ESE-2020
(Preliminary Examination)

Current Issues

(December - 2020)

INTERNATIONAL RELATIONS:

1) **China, Pakistan sign military deal**

- China and Pakistan have signed a new military memorandum of understanding to boost their already close defence relationship, as China's Defence Minister and People's Liberation Army (PLA) General Wei Fenghe met Pakistan's leadership in Islamabad and visited the headquarters of the Army at Rawalpindi.

- The two militaries signed an MoU following Gen. Wei's meeting with Pakistan's Chief of the Army Staff, General QamarJavedBajwa, at the General Headquarters, according to reports in the Pakistani media.

- Both exchanged in-depth views on the international and regional situations, the relations between the two countries and militaries, the equipment and technology cooperation and other issues.

- They also discussed ongoing projects under the China Pakistan Economic Corridor (CPEC), in which the Pakistani military is playing an increasingly prominent role.

CPEC:

The China–Pakistan Economic Corridor (CPEC) is an economic route stretching from western China through Pakistan to the Indian Ocean coast. It is part of China's Belt and Road Initiative.

It is a collection of infrastructure projects that are under construction throughout Pakistan since 2013.

2) LAC standoff

Talks with China on the Line of Actual Control (LAC) could take much longer according to the External Affairs Minister S. Jaishankar drawing a parallel to a similar military stand-off in Arunachal Pradesh's 'Sumdorong Chu' in 1986 that took nearly nine years to resolve.

Sumdorong Chu' crisis:

- Sumdorong Chu, referred to as Sangduoluo He in the Chinese media, is a tributary of the Nyamjang Chu river that flows along the disputed Sino-Indian border between the Cona County of Tibet and the Tawang district of Arunachal Pradesh.

- In 1986–87, a military standoff took place between India and China in the Sumdorong Chu Valley bordering the Tawang district, Arunachal Pradesh and Cona County, Tibet. It was initiated by China moving a company of troops to Wangdung, a pasture to the south of Sumdorong Chu that India believed to be its territory.

- The Indian troops stood their ground on the neighbouring Longro La ridge and both the sides moved a large number of troops to the border. The crisis was diffused after the visit of Indian External Affairs minister to Beijing in May 1987. The standoff was the first military confrontation along the disputed McMahon Line after the 1962 war and gave rise to fears of escalation. Subsequently, India and China formulated agreements for managing future border tensions.

3) Biden and Iran nuclear deal

- U.S. President-elect Joe Biden will insist Iran agrees to new demands if it wants the U.S. to return to a nuclear deal and lift sanctions.
- The Biden administration would seek to extend the duration of "restrictions on Iran's production of fissile material that could be used to make a (nuclear) bomb" in a new round of negotiations.
- Iran would also have to address its "malign" regional activities through proxies in Lebanon, Iraq, Syria and Yemen in the talks that would have to include its Arab neighbours like Saudi Arabia.

Background:

- President Donald Trump unilaterally withdrew from the deal in 2018 and has reimposed crippling sanctions on Iran as part of a "maximum pressure" campaign against the US's arch enemy.
- Mr. Biden warned that if Iran acquired a bomb, it would spark a nuclear arms race in the West Asia, "and the last goddamn thing we need in that part of the world is a buildup of nuclear capability".
- The 2015 nuclear deal — known formally as the Joint Comprehensive Plan of Action, or JCPOA — gave Iran relief from sanctions in return for curbs on its nuclear programme.
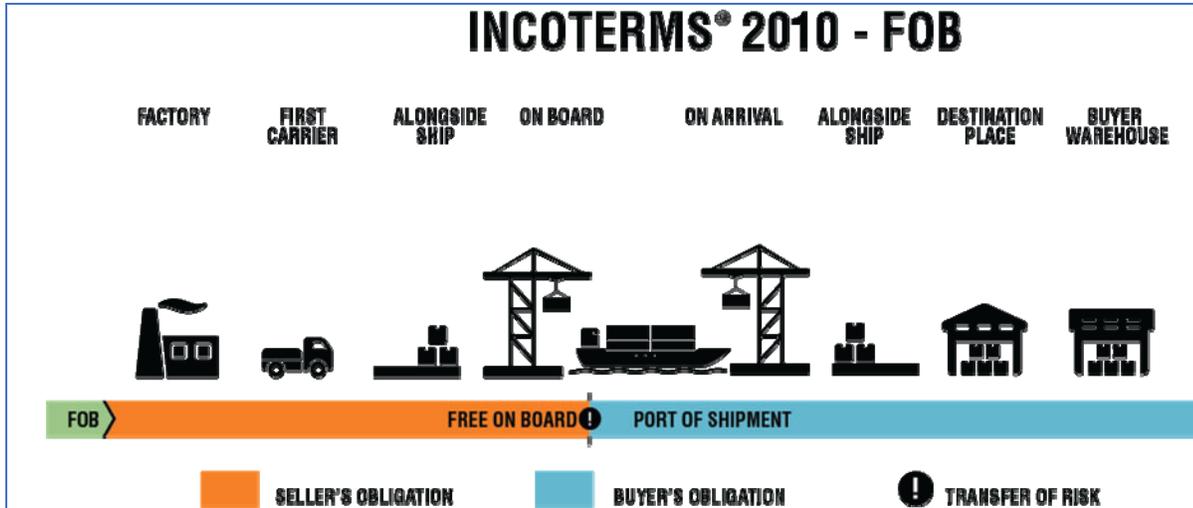
> The Joint Comprehensive Plan of Action, known commonly as the Iran nuclear deal or Iran deal, is an agreement on the Iranian nuclear program reached in Vienna on 14 July 2015, between Iran and the P5+1 together with the European Union.
>
> This nuclear deal or JCPOA seeks to prevent Iran from producing a nuclear weapon — something Iran insists it does not want to do — by putting curbs on its atomic programme in exchange for economic incentives.

4) China buys first Indian rice in decades

- China has begun importing Indian rice for the first time in at least three decades due to tightening supplies from Thailand, Myanmar and Vietnam.
- India is the world's biggest rice exporter and China the biggest importer. Beijing buys about 4 million tonnes a year but has avoided purchases from India, citing quality issues.
- Although the public mood in India has been anti-China, the country has remained engaged with Indian businesses.
- Indian traders have contracted to export 100,000 tonnes of broken rice for December-February shipments at around $300 per tonne on a free-on-board (FOB) basis.

> FOB is a term in international commercial law specifying at what point respective obligations, costs, and risk involved in the delivery of goods shift from the seller to the buyer under the Incoterms standard published by the International Chamber of Commerce.

INCOTERMS® 2010 - FOB

| FACTORY | FIRST CARRIER | ALONGSIDE SHIP | ON BOARD | ON ARRIVAL | ALONGSIDE SHIP | DESTINATION PLACE | BUYER WAREHOUSE |

FOB › FREE ON BOARD ❗ PORT OF SHIPMENT

SELLER'S OBLIGATION   BUYER'S OBLIGATION   ❗ TRANSFER OF RISK

- China's traditional suppliers, such as Thailand, Vietnam, Myanmar and Pakistan, have limited surplus supplies for export and were quoting at least $30 per tonne more compared with Indian prices, according to Indian rice trade officials.

5) Pakistan shells forward posts in Poonch

- The Pakistan Army violated ceasefire and resorted to heavy firing and mortar shelling targeting forward posts along the LoC in Jammu and Kashmir's ShahpursectorinPoonch district, drawing retaliation from Indian troops.

- Earlier, two Indian Army jawans — NaikPrem Bahadur Khatri and Rifleman Sukhbir Singh — were killed when the Pakistan Army resorted to heavy firing in the Sunderbani sector of Rajouri district.

- The Line of Control (LoC) is a military control line between the Indian and Pakistani controlled parts of the former princely state of Jammu and Kashmir—a line which does not constitute a legally recognized international boundary, but serves as the de facto border. Originally known as the Cease-fire Line, it was redesignated as the Line of Control following the Simla Agreement, which was signed on 3 July 1972.

- There are three main crossing points on the LoC currently operational:

  1. Chakothi / Salamabad: Salamabad crossing point is located on the road between Chakothi and Uri in the Baramulla district of Jammu and Kashmir along the Indo-Pak LoC

  2. Tetrinote / Chakan Da Bagh: A road connects Kotli and Tatrinote in Pakistan side of the LoC to Indian Poonch district of Jammu and Kashmir through ChakanDaBagh crossing point.

  3. Chilliana / Teetwal: The Teetwal crossing is across the Neelum River between Muzaffarabad and Kupwara. It is usually open only during the summer months, and in contrast to the other two crossings is open only for the movement of people, not for trade.
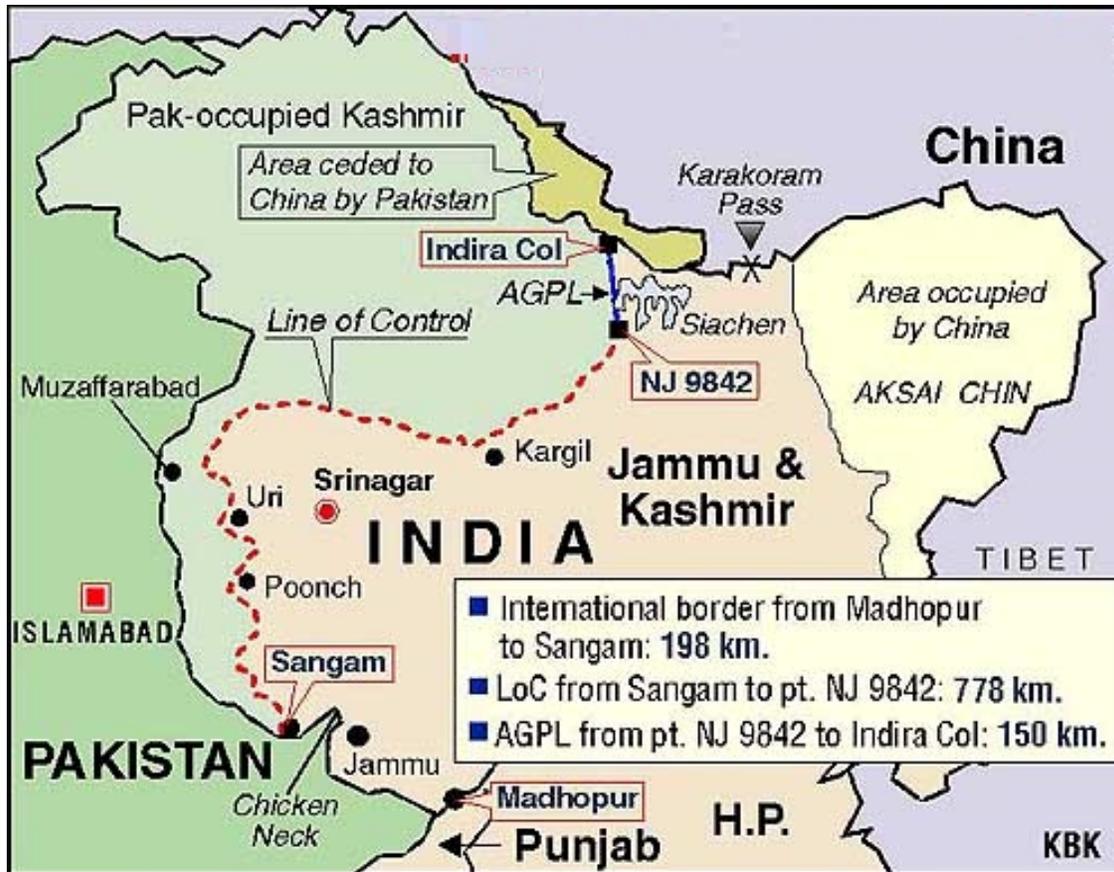
6) U.S. tightens visa rules for CCP members

- The Trump administration issued new rules to curtail travel to the U.S. by members of the Chinese Communist Party (CCP) and their immediate families, a move certain to further exacerbate tensions between the two countries.

