objectives of the Non Aligned Movement".







KARTARPUR SAHIB CORRIDOR AGREEMENT

- The **travel will be Visa Free**; Pilgrims need to carry only a valid passport
- The Pakistan side has assured India to make sufficient provision for 'Langar' and distribution of 'Prasad'. However, there has been no progress on resolving the disagreement over a \$20 fee that Pakistan intends to levy on each traveller.
- Pilgrims would be allowed to carry kirpans (dagger), one of the five articles of faith worn by Sikhs.
- India and Pakistan signed an agreement to operationalise the Kartarpur corridor that will facilitate pilgrims from India to visit the Gurdwara Kartarpur Sahib in Pakistan.
- The corridor is being built to connect Dera Baba Nanak in Gurdaspur with Gurdwara Darbar Sahib in Kartarpur, the final resting place of Sikhism founder Guru Nanak, to commemorate his 550th birth anniversary celebrations on November 12.
- Indian pilgrims of all faiths and persons of Indian origin can use the corridor.







Commission for Protection of Child Rights

About:

- The Karnataka State Commission for Protection of Child Rights wants the Department of Primary and Secondary Education to ban schools from assigning homework to students in classes I to V.
- This proposal is made on the grounds that the move will ease the pressure on young minds.
- Commissions for Protection of Child Rights Act, 2005 provided establishment of Commissions for Protection of Child rights both at National level and State level.

About National Commission for Protection of Child Rights (NCPCR)

- The Chairperson of NCPCR should be a person of eminence who has done outstanding work on promoting the child rights.
- Commission's The Mandate to ensure that all Laws, Policies, Programmes, and Administrative Mechanisms are in consonance with the Child Rights perspective as enshrined in the Constitution of India and also the UN Convention on the Rights of the Child.
- NCPCR is country's apex child rights body.
- Objective of this commission is to protect, promote and defend the child rights in India including the rights adopted in the United Nations Convention on the **Rights** Children, 1989, ratified by India in 1992.





Jailed Uighur intellectual wins EU rights award

About:

- The European Parliament has awarded the Sakharov Prize for human rights to Uighur intellectual Ilham Tohti, who has been sentenced to China imprisonment in for "separatism".
- The outspoken former Professor of economics at a Beijing university was sentenced in 2014.
- By awarding this prize, European Parliament strongly urge the Chinese government to release Tohti and calls for the respect of minority rights in China

Who are Uighurs?

- The Uighurs are a minority Turkic ethnic group originating from and culturally affiliated with the general region of Central and East Asia.
- The Uighurs have been recognized as native to only one region, the Xinjiang Uyghur Autonomous Region of the People's Republic of China







RTI RULES

- It gives the government the discretion to decide on "conditions of service" for which no express provisions are made in the rules.
- According to activists, the rules had been drafted and promulgated in completely surreptitious manner which is in violation of the procedures laid down in the Pre-Legislative Consultation Policy of 2014.
- The policy requires all draft rules to be placed in the public domain for comments/suggestions of people. The draft was not available in the public domain and no consultations were held with members of the public.
- The changes would affect the independence of 'Information Commissions who will function like caged parrots.'
- The Ministry of Personnel notified the Right to Information (Term of Office, Salaries, Allowances and Other Terms and Conditions of Service of Chief Information Commissioner, Information Commissioners and State Information Commissioners) Rules, 2019.
- The rules have reduced the tenure of Information Commissioners from five years to three.
- The Chief Information Commissioner's salary has been fixed at Rs2.5 lakh and an Information Commissioner's at Rs 2.25 lakh.







Brazil intends to allow Indians without visas

- Brazil is working to implement a policy to facilitate a faster entry for Indian travellers into the country,
- This is intended to boost people to people contact between the two countries and increase foreign investment into Brazil
- Brazil has already ended visa requirements for the citizens of U.S., Canada, Japan and Australia.
- The announcement from Brazil came ahead of the upcoming BRICS summit that will be held in Brazil which is expected to **boost intra-BRICS ties.**







Manipur, Arunachal wants to be kept out of Naga peace deal

About:

- Arunachal Pradesh has echoed Manipur in demanding to be kept out of any "territorial changes" that might be incorporated in the settlement of the Naga political problem.
- The Central government has been discussing with National Socialist Council of Nagaland (NSCN-IM) as well as a rival conglomerate named Naga National Political Groups for the "final solution" on the peace accord by October 31
- NSCN-IM's vision of Nagalim or Greater Nagaland would entail redrawing of boundaries to bring all Naga-inhabited areas in the Northeast under one administrative umbrella.
- The NSCN-IM's map of Nagalim spreads over 1,03,473 sq km beyond the 16,527 sq km area of Nagaland. It includes much of eastern Arunachal.
- The outfit, as well as rival factions, claim these areas, primarily Changlang, Longding and Tirap districts are dominated by Nagas.

Naga Framework Agreement, 2015

- On Aug 3, 2015, latest agreement was signed with NSCN (Isak-Muivah)and other Naga armed groups such as NSCN (Khole-Kitovi) with the Union government. (however, NSCN (Khaplang) was excluded)
- Idea of a pan-Naga Hoho(a proposed statutory body as part of the Framework Agreement) that will enjoy independent executive and budgetary powers to look after the welfare of Naga inhabited areas outside Nagaland was mooted to bring long lasting solution to Naga peace process

• The biggest breakthrough is that the NSCN (I-M), and other Naga armed groups such as NSCN (Khole-Kitovi) have agreed to give up violence and resolve all issues peacefully.







India, Saudi to form strategic council

- PM Modi's visit will be used to showcase that Saudi-India ties are determined by long-term strategic considerations like India's energy security and desire to ensure stability in the Gulf region
- Kashmir unlikely to get any attention from Saudi rulers as the visit is expected to boost the Crown Prince's global stature which suffered after Saudi journalist Jamal Khashoggi was brutally killed in the Saudi consulate in Istanbul.
- PM will Modi deliver address **Future Investment** Forum organised by the Sovereign Wealth Fund of Saudi Arabia, the kingdom's public investment fund
- The forum is popularly known as the 'Davos in the Desert' and has been hosted by Riyadh since 2017 to project the kingdom as the future investment hub in the region.
- India and Saudi Arabia are set to sign an agreement for creating a bilateral strategic partnership council during the official visit of Prime Minister Narendra Modi to Riyadh
- The council will include multiple sections involving the External Affairs Ministry and NITI Aayog counterpart organisations from Saudi Arabia.
- The council will be led by Mr. Modi and King Salman bin Abdulaziz Al Saud.







Mountain gorillas

About

- Rainforest protection and dedicated veterinarians have helped the mountain gorilla population bounce in Volcanoes National Park, Rwanda
- Alarmed by rising rates of poaching and deforestation in central Africa, experts predicted the species could go extinct by 2000.
- Instead, a concerted and sustained conservation campaign has averted the worst and the number of mountain gorillas - a subspecies of eastern gorillas – has risen from 680 a decade ago to just over 1,000 today
- Switzerland-based International Union for Conservation of Nature changed the status of mountain gorillas from "critically endangered" "endangered," an improved if stillfragile designation.
- It involved "extreme conservation," which has entailed monitoring every single gorilla in the rainforest, periodically giving them veterinary care and funding forest protection by sending money into communities that might otherwise resent not being able to convert the woods into cropland.

More

- Gorillas share about 98% of human DNA
- Gorillas are actually languid primates that eat only plants and insects, and live in fairly stable, extended family groups.
- Their strength and chest-thumping displays are generally reserved for contests between male rivals.





Chile pulls out from hosting climate and trade

- Cancelling the climate meeting, which had been scheduled for December, leaves organisers with a very tight window to find a new venue.
- Chile stepped up to host the Climate Change Conference after the initial host, Brazil, pulled out last year.Brazil's decision came soon after the election of President Jair Bolsonaro
- Chile's President announced that his country, which has been rocked by a wave of recent protests, was not in a position to host a key UN climate change meeting and major Asia-Pacific trade summit later this year.
- The priority of Chilean government was to focus first and foremost on fully restoring public order and social peace,







Aspire (IAS The name associated with excellence

9999801394, 8010068998





Green energy target lacks deadline

About

Prime Minister Narendra Modi at the Climate Action Summit in New York announced India's ambitious aim to increase its renewable energy target to 450 GW (gigawatts). A senior official in the Union Environment Ministry has pointed out that there is not yet a deadline for when this target would be achieved.

Details:

- India had previously set a target for increasing the non-fossil fuels to 175 GW in 2022.
- India's plan for installing 175 GW of renewable energy capacity by 2022 was first announced in 2015 during then Finance Minister Arun Jaitley's Budget speech.
 - o It included 100 GW from solar, 60 GW from wind, 10 GW from biopower and 5 GW from small hydro-power.
- Recent announcements highlight India's aim to achieve 450 GW target, with no particular deadline.

Concerns:

- Given that the country right now has an installed renewable energy capacity of 80.47 GW, of which 29.55 GW is solar, 36.37 GW is wind, 9.81 GW is biomass and 4.6GW is small hydropower, achieving the 450 GW target, which is a more than 460 per cent jump from the current level, in 3-5 years is an extremely tough task. For the record, India's renewable power capacity had jumped nearly 150 per cent in the past five years.
- The announcement comes at a time when commissioning of projects has **slowed** and states are raising red flags.
- Slow project allocation and financial stress have **halted wind power projects**.

- Solar projects have been facing land crunch and grid connectivity issues.
- India expands it renewables portfolio, wind power seem to be losing steam. Leading domestic wind turbine manufacturers, with more than 80 per cent market share, are staring at a weak order pipeline, financial losses and regulatory niggles. Foreign companies, including some Chinese ones, are increasing footprint in India.
- Commissioning from wind power projects has slowed to historic lows.
- In solar, the challenge is the **low capacity** of domestic solar panels and increased influx of imports from China.

Way forward:

- The renewable energy ministry is planning to introduce a **standard power-purchase** agreement (PPA) for projects.
- The terms of the PPA will ensure any default from the procuring state would lead to stringent penalty. A letter of credit-type system of payment would be made mandatory.
- To sort out land-acquisition issues, the ministry plans to change the project-award system.
 - The government will acquire the
 - Special-purpose vehicles (SPVs) will be formed by state-owned companies.
 - The land will then be allotted to private companies bidding for projects
- The government should implement antidumping duty on a priority to deal with cut-throat competition from international players.
- In order to boost Make in India, the renewable power ministry has asked the Ministry of Finance to impose a **Customs** duty on solar cells and modules being





No MAT credit for 'Firms opting for new lower tax'

imported into the country.

About:

The Finance Ministry has said that the companies opting for the lower corporate tax rate of 22% will not be allowed to reduce their tax liability by deductions towards additional depreciation and Minimum Alternative Tax (MAT) credits.

Details:

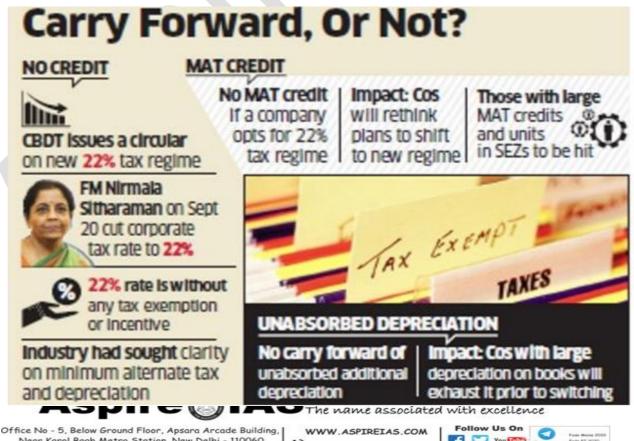
- The Central Board of Direct Taxes (CBDT). has announced that companies will be allowed to utilise such credits only against regular taxes under the old regime and may opt for lower corporate tax regime in the subsequent assessment years.
- Under Section 115BAA, it was stated that companies opting for lower tax rate of 22% will not be allowed to claim any deduction or exemption.
- It gave the companies the **right to exercise** the option before furnishing the income

tax return.

- It was also stipulated that the **option, once** exercised, cannot be withdrawn in subsequent years.
- The section does not give any timeline for companies to opt for the new regime of lower tax rate.
- The CBDT said, "a domestic company which would exercise option for availing benefit of lower tax rate under section 115BAA shall not be allowed to claim set off · of any brought forward loss on account of additional depreciation for an assessment year for which the option has been exercised and for any subsequent assessment year."

Concerns:

- The government had recently slashed the corporate tax rates in order to attract manufacturing companies that are looking to diversify their production out of China.
- The latest scheme had made the country one of the lowest tax jurisdictions in







South and Southeast Asia.

- The recent development could be a huge cost to some companies that will perhaps consider continuing under the old regime for the time being.
- It is opined that the new tax regime is heavily weighed in favour of new companies and investors and that the one-time transition costs, requirement for fresh investments and other hurdles posed for existing taxpayers are significant enough to dent benefits intended in the original announcement.

Minimum Alternative Tax (MAT):

- Tax liability of the company computed as per the normal provisions of the Incometax Law, i.e., tax computed on the taxable income of the company by applying the tax rate applicable to the company. Tax computed in the above manner can be termed as normal tax liability.
- The tax computed by applying a fixed rate as determined by the government (plus surcharge and cess as applicable) on book profit is called MAT.
- The objective of the introduction of MAT is to bring into the tax net "zero tax companies" which in spite of having earned substantial book profits and having paid handsome dividends, do not pay any tax due to various tax concessions and incentives provided under the Income-tax Law.







Excess rain washes out IMD's methods

Issue:

- India ended up with 10% more monsoon rain (or 110% of the long period average LPA of 887 mm) than usual and none of the agency's models tuned to capture long term forecast trends warned of this.
- is found that the Monsoon Τt Mission Coupled Forecast Model (CFS), deployed by the India Meteorological Department (IMD) over the last decade don't do better than the older ones in longrange forecasting.
- The forecast abilities of the CFS model. used since 2012, show that only twice in 2013 and 2015 — did the CFS model get the monsoon right.
- Traditionally IMD has relied on its statistical database of over a 100 years to correlations between certain weather parameters such temperatures in the Indian ocean, or the warm water volume in the Pacific, for instance, to estimate the chances of a good monsoon — or a drought.
- In consonance with emerging trends in meteorology, the IMD too came around to the view that a new approach to forecasting was needed.
- Dynamical models employ a different approach to **forecasting the monsoon**.
- Roughly, this relies on capturing the interactions between the land, ocean

Rain or shine?

