

PRAYAS4IAS

AN INITIATIVE BY THE PRAYAS INDIA

MAY WEEK 1



May (Week 1)

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Prelims

NATIONAL

National Human Rights Commission

(Source: [The Hindu](#))

Context: Justice Prafulla Chandra Pant, a former Supreme Court judge, has been appointed the Acting Chairperson of the National Human Rights Commission (NHRC) with effect from April 25, Justice Pant was appointed a member of the NHRC on April 22, 2019.

What is the National Human Rights Commission (NHRC)?

- The National Human Rights Commission (NHRC) established in 1993, is an independent statutory body as per the provisions of the **Protection of Human Rights Act of 1993** which was amended in 2006.
- Human Rights are an indispensable part of society and Human Rights in India are watched by NHRC.
- NHRC acts as a watchdog of human rights in the country.
- NHRC looks over the rights that are related to life, dignity, liberty and equality of the individual that is defined in Section 2(1) of the PHR Act.
- They are guaranteed by the Constitution of India, embodied in the international covenants and are enforceable by the courts of India as well.
- NHRC was established in compliance with the Paris Principles of Human Rights, 1991 which were adopted for the promotion and protection of Human Rights and were endorsed by United Nations at its General Assembly of 1993

NHRC History for UPSC

- In 1948, the UN adopted the UDHR (Universal Declaration of Human Rights).
- In 1991, the Paris Principles were established by the National Human Rights Institutions (NHRIs).
- In 1993, the UN adopted these Paris Principles at its General Assembly.
- In 1993, India enacted the Protection of Human Rights Act.
- This led to the formation of the National Human Rights Commission (NHRC).
- The Protection of Human Rights Act also allowed state governments to establish the State Human Rights Commission.

NHRC Composition – Members of NHRC for UPSC

- The National Human Rights Commission (NHRC) is composed of a Chairperson and eight other members.
- Those eight members are:
 - Four full-time members.
 - Four deemed members.

Members of NHRC

Chairman of NHRC	Retired Chief Justice of India
Member 1	One who is/has been a Judge of Supreme Court of India
Member 2	One who is/has been a Chief



	Justice of a High Court
Two Members	Candidates with the knowledge or practical experience in the matters of Human Rights
Deemed Members (Ex-officio Members)	Deemed members are chairpersons of the below national commissions: <ol style="list-style-type: none">1. National Commission for Minorities2. National Commission for Scheduled Castes3. National Commission for Scheduled Tribes4. National Commission for Women

Appointment of NHRC Members

- A Selection Committee will recommend the candidates to the President.
- The Selection Committee includes:
 - Prime Minister (Chairman)
 - Speaker of Lok Sabha
 - Union Home Minister
 - Deputy Chairman of Rajya Sabha
 - Leaders of the Opposition in both Houses of the Parliament

Functions & Powers of NHRC

- NHRC can investigate any complaints related to violation of Human Rights in India either suo moto or after receiving a petition.
- NHRC can interfere in any judicial process that involves any allegation of violation of Human Rights.
- It can visit any prison/institute under the control of the state governments to observe the living conditions of inmates. It can further make recommendations based on its observations to the authorities.
- NHRC can review the provisions of the Constitution that safeguard Human Rights and can suggest necessary restorative measures.
- Research in the field of Human Rights is also promoted by the NHRC.
- Human Rights awareness and literacy through different media are promoted by NHRC in various sectors of society.
- NHRC has the power to recommend suitable steps that can prevent violation of Human Rights in India to both Central as well as State Governments.
- The President of India gets an annual report from NHRC which is laid before both the Houses of the Parliament.

Maratha quota unconstitutional

(Source: [The Hindu](#))

Context: A five-judge Constitution Bench of the Supreme Court unanimously declared a Maharashtra law, which provides reservation benefits to the Maratha community taking the quota limit in the State in excess of 50%, unconstitutional.