- The new policy, which took immediate effect, limits the maximum duration of travel visas for party members and their families to one month. Previously, party members, like other Chinese citizens, could obtain visitor visas for the U.S. that were valid for 10 years.

- Travel visas for party members will also be limited to a single entry rather than multiple entries as was possible before, according to two people familiar with the changes.

- The new measures do not affect party members' eligibility for other kinds of visas, such as immigration or employment. The State Department spokesman added that no current visas would be revoked as a result of the policy changes.

Background:

- In principle, the new visa policy could affect the travel of roughly 270 million people, according to U.S. government estimates based on a Communist Party membership of 92 million. In practice, it might be difficult to determine who, apart from high-level officials, belongs to the party.

- The new visa rules add to the conflict, now years long, between the two countries on trade, technology and much else. Coming in the twilight of the Trump administration and aimed squarely at China's ruling elite, the visa restrictions and the likely Chinese response will be yet another challenge to President-elect Joe Biden, who is inheriting a U.S.-China relationship that is in its worst state since the normalisation of diplomatic ties in 1979.

7)   U.S. to block import of 'slave labour' cotton from China

The United States will block imports of cotton that is harvested with "slave labour" in China's Xinjiang region.

Background:

- Beijing has come under intense international criticism over its policies in the resource-rich territory, where rights groups say as many as one million Uighurs and other mostly Muslim minorities are being held in internment camps.
- The new rule allows Customs and Border Protection officials to detain shipments containing cotton originating from the Xinjiang Production and Construction Corps, a major paramilitary group already sanctioned by the U.S. Treasury.

Forced labour is any work or service which people are forced to do against their will, under threat of punishment. Almost all slavery practices contain some element of forced labour.

Chinese response:

- Beijing responded by accusing the U.S. of fabricating "fake news of so-called forced labour" and attempting to "oppress Xinjiang businesses." "Their aim is to constrain and oppress relevant parties and enterprises in China and curb China's development," said foreign ministry spokeswoman Hua Chunying.

8) US troops in Somalia

The Pentagon said it is pulling most U.S. troops out of Somalia on President Donald Trump's orders, continuing a post-election push by Mr. Trump to shrink U.S. involvement in counterterrorism missions abroad.

Facts:

- The Pentagon said in a statement that "a majority" of U.S. troops in Somalia will be withdrawn in early 2021.
- There are currently about 700 troops in that Horn of Africa nation, training and advising local forces in an extended fight against the extremist group al-Shabab, an affiliate of al-Qaida.

Harakat al-Shabaab al-Mujahideen, more commonly known as al-Shabaab, is a terrorist, jihadist fundamentalist group based in East Africa.

Al-Shabaab began in late December 2006 as a splinter group of the Islamic Courts Union (ICU), after the Islamic Courts Union peacefully withdrew from Mogadishu.

Headquarters - Kismayo (2008–12)

Barawe (2012–14)

Jilib (2014–)

Active regions - Somalia, Kenya and Yemen

- Mr. Trump recently ordered troop drawdowns in Afghanistan and Iraq.

9) Morocco to normalise ties with Israel

Morocco has become the fourth Arab nation this year to recognise Israel, U.S. President Donald Trump announced as he, in turn, fulfilled a decades-old goal of Morocco by backing its sovereignty in disputed Western Sahara.

Background:

- Morocco had a large Jewish population prior to Israel's establishment in 1948. The two countries have long had informal ties, establishing low-level diplomatic relations during the 1990s following Israel's interim peace accords with the Palestinians, which were suspended after the start of the Al-Aqsa Intifada in 2000.

The Second Intifada, also known as the Al-Aqsa Intifada was a Palestinian uprising against Israel.

- The two countries have maintained informal ties since then, with an estimated 50,000 Israelis traveling to Morocco each year.

- Morocco and Israel had respectively maintained liaison offices in Tel Aviv and Rabat in the 1990s, before closing them in 2000.

- Israel has helped Morocco obtain weapons and intelligence-gathering gear and learn how to use them, and helped it assassinate an opposition leader. Morocco has helped Israel take in Moroccan Jews, mount an operation against Osama bin Laden, and even spy on other Arab countries.

- The collaboration — uncovered in an array of interviews conducted and documents unearthed over many years — reflects a longstanding Israeli policy of building covert ties with Arab regimes where common interests — and enemies — could be found.

- After the United Arab Emirates, Bahrain and Sudan, Morocco is the fourth Arab State since August to commit to establishing diplomatic relations with the Jewish State.

- In return for Morocco's decision to establish formal ties with Israel, the U.S. has recognised Rabat's sovereignty over Western Sahara, a disputed territory in northwestern Africa, which has been under Moroccan control for decades.

About the places:

Morocco is a North African country bordering the Atlantic Ocean and Mediterranean Sea.

Israel, a Middle Eastern country on the Mediterranean Sea, is regarded by Jews, Christians and Muslims as the biblical Holy Land. Its most sacred sites are in Jerusalem.

10) India and Uzbekistan

News:

India and Uzbekistan plan to cooperate on connectivity projects in Afghanistan and will participate in a trilateral dialogue with Iran, said the two sides after talks between Prime Minister Narendra Modi and Uzbekistan President ShavkatMirziyoyev during a virtual summit.

Military exercise

India also confirmed the approval of a $448- million Line of Credit for four developmental projects in Uzbekistan in the areas of "road construction, sewerage treatment and information technology" and specific projects under the Line of Credit were being identified at present.

Energy pact

The two sides signed a Dollar Credit Line Agreement between the Export-Import Bank of India and the Uzbekistan Government and several Memorandums of Understanding (MoUs) including in the areas of renewable energy and information technology on the sidelines of the meeting.

11) 'Carefully monitoring' Brahmaputra developments: India

News:

- A State-run Chinese hydropower firm, POWERCHINA, is planning to build the first downstream dam on the Brahmaputra, known as the YarlungZangbo in Tibet.
- India said it "carefully monitors all developments on the Brahmaputra" river, even as Beijing said it was its "legitimate right" to develop hydropower projects on the lower reaches of the river.

Background:

- Officials from the firm said last week that they were eyeing the enormous potential of the river's "Great Bend" just across the border from Arunachal Pradesh in Tibet's Medog county, where the river falls over a 2,000-metre drop before turning to flow into India.
- While China in 2015 operationalised its first hydropower project at Zangmu in Tibet and is constructing three other dams at Dagu, Jiexu and Jiacha, these are run-of-the-river dams on the upper and middle reaches. The proposed new dam is also likely to be a run-of-the-river hydropower project that will not divert water, but will be the first on the lower reaches.

MISCELLANEOUS:
ECONOMIC DEVELOPMENT:

1) **'Bank capital in India, Sri Lanka to fall more than in other EMs'**

News:

- Bank capital will shrink moderately in Asia's emerging markets over the next two years with banks in India and Sri Lanka expected to post larger declines in the absence of public or private funds injections, Moody's Investors Service said in its Emerging Markets Financial Institutions Outlook report.

- Non Performing Loans (NPLs) will rise most for banks in India and Thailand because of the greater shock to their economies and the historically poor performance of certain loan types. In India, stress among non-bank financial institutions will also curtail their capacity to lend.

- *A non-performing loan is a loan that is in default or close to being in default. Many loans become non-performing after being in default for 90 days, but this can depend on the contract terms.*

- *Common Equity Tier 1 (CET1) capital includes the core capital that a bank holds in its capital structure. CET1 ratio compares a bank's capital against its risk-weighted assets to determine its ability to withstand financial distress.*

  The core capital of a bank includes equity capital and disclosed reserves such as retained earnings.

- Moody's said the tangible common equity to risk-weighted assets will remain broadly unchanged or decrease modestly at most banks in emerging Asia over the next two years.
- Overall, terming the 2021 outlook for banks in emerging markets as negative, Moody's said the outlook for emerging markets insurers was stable.

Asset quality uncertainty:

- The uncertain trajectory of asset quality is one of the biggest threats for emerging market banks, as operating conditions remain challenging amid the current health crisis.
- Profit growth will be modest because of low interest rates and subdued lending, but lower loan volumes should aid capital.
- Additionally, banks' lending and funding shifts in response to flatter yield curve dynamics and low rates will also pressure net interest margins.

2) RBI tightens oversight of NBFCs, UCBs

- The Reserve Bank of India (RBI) announced the introduction of risk-based internal audit norms for large urban cooperative banks (UCBs) and non-banking financial companies (NBFCs), as part of measures aimed at improving governance and assurance functions at supervised entities.
- The growing significance of NBFCs and their interlinkages with different parts of the financial system had made it imperative to enhance the sector's resilience. Thus it had been decided to put in place transparent criteria for the declaration of dividends by different categories of NBFCs.
- The RBI also moved to harmonise the guidelines on appointment of statutory auditors for commercial banks, UCBs and NBFCs in order to improve the quality of financial reporting.
- With a view to deepening financial markets, regional rural banks would be allowed to access the liquidity adjustment facility (LAF) and marginal standing facility (MSF) of the RBI, as also the call/notice money market.
- To significantly improve the ecosystem of digital payment channels with robust security and convenience for users, the RBI has proposed to issue Digital Payment Security Controls directions for the regulated entities.

The call/notice/term money market facilitates lending and borrowing of funds between banks and entities like Primary Dealers. An institution which has surplus funds may lend them on an uncollateralized basis to an institution which is short of funds. Money market transactions are categorized as follows:

- ✓ Borrowing/Lending for 1 day is known as Call Money
- ✓ Borrowing/Lending for 2-14 days is known as Notice Money
- ✓ Borrowing/Lending for more than 14 days is known as Term Money

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3) Supply-side issues fuelling inflation

- RBI Deputy Governor Michael Patra said supply-side issues, including profit maximisation at retailers' end, are hurting the inflation situation, which has breached the central bank's comfort level in the past few months.