The year-wise predictions made by the IMD's statistical and dynamical (CFS) models, and the actual rainfall:

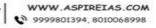


Year	Statistical model (% of LPA)	CFS model (% of LPA)	Actual rainfall (% LPA)
2012	99	104	93
2013	98	104	106
2014	95	96	88
2015	88	86	86
2016	106	112	97
2017	98	100	95
2018	97	97	91
2019	96	97	110

Background:

and atmosphere and tracking how the









changes in each affect the other.

- The land, atmosphere and ocean state at a particulate time, generally March, is mathematically simulated on supercomputers and extrapolated into the monsoon months.
- The dynamical model is also called the Climate Forecast Model (CFS) and has been developed based on a climate model developed by the National Center for Environmental Prediction (NCEP), U.S.

Details:

- India this year has recorded its highest monsoon rain in 25 years. The IMD models that forecast two weeks ahead (called extended range prediction) did warn of increased monsoon activity, as did short-term forecast models (that gauge weather three days ahead).
- The Department doesn't use these to update estimates of the anticipated all India figures.
- However, IMD scientists admitted that the dynamical models were yet incapable of factoring in changes in the Indian Ocean a month or two in advance.
- It was opined that dynamical models gave a good "sign" rather than getting the numbers right and it could be customised for predicting summer heatwaves and cold-waves and that it would need much more time to be fully integrated into India's monsoon forecasting system.
- The newer models were developed as part of a Rs.1200 crore 'Monsoon mission' that has been underway for over a decade and were meant to improve both short term and long term forecasts.

Drone cameras threatening Nilgiris wildlife

Concerns:

- Environment conservationists are
- Videos of elephants being absolutely petrified by drone cameras have also been found.
- When animals come into contact with drones, they experience physiological changes such as an increased heart rate, behavioural responses such as running or flying away, or even suffer stress that could disrupt their reproductive process.
- If the animals decide to avoid specific areas as a result of frequent disturbing drone encounters, this could fragment and ultimately damage the whole population.
- concerned about the increasing number of enthusiasts using drone cameras which is found to have been posing a significant threat to the endangered species of birds.
- Species of Birds, especially raptors, many of which are known to attack the equipment, sustain injuries in the process.
- When birds attack these cameras, the rotor blades of the equipment can cause lifethreatening injuries to them.
- Raptors, when threatened, are known to even abandon nesting sites.

Way forward:

- There is a ban on using drones in reserve forests, unless the written permission is obtained from the Chief Wildlife Warden: this must be implemented effectively.
- There is a need for a legal framework so that appropriate actions can be taken when wildlife is negatively affected by irresponsible drone operators.
- Care should be taken to avoid endangered species, animals that may be more vulnerable to drone presence like those that fly or who have evolved to fear aerial predators, and to never interfere with

- animals during sensitive times in their **life cycle**, such as breeding seasons.
- When drones are operated correctly, there's a chance to help people feel more connected with wildlife, which extremely important for **conservation** outcomes.
- While a blanket ban on drones is to enforce, the forest impossible department should identify areas where vultures and other raptor species are known to nest, and set up effective policing to prevent the unauthorised use of cameras and drones.

Aspire 🕲 I A



IRDAI working group to revisit title insurance structure

About:

The Insurance Regulatory and Development Authority of India has constituted a working group that will revisit the product structure of title insurance.

What is Title Insurance?

- A few general insurers offer title insurance.
- Their product features vary in policy terms and conditions and scope of coverage depending on the support received from their reinsurers.
- Title insurance is form of indemnity insurance that protects the holder from financial loss sustained from defects in a title to a property.
- provides indemnity basically developers subsequent and the homeowners of the property against losses and risks related to defects in the title of the property.
- It even covers issues which are not discovered prior to the commencement date of the policy.

Issues:

- Feedback received from the Government of India revealed that stakeholders, especially developers associations, had flagged the need for standardisation in title insurance products.
- The number of title insurance policies sold is minimal, despite availability for the last one and half years and the obligation cast under the Real Estate (Regulation and **Development**) Act, 2016 promoter/developers to obtain the said
- The decision comes in the backdrop of a less-than-desired response insurance products.

- The group will study the structure of **title** insurance products available in the current Indian Market and analyse the reasons for its sluggish demand.
- The 12 member working group is **tasked**
 - a) Examining the legal and regulatory framework in place and its impact on the marketability of title insurance.
 - b) Studying the structure of such products available and analyse reasons for sluggish demand.
 - c) Suggesting augmentation of reinsurance capacity.
 - d) Developing a standard product.
 - e) Coming out with recommendations to spur demand.
- The group has been asked to submit its recommendations within 12 weeks.

Details:

Aspire () IAS The name associated with excellence





Fourth bi-monthly monetary policy statement, 2019-20

About

- Consequently, the reverse repo rate under the LAF stands reduced to 4.90 %, and the marginal standing facility (MSF) rate and the Bank Rate to 5.40 %.
- Monetary Policy Committee (MPC) has decided to reduce the policy repo rate under the liquidity adjustment facility (LAF) by 25 basis points to 5.15 % from 5.40 %
- It also revised its growth forecast for the current financial sharply, from 6.9% projected in the August policy, to 6.1%. Growth forecast for the first quarter of the next financial year was also trimmed to 7.2% from 7.4%.

About MPC

- Before establishment of Monetary Policy Committee, the final decision on interest rates etc. would come from RBI Governor's desk.
- The quorum for the meeting of the MPC is four members. Each member of the MPC has one vote, and in the event of an equality of votes, the Governor has a second or casting vote.
- MPC is a **six-member committee** constituted by the Central Government (Section 45ZB of the amended RBI Act, 1934).
- Of these, three members are from RBI while three other members are nominated by the Central Government.
- The MPC determines the policy interest rate required to achieve the inflation target







India's first e-waste clinic will come up in Bhopal

About

- The clinic is being conceived in compliance with the Solid Waste Management Rules, 2016
- Electronic waste will be collected door-todoor or could be deposited directly at the clinic in exchange for a fee. The CPCB will provide technical support at the unit
- The Bhopal Municipal Corporation (BMC) and the Central Pollution Control Board (CPCB) have joined hands to set up the country's first e-waste clinic in Bhopalthat would enable segregation, processing and disposal of waste from both household and commercial units.

Do You Know?

- The concept of Extended Producer Responsibility (EPR)- under 2016 E-waste (Management) Rules mandated producers of electrical and electronic equipment to register and specified targets to collect back e-waste generated and to ensure that it is channelised to authorized recyclers.
- India is ranked 5th in the world among top e-waste producing countries-USA, China, Japan and Germany. The volume of e-waste is growing at an estimated 21 per cent annually.
- It is estimated that 50 million tonne of e-waste will be generated globally in 2018. Half of this is personal devices such as computers, screens, smartphones, tablets.







ELECTRIC VEHICLE (EV) CHARGING GUIDELINES

About

- Union Minister for Power has approved amendments in Electric Vehicle Charging Guidelines and Specifications.
- For inter-city travel, Fast Charging Station to be installed at every 100 Kms.
- Bureau of Energy Efficiency (BEE), a statutory body under Ministry of Power has been nominated as the Central Nodal Agency to facilitate installation of Charging Infrastructure.
- At least one Charging Station to be available in a grid of 3 Km x 3 Km in the cities and one Charging Station at every 25 Km on both sides of highways/roads.
- All Mega Cities & expressways connected to these Mega Cities to be taken up for coverage in first phase, other big cities to be taken up in second phase.







MICROFINANCE

In News

- RBI has decided to raise the lending limit per borrower from ₹1 lakh to ₹1.25 lakh to enable more borrowers to avail loans from microfinance institutions (MFI)
- RBI said the decision was taken after taking into consideration the important role played by MFIs in delivering credit to those at the bottom of the economic pyramid and enable them to play their assigned role in a growing economy.
- Microfinance institutions (MFIs) are financial companies that provide small loans to people who do not have any access to banking facilities.
- RBI has also proposed to increase the **household income limit for borrowers** of NBFC-MFIs from the current level of ₹ 1.00 lakh for rural areas to ₹ 1.25 lakh and from present level of ₹ 1.60 lakh for urban/semi urban areas to ₹ 2.00 lakh.







Green Crackers

Green Crackers:

- The commonly used pollution-causing chemicals – aluminium, barium, potassium nitrate and carbon - have either been removed or sharply reduced in the green crackers
- It has been developed by Council of Scientific and Industrial Research (CSIR)
 - Components in firecrackers are replaced with others that are "less dangerous" and "less harmful" to the atmosphere
- They include environment-friendly fireworks such as sound emitting crackers, flowerpots, pencils, chakkar and sparklers.

Historical Perspective:

- This meant that these crackers couldn't be loud beyond a certain limit, had to be approved by the Petroleum and Explosives Safety Organisation (PESO) and had to be free of mercury, arsenic and barium.
- The Supreme Court in October 2018 banned the sale, use and manufacture of crackers that weren't 'green' to reduce the pollution levels as firecrackers played a major role in exacerbating it
- However, compliant crackers weren't available in the market.
- The court also restricted the time that crackers could be burst on Deepavali and police officials were tasked enforcement.

Hence this led to development of green Crackers which could reduce the impact of pollution

decrease sulphur oxide and nitrous oxide emissions by 20%.

- A green logo as well as a Quick Response (QR) coding system has been developed for differentiation of green crackers from conventional crackers.
 - QR codes is a novel feature incorporated on the fire crackers to avoid manufacture and sale of counterfeit products.
 - This will also help the consumers to track the cracker using smart phones and other devices.
- These crackers cost the same as the **older** [banned ones] and are significantly greener
- This will also protect the livelihoods of millions of people engaged in manufacture and sale of fireworks across the country.

Challenges:

- It is too short a time before Deepavali (on the 27th and 28th) to manufacture and release them in the market.
- Cracker manufactures say they aren't sure if they will be able to supply and manufacture in sufficient quantities in 2019.

Significance:

- It would reduce particulate matter pollution by 30%.
 - On explosion, they reduce the dust and smoke typically associated with crackers by 30% and also







Sanitization of Hindon River

About:

 The Ghaziabad district administration will constitute a sanitation force to clean up the Hindon river

Details

- The civil defence will also help in cleaning the river.
- A sanitation force will be constituted for cleaning the river. Local residents can also be a part of it
- The irrigation department has been ordered to purchase the necessary equipment to weed out the water hyacinths

Water Pollution:

- A test by senior scientist from the Haryana State Pollution Control Board has confirmed several chemicals such as cadmium, chromium, nickel, cobalt, arsenic, lead, mercury and other heavy metals were found in the water samples
- The discharge of untreated sewage and industrial effluents into the rivers is mainly responsible for the pollution of the Hindon
- Those living along this river dump their waste, be it sewage or solid waste, into the river.

Health Impact

- The deteriorating quality of the water in the Hindon River is a health hazard, which could lead to serious kidney malfunction issues
- It can cause skin disease and other problems like hepatitis or even cancer
- Farmers use water from Hindon for agriculture
 - Vegetables and crops are grown using this polluted water because farmers have no other choice. This

has poisoned the food chain and the food production is contaminated with chemicals



ne name associated with excellence



Army Battle Casualties Welfare Fund (ABCWF)

About:

- The fund was created under the Charitable Endowments Act, 1890.
- The ABCWF was instituted in July 2017 and was implemented retrospectively with effect from April 2016.
- The ABCWF has been set up under Department of Ex-Servicemen Welfare (ESW), Ministry of Defence
- This fund is in addition to the various schemes for the welfare of NoK (next of kin) and children of battle casualties in the form of additional ex-gratia.
 - In addition to the above assistance, existing monetary includes ex-gratia (central) for various ranks ranging from ₹25 lakh to ₹45 lakh and Army group insurance, ranging from ₹40 lakh to ₹75 lakh.
- The ABCWF has been set up after a large number of people offered to provide monetary assistance to the families of battle casualties following an incident in February 2016 at Siachen where 10 soldiers lost their lives in an avalanche.

Details

- The assistance is given in addition to family pension, financial liberalised assistance from Army group insurance, Army Welfare Fund and ex-gratia amount.
- At present, financial assistance of Rs. 2 lakh was given to battle casualties in case of death and also to those sustaining 60 per cent and above disability besides to several other categories.







(MOSAiC) expedition

(MOSAiC) : <u>Multidisciplinary drifting</u> observatory for the Study of Arctic Climate

ABOUT:

- Vishnu Nandan, a 32-year-old polar researcher from Kerala, will be the only Indian among 300 scientists from across the world aboard the MOSAiC expedition
- Under it, the German research vessel Polarstern has locked itself into a large sea ice sheet, before the winter, and will drift along with it
- Spearheaded by the Alfred Wegener Institute in Germany, scientists from 17 nations will take part in the year-long mission.
- The aim of the expedition will be to parameterise the atmospheric, geophysical, oceanographic and all other possible variables in **the Arctic**, and use it to more accurately forecast the changes in our weather systems.
- MOSAiC, the largest ever Arctic expedition in history, will be the first to conduct a study of the North Pole for an entire year. Previous studies have been of shorter periods as the thicker sea ice sheets prevent access in winter.





NATIONAL e-ASSESSMENT CENTRE (NeAC)

About:

- Union Finance Minister Nirmala Sitharaman inaugurated National e-Assessment Centre (NeAC) in New Delhi.
- Replies to the notices can be prepared at ease by taxpayers at their own residence or office and sent by email to the National e-Assessment Centre by uploading the same on the designated web portal.
- With this, Income Tax Department is introducing faceless e-assessment to impart greater efficiency, transparency and accountability in the assessment process. There would be no physical interface between taxpayers and tax officers.
- Under the new system, taxpayers have received notices on their registered emails as well as on registered accounts on the web portal, with real-time by way of SMS on their registered mobile number, specifying the issues for which their cases have been selected for scrutiny.