Details:

- The Bench, led by Justice Ashok Bhushan, found there was no “exceptional circumstances” or “extraordinary situation” in Maharashtra, which required the State government to break the 50% ceiling limit to bestow quota benefits on the Maratha community.
- The Supreme Court struck down the findings of the Justice M.G. Gaikwad Commission, which led to the enactment of the Maratha quota law, and set aside the Bombay High Court judgment which validated the Maharashtra State Reservation for Socially and Educationally Backward Classes (SEBC) Act of 2018.
- The High Court, in June 2019, reduced the quantum of reservation for Marathas from the 16% recommended by the Gaikwad Commission to 12% in education and 13% in employment.
- The Supreme Court concluded that even the reduced percentages were ultra vires.
- In fact, the Supreme Court held that a separate reservation for the Maratha community violated Articles 14 (right to equality) and 21 (due process of law).
- Most important, the top court declined to revisit its 1992 Indra Sawhney judgment, which fixed the reservation limit at 50%. “The judgment of Indra Sawhney has stood the test of time and has never been doubted by any judgment of this court,” Justice Bhushan wrote.

When did state adopt the legislation?

- In November 2018, the Maratha community was given the reservation under the Maharashtra State Socially and Educational Backward Act.
- The special act was sanctioned by Maharashtra State Backward Class Commission and approved in both the assembly and council.
- The emphasis on legislation was to give reservation under SEBC, a legal and constitutional validity.
- The legislation proposed by then BJP-Sena government got unanimous support from then opposition parties Congress and NCP.
- However, the reservation under SEBC was challenged by a PIL in Bombay High Court. The Bombay High Court while upholding the reservation pointed that instead of 16 per cent it should be reduced to 12 per cent in education and 13 per cent in jobs.
- Accordingly, the Act was implemented with Maratha students availing the quota in educational institutions and jobs.
- In September 9, 2020 the Maratha reservation confronted another hurdle as Supreme Court stayed its implementation and refer the case to Chief Justice of India for larger bench.
- It meant Marathas could not avail quota benefits either in education or jobs till the final verdict came out. But those who had availed the quota benefit till date remained unaffected. The Supreme Court has on May 5 quashed the reservation.

Centre alone can identify SEBC: SC

(Source: [The Hindu](#))

Context: *The Centre alone is empowered to identify Socially and Educationally Backward Classes (SEBC) and include them in the Central List for claiming reservation benefits.*

Details:

- The President (that is the Central government) alone, to the exclusion of all other authorities, is empowered to identify SEBCs and include them in a list to be published **under Article 342A (1)**, which shall be deemed to include SEBCs in relation to each State and Union Territory for the purposes of the Constitution- said Justice S. Ravindra Bhat.
- Justice Bhat said the States could only make suggestions to the President or the statutory commissions concerned for inclusion, exclusion or modification of castes and communities to be included in the List.



- **The Central List is to be the “only list” for the SEBC.**
- Once published, under Article 342A (1), the list can only be amended through a law enacted by Parliament, by virtue of Article 342A (2),” Justice Bhat said.
- “In the task of identification of SEBCs, the President shall be guided by the Commission (National Commission for Backward Classes) set up under Article 338B; its advice shall also be sought by the State in regard to policies that might be framed by it,” the court said.
- “If the commission prepares a report concerning matters of identification, such a report has to be shared with the State government, which is bound to deal with it, in accordance with provisions of Article 338B. However, the final determination culminates in the exercise undertaken by the President (i.e. the Central Government, under Article 342A (1),” the court clarified.
- However, “the President’s prerogative as far as the identification and inclusion of SEBCs in the List would not affect the States’ power to make reservations in favour of particular communities or castes, the quantum of reservations, the nature of benefits and the kind of reservations, and all other matters falling within the ambit of Articles 15 and 16”.