Profit maximization is the short run or long run process by which a firm may determine the price, input, and output levels that lead to the highest profit.

- There is a window for cooling off in prices presented by the softness in vegetable prices in winters and arrivals of the kharif or summer crop.
- At current time the assessment is that the large part of inflation pressures are emanating out of supply-side disruptions (like) at the level of retailer, very high margins being charged by the retailers and some amount of indirect taxes.

4) India bucks China's record export show

News:

India's imports from China as well as its trade deficit declined sharply in November, marking an exception to a record month for Chinese exports around the world that registered the fastest growth in almost three years and underlined China's continuing recovery amid a pandemic-induced global slump.

Facts & Figures:

- Bilateral trade reached $78 billion over the 11-month period, sharply lower than 2019's $84.4 billion.
- China's shipments to India at the end of November accounted for $59 billion, sliding 13% and helping narrow India's deficit to $40 billion, from $51.6 billion in the year-earlier period.
- India's annual trade deficit with its northern neighbour had shrunk by 2% in 2019 to $56.95 billion, marking the first decline since 2005.
- India's imports of electrical and non-electrical machinery – items that have traditionally had the biggest share in China's exports to the country -- slid by 13.4%, the Centre's official data showed.
- Overall, China's exports surged 21.1% in November, customs data showed, the fastest growth since February 2018, Reuters reported. The pace of increase was almost double October's 11.4% expansion. November's exports of $268 billion were the highest on record amid the continuing global economic slump and lockdowns in many of China's biggest trading partners.
- In November, China also agreed to import rice from India for the first time in three decades, with 1,00,000 tons of exports of broken rice contracted for December to February at $300 per ton, Reuters reported.
- The rice purchase was a "purely commercial move" as the price was "far cheaper than that of its domestic counterparts".

5) India on 'currency manipulators' monitoring list

News:
- The U.S. Treasury labelled Switzerland and Vietnam as currency manipulators and added three new names, including India, to a watch list of countries it suspects of taking measures to devalue their currencies against the dollar.
- In what may be one of the last broadsides to international trading partners by the departing administration of President Donald Trump, the U.S. Treasury said that in the year through June 2020 Switzerland and Vietnam had intervened heavily in currency markets to prevent effective balance of payments adjustments.

Treasury's criteria
- To be labeled a manipulator by the U.S. Treasury, countries must at least have a $20 billion-plus bilateral trade surplus with the U.S., foreign currency intervention exceeding 2% of gross domestic product and a global current account surplus exceeding 2% of GDP.

India's interventions
- The Treasury also said its "monitoring list" of countries that meet some criteria has hit 10, with the additions of Taiwan, Thailand and India. Others include China, Japan, Korea, Germany, Italy, Singapore and Malaysia.
- The U.S. also said that India and Singapore had also intervened in the foreign exchange market in a "sustained, asymmetric manner" but did not meet other requirements to warrant designation as manipulators.

6) Govt. invites EoI to divest full stake in Shipping Corp.

- The Centre invited expression of interest (EoI) for the disinvestment of its entire 63.75% shareholding in the Shipping Corporation India Limited (SCIL) along with the handing over of its management control. Potential bidders have time until February 13 to submit their interest.
- The SCIL was incorporated in 1961 and owns a fleet of 59 vessels, including two container vessels, 13 crude oil tankers and eight off-shore supply vessels. It has been a profitable commercial venture and garnered ₹347.5 crore in profit in FY20.
- The remaining 36.25% stake is jointly owned by mutual funds, banks, insurance companies as well as individuals, according to the pre-bid document. Any private or public limited company registered, or a company / a fund incorporated outside India and eligible to invest in India is eligible to bid either as a sole bidder or as a part of a consortium.
- Employees are permitted to participate in the transaction either directly and independently or by forming a consortium. The interested bidder should have a net worth of at least ₹2,000 crore and generated positive EBIDTA for 3 out of the past 5 years. Once the EoIs are evaluated, the Centre will float a 'Request for Proposal'. Thereafter, financial bids submitted by qualified parties will be opened and evaluated and a winner would be declared.

7) GST: physical verification

- The government has introduced mandatory physical verification of business premises for the purposes of obtaining GST registration.
- Further, in case an applicant opts for Aadhaar authentication, he will undergo biometric-based Aadhaar authentication at one of the facilitation Centres notified by the Commissioner.
- The GST Council Secretariat said that the move, aimed at controlling the menace of GST fake invoice frauds, was recommended by the Council's law committee.

'Pay 1% in cash'

- Separately, a new rule has been introduced by the Central Board of Indirect Taxes and Customs that mandates businesses with monthly turnover of over ₹50 lakh to pay at least 1% of their GST liability in cash instead of using input tax credits to discharge their entire liability.
- The validity of e-way bills has also been tweaked, doubling the distance to be covered for each day of validity, effective January 1.
- Till now, an e-way bill for transporting goods under GST allowed transporters to cover 100 km in one day. Now, that distance for each day of validity has been increased to 200 km.
- While four days were granted in terms of e-way bill validity to cover 400 km, going forward, only two days will be granted for the same distance.

8) CCEA nod for 3 infra projects

News:

- The Cabinet Committee on Economic Affairs (CCEA) approved three infrastructure proposals estimated at ₹7,725 crore for setting up greenfield industrial cities with connectivity to major transportation corridors such as the eastern and western dedicated freight corridors, expressways and National highways.
- The three projects, proposed by the Department of Promotion of Industry and Internal Trade, include construction of various trunk infrastructure components for the Krishnapatnam Industrial Area in Andhra Pradesh at an estimated cost of ₹2,139.44 crore; the Tumakuru Industrial Area in Karnataka at ₹1,701.81 crore; and a multi-modal logistics hub (MMLH) and multi-modal transport hub (MMTH) at Greater Noida in Uttar Pradesh at ₹3,883.8 crore.
- The developed land parcels in these cities will be ready for immediate allotment to attract investments into manufacturing and position India as a strong player in the global value chain.

A greenfield city is an underdeveloped area, where greater development is proposed allowing it to develop into a city

Job opportunities

- These projects will generate ample employment opportunities through industrialisation. For the Krishnapatnam node, estimated employment projection on the completion of the first phase of development is likely to be around 98,000 persons, of which about 58,000 persons are likely to be employed at the site, the statement said.

- For the Tumakuru node, employment of about 88,500 persons is estimated, out of which 17,700 persons will be from service industries such as retail, offices and other commercial opportunities in the initial development phase.

- The MMLH at Greater Noida will be developed as a world-class facility that will provide efficient storage/transitioning of goods to/from dedicated freight corridors, and offer a one-stop destination to freight companies and customers.

- Likewise, the MMTH located near the already existing railway station of Boraki will act as a transport hub with provisioning of rail and road.

- It will have space for an inter-State bus terminal, a local bus terminal, a Metro transit system, commercial, retail and hotel space, and green open spaces.

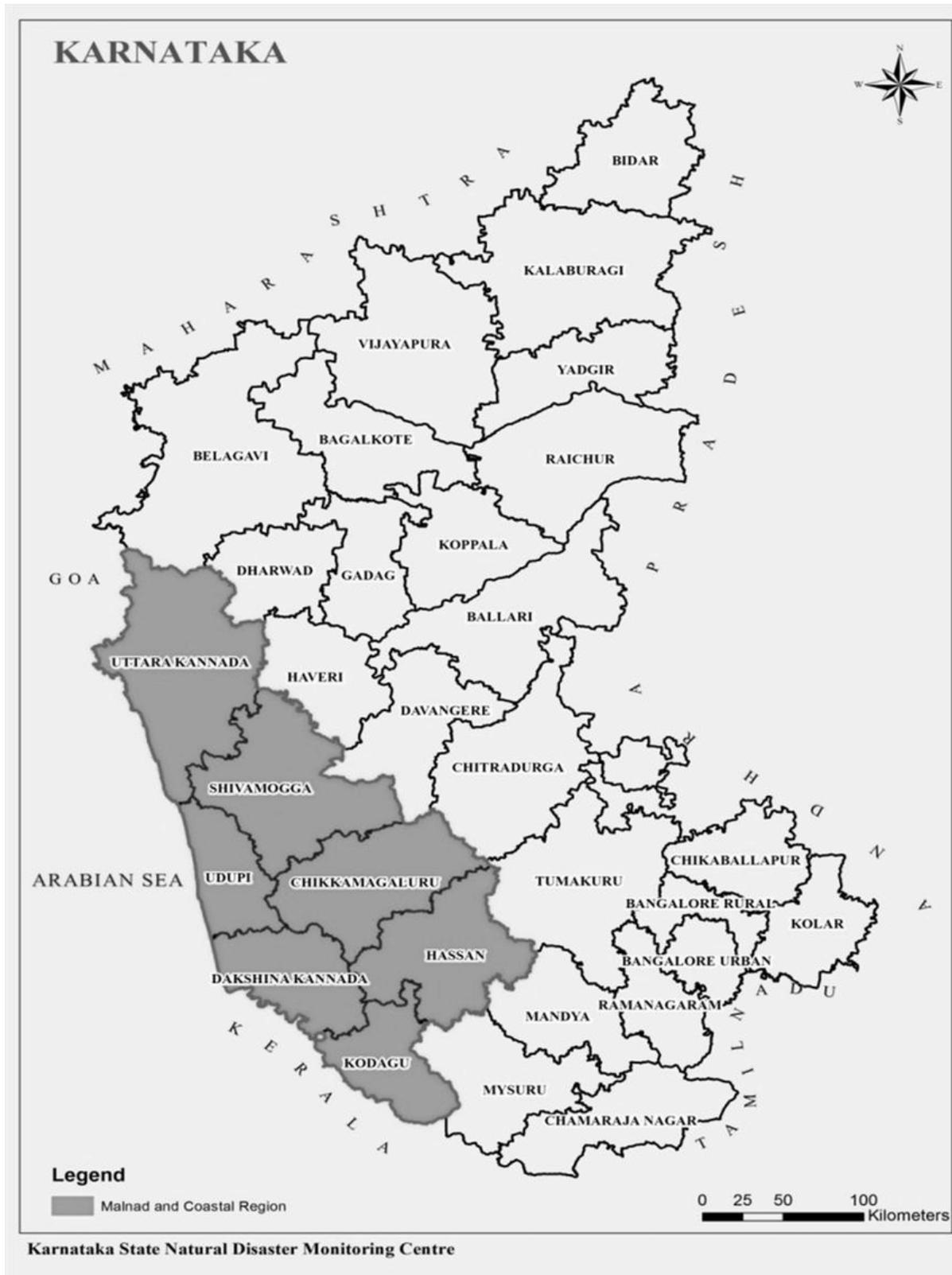## ENVIRONMENT:

1) Tiger conservation from Malenad

News:

- With heavy rainfall, picturesque mountainous terrain and varied flora and fauna, Malenad in Karnataka is also home to the magnificent tiger.