Information Fusion Centre-Indian Ocean Region (IFC-IOR)

About:

- The IFC tracks and monitors 75,000-1.5 lakh shipping vessels in real timeround the clock
- The IFC actively interacts with maritime community and has already built linkages with 18 countries and 15 multinational and maritime security centres
- India has asked neighbours to draw upon it and consider it as their own facilityrather than duplicating it. This statement is important in the context of reports that Bangladesh and Sri Lanka are considering setting up similar fusion centres.
- The Navy's IFC-IOR is a single point centre linking all coastal radar chain networks along the 7500km Indian coastline and in some neighbouring countries
- The FC-IOR was inaugurated in **December 2018 at Gurugram** and has now started functioning as an information sharing hub of maritime data and "cuing incident responses" to maritime security situations through a collaborative approach







India received first Rafale fighter jet

About:

- In September 2016, India and France signed a €7.87 billion Inter-Governmental Agreement (IGA) for 36 Rafale multi-role fighter jets in fly-away condition following the surprise announcement by Prime Minister Narendra Modi in April 2015.
- The first batch of the jets will arrive in India only in May 2020. By February 2021, India will receive 18 Rafale jets and by April 2022, India will get all the 36 Rafale.
- The DassaultRafale is a French twinengine, canard delta wing, multirole fighter aircraft designed and built by Dassault Aviation of France
- Equipped with a wide range of weapons, the Rafale is intended to perform in-depth strike, anti-ship strike and nuclear deterrence missions

Do You Know?

- The Rafale has been used in combat over Afghanistan, Libya, Mali, Iraq and Syria.
- Rafale has been selected for purchase by the Indian Air Force, the Egyptian Air Force, and the Qatar Air Force.

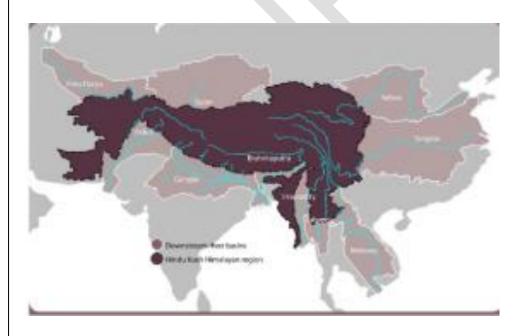




HINDU-KUSH-HIMALAYAN (HKH) REGION

About:

- The HKH region is considered the Third Pole [after the North and South Poles], and has significant implications for climate.
- It contains vast cryospheric zones, is also the world's largest store of snow and ice outside the polar region, and the source of 10 major rivers.
- There are proposals to establish a regional climate centre that will provide forecasting services and climate analyses, which will be under World Meteorological Organisation
- The India Meteorological Department (IMD) will collaborate with meteorological agencies in China and Pakistan to provide climate forecast services to countries in HKH region
- HKH region spans Afghanistan, Bangladesh, Bhutan, China, India, Kyrgyzstan, Mongolia, Myanmar, Nepal, Pakistan, Tajikistan, and Uzbekistan.









2019 NOBEL PRIZE FOR PHYSICS

About:

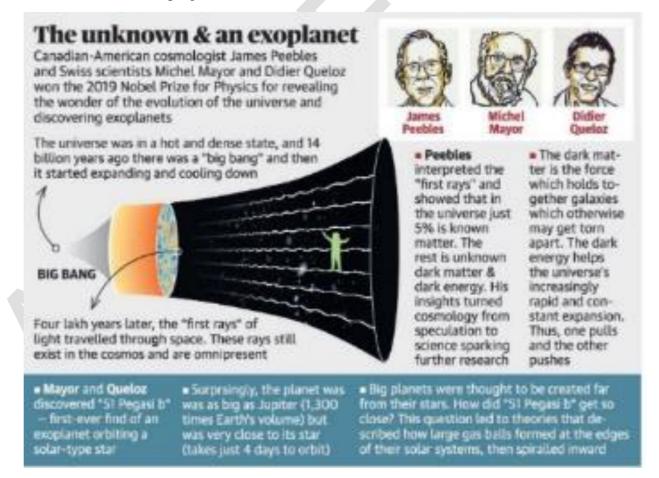
 Three scientists, James Peebles, Michel Mayor and Didier Queloz have won the Nobel Prize 2019 for Physics for their contribution to the understanding of the evolution of the universe and earth's place in the cosmos.

Cosmic Microwave Background (CMB):

- His work is focused largely on Cosmic Microwave Background (CMB) radiation, which is electromagnetic radiation left over from the early universe once it had cooled sufficiently following the Big Bang.
- Canadian-American cosmologist James Peebles, 84, won one-half of the Prize for his theoretical work helping us understand

Exoplanet:

- Using a spectrograph, ELODIE, they predicted the planet by observing the "Doppler effect" when the star wobbles as an effect of a planet's gravity on its observed light.
- The other half went to Swiss astronomers Michel Mayor, 77, and Didier Queloz, 53, for their discovery of an exoplanet that challenged preconceived ideas about planets.
- Today, exoplanets are being discovered very frequently — over 4,000 are known — which is remarkable progress from three decades ago, when not even one exoplanet was known.



how the universe evolved after the Big Bang.



Office No - 5, Below Ground Floor, Apsara Arcade Building, Near Karol Bagh Metro Station, New Delhi - 110060







2019 NOBEL PRIZE IN MEDICINE

About:

- Their research has paved the way for promising new strategies to fight anaemia, cancer and many other diseases.
- It is the 110th prize in the category that has been awarded since 1901.
- The 2019 Nobel Prize for Physiology or Medicine has been awarded to scientists William G Kaelin, Jr, Peter J Ratcliffe and Gregg L Semenza.
- They received the award jointly for their discoveries of "how cells sense and adapt to oxygen availability". They established the basis for our understanding of how oxygen levels affect cellular metabolism and physiological function.







zero budget natural farming

Context:

National Academy of Agricultural Sciences, based on a brainstorming session that included industry representatives, sent a letter to Prime Minister Narendra Modi opposing Zero Budget Natural Farming (ZBNF) recently

Historical Perspective:

- Claims were made that alternative, nonchemical agricultures were possible. Ex: Organic farming , Rudolf Steiner's biodynamics, Masanobu Fukuoka's onestraw revolution and Madagascar's System of Rice Intensification (SRI).
- In India, such alternatives and their variants included, among others, homoeofarming, Vedic farming, Natu-eco farming, Agnihotra farming Amrutpani farming. Zero Budget Natural Farming (ZBNF)
- It was after the pioneering work of Justus von Liebig and Friedrich Wöhler in organic chemistry in the 19th century that chemical fertilizers began to be used in agriculture.
- In the 20th century, the criticisms levelled against Green Revolution technologies criticisms of the increasing "chemicalisation" of agriculture.

About 'zero budget natural farming' (ZBNF): Pioneered by Subhash Palekar, an innovative farmer from Maharashtra.

- The technique replaces fertilisers and pesticides with concoctions of cow dung, cow urine, jaggery and pulse flour, and ensure perfect soil conditions for plant growth.
- It does so by keeping the top soil covered with crop residues to increase water retention, coating of seeds with cow dung and urine, concoction made of dung, urine, jaggery and pulse flour to multiply soil microbes, concoction to protect plants from pests etc.

Logic:

Soil has all the nutrients plants need. To make these nutrients available to plants, we need the intermediation of microorganisms. For this, he "four wheels recommends the ZBNF": Bijamrit, Jivamrit, Mulching and Waaphasa.

- **Bijamrit** is the microbial coating of seeds with formulations of cow urine and cow
- Jivamrit is the enhancement of soil microbes using an inoculum of cow dung, cow urine, and jaggery.
- All nutrients are present in adequate quantities in all types of soils. However, they are not in a usable form.
- Jivamrit. Mr Palekar's magical concoction. nutrients makes these available to the plants by increasing the population of soil microorganisms.
- Because of ZBNF's spiritual closeness to nature, its practitioners will stop drinking, gambling, lying, eating non-vegetarian food and wasting resources.
- Mulching is the covering of soil with crops or crop residues.
- Waaphasa is the building up of soil humus to increase soil aeration.
- Includes three methods of insect and pest management: Agniastra, Brahmastra and Neemastra (all different preparations using cow urine, cow dung, tobacco, fruits, green chilli, garlic and neem).
- 98.5% of the nutrients that plants need is obtained from air, water and sunlight; only 1.5% is from the soil.









Mr. Palekar' arguments:

- All knowledge created by agricultural universities is false. He calls Liebig as "Mr. Lie Big".
- He calls vermicomposting a "scandal" and Eiseniafoetida, the red worm used to make vermicompost, as the "destructor beast".
- He also calls Steiner's biodynamic farming "bio-dynamite farming".
- labels chemical fertilizers pesticides as "demonic substances", crossbred cows as "demonic species" and biotechnology and tractors as "demonic technologies",
- He is critical of organic farming," is "more dangerous than chemical farming", and "worse than [an] atom bomb".

Research argues:

- About 48% are low or medium in available potassium.
- Indian soils are also varyingly deficient in micronutrients, such as zinc, iron, manganese, copper, molybdenum and boron.

- Indian soils are poor in organic matter content.
- About 59% of soils are low in available nitrogen;
- About 49% are low in available phosphorus;

Solution:

- Location-specific solutions to nurture soil health and sustain increases in soil fertility.
- Scientists suggest soil test-based balanced fertilisation and integrated nutrient management methods combining organic manures (i.e., farm yard manure, compost, crop residues, biofertilizers, green manure) with chemical fertilizers.

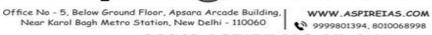
Criticisms of ZNBF:

- ZBNF is hardly zero budget. Many ingredients of Mr. Palekar's formulations have to be purchased.
- There are no independent studies to validate the claims that ZBNF plots have a higher yield than non-ZBNF plots.
- Field trials have recorded a yield shortfall of about 30% in ZBNF plots when compared with non-ZBNF plots.
- The Jivamrit prescription is essentially the application of 10 kg of cow dung and 10 litres of cow urine per acre per month. For a five-month season, this means 50 kg of cow dung and 50 litres of cow urine. Given nitrogen content of 0.5% in cow dung and 1% in cow urine, this translates to just about 750 g of nitrogen per acre per season. This is totally inadequate considering the nitrogen requirements of Indian soils.

Way Forward:

- We need to improve the fertility of saline, acidic, alkaline and toxic soils by reclaiming them. We need locationspecific interventions towards balanced fertilisation and integrated nutrient management.
- We need steps to check wind and water erosion of soils.











 We need innovative technologies to minimise physical degradation of soils due to waterlogging, flooding and crusting.

Conclusion:

- In this sense, the inclusion of ZBNF into our agricultural policy by the government appears unwise and imprudent.
- While we try to reduce the use of chemical fertilizers in some locations, we should be open to increasing their use in other locations. But such a comprehensive approach requires a strong embrace of scientific temper and a firm rejection of anti-science postures.







Data localisation plans hang in the balance

About:

India will join the Regional Comprehensive Economic Partnership (RCEP) countries in discussing the e-commerce chapter of the RCEP agreement.

Concerns:

- Clauses in the e-commerce chapter committing to free cross-border data flow can scuttle India's chances to catch-up with digital industrialisation.
- If India agrees to the provisions of Chapter 10 on e-commerce, as specified by most of the other countries, it will mean it won't be allowed to impose data localisation rules on companies looking to do business in India.
 - "No Party shall require a covered person to use or locate computing facilities in that Party's territory as a condition for conducting business in that territory," reads the wording in the draft chapter.
 - > "A Party shall not prevent crossborder transfer of information by electronic means, where such activity is for the conduct of the business of covered person."
- This would go against the Reserve Bank of India's (RBI's) norms on localisation of payments data that it had ordered in April 2018.
 - In its April 2018 notification, the RBI had said that "all system providers shall ensure that the entire data relating to payment systems operated by them are stored in a system only in India."
 - This data is to include the full endto-end transaction details. information collected, carried, or processed as part of the message or payment instruction.
- It can prevent countries implementing national laws related to data and making use of the government

procurement route to promote the ICT sector. These are critical policy tools in the unfolding data-based economic growth trajectories.

Way forward:

- Union The European (EU) has implemented the General Data Protection Regulation (GDPR), while China's Cybersecurity Law of 2016 prohibits or severely restricts routine cross-border transfers of information.
- India's Draft National E-commerce policy is aimed at enacting a data protection regulation based on the Srikrishna Committee recommendations.
- If India agrees to the wording as it is, then the rules laid down by the RBI will also have to be reviewed, as would any future plans the government has to implement data localisation in any form.
- Negotiators must ensure that the national concerns are taken on board.
- **RCEP** should not become impediment to realising the national **objectives** of increasing local production and India's ability to put its house in order to benefit from digital industrialisation.
- The flow of data now contributes more to the world's GDP than the flow of **physical goods**. The rise in importance of data and its intangibility have made the regulatory framework governing data flows complex.
- While it is increasingly difficult for countries to regulate technology, there are concerns that growing digitalisation may increase the risks to national security and consumer privacy. To enforce government right to vigilance and consumer data protection, a number of developed and developing countries are implementing data localisation measures.





India slips 10 places in global competitiveness index

About:

India has moved down 10 places to rank 68th on the annual global competitiveness index.

India's Performance:

- India is ranked also high at 15th place in terms of corporate governance, while it is ranked second globally for shareholder governance.
- In terms of market size, India is ranked third, while it has got the same rank for renewable energy regulation.
- India is above its development status when it comes to innovation, which is well ahead of most emerging economies and on par with several advanced economies.
- Compared to last year, India has moved down 10 places to rank 68th. India was ranked 58thlast year.
- World Economic Forum has said that India is among the worst-performing BRICS nations.
- It is said that India has moved down 10 places largely due to improvements witnessed by several other economies.
- Announcing the latest index, the WEF said that India ranks high in terms of macroeconomic stability and market size, while its financial sector is relatively deep and stable despite the high delinquency rate, which contributes to weakening the soundness of its banking system.
- Major areas of concern for India are:
 - Limited **ICT** (information, communications and technology) adoption
 - Low healthy life expectancy
 - India's product market efficiency is undermined by a lack of trade openness.
 - ➤ Labour market is characterised by a lack of worker rights' protection, insufficiently developed active market policies critically low participation

women.

- With a ratio of female workers to male workers of 0.26, India has been ranked very low at 128th place.
- > Poor health conditions
- India is also ranked low at 118th in of meritocracy and incentivisation
- ➤ It is ranked at 107th place for skills.
- The WEF said the healthy life expectancy, where India has been ranked 109th out of total the 141 countries surveyed for the index, is one of the shortest outside Africa and significantly below the South Asian
- There is an urgent need for India to grow its skill base.