Resolution Framework 2.0 of RBI

(Source: [The Hindu](#))

Context: *The Reserve Bank of India announced measures to protect small and medium businesses and individual borrowers from the adverse impact of the intense second wave of COVID-19 buffeting the country.*

Eligibility criteria

- In an unscheduled address, RBI Governor Shaktikanta Das unveiled a Resolution Framework 2.0 for COVID-related stressed assets of individuals, small businesses and MSMEs and also expressed the central bank’s resolve to do everything at its command to ‘save human lives and restore livelihoods through all means possible’.
- Considering that the resurgence of the pandemic had made these categories of borrowers most vulnerable, the RBI said those with aggregate exposure of up to ₹25 crore, who had not availed restructuring under any of the earlier restructuring frameworks (including under last year’s resolution framework), and whose loans were classified as ‘standard’ as on March 31, 2021, were eligible for restructuring under the proposed framework.
- In respect of individual borrowers and small businesses who had already availed restructuring under Resolution Framework 1.0, lenders have been permitted to use this window to modify such plans to the extent of increasing the period of moratorium and/or extending the residual tenor up to a total of two years.
- In respect of small businesses and MSMEs restructured earlier, lending institutions have been permitted as a one-time measure, to review the working capital sanctioned limits, based on a reassessment of the working capital cycle and margins.

Credit support

- To provide further support to small business units, micro and small industries, and other unorganised sector entities adversely affected during the current wave of the pandemic, the RBI decided to conduct special three-year long-term repo operations (SLTRO) of ₹10,000 crore at the repo rate for Small Finance Banks.
- The SFBs would be able to deploy these funds for fresh lending of up to ₹10 lakh per borrower. This facility would be available till October 31.



In view of the fresh challenges brought on by the pandemic and to address the emergent liquidity position of smaller MFIs, SFBs are now being permitted to reckon fresh lending to smaller MFIs (with asset size of up to ₹500 crore) for onlending to individual borrowers as priority sector lending. This facility will be available up to March 31, 2022.

State governments

- To enable the State governments to better manage their fiscal situation in terms of their cash flows and market borrowings, maximum number of days of overdraft (OD) in a quarter is being increased from 36 to 50 days and the number of consecutive days of OD from 14 to 21 days, the RBI said.

Steps Taken

Emergency liquidity window of ₹50,000 cr for health sector

Long-term repo operations of ₹10,000 crore for small finance banks (SFBs)

On-lending by SFBs to MFIs to be classified as priority sector lending

Special recast window for individuals, small businesses & MSME borrowers

WHAT DID RBI SAY

Demand conditions in contact-intensive services likely to see a temporary dip

Households and businesses learning to adapt to localised restrictions

Aggregate demand expected to be moderate in comparison to a yr ago

Disruption in manufacturing units so far minimal

High frequency indicators emitting mixed signals

Consumption demand holding up with sales rising in double digits in Mar qtr



Shaktikanta Das
RBI Governor

RBI's Rs 50,000 crore fund support to healthcare

(Source: [Indian Express](https://www.indianexpress.com))

Context: With the raging Covid pandemic putting severe stress on the economy, the Reserve Bank of India (RBI) unveiled a host of measures to boost fund flow to the healthcare sector and ease the pain of small borrowers and units. The RBI has opened an on-tap liquidity window of Rs 50,000 crore with tenors of up to three years at the repo rate – four per cent — till March 31, 2022 to boost provision of immediate liquidity for ramping up Covid-related healthcare infrastructure and services in the country.

Details:

- Under the scheme, banks can provide fresh lending support to a wide range of entities including vaccine manufacturers, importers and suppliers of vaccines and priority medical devices, hospitals and dispensaries, pathology labs, manufactures and suppliers of oxygen and ventilators, importers of vaccines and Covid-related drugs, logistics firms and also patients for treatment, RBI Governor Shaktikanta Das said while announcing the measures.
- Das said banks are being incentivised for quick delivery of credit under the scheme through extension of priority sector classification to such lending up to March 31, 2022.
- These loans will continue to be classified under priority sector till repayment or maturity, whichever is earlier.
- Banks are expected to create a Covid loan book under the schem.
- By way of an additional incentive, such banks will be eligible to park their surplus liquidity up to the size of the Covid loan book with the RBI under the reverse repo window at a rate which is 25 bps lower than the repo rate or, termed in a different way, 40 bps higher than the reverse repo rate, he said.