- The present estimates suggest the tiger population here has increased from approximately 70 to 391 individuals in about 45 years.

Facts:

- A new paper has summarised the research and conservation work carried out in this region by the Centre for Wildlife Studies (CWS) in Bengaluru. It details the problems that still need to be addressed if the tiger numbers have to triple.

- The researchers hope that these lessons can be applied in the management of wild tiger populations in other parts of the country and globally as well.

Malenadu is a region in the state of Karnataka in India. Malenadu covers the western and eastern slopes of the Western Ghats or Sahyadri mountain range, and is roughly 100 kilometers in width.

KARNATAKA

MAHARASHTRA

BIDAR

KALABURAGI

VIJAYAPURA

YADGIR

BAGALKOTE

RAICHUR

BELAGAVI

GOA

KOPPALA

DHARWAD   GADAG

BALLARI

UTTARA KANNADA

HAVERI

DAVANGERE

SHIVAMOGGA

CHITRADURGA

ARABIAN SEA

UDUPI   CHIKKAMAGALURU

CHIKABALLAPUR

TUMAKURU

BANGALORE RURAL

KOLAR

HASSAN

BANGALORE URBAN

DAKSHINA KANNADA

RAMANAGARAM

MANDYA

KODAGU

MYSURU

CHAMARAJA NAGAR

KERALA

TAMIL NADU

PRADESH

Legend

Malnad and Coastal Region

0   25   50   100
Kilometers

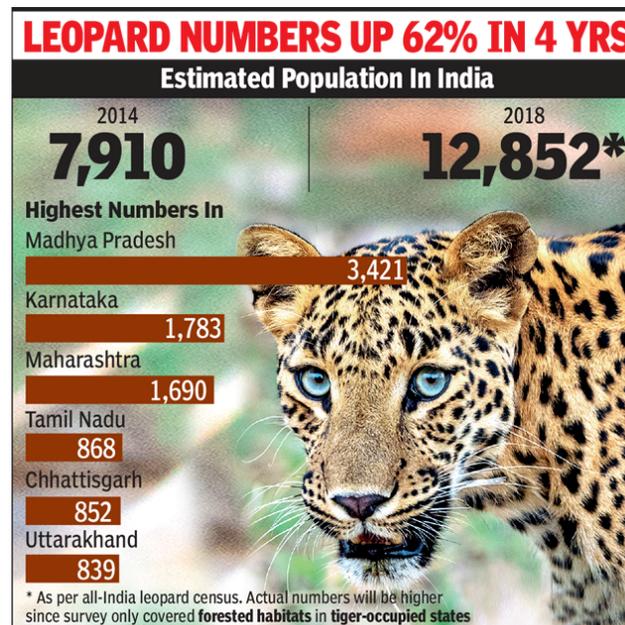Karnataka State Natural Disaster Monitoring Centre

Study:

- The research team carried out a unique macro ecology study across these very large landscapes, involving larger, elusive animal species over a long period between 1986 and 2017. They collected data on tiger ecology, predator–prey ecology, anthropogenic impacts, existing and emergent conflicts.
- Though Malenad has over 21,000 square kilometres of potential habitat, reproducing tiger populations are found to survive in less than 30% of the area. The team writes: "If tiger recovery efforts can be optimised in the future, the Malenad landscape can potentially support approximately 1,300 wild tigers."
- The report suggests that "tiger tourism" can be expanded beyond government-managed wildlife reserves to adjacent agricultural areas outside. "This has been implemented successfully in countries like Kenya and Brazil. Local populations can economically benefit from the growth of the tourism sector.

Debated topic:

- Resettlement of people living inside reserves continues to be a debated topic.
- Fundamentally people living inside reserves have well-documented negative consequences for wildlife and biodiversity because of human activities.
- Problems also include high human–wildlife conflict, lack of access to quality health care and education, and isolation from a rapidly changing world.

2) **Leopard count in Western ghats**

- Karnataka tops the list with 1,783 leopards, followed by Tamil Nadu with 868, according to the Status of Leopards in India 2018 report.
- With 650 leopards, Kerala has the third highest number of big cats in the Western Ghats region. Goa has 86.

LEOPARD NUMBERS UP 62% IN 4 YRS
Estimated Population In India

2014	2018
7,910	12,852*

Highest Numbers In
- Madhya Pradesh: 3,421
- Karnataka: 1,783
- Maharashtra: 1,690
- Tamil Nadu: 868
- Chhattisgarh: 852
- Uttarakhand: 839

* As per all-India leopard census. Actual numbers will be higher since survey only covered **forested habitats** in **tiger-occupied states**

- "The Western Ghats is home to 3,387 leopards, against India's population of 12,852," says the report released recently by the Ministry of Environment, Forest and Climate Change.
- The leopard population was counted during the tiger population assessment undertaken in 2018. The leopard population was estimated to be within the forested habitats in tiger-occupied States, the report said.

SCIENCE & TECHNOLOGY:

1) Solve vaccine firms' issues: Prime Minister

News:

Prime Minister Narendra Modi had a virtual conference with heads of three vaccine development and manufacturing companies: Gennova Biopharmaceuticals, Pune; Biological E Ltd and Dr. Reddy's Laboratories Ltd., Hyderabad.

1. Biological E got permission to begin human trials of its COVID-19 vaccine candidate in October.
2. Gennova is scheduled to begin human trials of its proprietary m-RNA vaccine — similar to those of Pfizer-BioNTech and Moderna — in December.
3. Dr. Reddy's has tied up with Russia's RDIF (Russian Direct Investment Fund) and Gamaleya to test the Sputnik V vaccine on Indian volunteers. If all steps go according to plan and pending regulatory approvals, these companies are expected to begin making millions of doses of vaccine by next year.Human trials are also scheduled in India with Dr. Reddy's, under a previous agreement between the companies. The RDIF said it planned to start producing 100 million doses of the vaccine in the beginning of 2021 in partnership with Hetero Pharma.

'*Remarks reassuring'*

During his interaction, Mr. Modi discussed how the pandemic has placed "extraordinary demands" on the pharmaceutical industry.

2) Facebook News

News:

- Facebook said it will launch its news tab feature in Britain from next year, paying publishers for stories delivered through the world's leading social network.
- The arrival of 'Facebook News' in January comes after the service was rolled out in the U.S. in late 2019 and is part of plans to extend it worldwide.
- Titles covered in the first wave of deals include The Economist, The Guardian, The Independent and the Mirror, and local newspapers the London Evening Standard, the Manchester Evening News and the Scotsman.

- Lifestyle magazines such as Cosmopolitan, GQ, Vogue and Tatler have also signed up, while there is a video partnership with Channel 4 News.
- Facebook's director of news partnerships JesperDoub said the company was "in active negotiations" to bring the feature to France and Germany.

3) Naval version of brahmos tested

News:

A naval version of the BrahMos supersonic cruise missile was successfully test-fired by the Indian Navy in the Bay of Bengal as part of a series of trials being carried out by the three services.

BrahMos:

- BrahMos Aerospace, an India-Russian joint venture, produced the supersonic cruise missile that can be launched from submarines, ships, aircraft, or land platforms.
- The range of the new land-attack version of the missile has been extended to 400 km from the original 290 km.
- India has already deployed a sizeable number of the original BrahMos missiles and other key assets in several strategic locations along the Line of Actual Control with China in Ladakh and Arunachal Pradesh.

- The IAF is also integrating the Brahmos supersonic cruise missile on over 40 Sukhoi fighter jets which are aimed at bolstering the overall combat capability of the force.

Sukhoi:

- The Sukhoi Su-30 is a twin-engine, two-seat supermaneuverable fighter aircraft developed in the Soviet Union by Russia's Sukhoi Aviation Corporation. It is a multirole fighter for all-weather, air-to-air and air-to-surface deep interdiction missions.

Sukhoi Su-57 T-50 (2019)
Length: 22 m (72.18 ft)
Wingspan: 14.2 m (46.59 ft)
Weight: 18,500 kg (40,786 lb)

Sukhoi Su-70 Okhotnik (2023)
Length: 11.65 m (38.22 ft)
Wingspan: 20 m (65.62 ft)
Weight: 20,000 kg (44,092 lb)

HAL Sukhoi PMF/FGFA (2019)
Length: 22.6 m (74.15 ft)
Wingspan: 14.2 m (46.59 ft)
Weight: 18,500 kg (40,786 lb)

Sukhoi Su-34 Fullback (2014)
Length: 23.34 m (76.57 ft)
Wingspan: 14.7 m (48.23 ft)
Weight: 22,100 kg (44,200 lb)

4) SII seeks emergency use nod for Covishield in India

News:

The Serum Institute of India (SII) became the first indigenous company to apply to the Drugs Controller General of India (DCGI) seeking emergency use authorisation for the Oxford COVID-19 vaccine in the country, citing unmet medical needs due to the pandemic and in the interest of the public at large.

Background:

- The phase-3 clinical trial of the Oxford COVID-19 vaccine, Covishield, is being conducted by the Pune-based SII, co-sponsored by the Indian Council of Medical Research (ICMR), in various parts of the country in addition to clinical studies being carried out by Oxford-AstraZeneca in the UK and Brazil.

- According to the ICMR, the SII has already manufactured 40 million doses of the vaccine under the at-risk manufacturing and stockpiling license it obtained from the DCGI.

- Official sources, citing the SII application, said the firm had stated that data from four clinical studies, two in the U.K. and one each in Brazil and India, showed that Covishield is highly efficacious against symptomatic and severe infections.

In an emergency, like a pandemic, it may not be possible to have all the evidence that the FDA would usually have before approving a drug, device, or a test.

When there is a declared emergency, the FDA can make a judgment that it's worth releasing something for use even without all the evidence that would fully establish its effectiveness and safety. If there's evidence that strongly suggests that patients have benefited from a treatment or test, the agency can issue an EUA to make it available.

5) Artificial sun

News:

China successfully powered up its "artificial sun" nuclear fusion reactor for the first time a great advance in the country's nuclear power research capabilities.