Details:

- Singapore has replaced the U.S. as the world's most competitive economy.
- Asia-Pacific is the most competitive region in the world, followed closely by Europe and North America.
- Nordic countries are among the world's most technologically advanced, innovative and dynamic while also providing better living conditions and social protection.
- In the overall ranking, India is followed by some of its neighbours including Sri Lanka at 84th place, Bangladesh at 105th, Nepal at 108th and Pakistan at 110th place.

observations:

- Subdued growth, rising inequalities and accelerating climate change have provided the context for a backlash against capitalism, globalization, technology, and elites.
- There is gridlock in the international governance system and escalating trade and geopolitical tensions are fuelling uncertainty. This holds back investment and increases the risk of supply shocks: disruptions to global supply chains, sudden





price spikes or interruptions in the availability of key resources.

- The world is at a social, environmental and economic tipping point.
- Ten years on from the global financial crisis, the world economy remains locked in a cycle of low or flat productivity growth despite the injection of more than \$10 trillion by central banks.

Global Competitiveness Index:

- It was launched in 1979 and provides an annual assessment of the drivers of productivity and long-term economic growth.
- The index maps the competitiveness landscape of 141 economies through 103 indicators organised into 12 pillars.
- The pillars, which cover broad socioeconomic elements are institutions. infrastructure, **ICT** adoption, macroeconomic stability, health, skills, product market, labour market, the financial system, market size, business dynamism and innovation capability.
- Global Competitiveness Index compiled Geneva-based World Economic Forum (WEF).





Chemistry Nobel to trio for work on batteries

About:

Three scientists have won the Nobel Prize in Chemistry for their work developing lithium-ion batteries.

Chemistry Nobel Prize:

- The prize went to John B. Goodenough, 97, a German-born engineering professor at the University of Texas; Stanley Whittingham, 77, a British-American chemistry professor at the State University of New York; and Japan's Akira Yoshino, 71, of Meijo University.
- Whittingham developed the first functional lithium-ion battery in 1976.
- brought in Goodenough a major improvement in 1980.
- Yoshino made the first practical-use lithium-ion battery in 1985.
- Commercially manufactured lithium-ion batteries, based on what Yoshino had developed, made their first appearance in 1991.

Details:

- Lithium-ion batteries are the **first truly** portable and rechargeable batteries
- The development of lithium-ion batteries have reshaped energy storage transformed cars, mobile phones and many other devices and reduced the world's reliance on fossil fuels.
- Whittingham harnessed the enormous tendency of lithium, the lightest metal, to give away its electrons to make a battery capable of generating over two volts.
 - The choice of lithium was dictated by the fact that it let go of its electron quite easily and was also very light.
 - The older rechargeable batteries used to have solid materials in the electrodes which used to react with the electrolyte and damage the battery.

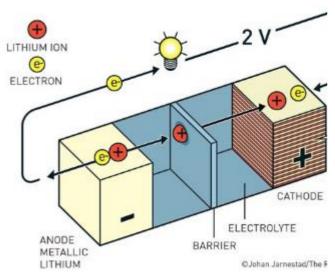
- Whittingham's innovation came from the fact that he used the atomsized spaces within the cathode material, titanium disulphide, to store the positive lithium ions.
- Goodenough had doubled the capacity of the battery to four volts by using cobalt oxide in the cathode one of two electrodes, along with the anode, that make up the ends of a battery.
 - Goodenough's battery was almost twice powerful Whittingham's.
 - Whittingham's battery worked at room temperature, making it practical, but was prone to shortcircuits on repeated charging.
 - An addition of aluminium, and a change of electrolyte, made it safer, but the big breakthrough was bv Goodenough changed the cathode to a metal oxide instead of metal sulphide (titanium disulphide) Whittingham had been using.
- Yoshino substituted petroleum coke, a carbon material, in the battery's anode. This step paved the way for the first lightweight, safe, durable and rechargeable commercial batteries to be built.
 - He got excellent results with petroleum coke, a byproduct of the oil industry.
 - battery was stable, lightweight, and as powerful as Goodenough's.
 - Yoshino started working Goodenough's battery and tried using various lighter carbon-based materials as the anode in order to bring down the weight further.

How batteries work?









- Batteries convert chemical energy into electricity.
- A battery comprises two electrodes, a positive cathode and a negative anode, which are separated by a liquid chemical, called electrolyte, which is capable of carrying charged particles.
- The two electrodes are connected through an **electrical circuit**.
- When the circuit is on, electrons travel from the negative anode towards the positive cathode, thus generating electric current, while positively charged ions move through the electrolyte.
- Single-use batteries stop working once a balance is established between the electrical charges.
- In rechargeable batteries, an external power supply reverses the flow of electric charges, so that the battery can be used again.
- Researchers have continued to look for other materials to make more efficient batteries, but so far none of these has succeeded in outperforming lithium-ion battery's high capacity and voltage.
- The lithium-ion battery itself has, however, gone several modifications and improvements so that it is much more environment-friendly than when it was first developed.





Highest no. of wildlife roadkills on NH 766

About:

A recent study has found that roadkills on the proposed alternative to NH 766 route are one of the highest in the country.

Details:

- Studies on roadkills are comparatively low in the country, but available studies show that the roadkill on the proposed alternative highway is high.
- It is suspected that the major reason for the roadkills on the alternative route is the unrestricted vehicle movements. especially during night hours, after the night traffic ban was introduced on NH 766 since 2009.
- The eight-month study recorded 2,426 roadkills during the period.

Concerns:

- For large animals such as tigers and elephants, roads and railroads hardly pose any physical barrier.
- Most mammals, however, are sensitive to disturbances by humans.
- Mananthavady-Gonikoppal Mysuru highway passes through the Tholpetty forest range of the Wayanad Wildlife Sanctuary.
- The forest range, with an extent of 77 sq km, is also a major tiger habitat.
- Smell, noise, and vehicle movement, as well experiences from human encounters, may repel the animals from approaching the road corridor.

Way forward:

- Human-wildlife conflict is one of the major threat to Indian wildlife, human activities such as deforestation, Habitat loss, Lack of prey and illegal roads cut through forest are threaten the safety and survival of wildlife in India.
- Speed-breakers have to be set up on the route to curb the menace.
- Speed limit reductions during these times

- may decrease mortality rates.
- A more robust approach would be to realign the roads.
- Many wild animals have been killed due to road accidents and speeding vehicles passing through the wildlife protected area.
- The Centre and the National Highways Authority of India have been repeatedly advised by the National Board for Wildlife, as well independent as researchers, to realign or modify sensitive roads.







GEMINI system to warn fishermen of danger

About:

- GEMINI works on GAGAN and is an India-made global positioning system. It relies on the positioning system of ISRO's GSAT satellites.
- The Indian National Centre for Ocean Information Services (INCOIS), a Hyderabad institute collaborated with Accord, a private company, to develop a box-shaped receiver that has an antenna and in-built battery that can last three to four days.
- To avoid communication blackouts during disasters like cyclones, slew of government departments, research agencies and private companies have developed GEMINI, a portable receiver linked to ISRO satellites, that is "fail-proof" and warn fishermen of danger.
- When GEMINI is connected to an app, it also lets fishermen know the probability of fish catch in the surrounding seas.
- At ₹9,000 a device, it's relatively expensive but attempts are on to subsidise it by as much as 90%.

About GAGAN

- GAGAN is inter-operable with other international SBAS systems.
- GAGAN covers the area from Africa to Australia and has expansion capability for seamless navigation services across the region.
- GPS Aided GEO Augmented Navigation (GAGAN), developed by ISRO and Airports Authority of India(AAI) is a regional Satellite Based Augmentation System (SBAS).
- The GAGAN's goal is to provide a navigation system to assist aircraft in accurate landing over the Indian airspace and in the adjoining area and applicable to safety-to-life civil operations.
- GAGAN makes airline operations more efficient and effective, increase air safety, and fuel efficiency.

Aspire () IAS The name associated with excellence





Annual Ganges river dolphin census begins

About:

The annual Ganges river dolphin census has

Details:

- During the previous censuses, direct counting method was used.
- The census is undertaken by World Wide Fund for Nature-India in collaboration with the Uttar Pradesh Forest Department.
- The census will be carried out along about 250-km-long riverine stretch of Upper Ganga between Hastinapur Wildlife Sanctuary and Narora Ramsar site in Bijnore.
- This year the tandem boat survey **method** is being used.
 - The officials use two inflated boats that move in tandem to count the dolphins.
 - After collating the data, statistical tools are employed to arrive at the final count.
 - The method, developed by the renowned river and marine ecologist Gill Braulik, provides a more accurate count of the dolphins.

Concerns:

- Once present in tens of thousands of numbers, the Ganges river dolphin has dwindled abysmally to less than 2000 during the last century owing to:
 - Direct killing
 - Habitat fragmentation by dams and barrages
 - Indiscriminate fishing.
- It is for these reasons that despite high level of protection, its numbers continue to decline.
- The absence of a coordinated conservation plan, lack of awareness and continuing anthropogenic pressure, are posing incessant threats to the existing dolphin

population.

Conservation Initiatives activated by the **Government of India:**

- Dolphin Awareness Program (Phase I) has been completed.
- Further strengthening of networking is being taken up in Phase- II with NGOs, schools and teachers in Ganga and Brahmaputra river basins.
- In the upper Ganga. 164 kms stretch of dolphin habitat is under monitoring to minimize potentials threats.
- Declared the Ganges River Dolphin as **National Aquatic Animal** on 10th May 2010 as recommended in the first meeting of NGRBA.
- working group was formed to prepare conservation action plan for the Gangetic River Dolphin.
- National Mission for Clean Ganga (NMCG) in its efforts of biodiversity conservation in the Ganga River basin has been working further on the Ganges River Dolphin Conservation Action Plans.

Gangetic Dolphins:

- The animal is known to make strange sounds when it breathes, earning it the nickname 'Susu'.
- Being a mammal, it has to come to the surface to breathe.
- It is also called **a blind dolphin** because it doesn't have a crystalline eye lens and uses echolocation to navigate and hunt.
 - It is crucial to find prey in the murky waters of the Ganga.
 - Like bats, they produce highfrequency sounds which help them 'see' objects when the sound waves bounce off them.
- IUCN Red List classifies Gangetic **Dolphin** as Endangered.





Invasive weeds threatening tiger habitats in Adilabad

About:

- But nothing much was done subsequently to contain the spread of invasive weed species in environmentally-sensitive areas like the former composite Adilabad district, where plants are threatening to obliterate pastures from precious habitats.
- Adilabad is now in need of grasslands for herbivores to thrive and in turn. support the swelling influx of tigers from forests across the border in Maharashtra.
- Way back in 1992 at the Rio de Janeiro Convention on Biodiversity, biological invasion of alien species of plants was recognised as the second-worst threat to the environment after habitat destruction.

Invasive alien species:

- They occur in all taxonomic groups, animals, plants, fungi, and microorganisms.
- They have the ability adapt physiologically to new conditions.
- They can **affect all types of ecosystems**.
- Invasive alien species are species whose introduction and/or spread outside their natural past or present distribution threatens biological diversity.
- For a species to become invasive, it must successfully out-compete native organisms, spread through its new environment, increase in population density and harm ecosystems in its introduced range.

Way forward:

- Action should be taken to stem the propagation of invasive weeds and remove those that have already propagated as they do not allow the grasses palatable to wild herbivores to grow.
- More research must be carried to monitor and check the influx of exotic pests and weeds.





Industrial output shrinks by 1.1% in August 2019

About:

- The Index of Industrial Production (IIP) contracted 1.1% from a year earlier, following a growth of 4.3% in July. Industrial output had grown 4.8% in August 2018.
- The manufacturing sector, hampered by poor demand, witnessed a contraction of 1.2%, compared with a growth of 4.2% in July and a 5.2% expansion in the year-earlier period.
- Industrial production slipped into a contraction in August, driven in large part by poor performances in the mining, manufacturing and capital goods sectors
- Within the Index, the mining sector saw growth decelerating to 0.1%, from a 4.9% expansion in July.

About IIP:

- It is compiled and published on a monthly basis by the **Central Statistical Office** with a time lag of six weeks from the reference month.
- Coal, Crude Oil, Natural Gas, Refinery Product, Steel, Cement and Electricity are known as Core Industries. The eight Core Industries comprise nearly 37.9 % of the weight of items included in the Index of Industrial Production (IIP).
- IIP is a composite indicator measuring changes in the volume of production of a basket of industrial products over a period of time, with respect to a chosen base period.

Sector	Base year 2011-12		Base year 2004-05	
Sector	Weights (%)	Item groups	Weights (%)	Item groups
Mining	14.373	1	14.157	1
Manufacturing	77.633	405	75.527	397
Electricity	7.994	1	10.316	1
Total	100	407	100	399





Saturn has the most numbers moons in our Solar System

About:

- Another 20% are orbiting Uranus (27) and Neptune (14). Of the remaining three moons, one is Earth's own while the other two are with Mars.
- Mercury is so close to the Sun and its gravity that it wouldn't be able to hold on to its own moon. Any moon would most likely crash into Mercury or maybe go into orbit around the Sun and eventually get pulled into it.
- It is not yet clear, however, why Venus does not have a moon.
- The International Astronomical Union's Minor Planet Center confirmed 20 new moons orbiting Saturn, making it the planet with the most moons in our Solar System, at 82.
- Until their confirmation, the planet with the most moons was Jupiter, at 79
- Our Solar System's planets together have 205 confirmed moons now.Saturn and Jupiter, with 161 between them, account for nearly 80% of these.







time the neighbouring states take notes

Sikkim sees surge in butterfly biodiversity

About

• From the iconic Kaiser-i-Hind to the recently rediscovered Small Woodbrown butterfly, the state of Sikkim is home to nearly 700 species of butterfly.

Details

- A new study has found that the indigenous farming systems in this area are not affecting butterfly diversity. In fact, the team from Sikkim University found that organic farming has increased the species diversity.
- There were issues raised in the past that organic farming could affect butterfly diversity in the state
- This study has helped break the stereotype that agriculture declines the wild biodiversity.

But some steps needs to be taken to protect the biodiversity

- Three, farmers should be encouraged and incentivised to maintain the diversity of the farmlands.
- Finally, more than monoculture systems, the focus should be on growing a variety of crops in a traditionally way and mixed crop farms to better conserve biodiversity.
- The agroecosystems need special protection in order to protect the wild biodiversity as there is no scope of extension of protected areas in lower elevation.
- Two, a synergy between agriculture, horticulture, forest and rural management department along with all stakeholders including farmers is required.