RBI's Rs 10,000 crore liquidity support for small finance banks



- The RBI has decided to conduct special three-year long-term repo operations (SLTRO) of Rs 10,000 crore at repo rate for small finance banks, to be deployed for fresh lending of up to 10 lakh rupees per borrower.
- This is to provide further support to small business units, micro and small industries, and other unorganised sector entities adversely affected during the current wave of the pandemic.
- SFBs will be permitted to reckon fresh lending to smaller MFIs (with asset size of up to Rs 500 crore) for on-lending to individual borrowers as priority sector lending.
- This means there will be concessions on interest rates and repayments. This facility will be available up to March 31, 2022.

Resolution framework Covid-related stressed assets of individuals, small businesses and MSMEs

- The RBI said borrowers — individuals and small businesses and MSMEs — having aggregate exposure of up to Rs 25 crore and who have not availed restructuring under any of the earlier restructuring frameworks (including under the Resolution Framework 1.0 dated August 6, 2020), and who were classified as 'Standard' as on March 31, 2021 will be eligible to be considered under Resolution Framework 2.0. Restructuring under the proposed framework may be invoked up to September 30, 2021 and will have to be implemented within 90 days after invocation.
- In the case of individual borrowers and small businesses who have availed restructuring of their loans under Resolution Framework 1.0, where the resolution plan permitted moratorium of less than two years, lending institutions will be permitted to use this window to modify such plans to the extent of increasing the period of moratorium and/or extending the residual tenor up to a total of 2 years.

Credit to MSME entrepreneurs

- In February 2021, banks were allowed to deduct credit disbursed to new MSME borrowers from their net demand and time liabilities (NDTL) for calculation of the cash reserve ratio (CRR).
- In order to further incentivise inclusion of unbanked MSMEs into the banking system, this exemption currently available for exposures up to Rs 25 lakh and for credit disbursed up to the fortnight ending October 1, 2021 is being extended till December 31, 2021.

Overdraft (OD) facility for states

- The RBI also announced certain relaxations in Overdraft (OD) facilities of State Governments so that they can better manage their fiscal situation in terms of their cash-flows and market borrowings.
- Accordingly, the maximum number of days of OD in a quarter is being increased from 36 to 50 days and the number of consecutive days of OD from 14 to 21 days.
- This facility will be available up to September 11 30, 2021. The Ways and Means Advance (WMA) limits of states have already been enhanced on April 23, 2021.

KYC rationalisation

- The RBI has decided to rationalise certain components of the extant KYC norms.
- These include
 - (a) extending the scope of video KYC known as V-CIP (video-based customer identification process) for new categories of customers such as proprietorship firms, authorised signatories and beneficial owners of Legal Entities and for periodic updation of KYC,
 - (b) conversion of limited KYC accounts opened on the basis of Aadhaar e-KYC authentication in non-face-to-face mode to fully KYC-compliant accounts,
 - (c) enabling the use of KYC Identifier of Centralised KYC Registry (CKYCR) for V-CIP and submission of electronic documents (including identity documents issued through DigiLocker) as identify proof and
 - (d) introduction of more customer-friendly 10 options, including the use of digital channels for the purpose of periodic updation of KYC details of customers.

SUTRA Model

(Source: [PIB](#))

Context: *Scientists working on SUTRA model for charting trajectory of COVID-19.*

Details:

- Scientists from the IITs of Kanpur and Hyderabad have applied the ‘Susceptible, Undetected, Tested (positive), and Removed Approach’ (SUTRA) model to predict the COVID graph in India.
- The model uses three main parameters to predict the course of the pandemic.
 - The first is called beta, or contact rate, which measures how many people an infected person infects per day. It is related to the R0 value, which is the number of people an infected person spreads the virus to over the course of their infection.
 - The second parameter is ‘reach’ which is a measure of the exposure level of the population to the pandemic.
 - The third is ‘epsilon’ which is the ratio of detected and undetected cases.