About the reactor:

- The HL-2M Tokamak reactor is China's largest and most advanced nuclear fusion experimental research device, and scientists hope that the device can potentially unlock a powerful clean energy source.
- It uses a powerful magnetic field to fuse hot plasma and can reach temperatures of over 150 million degrees Celsius approximately ten times hotter than the core of the sun.
- Located in Sichuan province and completed late last year, the reactor is often called an "artificial sun" on account of the enormous heat and power it produces.
- Chinese scientists have been working on developing smaller versions of the nuclear fusion reactor since 2006.
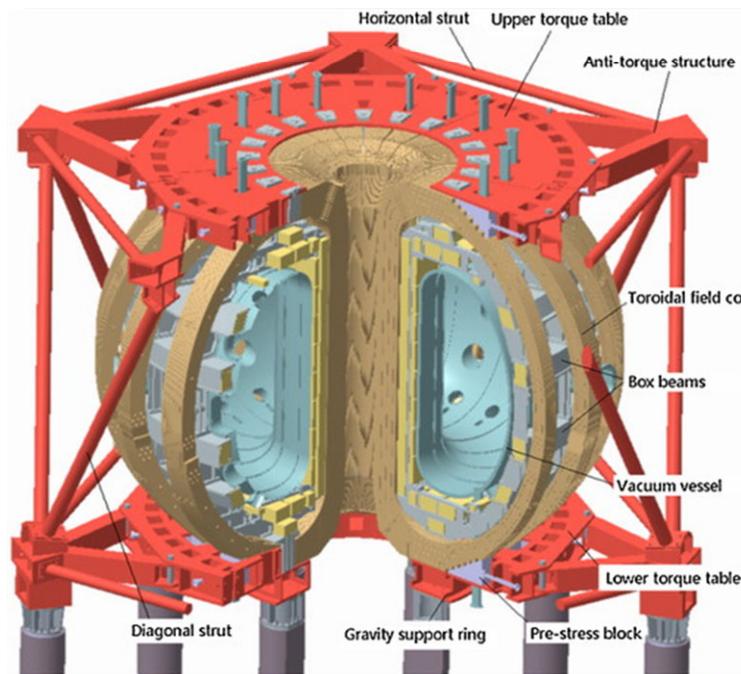
6) The largest buyer of vaccines

- India is set to be the largest buyer of COVID-19 vaccines in the world with 1.6 billion doses, according to a global analysis, a number some scientists say could cover 800 million people or 60% of its population, and will be enough to develop 'herd immunity'.

Herd immunity is a form of indirect protection from infectious disease that occurs when a sufficient percentage of a population has become immune to an infection, whether through vaccination or previous infections, thereby reducing the likelihood of infection for individuals who lack immunity.
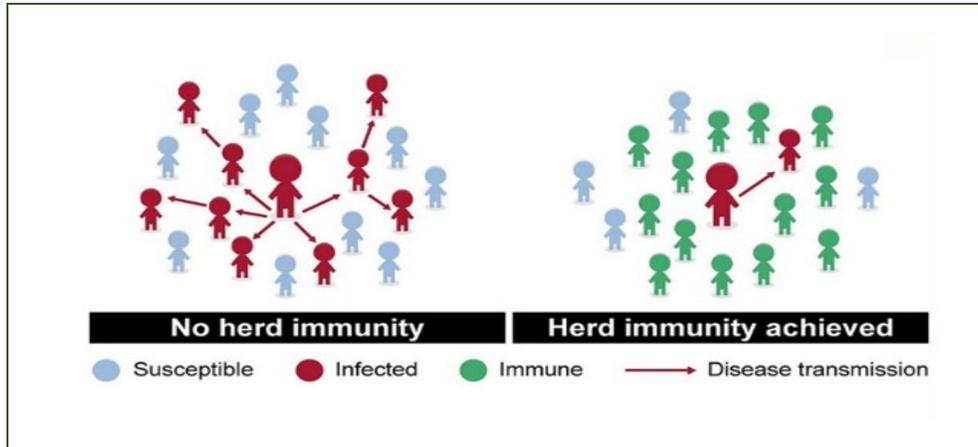
- India has agreed to buy 500 million doses of the Oxford University-AstraZeneca vaccine candidate, one billion from the U.S. CompanyNovavax and 100 million doses of the Sputnik V candidate from Russia's Gamaleya Research Institute, according to the U.S.-based Duke University Global Health Innovation Center.
- The 'Launch and Scale Speedometer' analysis, which is updated every two weeks, shows India has confirmed 1.6 billion doses of three vaccines as of November 30.

7) 'Mixopathy' across country

News:

Members of the Indian Medical Association (IMA) and several doctors across India staged protests against the government decision to allow post-graduate Ayurveda doctors to perform select medical procedures.

Background:

- A gazette notification, issued last month by the Central Council of Indian Medicine (CCIM), a statutory body under the AYUSH Ministry, listed 39 general surgery procedures and 19 other procedures, involving the eye, ear, nose and throat, by amending the Indian Medicine Central Council (Post Graduate Ayurveda Education) Regulations, 2016. These surgeries include general surgery, orthopaedic, ophthalmology, ENT and dental surgeries.
- The IMA termed it 'mixopathy'. It had threatened to withdraw all non-essential, non-COVID-19 services between 6 a.m. and 6 p.m. to protest against the notification.
- Earlier, the AYUSH ministry had defended the notification, saying it was a clarification of the relevant provisions in the previously existing regulations of 2016 and that the use of modern terminology in the said notification does not amount to "mixing" of Ayurveda with conventional (Modern) medicine.
- "Since beginning, Shalya and Shalakya are independent Departments in Ayurveda colleges, performing such surgical procedures."

8) ISRO'sCMS-01

- The Indian Space Research Organisation (ISRO) successfully placed into a transfer orbit India's 42nd communications satellite, CMS-01, carried on board the PSLV-C50, from the second launch pad of the Satish DhawanSpace Centre, Sriharikota Range.

- India's workhorse launch vehicle, the PSLV, in its 52nd mission, configured in its 'XL' version with six strap-on motors, rose into the skies at 3.41 p.m. The satellite was placed into a precise geosynchronous transfer orbit (GTO) roughly 20 minutes after lift-off.

CMS-01:

- CMS-01 is a communications satellite envisaged for providing services in extended C Band of the frequency spectrum and its coverage will include the Indian mainland and the Andaman & Nicobar and Lakshadweep islands, the ISRO said. The satellite is expected to have a life of over seven years.

- "The satellite was injected precisely into its pre-defined sub-GTO orbit.

- Mr. Sivan, ISRO Chairman said the next launch, the PSLV-C51, would be a special mission for ISRO and the entire country as the vehicle would carry the country's first private sector satellite under the space reforms programme announced by the Indian government.

- He said two more satellites, 'Satish Sat' from Space Kidz India and 'Unity Sat' from a consortium of universities will also be launched.

- The ISRO Chairman said the PSLV-C51 launch will mark a new era of space reforms in India.
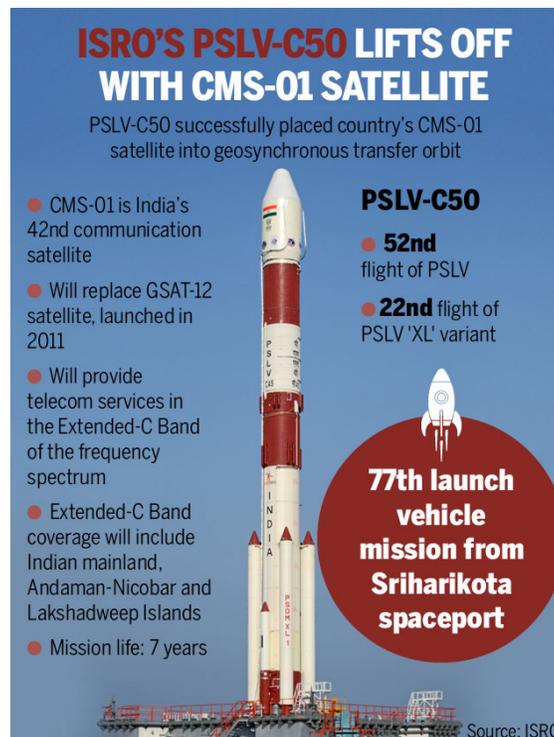
ISRO'S PSLV-C50 LIFTS OFF WITH CMS-01 SATELLITE

PSLV-C50 successfully placed country's CMS-01 satellite into geosynchronous transfer orbit

- CMS-01 is India's 42nd communication satellite
- Will replace GSAT-12 satellite, launched in 2011
- Will provide telecom services in the Extended-C Band of the frequency spectrum
- Extended-C Band coverage will include Indian mainland, Andaman-Nicobar and Lakshadweep Islands
- Mission life: 7 years

PSLV-C50
- 52nd flight of PSLV
- 22nd flight of PSLV 'XL' variant

77th launch vehicle mission from Sriharikota spaceport

Source: ISRO

9) Indomethacin beneficial in COVID-19 care

- A pre-print published recently in Medrxiv has advanced the case to use indomethacin, a drug conventionally used in the treatment of rheumatoid arthritis, for faster symptomatic relief and preventing progression of pneumonia in COVID-19 patients.

- A total of 104 patients who had tested COVID-19 positive received the drug, along with standard care in two centres — Narayana Medical College, Nellore, Andhra Pradesh, and DattaMeghe Institute of Medical Sciences, Wardha, Maharashtra.

- The authors have called for indomethacin to replace paracetamol if there is no contraindication for its use.

- It was an open-labelled, single-arm, propensity score matching study for the efficacy and safety of indomethacin.

- The study was done in two groups. One, involving 82 mild and moderate patients, used the Propensity Score Match technique to compare indomethacin and paracetamol-based treatments. In the second group, severe patients (22) were treated with indomethacin in addition to remdesivir.

- The authors wrote that those treated with indomethacin had a reduction in the number of days to become fever-free, and reduction in cough and muscle pain by half compared to the paracetamol set.

- Only one patient of 82 in the indomethacin arm of the first group required supplementary oxygen, while 28 of 109 patients on paracetamol required supplementary oxygen. No one in the second group deteriorated enough to require mechanical ventilation.

Indometacin, also known as indomethacin, is a nonsteroidal anti-inflammatory drug commonly used as a prescription medication to reduce fever, pain, stiffness, and swelling from inflammation. It works by inhibiting the production of prostaglandins, endogenous signaling molecules known to cause these symptoms.

10) Super Hornet fighter

- Boeing announced the successful demonstration of the compatibility of its F/A-18 Super Hornet fighter jets with the Indian Navy's aircraft carriers as part of its pitch for the Navy's fighter procurement.

- The demonstrations, held in coordination with U.S. Navy on a shore-based facility at the Naval Air Station Patuxent river in Maryland, U.S., show that the F-18 Super Hornet would do well with the Indian Navy's Short Takeoff but Arrested Recovery (STOBAR) system and validate earlier simulation studies done over the last two years.

- The F/A-18 Block III Super Hornet would not only provide superior war-fighting capability to the Indian Navy but also create opportunities for cooperation in naval aviation between the U.S. and India.

- As a part of Boeing's proposed "By India, for India" sustainment program, the Block III Super Hornets could be serviced in partnership with the Indian Navy as well as India and U.S. based partners throughout the life cycle of the aircraft.

- Both the Navy's sole carrier in service, INS Vikramaditya, and the under-construction indigenous Aircraft Carrier (IAC)-I, Vikrant, have a ski-jump with the STOBAR mechanism.

STOBAR ("Short Take-Off But Arrested Recovery" or "Short Take-Off, Barrier Arrested Recovery") is a system used for the launch and recovery of aircraft from the deck of an aircraft carrier, combining elements of "short take-off and vertical landing" (STOVL) with "catapult-assisted take-off but arrested recovery" (CATOBAR).