Way Forward

 As the Himalayan biodiversity has recently been facing threats from habitat loss, change in land use, forest fragmentation and urbanisation, it is high from Sikkim and shift to traditional organic methods to preserve the biodiversity of the region.



ne name associated with excellence



GM cottonseeds approved as food by U.S. regulators

About

U.S. regulators gave the green light for genetically modified cotton to be used for human consumption, paving the way for a protein-packed new food source — edible cottonseed that tastes a bit like chickpeas

Details

- It was developed by Texas A&M University scientists
- Ordinary cottonseed is unfit for humans and many animals to eat because it contains high levels of gossypol, a toxic chemical.
 - But the research team has used RNA interference. RNAi. or "silence" technology to virtually eliminating gene, gossypol from the cottonseed.
 - Gossypol was left at natural levels in the rest of the plant because it guards against insects and disease.
- It can be eaten as food for people and all types of animals.

Significance

- The genetic modification does not affect the plant's fiber for use in textiles
- It could help tackle global malnutrition.



megapode as well as leatherback turtles.

'Foreign' plastic invades Great Nicobar Island

About

- The huge quantities of marine debris observed on this island might be due to improper handling of the solid waste from fishing/mariculture activity and ship traffic.
- Plastic pollution has emerged as one of the severest threats to ocean ecosystems and its concentration has reached 5,80,000 pieces per square kilometre.
- Plastic represents 83% of the marine litter found. The remaining 17% is mainly textiles, paper, metal and wood.
- About 10 countries including India contributed to the plastic litter in the Great Nicobar island. They were Malaysia, Indonesia, Thailand, Singapore, Philippines, Vietnam, India, Myanmar, China and Japan.
- Major portion of the litter (40.5%) was of Malaysian origin. It was followed by Indonesia (23.9%) and Thailand (16.3%). The litter of Indian origin only amounted to 2.2%
- The overwhelming contribution from Indonesia and Thailand was likely due to its proximity to the island; the plastic is likely to have made its way to the island because of water currents via the Malacca Strait, which is a major shipping route.

Details:

- The island includes the Great Nicobar Biosphere Reserve (GNBR) comprising of the Galathea National Park and the Campbell Bay National Park.
- The island harbours a wide spectrum of ecosystems from tropical wet evergreen forests, mountain ranges and coastal plains.
- The island is also home to giant robber crabs, crab-eating macaques, the rare

- The Great Nicobar Island of Andaman has an area of about 1044 sq. km.
- According to the 2011 census, has a population of about 8,069.
- The island is home to one of the most primitive tribes of India the **Shompens**.

Aspire () IAS The name associated with excellence





Project Beehive

- Each of them will be able to track their equipment and readiness in realtime. On a click, all critical readiness states will be displayed. The equipment, how much mileage was done, when is the next service due and so on. It allows easy forecast of requirements
- The Army had earlier automated its workshops under WASP (Workshop Honey bees) which is now being upgraded to be on same level with Beehive.
- The Army's Corps of Electronics and Mechanical Engineers (EME) has launched a major initiative under Project Beehive for automation of the entire Corps
- The objective is to enable real-time monitoring and response of its 2,000 workshops across the country.
- The Army is collaborating with the Ministry of Electronics and Information Technology on this and EME officers are part of the product development.







Delhi's air quality slips to 'very poor' category

Issue

Sources in the Meteorological Department have said that the smoke from crop residue burning in neighbouring States had started reaching Delhi and is not getting dispersed due to calm winds, creating a haze over Delhi.

Details:

A Graded Response Action Plan (GRAP) is scheduled to kick-in on October 15, 2019 to check rising air pollution in the Capital.

Details:

- What is new in the recent announcement is that measures aimed at stopping the use of diesel generator sets will, extend beyond Delhi to the NCR, where many areas see regular power cuts.
- All these measures are part of GRAP, which was formulated in 2016 and notified in 2017.
- Starting October 15, some stricter measures to fight air pollution will come into force in Delhi's neighbourhood, as part of the Graded Response Action Plan (GRAP).
- The action plan has already been in effect for two years in Delhi and the National Capital Region (NCR).

What is Graded Response Action Plan (GRAP)?

- A Graded Response Action Plan (GRAP) is a set of stratified actions that are taken once the pollution level reaches a certain specified limit.
- Approved by the Supreme Court in 2016, the plan was formulated after several meetings that the Environment Pollution (Prevention and Control) Authority (EPCA) held with state government representatives and experts. The result was a plan that institutionalised measures to be taken when air quality deteriorates.
- GRAP works only as an emergency

measure. As such, the plan does not include action by various state governments to be taken throughout the year to tackle industrial, vehicular and combustion emissions. When the air quality shifts from poor to very poor, the measures listed under both sections have to be followed since the plan is incremental in nature.

- If air quality reaches the severe+ stage, GRAP talks about shutting down schools and implementing the odd-even road-space rationing scheme.
- GRAP has been successful in doing things that had not been done before
 - Creating a step-by-step plan for the entire Delhi-NCR region and getting on board several agencies: all pollution control boards, industrial area authorities, municipal corporations, regional officials of the India Meteorological Department, and others.
 - The plan requires action and coordination among 13 different agencies in Delhi, Uttar Pradesh, Haryana and Rajasthan (NCR areas). At the head of the table is the EPCA, mandated by the Supreme Court.
- GRAP was notified in 2017 by the Centre and draws its authority from this notification.
- Before the imposition of any measures, EPCA holds a meeting with representatives from all NCR states, and a call is taken on which actions has to be made applicable in which town.
- In 2018, the ban on using diesel generator sets was implemented only in Delhi.
- This year, it is being extended to a few NCR towns. Rural areas are, however, being left out of this stringent measure because of unreliable power supply.





Has GRAP helped?

- The biggest success of GRAP has been in fixing accountability and deadlines. For each action to be taken under a particular air quality category, executing agencies are clearly marked.
- In a territory like Delhi, where a multiplicity of authorities has been a long-standing impediment to effective governance, this step made a crucial difference.
- Also, coordination among as many as 13 agencies from four states is simplified to a degree because of the clear demarcation of responsibilities.
- Three major policy decisions that can be credited to EPCA and GRAP are the closure of the thermal power plant at Badarpur, bringing BS-VI fuel to Delhi before the deadline set initially, and the ban on Pet coke as a fuel in Delhi NCR.
- The initial mandate of the body was to ensure the shift of Delhi's bus and auto fleet to CNG a mammoth task that was among the most crucial ones in cleaning Delhi's air in the late 2000s.
- The body continues to monitor pollution and assists the Supreme Court in several pollution-related matters.

Way forward:

- One criticism of the EPCA, as well as GRAP, has been the focus on Delhi.
- While other states have managed to delay several measures, citing lack of resources, Delhi has always been the first one to have stringent measures enforced.
- In meeting that discussed the ban on diesel generator sets, the point about Delhi doing all the heavy lifting was also raised.
- In 2014, when a study by the World Health Organization found that Delhi was the most polluted city in the world, panic spread in the Centre and the state government.
- The release of a study on sources of air pollution the following year also gave experts, NGOs and scientists a handle on

- why Delhi was so polluted.
- All of these things, state government officials say, have made Delhi the obvious pilot project.
- For GRAP as well as EPCA, the next challenge is to extend the measures to other states effectively.

Air Quality Indications:

- 1. Moderate to poor
- 2. Very Poor
- 3. Severe
- 4. Severe+ or Emergency





'Foreign' plastic invades Great Nicobar Island

About:

A survey of five beaches in the Great Nicobar Island has recorded plastic that is found to be of 'non-Indian origin'.

Details:

- About 10 countries including India contribute to the plastic litter in the island.
- They are Malaysia, Indonesia, Thailand, Singapore, Philippines, Vietnam, India, Myanmar, China and Japan.
 - Major portion of the litter (40.5%) was of Malaysian origin. It was followed by Indonesia (23.9%) and Thailand (16.3%).
 - Other countries contributed a minor portion.
 - The litter of Indian origin only amounted to 2.2%.
- The overwhelming contribution from Indonesia and Thailand was likely due to its proximity to the island; the plastic is likely to have made its way to the island because of water currents via the Malacca Strait, which is a major shipping route.
- The huge quantities of marine debris observed on this island could be due to improper handling of the solid waste from fishing/mariculture activity and ship

Concerns:

- Plastic pollution has emerged as one of the severest threats to ocean ecosystems and its concentration has reached 5,80,000 pieces per square kilometre.
- Plastic represents 83% of the marine litter found.
- The remaining 17% is mainly textiles, paper, metal and wood.

Great Nicobar Island:

- The Great Nicobar Island of Andaman has an area of about 1044 sq. km.
- According to the 2011 census, has a population of about 8,069.
- The island is home to one of the most primitive tribes of India — the Shompens.
- The island includes the Great Nicobar Biosphere Reserve (GNBR) comprising of the Galathea National Park and the Campbell Bay National Park.
- The island harbours a wide spectrum of ecosystems from tropical wet evergreen forests, mountain ranges and coastal plains.
- The island is also home to giant robber crabs, crab-eating macaques, the rare megapode as well as leatherback turtles.

Conclusion:

The recent

Plastic threat	Country-wise plastic litter (in %) found on the beaches of Great Nicobar Island
-----------------------	---

Country						
	S-1*	5-2*	S-3*	S-4*	S-5*	
Indonesia	24.2	23.8	23.5	22.6	25.2	
Malaysia	37.4	45.0	44.7	39.6	36.0	
Vietnam	2.2	1.3	2.4	2.8	2.7	
Thailand	15.4	12.5	18.8	17.0	18.0	
Myanmar	2.2	2.5	0.0	1.9	3.6	
Singapore	6.6	10.0	5.9	9.4	5.4	
China	2.2	0.0	2.4	1.9	3.6	
The Philippines	2.2	2.5	1.2	2.8	3.6	
Japan	2.2	0.0	0.0	0.9	0.9	
India	5.5	2.5	1.2	0.9	0.9	

^{*} S-1 to S-5 are five beach areas in the eastern part of the Great Nicobar Island



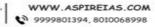
Tourists walking past a pile of plastic garbage on a beach on Phi Phi Don island in the Andamans - AFP

traffic.

findings of the survey highlight the need for



Near Karol Bagh Metro Station, New Delhi - 110060







proper guidelines and adequate staff to monitor these islands.



Aspire () IAS The name associated with excellence



Govt. yet to decide on exempting 2-wheelers from odd-even

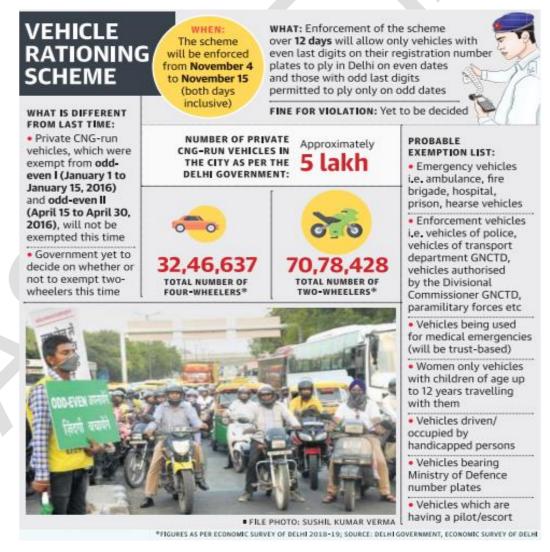
About

- Stringent pollution control measures will be imposed across Delhi and NCR towns to fight pollution.
- The measures under "very poor" and "severe" categories of the GRAP (Graded Response Action Plan) will be in place.
- GRAP was notified in 2017 and it includes a set of guidelines to be followed when air quality deteriorates.

Issue:

 Delhi government continues to work out the modalities of the scheme such as deciding on the quantum of fine for

- violators as well as putting arrangements in place to hire private buses to temporarily augment the public transport infrastructure in the Capital.
- The fate of over 70 lakh two-wheelers, which constitute close to two-thirds of the Capital's vehicular population, hangs in the balance as the Delhi government continues to deliberate on whether or not to exempt them from the provisions of the **odd-even road rationing scheme**.
- As the road rationing measure returns to the Capital for the third time, government's decision regarding twowheelers, which were exempt from the provisions of the scheme during its past













renditions in January and April 2016, would have a significant impact on whether it would be able to fulfil its stated objective of improving the Delhi's air quality.

Details:

- Announced as part of a seven-point 'Parali Pradushan' Action Plan, the other aspects of the drive, which mainly seeks to combat the detrimental effect of stubble burning in neighbouring States on Delhi's air quality, includes related measures.
- It will consist of mass distribution of anti-pollution masks to citizens, mechanised sweeping and water sprinkling on roads, tree plantation and special measures to be put in place at 12 pollution hotspots in the city.

Conclusion:

The government is currently engaged in multilevel discussions regarding the decision on exempting two-wheelers. Several departments, including Delhi Police, have been requested to share their views on the issue.

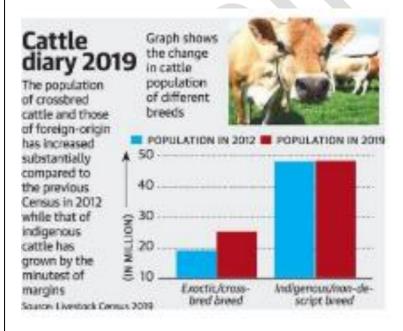






Indigenous breeds record marginal rise

- The **Rashtriya Gokul Mission**, launched by the Bharatiya Janata Party-led (BJP) government in 2014, aimed to promote indigenous desi breeds.
- However, the total population of such cattle (indigenous desi breeds) male and female together, milk-producing or not actually dropped 6% to 14.2 crore animals, while exotic and crossbred cattle saw an overall growth of almost 27% to 5 crore animals.
- According to 20th Livestock Census released there are 4.85 crore desi (native) milch cows in the country compared to 4.81 crore population in the last census in 2012, indicating less than 1% increase
- On the other hand, the milch population of exotic and crossbred cattle including varieties such as Jersey or Holsteins which have much higher milk yields saw a whopping growth of 32% over the last seven years, growing from 1.9 crore to 2.5 crore animals.







Army mulls over Joint Services Act

- Thus there is a need for creating arrangements and structures to synergise and which can pave way for effective integration
- Currently, each Service has an individual Act passed by Parliament. A Joint Services Act on approval by the government will facilitate faster integration.
- In his Independence Day address, PM Modi announced the creation of the post of **Chief of Defence Staff** to provide "effective leadership at the top level" to the three wings of the armed forces, and to help improve coordination among them.
- CDS offers seamless tri-service views and single-point advice to the Executive on long-term defence planning and management, including manpower, equipment and strategy, and above all, "jointsmanship" in operations.