Production Linked Incentive Scheme for the Food Processing Industry

(Source: [PIB](#))

Context: *The Ministry of Food Processing Industries issued guidelines for ‘Production Linked Incentive Scheme for the Food Processing Industry.*

About PLI

- Production Linked Incentive or PLI scheme is a scheme that aims to give companies incentives on incremental sales from products manufactured in domestic units.
- The scheme invites foreign companies to set up units in India, however, it also aims to encourage local companies to set up or expand existing manufacturing units and also to generate more employment and cut down the country’s reliance on imports from other countries.
- It was launched in April 2020, for the Large Scale Electronics Manufacturing sector, but later towards the end of 2020 was introduced for 10 other sectors.
- This scheme was introduced in line with India’s Atmanirbhar Bharat campaign.

Background

- It was introduced as a part of the National Policy on Electronics by the IT Ministry to give incentives of 4-6% to electronic companies, manufacturing electronic components like mobile phones, transistors, diodes, etc.
- The main aim of this scheme was to invite foreign investors to set up their manufacturing units in India and also promote the local manufacturers to expand their units and generate employment
- The first sector which the PLI scheme had targeted was the Large Scale Electronics Manufacturing in April 2020, and by the end of the year (November 2020), 10 more sectors including food processing, telecom, electronics, textiles, speciality steel, automobiles and auto components, solar photovoltaic modules and white goods such as air conditioners and LEDs were also expanded under the PLI scheme
- As far as the eligibility is concerned, all electronic manufacturing companies which are either Indian or have a registered unit in India will be eligible to apply for the scheme

- In the Union Budget 2021, Finance Minister Nirmala Sitharaman mentioned the inclusion of thirteen more sectors under the PLI Scheme for a period of five years and Rs. 1.97 lakh crores have been allocated for this scheme from Financial Year 2022

Expansion of Production Linked Incentive Scheme

- The Union Cabinet chaired by Prime Minister Narendra Modi, on November 11, 2020, approved the introduction of the PLI scheme for the 10 key sectors which can enhance India's Manufacturing Capabilities and improve exports.
- Given below are the 10 new sectors to which the scheme has been expanded along with the approved financial outlay:

Sectors	Implementing Ministry/Department
Advance Chemistry Cell (ACC) Battery	NITI Aayog and Department of Heavy Industries
Electronic/Technology Products	Ministry of Electronics and Information Technology
Automobiles & Auto Components	Department of Heavy Industries
Pharmaceuticals drugs	Department of Pharmaceuticals
Telecom & Networking Products	Department of Telecom
Textile Products: MMF segment and technical textiles	Ministry of Textiles
Food Products	Ministry of Food Processing Industries
High-Efficiency Solar PV Modules	Ministry of New and Renewable Energy
White Goods (ACs & LED)	Department for Promotion of Industry and Internal Trade
Speciality Steel	Ministry of Steel

Ayush-64

(Source: [PIB](#))

Context: Clinical trials conducted by the Central Council for Research in Ayurvedic Sciences (CCRAS) has shown that the polyherbal drug Ayush-64 has notable antiviral, immune-modulator and antipyretic properties.

What's in the News?

- The clinical trials were conducted by CCRAS in collaboration with the Council of Scientific and Industrial Research (CSIR) and many other research organizations and medical colleges across the country.
- The trials have shown that Ayush-64 is found to be useful in the treatment of asymptomatic, mild and moderate COVID-19 infection.
- Consequently, the drug is now repurposed for COVID-19.

What is Ayush-64?

- Ayush-64 is an Ayurvedic formulation developed by CCRAS.
- Originally developed in 1980 for the management of Malaria, this drug has now been repurposed for Covid-19 as its ingredients showed notable antiviral, immune-modulator and antipyretic properties.
- The in-silico study done on Ayush 64 showed that 35 out of 36 of its Phyto-constituents have high binding affinity against the COVID-19 virus.
- The formulation has also shown very promising results in Influenza like illnesses.