The STOBAR system is simpler to build than CATOBAR. As of 2018 it has been used regularly on Russian, Indian, and Chinese carriers.

11) U.K. approves Oxford vaccine

- The COVID-19 vaccine by Oxford Universty and AstraZeneca has been approved for emergency supply in the U.K., with the first doses being released on Wednesday so that vaccinations may begin early in the New Year.

- This is significant for India, as the Pune-based Serum Institute of India (SII) has tied up with AstraZeneca to deploy the vaccine in the country.

- India's drug regulators, in a meeting convened just hours after the approval accorded to AstraZeneca, reviewed an application by the SII for "emergency use authorisation" (EUA).

- The applications of Bharat Biotech, which is testing its "Covaxin" vaccine candidate; and Pfizer, with its m-RNA vaccine, were also reviewed.

- The EUA is for active immunisation of individuals of 18 years or older and recommends two doses with an interval of between four and 12 weeks.

REPORTS AND AWARDS:

1) Report on arms market

News:

- U.S. and Chinese companies dominated the global arms market in 2019, while West Asia made its first appearance among the 25 biggest weapons manufacturers based on a report by the SIPRI.

- The U.S. arms industry accounted for 61% of sales by the world's "Top 25" manufacturers last year, ahead of China's 15.7%, according to the Stockholm International Peace Research Institute.

- Total sales by the "Top 25" rose by 8.5% to $361 billion, or 50 times the annual budget of the UN's peacekeeping operations.

Top sellers

- Six U.S companies and three Chinese firms were in the top 10, rounded out by Britain's BAE Systems in seventh spot.

- U.S. companies Lockheed Martin, Boeing, Northrop Grumman, Raytheon and General Dynamics clinched the top five spots, while China's AVIC, CETC and Norinco held spots six, eight and nine. U.S. group L3Harris Technologies was in 10th place.

- Airbus (European, 13th in the ranking) and Thales (French, 14th) can meanwhile boast of having the strongest international presence — each is represented in 24 countries, ahead of U.S. Boeing.

West Asian surprise

- For the first time, a company from the West Asia made it into the "Top 25": EDGE, of the United Arab Emirates, was formed by the consolidation of some 25 defence entities in 2019.

- SIPRI also noted that French group Dassault had shot up from 38th to 17th place, boosted by exports of its Rafale fighter jets in 2019.

- Meanwhile, two Russian companies were also in the "Top 25", Almaz-Antey in 15th spot and United Shipbuilding in 25th.

World's top arms sellers

US corporations continue to dominate the global arms industry, while three Chinese firms are now in the top 10

Top 10
2019   Arms sales US$, billions

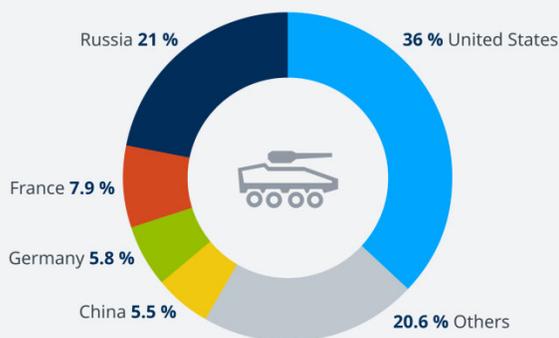| Company	Country		Sales
Lockheed Martin	US	🇺🇸	53.2
Boeing	US	🇺🇸	33.6
Northrop Grumman	US	🇺🇸	29.2
Raytheon	US	🇺🇸	25.3
General Dynamics	US	🇺🇸	24.5
AVIC[a]	CHINA	🇨🇳	22.5
BAE Systems	UK	🇬🇧	22.2
CETC[c]	CHINA	🇨🇳	15.1
NORINCO[b]	CHINA	🇨🇳	14.5
L3Harris Tech.	US	🇺🇸	13.9

a - Aviation Industry Corp of China
b - China North Industries Group Corp
c - China Electronics Technology Group Corp

Source: SIPRI Insights on Peace and Security December 2020

AFP●

Global share of major arms exports by the 5 largest exporters, 2015–19

Russia **21 %**
France **7.9 %**
Germany **5.8 %**
China **5.5 %**
20.6 % Others
36 % United States

Source: SIPRI Arms Transfers Database, Mar. 2020

Global share of major arms imports

by the five largest importers, 2015-2019 in %

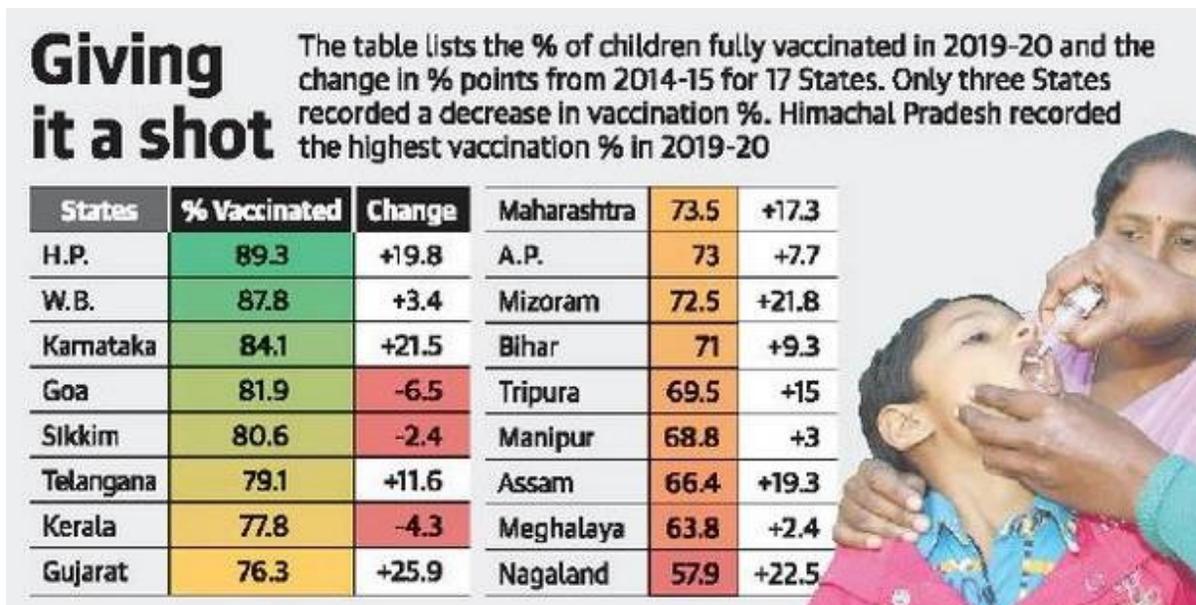| Country	Share
Saudi Arabia	12
India	9.2
Egypt	5.8
Australia	4.9
China	4.3
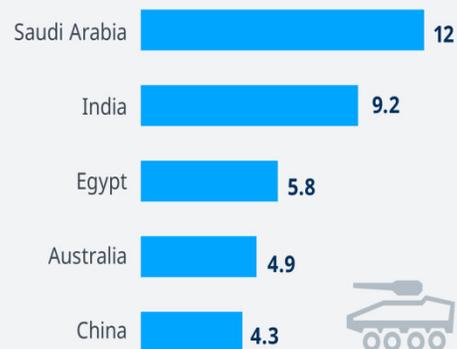
Source: SIPRI Arms Transfers Database, Mar. 2020.

2) NFHS finds jump in vaccination

News:

- The Health Ministry on Saturday released partial data from the fifth edition of the National Family Health Survey (NFHS) claiming "considerable improvement" in the supply of vaccine for childhood immunisation from the fourth round in 2015-16.

- A quick perusal of the data showed that in Andhra Pradesh, the percentage of fully vaccinated children (12-23 months of age) jumped to 73% from 65%. However, children with diarrhoea in the two weeks preceding the survey jumped to 7.2% from 6.6%.

- In West Bengal, institutional births of children increased from 75% to 91% and in Gujarat, the proportion of anaemic children sharply increased from 62.6% to 79.7%.

Giving it a shot

The table lists the % of children fully vaccinated in 2019-20 and the change in % points from 2014-15 for 17 States. Only three States recorded a decrease in vaccination %. Himachal Pradesh recorded the highest vaccination % in 2019-20

States	% Vaccinated	Change	States	% Vaccinated	Change
H.P.	89.3	+19.8	Maharashtra	73.5	+17.3
W.B.	87.8	+3.4	A.P.	73	+7.7
Karnataka	84.1	+21.5	Mizoram	72.5	+21.8
Goa	81.9	-6.5	Bihar	71	+9.3
Sikkim	80.6	-2.4	Tripura	69.5	+15
Telangana	79.1	+11.6	Manipur	68.8	+3
Kerala	77.8	-4.3	Assam	66.4	+19.3
Gujarat	76.3	+25.9	Meghalaya	63.8	+2.4
			Nagaland	57.9	+22.5

12 States to be covered

- As other versions, the new edition has information on population, health and nutrition for India, and is based on statistics gleaned from 6.1 lakh households.

- The results from 17 States and five Union Territories were released on Saturday under Phase I.

- Phase II, covering the remaining 12 States and two UTs, had their field work suspended because of COVID-19. This was resumed in November and is expected to be completed by May 2021.

Health indicators up

- "Substantial improvement in maternal and child health indicators over NFHS-4 was recorded in the present survey. The fertility rate has further declined, and contraceptive use has increased in most Phase I States.

- The survey found considerable improvement in vaccination coverage among children aged 12-23 months across all States/UTs. Women's empowerment indicators (including women with bank account) also portray considerable progress," a press statement from the Health Ministry noted.

3) Human Development Index

News:

India dropped two ranks in the United Nations' Human Development Index this year, standing at 131 out of 189 countries. However, if the Index were adjusted to assess the planetary pressures caused by each nation's development, India would move up eight places in the ranking, according to the report.

Facts & Figures:

- For the first time, the United Nations Development Programme introduced a new metric to reflect the impact caused by each country's per-capita carbon emissions and its material footprint, which measures the amount of fossil fuels, metals and other resources used to make the goods and services it consumes.
- Norway, which tops the HDI, falls 15 places if this metric is used, leaving Ireland at the top of the table.
- In fact, 50 countries would drop entirely out of the "very high human development group" category, using this new metric, called the Planetary Pressures-adjusted HDI, or PHDI.
- Australia falls 72 places in the ranking, while the United States and Canada would fall 45 and 40 places respectively, reflecting their disproportionate impact on natural resources.
- The oil and gas-rich Gulf States also fell steeply.
- China would drop 16 places from its current ranking of 85. China's net emissions (8 gigatonnes) are 34% below its territorial emissions (12.5 gigatonnes) compared with 19% in India and 15% in Sub-Saharan Africa.