Malaria parasite jumped from gorillas to humans

About:

Experts have found that African great apes were the original host to the parasite Plasmodium falciparum – the type the researchers studied, which accounts for most cases of Malaria.

Details:

- Malaria is caused by a parasite that gets into the bloodstream when an infected mosquito bites humans – or animals.
- There are lots of different strains of parasite and one of the most important ones, which now affects only humans, is Plasmodium falciparum.
- falciparumis one of seven species of parasite that can cause malaria in a family known as the Laverania.
- The study says that the parasite switched host from gorillas at about the same time as the first migration of humans out of Africa, some 40,000 to 60,000 years ago.
- The DNA sequence included a gene that produced a protein called RH5 that can bind to human red blood cells.

Zoonosis:

- When diseases, such as influenza or malaria, jump from animals to humans in this way it is known as a zoonosis.
- It occurs when pathogens that are already able to infect an animal host acquire genetic material that enables them to also infect humans.
- In the case of falciparummalaria, it is thought that the genetic transfer of the rh5 gene occurred when a gorilla cell became infected with two species of Plasmodium parasite simultaneously an event known as an introgression.
- When an introgression occurs, genetic material is swapped from one species to another.

In the history of mankind, Plasmodium falciparum malaria has arguably been responsible for more human deaths than any other disease. The scientists have discovered not only how a species

host switch has occurred, but the individual mutation which has then restricted P. falciparum to a single host species.







Scientists find clues to how brain controls pain

About

A new study published in Cell Reports has honed in on the brain circuitry responsible for upgrading downgrading pain signals, likening the mechanism to how a home thermostat controls room temperature.

Details:

- The study establishes that pain perception is essential for survival, but how much something hurts can sometimes be amplified or suppressed: for example, soldiers who sustain an injury in battle often recall not feeling anything at the time.
- The scientist said, that the region responsible was the central amygdala, which according to her work appeared to play a dual role.
 - The amygdala is an almond-shape set of neurons located deep in the brain's medial temporal lobe.
 - Shown to play a key role in the processsing of emotions, the amygdala forms part of the limbic system.
 - Amygdala is located close to the hippocampus, in the frontal portion of the temporal lobe.
 - Amygdalae are essential for the ability to feel certain emotions and to perceive them in other people.
 - This includes fear and the many changes that it causes in the body.
- The scientists found that the activity in neurons that express protein kinase C-delta amplified pain, while neurons that express somatostatin inhibited the chain of activity in the nerves required communicating pain.

What is the importance of the findings?

- It is said that experiencing pain can be a vital warning to seek help.
- For example, in a person experiencing appendicitis or heart attack. People who are born with insensitivity to pain,

- meanwhile, often do not realise the severity of injuries and are at greater risk of early death.
- According to a 2012 survey, about 11% of U.S. adults have pain every day and more than 17% of them have severe levels of pain.
- Often this leads to dependence on potent painkillers like opioids, or attempting to self-medicate through counterfeit or illicit drugs that are increasingly laced with deadly fentanyl.
- By better understanding the brain responsible mechanisms for pain modulation, researchers hope to eventually find better cures: Potentially ones that target only those forms of pain that is not useful.

Aspire 🚳 l A



Zomato, BioD Energy tie up for cooking oil-to-biodiesel

Aboout:

Restaurant aggregator and food delivery service Zomato and biodiesel manufacturer BioD Energy have inked a partnership to collect used cooking oil from restaurants around the country so that it could be converted into biodiesel, which would then be sold to oil marketing companies to be blended with regular diesel.

What is the Issue?

- Used cooking oil is given to small vendors and there is no traceability of how they dispose of the oil.
- Most of the techniques used are not in line with the standards set by the Food Safety and Standards Authority of India.

Details:

- The government has been pushing hard for used cooking oil in the country to be converted into biodiesel as an environment-friendly measure.
- Through the partnership, Zomato and BioD are aiming to collect 1,000 tonnes of used cooking oil per month and converting it into biodiesel.
- This initiative will, to an extent address the main problem of responsible disposal of cooking oil.

What is biodiesel?

- Transesterification is the chemical process, which converts natural fats and oils into Fatty Acid Methyl Esters (FAME) or Biodiesel.
- Some of the major sources of suitable oil (to make biodiesel) come from crops like palm, soybean or rapeseed.
- High-quality biodiesel is made from rapeseed but nowadays most of the biodiesel is produced from waste vegetable oils obtained from chips shops, restaurants, and industrial food producers.
- Biodiesel is an alternative fuel similar to conventional or 'fossil' diesel.
- Biodiesel can be produced from straight

- vegetable oil, animal oil/fats, tallow and waste cooking oil.
- The process used to convert these oils to Biodiesel is called transesterification.

What are the benefits of Biodiesel?

- Biodiesel has environmentally beneficial properties.
- Biodiesel and Biodiesel blends are used in almost all diesel engines and vehicles.
- The main benefit of biodiesel is that it can be described as 'carbon neutral'. This means that the fuel produces no net output of carbon in the form of carbon dioxide (CO2). This effect occurs because when the oil crop grows it absorbs the same amount of CO2 as is released when the fuel is combusted.
- In many commercial & domestic boilers, biodiesel is also used as heating fuel.







Spectroscopy

About:

- The Indian Space Research Organisation (ISRO) released an image from Chandrayaan-2 showing measurements from the Moon, carried out by the instrument Imaging Infrared Spectrometer (IIRS).
- Such studies make up a branch of physics called spectroscopy.

Details

- It is well known how visible light can disperse into rainbow colours after passing through a **prism**.
- The science of spectroscopy grew from there, and today it has extended to include the study of interaction between matter and electromagnetic radiation.
- IIRS is designed to measure light from the lunar surface in narrow spectral channels (bands).
- It has the ability to split and disperse reflected sunlight (and its emitted component) into these spectral bands.

Significance

- From the reflected solar spectrum, scientists will look for **signatures**, **including of minerals**.
- This will help map the lunar surface composition, which in turn will help us understand the Moon's origin and evolution in a geologic context.



Centre clarifies on definition of forest

About:

The Forest Advisory Committee (FAC) of the Environment Ministry has clarified that the States need not take the Centre's approval to define what constitutes unclassified land as forest. The states are free to decide on the criteria to classify land as forests.

Details:

- The freedom to define land, not already classified as forests by the Centre or State records, as forest has been the prerogative of the States since 1996 and stems from a Supreme Court order, called the Godavarman judgment.
- The conundrum of defining forests has been around since the 1980s. The 1996 Supreme Court judgment expanded the definition of forest to include lands that were already notified by the Centre as forests and appear in government records as forests as well as those that fell in the "dictionary definition" of forest.
- The latter clause allows the States to evolve their own criteria and define tracts of land as forest, and these would then be bound by forest conservation laws.
- States, having well established forest departments, are in a better position, rather than MoEF&CC, to understand their own forests and needs, and should frame criteria for their forests and the criteria so finalised by a State need not be subject to approval by MoEF&CC.
- An all-encompassing definition of forest wasn't possible for India, because the country has 16 different kinds of forest. A tract of grassland in one State might qualify in one region as forest, but not in another.
- The onus on the States to define forests is also significant, because the States often claim that they are helpless in preventing encroachment because a patch of land in question hadn't been notified as forest. A recent instance was the felling of trees in

Mumbai's Aarey Colony, which officially isn't classified as forest.

Additional Information: Forest conservation act:

- The Forest Conservation Act, 1980 is a Central Act of Parliament with a view to provide for the conservation of forest and for matters connected therewith or ancillary or incidental thereto. This law extends to the whole of India. It was enacted by Parliament of India to control further deforestation of Forest Areas in India. The act came into force on 25 October 1980
- Section 2 of the act makes a provision of a prior approval of the Central Government necessary before a State Government or any other authority issues direction for dereservation of reserved forests (which have been reserved under the Indian Forest Act 1927), use of forest land for non forest purpose, assigning forest land by way of lease or otherwise to any private person or to any authority, corporation, agency or any other organization not owned, managed or controlled by the government and clear felling of naturally grown trees.
- The term "forest land" mentioned in Section 2 of the Act refers to reserved forest, protected forest or any area recorded as forest in the government records. Lands which are notified under section 4 of the Indian Forest Act would also come within the purview of the Forest Conservation Act 1980. The Supreme Court has also held that "forest" as understood in the dictionary sense would also be included under "forest land".

Aspire OIAS The name associated with excellence





RBI Dy. Governor post vacant for 3 months

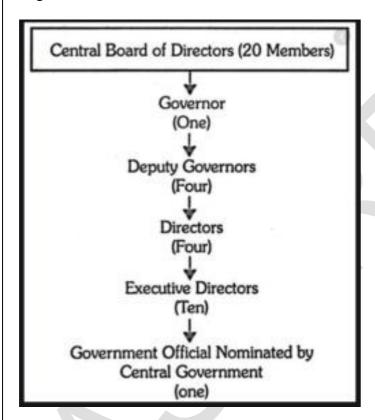
About:

At a time when the economy is facing headwinds from several fronts, the government is yet to appoint the Deputy Governor in-charge of Monetary Policy at the Reserve Bank of India (RBI). The post had fallen vacant after the resignation of Viral Acharya almost three months ago.

The importance of the economist-Deputy Governor can be gauged from the fact that the person is on the monetary policy committee that decides on interest rate and also handles the all-important monetary policy department.

Additional information on RBI:

Organizational structure



Importance of the post of deputy governor

Financial Sector Regulatory Appointment Search Committee (FSRASC) is responsible for selecting the candidate. The central bank has four Deputy Governors of which two are appointed from outside — one, a commercial banker and the other, an economist. The remaining two are promoted from within the RBI.







How insects, pests wipe off Ajanta cave paintings

About:

A classic masterpiece of Buddhist art, the Ajanta caves, is a UNESCO world heritage site and a protected monument of the Archaeological Survey of India. But the cave paintings have started deteriorating in the past few decades and are losing the battle against insects and other climatic stressors.

Details:

- Research shows that a mixture of hemp, clay, and lime plaster was considered efficient for preserving paintings and carvings in nearby Ellora caves but this method was not used in Ajanta caves. Previous studies have shown that the basal layer of the murals was made of mud plaster and organic matter such as paddy husks, grass, vegetable fibres, thus making it a good breeding place for microbes and insects.
- The main problem was the entry of rainwater and water from the Waghura River. This leads to dampness in the cave atmosphere causing an increase in algae, fungi, insects, and microbes. All these together were changing the original colour of the paintings white is turning to yellow and blue is becoming green.
- Even though ASI has started many initiatives to keep bats and pigeons from the caves, it has failed and bat and bird excreta continue to damage the paintings.

Solutions:

- The researchers have suggested using certain lights and colour to tackle the problem of insects. For instance, they suggest using ultraviolet light traps as nocturnal insects are known to get attracted to ultraviolet radiation
- A research team from National Environmental Engineering Research Institute (CSIR-NEERI) have suggested a few environmentally friendly solutions to the problem.

• ASI is presently carrying out precautionary treatments such as spraying of insecticides and herbicides, fixing the loose plaster on cave walls, regular cleaning and use of preservative coating on the painting.







National Tiger Conservation Authority(NTCA)

About:

- NTCA has red-flagged the Madhya Pradesh government's move to increase tourism activities inside the State's tiger reserves in violation of the existing guidelines
- According to a latest report by the Environment Ministry, India has 2,967 tigers, with 526 of them in Madhya Pradesh alone — the highest in the country.
- There are six tiger reserves in Madhya Pradesh — Kanha, Bandhavgarh, Panna, Satpura, Sanjay-Dubri and Pench.

About NTCA

- Project Tiger aims to aid and facilitate the breeding of tigers within environment and transport the tigers to other parks to increase the tiger population across its habitats. In addition, Project Tiger also takes up initiatives to improve the vegetation in the park, to facilitate the availability of prey for the tigers.
- NTCA used an app/system called MSTrlPES, to monitor and record the tiger population to release the census in 2019.
- It is a statutory body under the Ministry of Environment, Forests and Climate Change constituted under enabling provisions of the Wildlife (Protection) Act, 1972, as amended in 2006, for strengthening tiger conservation, as per powers and functions assigned to it under the said Act.
- The **National** Tiger Conservation Authority is set up under the Chairmanship of the Minister for Environment and Forests.







Annual Crime in India Report 2017

About:

- After a delay of two years the annual Crime in India Report 2017 was published by the National Crime Records Bureau (NCRB)
- Some of the findings of the report are:
- Delhi had the highest crime rate in the country with 1050 crimes committed per one lakh of the population as listed under the Indian Penal Code
- **Rioting**: 58,880 incidents of rioting were reported, of which the maximum incidents were reported from Bihar - 11,698, followed by Uttar Pradesh - 8,990 and Maharashtra – 7.743
 - Of the total riots reported, communal and sectarian riots accounted for 723 and 183 incidents respectively. There were 805 riots due to caste conflict and 1909 riots occurred due to political reasons,

Crime against women:

- 3,59,849 cases of crime against women were reported in the country in 2017an increaseof **6%** with respect to 2016 figures
- Uttar Pradesh topped the list with 56.011 cases followed Maharashtra with 31,979 cases and West Bengal 30,002
- Majority of cases under crimes against women were registered under 'Cruelty by Husband or his Relatives' (27.9%) followed by 'Assault on Women with Intent to Outrage her Modesty' (21.7%), 'Kidnapping & Abduction of Women' (20.5%) and 'Rape' (7.0%)
- **SC/ST Prevention of Atrocities Act:** The incidents registered under this act saw an increase from 5,082 in 2016 to 5,775 in

2017.

- Incidents of crime related to Scheduled Tribes dipped from 844 in 2016 to 720 in
- **Kidnapping/Abduction:** A total of 95,893 cases of kidnapping and abduction were registered during 2017, showing an increase of 9.0% over 2016 (88,008 cases).
- The NCRB for the **first time collected** circulationof "false/fake **news** and rumours."Under the category, maximum incidents were reported from Madhya Pradesh (138), Uttar Pradesh (32) and Kerala (18).