- With scientific evidence generated from six clinical studies across India, Ayush 64 has been identified as a potential adjunct to standard care in the management of asymptomatic, mild and moderate COVID-19 to improve the clinical recovery and quality of life.
- Ayush-64 is found to significantly enhance the speed of clinical recovery in terms of disease symptoms and severity. It also has significant beneficial effects on general health, fatigue, anxiety, stress, appetite, general wellbeing and sleep.
- The formulation can be taken by patients at any stage of the COVID-19 disease.
- However, its efficacy was scientifically studied in asymptomatic, mild and moderate disease without risk factors for poor outcome and those not requiring emergency interventions or hospitalization are eligible to take Ayush-64.

Moorhen Yoga Mat

(Source: [PIB](#))

Context: *Biodegradable yoga mat developed by 6 young girls from Assam may save lakes from water hyacinth menace.*

Details:

- Six young girls belonging to the fishing community in the fringes of the Deepor Beel in Assam have developed a biodegradable Yoga mat from water hyacinth.
- The Deepor Beel lake has been a source of livelihood for 9 villages of the fishing community who share this biome for centuries, but over the years have suffered from excessive growth and accumulation of water hyacinth.
- This innovation could therefore contribute significantly towards the environmental conservation and sustainability of Deepor Beel and also ensure local livelihood.
- The mat called ‘Moorhen Yoga Mat’ will soon be introduced to the world market as a unique product.
- The mat has been named after Kam Sorai (Purple moorhen, a resident bird of Deepor Beel Wildlife Sanctuary).

Social Security Code, 2020

(Source: [PIB](#))

Context: *Section 142 of the Social Security Code, 2020 has been notified by Ministry of Labour & Employment covering applicability of Aadhaar.*

About Code on Social Security, 2020

- The definition of employees has been widened to include inter-state migrant workers, construction workers, film industry workers and platform workers.
- The gratuity period for working journalists has been reduced from 5 years to 3 years.
- The Code talks about setting up social security funds for unorganized workers, platform workers, and gig workers.
- There is a provision for the central government to decrease or defer the employer’s or employee’s contribution towards the PF or ESI for up to 3 months in the event of a pandemic, national disaster or an epidemic.



- The Code proposes the establishment of a National Social Security Board for recommending to the central government the formulation of schemes for the various sections of unorganised, gig and platform workers.

5G trial

(Source: [Indian Express](#))

Context: *The Department of Telecommunications allowed private telcos Bharti Airtel, Reliance Jio Infocomm and Vi (formerly Vodafone Idea) and well as state-run telco Mahanagar Telephone Nigam Limited (MTNL) to start trials for 5G technology as well as its applications in various sectors. The trials will last for 6 months for now.*

Why are the trials for 5G technology important for telcos?

- 5G or fifth generation is the latest upgrade in the long-term evolution mobile broadband networks. 5G mainly works in 3 bands, namely low, mid and high-frequency spectrum — all of which have their uses and limitations.
- The telecom market in India is left with only three private telcos, with the rest having surrendered to the low returns on investments over the years. Apart from the private telecommunication companies, the two state-run companies, MTNL and Bharat Sanchar Nigam Limited (BSNL) have also survived but are making losses.
- In order to increase their average revenue per user, it is pertinent for telcos to start offering the new 5G technology as soon as possible. For that, however, they will have to conduct trials in a variety of circumstances, including in semi-urban and rural areas, which remains an untapped market for them.
- Apart from the telcos, it is also important that the government be ready to roll out the new technology as soon as possible.
- A standing committee of Lok Sabha on Information Technology has already flayed the government for delays in approvals, inadequate availability of spectrum, high spectrum prices, poor development of use cases and low status of fiberisation among others. It is due to these reasons, the panel had said, that India could miss the 5G bus.

Uranium

(Source: [Indian Express](#))

Context: *The Maharashtra Anti-Terrorism Squad (ATS) arrested two persons with 7 kg natural uranium estimated to be worth around Rs 21 crore. Prior to this, in 2016 the Thane police too had arrested two persons with depleted uranium.*

What exactly is uranium and what are its uses?

- Uranium occurs naturally in low concentrations in soil, rock and water and is commercially extracted from uranium-bearing minerals.
- Uranium that has a silvery grey metallic appearance is mainly used in nuclear power plants due to its unique nuclear properties.
- Depleted uranium is also used as shield against radiation in medical processes using radiation therapy and also while transporting radioactive materials.
- Though itself radioactive, uranium's high density makes it effective in halting radiation.
- Its high density also makes it useful as counterweights in aircraft and industrial machinery.