Miles to go

Though India improved its absolute value of the Human Development Index (0.645 in 2019 from 0.642 the previous year), it dropped a place in the overall ranking

Country	HDI rank (2019)	Change from 2018
Russia	52	-3
Sri Lanka	72	1
Brazil	84	0
China	85	2
South Africa	114	1
India	**131**	**-2**
Bangladesh	133	1
Nepal	142	1
Pakistan	154	0

Although this year's report covers 2019 only, and does not account for the impact of COVID, it projected that in 2020, global HDI would fall below for the first time in the three decades since the Index was introduced.

4) Modi awarded 'Legion of Merit'

- Prime Minister Narendra Modi was awarded the 'Legion of Merit' by U.S. President Donald Trump for his role in advancing the India-U.S. relationship. The award was also presented to former Japanese Prime Minister Shinzo Abe and Australian Prime Minister Scott Morrison.

- The Legion of Merit, instituted in 1942 by former U.S. President Franklin D. Roosevelt, is awarded to members of the U.S. Armed Forces and also members of foreign (i.e., non-U.S.) Armed Forces and sometimes heads of state or government.

- The award is presented to foreign recipients in four categories: Chief Commander, Commander, Officer and Legionnaire.

- Other Indians who have won the award include Field Marshal K.M. Cariappa, who received the Legion of Merit (Degree: Chief Commander) in 1949 from then U.S. President Harry S.Truman.

MISCELLANEOUS:

1) Fight 'fake news': BRICS Media Forum

News:

- Representatives of media organisations from BRICS (Brazil, Russia, India, China, and South Africa) called for the five nations to work together to jointly combat the "virus of disinformation" in the pandemic era.

- At the fifth BRICS Media Forum, held virtually to coincide with the recently concluded BRICS summit, media organisations discussed ways in which journalists from the grouping could collaborate more closely to tell stories, with the countries facing many similar challenges, from economic issues to public health, as they grapple with COVID-19.

The virtual meet:

- It is heartening that media organisations that come under the aegis of the BRICS Media Forum have done a commendable job in informing and educating readers, viewers, and listeners on the pandemic and its consequences for people's lives, health, livelihood, and well-being; on the tools and individual and social behaviours that can enable a country or a community to mount defences against this coronavirus; on the development of diagnostics, therapeutics, and vaccines for COVID-19; and on the science behind all this.

- Jose Juan Sanchez, president of Brazil's CMA Group; Sergey Kochetkov, first deputy editor-in-chief of Russia's RossiyaSegodnya; Narasimhan Ram, director of The Hindu Publishing Group of India; and Iqbal Surve, executive chairman of Independent Media of South Africa, attended the event as co-chairpersons of the forum.

- Disinformation that was being transmitted globally at warp speed on the so-called technology platforms, notably Facebook, Twitter, Google, WhatsApp, and Instagram was a major threat not just to the mainstream media but, more importantly, to the lives and well-being of tens of millions of people and the safety and integrity of society as a whole.

BRICS Media Forum:

- China's Xinhua news agency came up with the idea of a BRICS Media Forum in 2015 to promote media cooperation.
- The forum aims to:
  - ➢ Establish an efficient coordination mechanism among BRICS media.
  - ➢ Advance innovation-driven media development.
  - ➢ Gather stronger momentum for the development of BRICS countries through exchange and pragmatic cooperation under the mechanism.

2) December 3rd as anti corporate day

- Farmers across 52 districts of Madhya Pradesh are all set to hit the roads to participate in a chakkajaam on December 3 to protest against the three farm Bills and seek assurance on a Minimum Support Price (MSP).
- Sporadic protests held in different parts of the state are set to intensify with meetings called at village levels to mobilise farmers after talks remained inconclusive.
- The protesters will also mark December 3 as "anti-corporate day" against the farm Bills and the 36th anniversary of the Bhopal Gas Tragedy.

3) New Parliament building

News:

- Prime Minister Narendra Modi said the new Parliament building, for which the ground-breaking ceremony was held, would channel and reflect the aspirations of 21st century India.
- The ceremony was attended by Lok Sabha Speaker Om Birla, Deputy Chairman of the Rajya Sabha Harivansh, and Union Ministers HardeepPuri and Pralhad Joshi, along with members of the Union Cabinet, diplomats, and Members of Parliament.
- The ceremony included an all-faith prayer and rituals by priests from the SringeriSharadaPeetham, Karnataka. The shankha (conch shell) and navaratnas (nine precious stones) had come from the Peetham.

About the building:

- To be built over 64,500 sq m, it will be located a stone's throw from RashtrapatiBhavan, the official residence of the President of India. The four-storey building will be triangular and its interiors will have three national symbols - the lotus, the peacock and the banyan tree - as its themes.

- The parliament building alone will cost an estimated ₹ 971 crore and will, the government hopes, be ready before India's 75th Independence Day (in 2022).

- To be constructed (when the top court gives the green light) by Tata Projects Ltd, the new parliament building will overlook the old - which was built nearly 100 years ago at a cost of ₹ 83 lakh and will be turned into a museum.

- The new Lok Sabha and Rajya Sabha halls will have increased seating capacities (888 and 384 seats, respectively) in anticipation of an expanded Parliament; a 25-year-old freeze on increasing state-wise distribution of seats ends in 2026.

- In addition, seating in the Lok Sabha hall can be expanded to 1,272 to host joint sessions.

- Architect Bimal Patel said the triangular shape of the new parliament was a reference to "sacred geometries in various religions and cultures of India".

- In the Lok Sabha chamber, the national bird (peacock) is used as the theme.

- In the Rajya Sabha the national flower (lotus) and in the central lounge the national tree (banyan) are used as themes.

- The national emblem will crown the new parliament, the ceiling of which will have fresco paintings (similar to those in RashtrapatiBhawan) and carpets with traditional designs. Interior walls will have shlokas inscribed - to retain some of the characteristics of the existing parliament.

Ancient roots

- The PM said, "While pointing out that many nations felt Indian democracy would not last, the country had proven naysayers wrong, especially because of the ancient roots of democracy in India as elaborated in the concept of the 12th century AnubhavaMantapam set up by Basaveshwara; a 10th century stone inscription in a village near Chennai, describing a panchayat mahasabha and its elaborate rules, including the need for members to disclose their income; and the ancient republics of the Lichchavis and Shakyas."

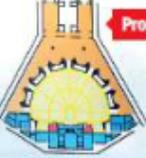WHAT IT WILL LOOK LIKE

Features of New Parliament Building

Present

Proposed

Lok Sabha

To be designed on theme of **peacock**

Current seating capacity	Proposed seats in new chamber
552	888 (Can accomodate 1,277 for joint sitting)

Rajya Sabha

To be designed on theme of **lotus**

Current seating capacity	Proposed seats in new chamber
245	384

National symbols
Crown of the building to get National Emblem, main courtyard to have Banyan tree
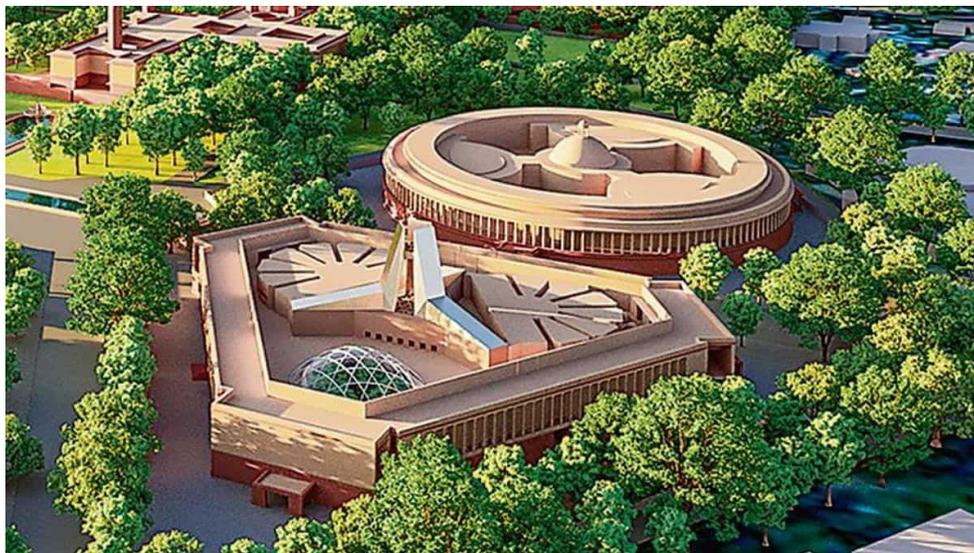
Each floor to get ministers' offices & committee rooms

First floor to have dining facility for MPs, VIPs and visitors

Constitution Hall at centre to have three entry points

Constitution Hall will have same height as that of existing Parliament

4) New cross-sector initiative for universal health coverage

- The Lancet Citizens' Commission on Reimagining India's Health System, a cross-sector initiative to develop a citizens' roadmap to achieving universal health coverage (UHC) in India over a period of ten years, was launched.
- The commission's co-chairs announced at the event that it was a first-of-its-kind participatory, countrywide initiative, in collaboration with world's leading health journal The Lancet and the Lakshmi Mittal and Family South Asia Institute, Harvard University.

Key mission

- The mission of the Commission is to lay out the path to achieving UHC in India in the coming decade, working with all stakeholders.
- "Despite considerable progress across health indicators such as maternal and infant mortality, disease burden in India is disproportionately high," the article added.
- The situation is exacerbated by structural inequities of caste, class, gender, geography, and community in India that translate into health inequalities and are amplified by the state of the health system.
- The Commission will be guided by four principles: first, UHC covers all health concerns; secondly, prevention and long-term care are key. Thirdly, the concern is financial protection for all health costs, and finally, aspiring for a health system that can be accessed by all who enjoy the same quality.

5) Yogasana is now a sport

- The Central government took the decision to promote yogasana as a competitive sport after extensive consultation with stakeholders over the last three or four years. The National Board of Promotion and Development of Yoga and Naturopathy in 2019 recommended that yogasana be recognised as a competitive sport.
- An exhaustive document containing rules, regulations and syllabus for yogasana competitions had been prepared, and the technical committee had made a list of the asanas after exhaustive research. Work for automation of the scoring system to introduce objectivity in marking has been initiated and district, State and national and world championships in yogasana are proposed in 2021. A pilot national individual yogasana sports championship (virtual mode) is proposed for February 2021.

Benefits of Yoga

- Stretches and protects your spine
- Keep your muscles strong
- Increases your blood flow
- Prevents joint problems
- Improves your posture
- Improves metabolism
- Increases immunity
- Makes you flexible
- Brings harmony to your life
- Calm your nerve system
- Improves your reaction
- Increases concentration
- Helps you to sleep well
- Relieves depression
- Makes you happier
- Helps you to relax
- Improves your heart rate
- Strengthens your bones
- Normalize your blood pressure
- Makes you stress-free
- Improves your memory
- Helps you to normalize your weight

- The work was currently on to develop a patented electronic scoring system for yogasana championships in India and globally, along with courses and certification.
- The sports discipline was likely to have 51 medals in four events and seven categories. The proposed events include traditional, artistic (single and pair), rhythmic (pair), and free flow and group yogasana, individual all round championship and team championship.