About NCRB

- NCRB was set-up in 1986 to function as a repository of information on crime and criminals so as to assist the investigators in linking crime to the perpetrators, based the recommendations of the National Police Commission (1977-1981)
- It was set up by merging the Directorate of Coordination and Police Computer (DCPC), Inter State Criminals Data Branch of CBI, Central Finger Print Bureau of CBI, and Statistical Branch of BPR&D.
- **NCRB** entrusted with the was responsibility for monitoring, coordinating and implementing the Crime and **Criminal Tracking Network & Systems** (CCTNS) project in the year 2009. The project connects 15000+ police stations and 6000 higher offices of police in the country.
- In 2017, NCRB launched **National Digital** Police Portal- It allows search for a criminal / suspect on the CCTNS database apart from providing various services to citizens like filing of complaints online and seeking antecedent verification of tenants, domestic helps, drivers





Many hydropower projects could face closure

- India's hydropower projects that do not comply with the Centre's ecological flow notification, which mandates that project developers ensure a minimum supply of water all through the year, could face closure.
- Power producers generally hoard water to create reserves to increase power production.
- Central Water Commission (CWC) has been tasked to ascertain actual flows and the amount of water present in the rivers
- The e-flow notification specifies that the upper stretches of the Ganga — from its origins in the glaciers and until Haridwar — would have to maintain:
 - of the monthly average flow of the preceding 10-days between November and March, which is the dry season
 - 25% of the average during the 'lean season' of October, April and May;
 - o 30% of monthly average during the monsoon months of June-September.





Rht14 & Rht18: Dwarfing genes in wheat mapped

About:

- ARI is an autonomous institute of the Department of Science and Technology.
- Scientists at Pune based Agharkar Research Institute (ARI) have mapped two alternative dwarfing g enes Rht14 and Rht18 in wheat.

Key takeaways

- DNA-based markers were developed for a better selection of genes.
- Advantages of wheat lines having these genes are:
 - Suitable for sowing under rice stubble-retained conditions and dry environments.
 - o Reduce crop residue burning
 - Allow deeper sowing of wheat seeds to avail advantage of residual moisture in the soil under dry environments.
- These genes have better **seedling vigour** and **longer coleoptiles** (sheath protecting the young shoot tip).
- Dwarfing genes were mapped on **chromosome 6A** in durum wheat.





2019 ozone hole is the smallest on record

- The gas is constantly being made and destroyed in the stratosphere, about 20-30km above the Earth.
- In an unpolluted atmosphere, this cycle of production and decomposition is in equilibrium. But chlorine and bromine-containing chemicals released by human activity have unbalanced the process, resulting in a loss of ozone that is at its greatest in the Antarctic spring in September/October.
- Nearly 200 countries agreed to ban the chemicals most damaging to the ozone under the Montreal Protocol of 1987.
- The ozone hole over Antarctica is the smallest observed since 1982, due to abnormally warm temperatures in the upper atmosphere that dramatically limited ozone depletion in September and October this year, according to NASA
- Ozone is a molecule that is composed of three oxygen atoms. It is responsible for filtering out harmful ultraviolet radiation from the Sun.







Ramgarh dam

- The dam, which earlier supplied drinking water to the city, has dried completely in the last decade
- There is a suggestion that the Chambal river water be supplied to the dam through the proposed Eastern Rajasthan Canal Project so as to revive the dam.
- An agitation for protection of catchment area of the historic Ramgarh dam, once considered the lifeline of Jaipur, has revived with the villagers and farmers of the region staging a sit-in near the dam demanding immediate removal of encroachments.
- Its construction was completed in 1904 during the reign of erstwhile Jaipur ruler Sawai Madho Singh II.







Rise in stubble burning cases in Punjab

- Consequently, harvesting of the crop has also started early this time. And because of this, the number of farm fires this year, as against the corresponding period last year, is higher.
- For management of paddy straw without burning, the Centre and the State government are providing subsidised agro-machines and equipment to farmers and cooperative societies. Yet farmers continue to burn crop residue claiming lack of alternatives.
- The ban and action against people burning crop residue is regulated under the Air (Prevention and Control of Pollution) Act, 1981.
- In 2016, Punjab witnessed 84,000 incidents of stubble fire while in 2017, a dip was seen with the number of cases at 46,000. In 2018, the fire incidents were close to 50,000, according to the government data.
- Over 3,300 cases reported till October 21 as against 2,564 incidents in corresponding period last year
- Stubble burning, close to the autumn season every year, has been a key contributing factor of pollution in the air and breathing problems among people across the northern region, including New Delhi
- The reason behind the higher number of fire cases has been the decision to advance the date of paddy sowing this season, a week earlier than the scheduled date of June 20 due to early arrival of monsoon this year.







Hover-taxis

- Many Asian mega-cities are notorious for monster traffic jams, which leave millions of commuters facing long journeys, and can delay executives trying to dash to airports or reach important meetings on time.
- Volocopter says that such innovation in air transport is going to reduce traffic congestion and revolutionize urban mobility
- German firm Volocopter tests its batteryoperated, two-seater heli-taxi vehicle in Singapore
- The 18 propeller vehicle— resembling small helicopters but powered by drone-like technology can fly autonomously but there was a pilot aboard during the test for safety reasons.
- Earlier in October 2019, Volocopter unveiled the "VoloPort", a flying taxi port at the Singapore's Marina Bay with a landing and takeoff pad as well as a passenger terminal.

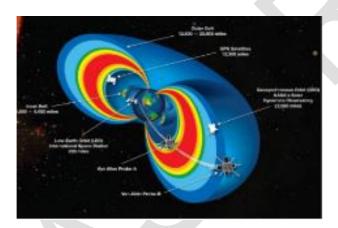






Van Allen Probes mission

- Both the satellites will exist in the orbit for approximately 15 years during which they are going to slowly come towards the atmosphere and get destroyed in the orbit.
- Van Allen radiation belts are giant swaths of magnetically trapped, highly energetic charged particles that surround earth.
- James Van Allen, a physicist at the University of Iowa, discovered these radiation belts in 1958.
- NASA recently decommissioned its 7year-old Van Allen Probes mission.
- It comprised of two satellites that were placed in Van Allen belts which studied how these radiation rings acquire and lose electromagnetic particles
- Understanding space weather is important as it interferes with our on-ground power grids, navigation communications satellites in orbit and health of astronauts









Air Quality Index (AQI), Ambient Air Quality Standards and SAFAR

National Air Quality Index' (AQI)

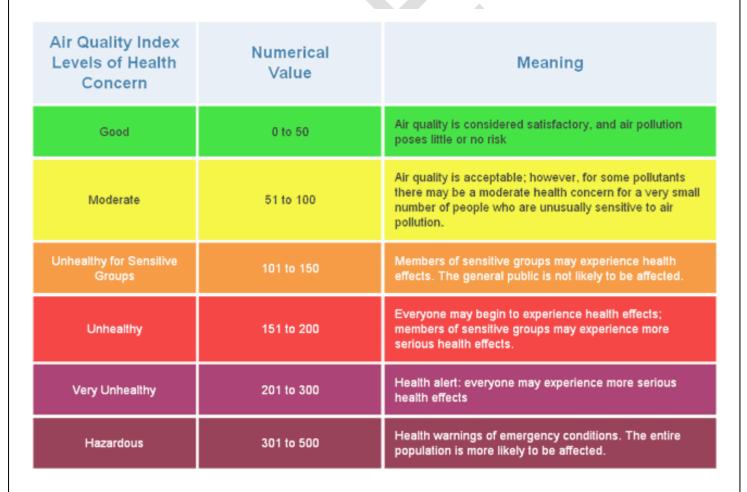
- Was launched in 2014 to disseminate information on air quality
- Initiative under Swachh Bharat Mission
- The measurement of air quality is based on eight pollutants
- AQI has six categories of air quality. These are: Good, Satisfactory, Moderately Polluted, Poor, Very Poor and Severe.
- AOI is considered as 'One Number- One Colour-One **Description'** common man to judge the air quality within his vicinity.

8 pollutants measured by AOI

- 1. Particulate Matter (size less than 10 μm) or (PM10),
- 2. Particulate Matter (size less than 2.5 µm) or (PM2.5),
- 3. Nitrogen Dioxide (NO2),

- 4. Sulphur Dioxide (SO2),
- 5. Carbon Monoxide (CO),
- 6. Ozone (O3),
- 7. Ammonia (NH3), and
- 8. Lead (Pb)

6 categories of air quality









8. Toluene 9. Xylene

10. Mercury

National Ambient Air Quality Standards

- **National Ambient** Air **Ouality** Standards are the standards for ambient air quality set by the Central **Pollution Control Board (CPCB)**
- The CPCB has been conferred this power by the Air (Prevention and Control of Pollution) Act, 1981.

Ambient Air Quality Standards contains 12 pollutants (8 pollutants contained in AQI and 4 others given below)

- 1. Benzene
- 2. Benzo(a)Pyrene (BaP)
- 3. Arsenic
- 4. Nickel

System of Air Quality and Weather Forecasting and Research (SAFAR)

- Initiative introduced by the Ministry of Earth Sciences (MoES) to measure the air quality of a metropolitan city
- Indigenously developed by the Indian Institute of Tropical Meteorology (IITM), Pune and is operationalized by the India Meteorological Department (IMD).
- It gives out real-time air quality index on a 24×7 basis with color-coding (along with 72 hours advance forecast).
- SAFAR is an integral part of India's first Air Quality Early Warning System operational in Delhi.

Objective:

- increase awareness among the general public regarding the air quality in their
- helps the policy-makers to develop appropriate mitigation measures and systematic actions

Pollutants monitored by SAFAR

- 2. PM10
- 3. Ozone
- 4. Carbon Monoxide (CO)
- 5. Nitrogen Oxides (NOx)
- 6. Sulfur Dioxide (SO2)
- 7. Benzene

Aspire () IAS The name associated with excellence





ISRO's PSLV missions

About:

- ISRO bags orders from four international customers
- 3 PSLV missions C47, C48 and C49 scheduled to launch in November and December 2019 from the Satish Dhawan Space Centre

Sky is the limit ISRO's workhorse launch vehicle PSLV has many international customers for its future missions PSLV-C47 will have ISRO's Cartosat-3 as its main payload CUSTOMERS PSLV will lend its Analytical antenna technology & small SAR satellite by the iQPS A third of PSLV's 300 Spire Global, an existforeign customers so ing customer, is sending by Spaceflight, a U.S. four nanosatellites to add to its constellation

Benefits from Launching of Foreign Satellites

- Reduces the cost of launching Indian satellites along with other foreign satellites.
- Helps in growth of space sector.
- Employment generation.
- Has led to New Space start-ups.

More

- India took a step into space business with **National Space India Limited**, which will be the new commercial arm of the department of space.
- The NSIL will help boost commercialization of India's space research.

Differences between GSLV and PSLV

- Both PSLV (Polar Satellite Launch Vehicle) and GSLV (Geosynchronous Satellite Launch Vehicle) are the satellitelaunch vehicles (rockets) developed by ISRO.
- PSLV is designed mainly to deliver the "earth-observation" or "remote-sensing" satellites with lift-off mass of up to about 1750 Kg to Sun-Synchronous circular polar orbits of 600-900 Km altitude.
- The GSLV is designed mainly to deliver

- the communication-satellites to the highly elliptical (typically 250 x 36000 Km) Geosynchronous Transfer Orbit (GTO).
- The satellite in GTO is further raised to its final destination, viz., Geo-synchronous Earth orbit (GEO) of about 36000 Km altitude (and zero deg inclination on equatorial plane) by firing its in-built onboard engines.







DOING BUSINESS REPORT 2020

- In the last 5 years, India's ranking has improved 79 places - to 63 in 2019 from 142 in 2014.
- Significant improvements have been registered in 'Resolving Insolvency', 'Dealing with Construction Permits', 'Registering Property', 'Trading across Boards' and 'Paying Taxes' indicators
- Recovery rate under resolving insolvency has improved significantly from 26.5% to 71.6%.
- The time taken for resolving insolvency has also come down significantly from 4.3 years to 1.6 years.
- India continues to maintain its first position among South Asian countries. It was 6th in 2014.
- The World Bank released its latest Doing Business Report (DBR, 2020).
- India ranks at 63rd among 190 countries, moved 14 places from the previous year (77th rank in 2018).
- The DBR ranks countries on the basis of Distance to Frontier (DTF), a score that shows the gap of an economy to the global best practice. This year, India's DTF score improved to 71.0 from 67.23 in the previous year.
- The report assess improvement in ease of doing business environment in Delhi and Mumbai.







2 out of 3 wild poliovirus strains have been eradicated

- Symptomatically, all three strains are identical, in that they cause irreversible paralysis or even death.
- But there are genetic and virological differences, which make these three strains three separate viruses that must each be eradicated individually.
- There is no cure for polio, it can only be prevented. Polio vaccine, given multiple times, can protect a child for life.
- Two polio vaccines, are used throughout the world to provide immunity to poliovirus. One uses inactivated (dead) poliovirus and the other uses attenuated (weakened) poliovirus.
- In an announcement by the World Health Organisation (WHO) on World Polio Day (October 24), an independent commission of experts declared that wild poliovirus type 3 (WPV3) has been eradicated worldwide.
- This follows the eradication of smallpox and wild poliovirus **type 2.**
- Efforts are being taken to eliminate the wild poliovirus type 1. This virus remains in circulation in just two countries, Afghanistan and Pakistan.
- There are three individual and immunologically distinct wild poliovirus strains: wild poliovirus type 1 (WPV1), wild poliovirus type 2 (WPV2) and wild poliovirus type 3 (WPV3).





PMO tells States to address stubble burning issue

ABOUT:

- Experts had earlier said that this weekend is particularly crucial for air quality due to Diwali which will see bursting of crackers as well as heightened traffic.
- The GRAP Task Force recommended that hot mix plants, stone-crushers and construction activities that generate dust are prohibited from October 26 to 30 in Delhi and its satellite towns
- The Prime Minister's Office (PMO) has instructed Punjab and Haryana to address the issue of stubble burning.
- Principal Secretary to the Prime Minister chaired a meeting with members of a task force that oversees implementation of the Graded Response Action Plan (GRAP)
- According to assessment by weather forecast agency SAFAR, the impact of stubble burning from Haryana & Punjab is "moderate but gradually increasing."

What is graded response action plan (GRAP)?