INTERNATIONAL

Mount Sinabung

(Source: [Indian Express](#))

Context: *Indonesia's Mount Sinabung, located in the North Sumatra province, erupted recently, belching a massive column of volcanic ash and smoke 3,000 metres (3 km) into the sky.*

Details:

- The volcano had erupted in March as well, sending a cloud of hot ash into the sky. This was the first time it erupted since August 2020 when the volcano sent a column of ash and smoke more than 16,000 feet into the air.
- The volcano has been active since 2010 when it erupted after nearly 400 years of inactivity.
- Indonesia is home to many active volcanoes owing to its location in the “Ring of Fire” or the Circum-Pacific Belt — an area along the Pacific Ocean characterised by active volcanoes and frequent earthquakes.
- The Ring of Fire is home to about 75 per cent of the world's volcanoes and about 90 per cent of earthquakes also occur here.
- Mount Sinabung volcano erupted in Indonesia, as residents were advised to be aware of ashfall and avalanches of volcanic debris.
- At least 15 smaller eruptions have been recorded in the past week, according to officials.

Why does a volcano erupt?

- Basically, there are three types of volcanoes — active, dormant or extinct.
- An eruption takes place when magma (a thick flowing substance), that is formed when the earth's mantle melts, rises to the surface.
- As magma is lighter than rock, it is able to rise through vents and fissures on the surface of the earth. Following eruption, the magma is called lava.
- Not all volcanic eruptions are explosive since explosivity depends on the composition of the magma.
- When the magma is runny and thin, gases can easily escape it. In such cases, the magma will flow out towards the surface.
- However, if the magma is thick and dense and gases cannot escape it, it builds up pressure inside resulting in a violent explosion.

SpaceX's Starship

(Source: [Indian Express](#))

Context: *Serial number 15 (SN15), a prototype of the futuristic Starship rocket developed by Elon Musk's SpaceX company, was able to launch and successfully land on Wednesday, heralding a new era in space exploration for NASA. The spacecraft has been described as a game-changer for space travel, being a fully reusable transportation system for crew and cargo to the Earth's orbit, Moon and Mars.*

What is the Starship?



- Designed by SpaceX, Starship is a spacecraft and super-heavy booster rocket meant to act as a reusable transportation system for crew and cargo to the Earth's orbit, Moon and Mars. SpaceX has described Starship as "the world's most powerful launch vehicle" with an ability to carry over 100 metric tonnes to the Earth's orbit.
- Starship has been under development since 2012 and is a part of Space X's central mission to make interplanetary travel accessible and affordable and to become the first private company to do so.
- Therefore, the company is working on building a fleet of reusable launch vehicles, capable of carrying humans to Mars and other destinations in the solar system.
- Reusability is at the heart of making interplanetary travel accessible, SpaceX believes, since a majority of the launch cost is attributed to the expense of building a rocket that is ultimately designed to burn up during re-entry.

What is it capable of doing?

- In time to come, the Starship system is expected to replace SpaceX's partially reusable Falcon rockets that are currently operational.
- Starship can deliver satellites further and at lower marginal costs than Falcon vehicles and it can ferry both cargo and crew to the International Space Station (ISS). Once developed, Starship is also expected to help carry large amounts of cargo to the Moon, for human spaceflight development and research. Beyond the Moon, the spacecraft is being designed for carrying crew and cargo for interplanetary missions as well.
- The Starship spacecraft is expected to enter Mars's atmosphere at a speed of 7.5 km per second and will be designed to withstand multiple entries. While no human being has set foot on Mars yet, the planet continues to intrigue scientists and researchers because of the possibility that life existed there once.
- SpaceX is planning its first cargo mission to the red planet by 2022 and by 2024, the company wants to fly four ships including two cargo and two crewed ones to Mars.

What is NASA's Artemis mission?