## 6) 'Buddhist philosophy connects SCO nations'

News:

- A virtual exhibition on the shared Buddhist heritage of the Shanghai Cooperation Organisation (SCO) countries was launched by Vice-President M. Venkaiah Naidu during the meeting of the SCO Council of Heads of Government meeting held via video-conference.
- "Buddhist philosophy and art of Central Asia connects SCO countries to each other. This presents an excellent opportunity for visitors to appreciate and compare Buddhist art antiquities from SCO countries on a single platform and from the comfort of their home.
- Such a transnational exhibition also has potential to connect, heal and rejuvenate communities in current pandemic times.
- The exhibition includes Buddhist treasures from India, including from the Gandhara and Mathura schools, Nalanda and Sarnath, in 3D format. Objects depicting the life of Gautam Buddha from Karachi, Lahore, Taxila, Islamabad, Swat and Peshawar museums are also included.

Gandhara School of Art	Mathura School of Art
Buddhist visual art is the main subject	Hinduism (both Vaishnav and Shavite images) and Jainism are the main subjects along with Buddhist art.
Hellenistic features of Buddha image.	The Buddha image at Mathura is modelled on the lines of earlier Yaksha images.
Gandhar Buddha express calmness.	Mathura Buddha is delighted in mood, seated in Padmasana and right hand in Abhyamudra and left hand on left thigh showing masculinity.
This school use grey sandstone, stucco (lime plaster).	This school used red stone for making the sculptures.
It was a fusion of Greco-Roman/Hellenisitc and Indian styles.	It was inspired by the early Indian Buddhist arts of Bharhut and Sanchi of MP.
It flourished from about the middle of the first century BC to about the fifth century AD in the Gandhara region (north-western India).	The origin has been traced back to the middle of the school century BC, but it was only in the first century AD that its genuine progress began.

Buddha in Gandhara School

Mthura school of Buddha art
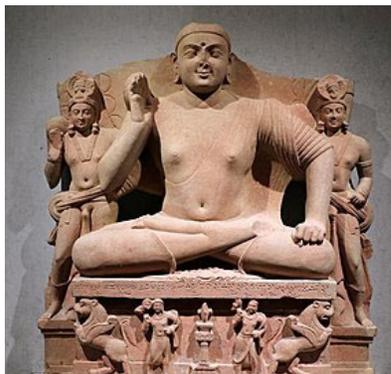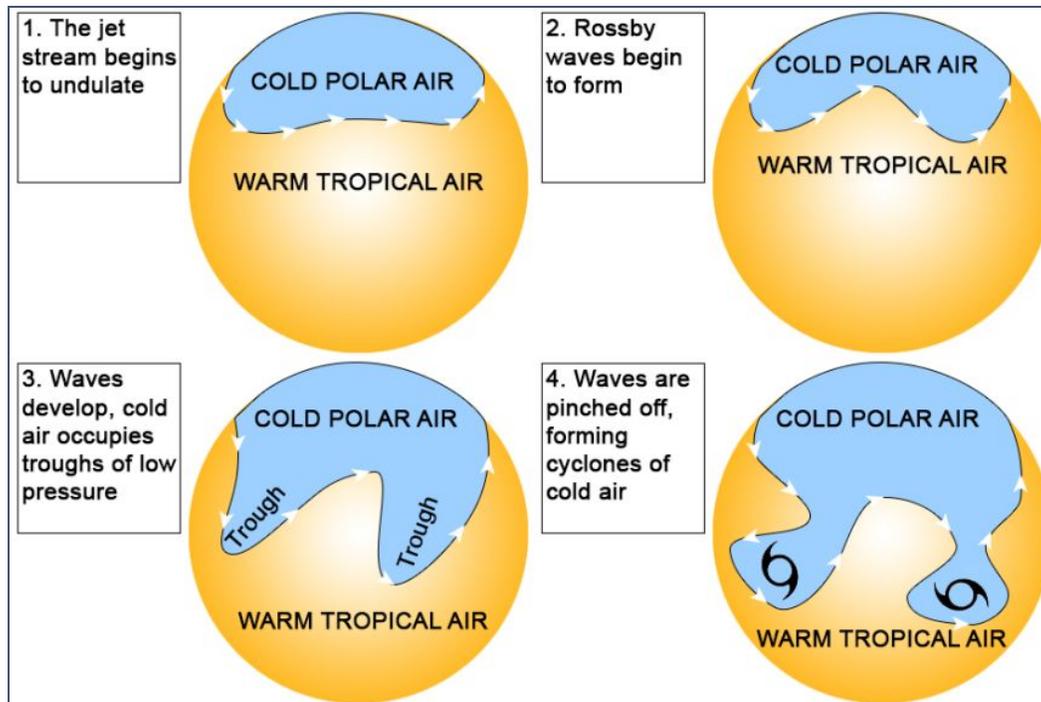
7) Causes of Indian droughts

News:

- Droughts in India have historically been associated with El Nino, an anomalous warming of the equatorial Pacific, but scientists from Bengaluru suggest other culprits too.
- The study that appears in journal Science says that nearly six out of 10 droughts, in non-El Nino years, that occurred during the Indian summer-monsoon season in the past century may have been driven by atmospheric disturbances from the North Atlantic region.
- Bengaluru scientists point to 'curving waves' from the Atlantic region that may be drying up the monsoons
- In an El Niño year, abnormally warm equatorial Pacific waters pull moisture-laden clouds away from the subcontinent, but the IISc study shows that in non-El Nino years, these droughts are a consequence of a sudden and steep drop in rainfall in late August.

Decline in rainfall

- In an El Nino year, the rainfall deficit departure from a long-term average will set in early around mid-June and progressively worsen.
- However, a non-El Nino-year drought will see rainfall and will similarly weaken in mid-June. But from mid-July to mid-August, usually the rainiest period of the monsoon, the monsoon will appear to recover. However, around August third week, there was a sudden steep decline in rainfall, resulting in drought conditions.

Causes other than El Niño - Rossby wave

- It seems, the researchers note, that winds in the upper atmosphere are interacting with a deep cyclonic circulation above the abnormally cold North Atlantic waters.
- The resulting wave of air currents, called a Rossby wave, curved down from the North Atlantic squeezed in by the Tibetan plateau and hit the subcontinent around mid-August, suppressing rainfall and throwing off the monsoon that was trying to recover from the June slump.

1. The jet stream begins to undulate

COLD POLAR AIR

WARM TROPICAL AIR

2. Rossby waves begin to form

COLD POLAR AIR

WARM TROPICAL AIR

3. Waves develop, cold air occupies troughs of low pressure

COLD POLAR AIR

Trough   Trough

WARM TROPICAL AIR

4. Waves are pinched off, forming cyclones of cold air

COLD POLAR AIR

WARM TROPICAL AIR

- The wave's usual course is to go from west to east, but not towards the equator.
- Thus beyond looking at the Pacific Ocean it is important to consider other influences on the Indian monsoon from outside the tropics.
- In 2014, India saw a 14% rainfall deficit — or a drought — that wasn't linked to El Nino and before that in 1986 and 1985.

8) Hold polls where NOTA got most votes: petition

News:

- An advocate has moved the Supreme Court for a direction that fresh elections should be held in a constituency where NOTA ('None of the above' option) garnered the maximum number of votes. Besides, none of the candidates who lost to NOTA should be allowed to contest the fresh polls.
- Advocate Ashwini Kumar Upadhyay said political parties chose candidates without consulting the voters, which was a "truly undemocratic" process. In turn, if the electorate has rejected these candidates by voting for NOTA, the parties should be barred from fielding them again in the fresh polls. The parties should accept that the voters have already made their discontent loud and clear.

Right to reject:

- Right to reject and elect new candidate will give power to the people to express their discontent. Right to reject will check corruption, criminalisation, casteism, communalism. Parties would be forced to give tickets to honest and patriotic candidates.
- The 'right to reject' was first proposed by the Law Commission in 1999. It also suggested that the candidates be declared elected only if they have obtained 50%+1 of the valid votes cast.

- Similarly, the Election Commission endorsed 'Right to Reject', first in 2001, under James Lyngdoh [the then CEC], and then in 2004 under T.S. Krishnamurthy [the then CEC], in its Proposed Electoral Reforms.
- The 'Background Paper on Electoral Reforms', prepared by the Ministry of Law in 2010, had proposed that if certain percentage of the vote was negative, then election result should be nullified and new election held.

NOTA:

- "None of the above", or NOTA for short, also known as "against all" or a "scratch" vote, is a ballot option in some jurisdictions or organizations, designed to allow the voter to indicate disapproval of the candidates in a voting system. It is based on the principle that consent requires the ability to withhold consent in an election, just as they can by voting "No" on ballot questions.
- Entities that include "None of the Above" on ballots as standard procedure include India, Indonesia, Greece, the U.S. state of Nevada, Ukraine, Belarus, Spain, North Korea and Colombia.
- Russia had such an option on its ballots until it was abolished in 2006. Bangladesh introduced this option in 2008. Pakistan introduced this option on ballot papers for the 2013 Pakistan elections, but the Election Commission of Pakistan later rejected it.
- Beginning with the 2016 presidential election, Bulgaria introduced a 'none of the above' option, which received 5.59% of the vote in the first round and 4.47% in the run-off.

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9) Public WiFi networks

News:

The Union Cabinet approved a proposal for setting up public WiFi hotspots across the country via public data offices or PDOs, which could even be a kirana shop or a paan shop.

PM-WANI:

- The move, aimed at helping accelerate the uptake of broadband Internet services, will not require the PDOs to get a license or pay a fee.
- The public WiFi Access Network Interface, which will be called 'PM-WANI', was first recommended by the Telecom Regulatory Authority of India (TRAI) in 2017.
- This will involve multiple players, including PDOs, Public Data Office Aggregators (PDOA), app providers, and a central registry.
- PDOs — comparable to a PCO or a cybercafe — will establish, maintain, and operate WiFi access points and deliver broadband services to subscribers, while the PDOAs will be aggregators of PDOs and perform functions such as authorisation and accounting.
- The app provider will develop the app to register users and discover PM-WANI compliant WiFi hotspots nearby.

- According to TRAI, in most major economies, for 50%-70% of their total usage time, mobile users use WiFi technology to communicate.

- However, in India, this figure is less than 10%. Service providers had in 2018 stated that they aimed to provide 5 lakh hotspots by March 31, 2019 and 10 lakh hotspots by September 30, 2019. However, these targets have not been achieved.

- An official release said that while no registration will be required for PDOs, the PDOAs and app providers will get themselves registered with the Department of Telecommunications online without any registration fee.