- The measures include stoppage in the running of diesel sets, a three-fourfold increase in the parking rates, enhanced bus and metro services, and newspapers, TV and radio stations alerts on a daily basis with advice to people with respiratory and cardiac problems.
- Also, air in moderate-to-poor category will involve periodical mechanised sweeping of roads, deployment of traffic police for smooth flow of traffic at identified choke areas and strict enforcement of pollution norms at brick kilns and industrial complexes.
- The plan was prepared by the Supreme Court-mandated Environment Pollution Control Authority (EPCA), which held meetings with stakeholders from all states over several months. A graded response lays down stratified actions that are required to be taken as and when the concentration of pollutants reaches a certain level.

• This plan will be putting into action a number of anti-pollution measures and there will be specific actions for each category — moderate to poor, very poor, severe and emergency.







IndiGen initiative

About:

- This has enabled benchmarking the scalability of genome sequencing and computational analysis at population scale in a defined timeline. The ability to decode the genetic blueprint of humans through whole genome sequencing will be a major driver for biomedical science.
- The aim of the exercise was twofold: to test if it's possible to rapidly and reliably scan several genomes and advise people on health risks that are manifest in their gene and to understand the variation and frequency of certain genes that are known to be linked to disease.
- The outcomes of the IndiGen will have applications in a number of areas including predictive and preventive medicine with faster and efficient diagnosis of rare genetic diseases.
- The IndiGen initiative was undertaken by Council of Scientific and Industrial Research (CSIR) in April 2019, which was implemented by the CSIR-Institute of Genomics and Integrative Biology (IGIB), Delhi and CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad.
- CSIR has conducted Whole Genome Sequencing of 1,008 Indians from different populations across the country under the IndiGen Genome project.

About Council of Scientific and Industrial Research (CSIR)

- It is an **autonomous body** and the largest research and development (R&D) organisation in India running 37 laboratories and 39 field stations or extension centres.
- Although it is mainly funded by the Ministry of Science and Technology, it operates as an autonomous body registered under the Registration of Societies Act, 1860.
- The research and development activities of CSIR includes aerospace engineering,

Structural engineering, ocean sciences, Life sciences, metallurgy, chemicals, mining, food, petroleum, leather, and environment.







SYCAMORE

About:

Google announced that its quantum computer - Sycamore- has achieved a breakthrough called quantum supremacy in computing.

what is quantum supremacy?

- It describes the point where quantum computers can do things that classical computers cannot.
- In Google's case, researchers at the University of California, Santa Barbara have claimed to have developed a processor that took 200 seconds to do a calculation that would have taken a classical computer 10,000 years.

what is a quantum computer?

- In a quantum computer, information is stored in quantum bits, or qubits. And a qubit can be both 0 and 1 at the same time.
- Unlike classical physics, in which an object can exist in one place at one time, quantum physics looks at the probabilities of an object being at different points. Existence in multiple states is called superposition, and the relationships among these states is called entanglement.
- Traditional computers work on the basis of the laws of classical physics, specifically by utilising the flow of electricity. A quantum computer, on the other hand, seeks to exploit the laws that govern the behaviour of atoms and subatomic particles.
- Α classical computer information. Bits of information are stored as either 0 or 1. Every string of such digits (bitstrings) represents a unique character or instruction; for example, 01100001 represents the lowercase "a".





DOXXING

- A court in Hong Kong has issued a temporary order, banning the practice of 'doxxing'
- A common dictionary definition of doxxing (also spelt as 'doxing') is to publicly identify or publish private information about someone, especially with the intention of punishing or taking revenge.
- The intention was to identify and stigmatise, and attempt to force a change in the behaviour of the targeted individual through these intimidatory tactics.
- While it was employed widely against members of the neo-Nazi supremacist crowd who seemed open and bold about their racism, its potential for use — and misuse — by a range of people and groups was apparent.
- In Hong Kong, protesters have been releasing information about police officers and their families, thereby opening them up to targeted violence or harassment and abuse, either physically or online.
- Doxxing has emerged as one of the major tactics employed by pro-democracy protesters who have been carrying out sometimes relentless. violent. demonstrations that the administration has found impossible to suppress for over four months now.







Nurture the Future

- The initiative will ensure a better and brighter future for the youth living in remote and rural areas.
- Over the next five years, the initiative is expected to cover nearly one lakh youth throughout the country as part of the foundation course of probationers who have just passed the civil services exam and joined the country's elite bureaucracy.
- The Centre's first-ever common foundation course Aarambh (Beginning) for 2019 batch probationer civil servants has begun at the Statue of Unity in Kevadia, Gujarat
- Along with training and seminars by experts, the government has also launched a new initiative under which each official will guide a local youth from villages near the Statue of Unity, which is located in a tribal area along the Narmada river.
- Under the mentorship programme Nurture the Future, close to 500 civil service officials will be divided into teams to visit villages near Kevadia and each official will take a youth under his wing and provide career and professional guidance







Weavers will soon sell products directly online

- Government already tied up with ecommerce site Yes Poho which is selling Uppada and Kalamkari saris. Yes Poho talks to weavers directly and middlemen and even the AP State Handloom Weavers Cooperative Society (APCO) have no role to play here.
- For sale of saris and fabric through showrooms other than APCO's stores, the H&T Department is going to tie up with Fab India who will procure the saris from weavers directly and sell them in their stores across the country and abroad.
- The APCO has also entered into an agreement with e-commerce giants Amazon and Flipkart for sale of 400 types of handloom products like saris, towels and blankets on their platforms.
- Handloom weavers in Andhra Pradesh are going to get the much-needed impetus as the Department of Handloom and Textiles(H&T) is all set to launch three initiatives that directly connect weavers to customers via popular online and offline garment business platforms.
- The initiatives are aimed at ending the middlemen system that has been depriving weavers of basic earnings and sustainability, and passing on the benefit from the sale of the product to the weaver





Kudankulam Power Plant

- Kudankulam and other Indian nuclear power plants, control systems were not connected to an outside cyber network and Internet
- Government revealed that a cybersecurity audit was conducted recently after a futile attempt to hack the NPCIL's isolated network was made.
- When an Iranian nuclear power plant came under suspected cyberattack in 2012 (Stuxnet virus), Nuclear Power Corporation of India Ltd. (NPCIL) took all precautionary measures though it had already put in place an isolated network
- Hours after a cybersecurity expert claimed on Twitter that the Kudankulam Nuclear Power Plant's (KKNPP) domain controller-level access could have been compromised, government has categorically denied it
- Cyberattack on the unit was not possible as its systems were all standalone and forms an isolated network.







Anti-Trust

About:

- The Competition Commission of India (CCI) has ordered a detailed investigation into online travel booking companies Make My Trip and Goibibo and hospitality provider OYO
- This order is based on complaints by members of the Federation of Hotel and Restaurant Associations of India (FHRAI) alleging deep-discounting, payment issues and cheating by these firms.
- CCI said there was a prima-facie case to investigate MMT-Go and OYO for alleged violation of the provisions of Section 3(4) of the Competition Act — pertaining to anti-competitive pacts and Section 4 of the Act (relating to abuse of dominant position).

Competition commission of India (CCI)

- A statutory body established under the provisions of The Competition Act, 2002.
- It consists of a Chairperson and 6
 Members appointed by the Central
 Government.
- Its mandate is implement provisions of The Competition Act, 2002 which
 - prohibits anti-competitive agreements and abuse of dominant position by enterprises
 - regulates mergers and acquisition (M&A) which can have an adverse effect on competition within India.





Flood risk

- Globally nearly 110 million people live on land below the current high tide lines and 250 million on land below annual flood levels
- Current climate studies say that climate change has caused global mean sea level to rise by 11-16 cm in the 20th century and is expected to by as much as 2 m by the end of this century.
- As the tideline rises higher than the ground people call home, nations will increasingly confront questions about whether, how much, and how long coastal defences can protect them
- New study has shown that in India, 36 million people would face annual flooding by 2050 and 44 million by 2100 if emissions continue to rise unabated.
- Nearly 21 million are expected to be living below the High Tide Line, the boundary that marks the farthest to which the sea reaches into the land at high tide.







Government to work on relief package for Telecom sector

About:

- Following the order, the telcos may have to pay the government ₹1.42 lakh crore within three months.
- CoS will review various demands made by the industry, including deferment of spectrum auction payment due for the next two years, reduction in spectrum usage charges and the Universal Service Obligation Fund levy.
- The government has constituted a Committee of Secretaries (CoS), headed by Cabinet Secretary to work out a relief package for the telecom sector.
- This may help mitigate the impact of the more than ₹1.4 lakh crore that the telcos may need to pay the exchequer following a recent Supreme Court order.
- Supreme Court upheld including government's position on from non-telecommunication revenue businesses calculating in annual adjusted gross revenue (AGR) of telecom companies, a share of which is paid as licence and spectrum fee to the exchequer.

Stress in Telecom Sector

- The industry's debt currently stands at about ₹4 lakh crore
- The gross revenue of the industry had fallen between 2017-18 and 2018-19, the source said the price of data for the customer at an average of ₹8 per GB is perhaps the lowest in the world.
- The average revenue per user per month has declined from ₹174 in 2014-15 to ₹113 in 2018-19.
- Bharti Airtel's liability stands at about ₹42,000 crore while Vodafone Idea may have to shell out about ₹40,000 crore





Graded Response Action Plan (GRAP)

About:

- With air quality in Delhi nose diving to 'severe' levels, the Graded Response Action Plan (GRAP) Task Force extended the ban on construction and industrial activities dependent on coal till November 2.
- Apart from Diwali crackers and sluggish wind, the key culprit for dip in air quality in Delhi was stubble burning in Punjab and Haryana,
- The plan was prepared by the Supreme Court-mandated Environment Pollution Control Authority (EPCA), which held meetings with stakeholders from all states over several months. A graded response lays stratified actions that are required to be taken as and when the concentration of pollutants reaches a certain level.
- This plan will be putting into action a number of anti-pollution measures and there will be specific actions for each category — moderate to poor, very poor, severe and emergency.
- Severe+ Emergency (PM 2.5 over 300 µg/cubic metre or PM10 over 500 µg/cu. m. for 48+ hours)
 - Stop entry of trucks into Delhi (except essential commodities)
 - Stop construction work
 - Introduce odd/even scheme for private vehicles and minimise exemptions
 - Task Force to decide any additional steps including shutting of schools

- Severe (PM 2.5 over 250 μg/cu. m. or PM10 over 430 µg/cu. m.)
- Close brick kilns, hot mix plants, stone crushers
- Maximise power generation from natural gas to reduce generation from
- Encourage public transport, with differential rates
- More frequent mechanised cleaning of road and sprinkling of water
- Very Poor (PM2.5 121-250 μg/cu. m. or PM10 351-430 μg/cu. m.)
 - 0
- Stop use of diesel generator
- Enhance parking fee by 3-4
- Increase bus and Metro services
- Apartment owners discourage burning fires in winter by providing electric heaters during winter
- Advisories to people with respiratory and cardiac conditions to restrict outdoor movement
- Moderate poor (PM2.5 61-120 μg/cu. m. or PM10 101-350 μg/cu. m.)
 - Heavy fines for garbage burning
 - Close/enforce pollution control regulations in brick kilns and industries
 - Mechanised sweeping on roads with heavy traffic and water

Aspire (1) IAS The name associated with excellence



sprinkling

Strictly enforce ban on firecrackers



Unnat Bharat Abhiyan

- The Objective is to use the knowledge base of the Premier Higher Education Institutions (HEIs) of the country to ensure rural development.
- It is expected to be a two-way learning process, where institutions share their knowledge with villages and also learn from the wisdom and commonsense of rural folk.
- The key points include helping villages achieve 100% school results, creating 25 jobs each in four sectors in each village where work would take place, increasing rural incomes, providing drinking water and sanitation to villages, disposing village garbage, among other things.
- Under Unnat Bharat Abhiyan 2.0, both technical and non-technical institutions have been invited to build systems in villages as per their strengths.
- President during his convocation address in Jamia millia University emphasised need to connect all sections of society with development and appreciated the University for adopting five villages under Unnat Bharat Abhiyan
- Unnat Bharat Abhiyan was launched by the Union Ministry of Human Resource Development (HRD) in April 2018.
- Under this each selected institute would adopt a cluster of villages/panchayats.
 Institutes will then carry out studies to assess the local problems and then use technology to improve the implementation of various government schemes.







Kudankulam plant&'dtrack' malware

In News

- The Nuclear Power Corporation of India Ltd. (NPCIL) on Wednesday confirmed that a malware had indeed infected its system at the Kudankulam Nuclear Power Plant (KKNPP), a day after KKNPP officials had categorically asserted that the systems at the plant could not be accessed by anyone outside the network as they were all isolated.
- The matter was conveyed by CERT-In [Indian Computer Emergency Response Team] when it was noticed by them on September 4, 2019.
- The investigation had revealed that the infected computer belonged to a user who was connected "in the Internet connected network used for administrative purposes,
- However, the authorities stated that system was isolated from the critical internal network and that the networks were being "continuously monitored".
- The cyberintrusion came to light on 28th October after the website VirusTotal uploaded a data dump that seemed to point to a data breach in the KKNPP system. The dump pointed to a 'dtrack' malware, which can be used as a remote administrator tool, having infected systems at the KKNPP.

About CERT-IN

- CERT-In is an acronym for 'Indian Computer Emergency Response Team'.
 As per Information Technology Amendment Act 2008, CERT-In is the National Incident Response Centre for major computer security incidents in its constituency i.e. Indian cyber community.
- CERT-IN is operational since 2004
- CERT-In's primary role is to raise security awareness among Indian cyber community and to provide technical assistance and advise them to help them recover from computer security incidents. It functions under the Ministry of Electronics and Information Technology.

- Objectives of CERT-In
- Preventing cyber-attacks against the country's cyber space.
- Responding to cyber-attacks and minimizing damage and recovery time.
- Reducing 'national vulnerability to cyberattacks.
- Enhancing security awareness among common citizens.

Aspire OIAS The name associated with excellence





Submarine propulsion system test a success

About:

- The indigenous Air Independent Propulsion (AIP) system to enhance the endurance of conventional submarines being developed by DRDO reached a milestone with the successful operation of a land-based prototype.
- An AIP module enables conventional submarines to remain submerged for longer duration. Fuel cell-based AIP has merits in performance compared to other technologies
- All Scorpene submarines of the Navy are planned to be equipped with an AIP module in due course

Scorpene-class submarines

- These are a class of diesel-electric attack submarines jointly developed by the French Direction des Constructions Navales (DCN) and the Spanish company Navantia, and now by Naval Group.
- It features diesel propulsion and an additional air-independent propulsion (AIP).