- Last month, NASA chose SpaceX to build a lander for its Artemis programme, which plans to send humans to the Moon in this decade.
- SpaceX won the \$2.89 billion contract in a bidding war against traditional space giants, Amazon and Dynetics.
- The vehicle, which is based on Starship, will carry the next man and the first woman to land on the Moon.
- The Artemis programme, initiated by the administration of former President Donald Trump, planned to do this in 2024, but the plans were postponed because of a shortfall in funding.
- With the Artemis programme, NASA aims to demonstrate new technologies, capabilities and business approaches that will ultimately be needed for the future exploration of Mars.

New research about climate change & a shift in Earth's axis

(Source: [Indian Express](#))

Context: *Rising sea levels, heatwaves, melting glaciers and storms are some of the well-known consequences of climate change. New research has added yet another impact to this list – marked shifts in the axis along which the Earth rotates.*

Details:

- A study published in Geophysical Research Letters of the American Geophysical Union (AGU) says that due to the significant melting of glaciers because of global temperature rise, our planet's axis of rotation has been moving more than usual since the 1990s.
- While this change is not expected to affect daily life, it can change the length of the day by a few milliseconds, experts say.

How the Earth's axis shifts

- The Earth's axis of rotation is the line along which it spins around itself as it revolves around the Sun. The points on which the axis intersects the planet's surface are the geographical north and south poles.
- The location of the poles is not fixed, however, as the axis moves due to changes in how the Earth's mass is distributed around the planet. Thus, the poles move when the axis moves, and the movement is called "polar motion".
- According to NASA, data from the 20th century shows that the spin axis drifted about 10 centimetres per year. Meaning over a century, polar motion exceeds 10 metres.
- Generally, polar motion is caused by changes in the hydrosphere, atmosphere, oceans, or solid Earth. But now, climate change is adding to the degree with which the poles wander.

What the new study says

- Since the 1990s, climate change has caused billions of tonnes of glacial ice to melt into oceans. This has caused the Earth's poles to move in new directions.
- As per the study, the north pole has shifted in a new eastward direction since the 1990s, because of changes in the hydrosphere (meaning the way in which water is stored on Earth). From 1995 to 2020, the average speed of drift was 17 times faster than from 1981 to 1995. Also, in the last four decades, the poles moved by about 4 metres in distance.
- The calculations were based on satellite data from NASA's Gravity Recovery and Climate Experiment (GRACE) mission as well as estimates of glacier loss and groundwater pumping going back to the 1980s, according to Science Alert.
- "The faster ice melting under global warming was the most likely cause of the directional change of the polar drift in the 1990s," the study says.
- The other possible causes are (terrestrial water storage) change in non-glacial regions due to climate change and unsustainable consumption of groundwater for irrigation and other anthropogenic activities.
- While ice melting is the major factor behind increased polar motion, groundwater depletion also adds to the phenomenon. As millions of tonnes of water from below the land is pumped out every year for drinking, industries or agriculture, most of it eventually joins the sea, thus redistributing the planet's mass.

TRIPS

(Source: [The Hindu](#))

Context: U.S. President Joe Biden said that he had not made a decision on whether the U.S. would support an Indian and South African initiative at the World Trade Organization (WTO) to waive Trade Related Intellectual Property Rights (TRIPS) to facilitate the production of COVID-19 vaccines and therapeutics around the world.

What is Trade Related Intellectual Property Rights (TRIPs)?

- TRIPs provide minimum standards in the form of common set of rules for the protection of intellectual property globally under WTO system.

- The TRIPs agreement gives set of provisions deals with domestic procedures and remedies for the enforcement of intellectual property rights.
- Member countries have to prepare necessary national laws to implement the TRIPs provisions.
- TRIPs cover eight areas for IPRs legislation including patent, copyright and geographical indications.

The TRIPs regime

- A breakthrough of the GATT signed in 1994 was that it brought TRIPs as a common standard for the protection of intellectual property globally.
- Implication of TRIPs is that member countries should design domestic intellectual property legislations on the basis of the TRIPs provisions.

TRIPs as WTO's IPR regime

- TRIPs is considered as a major achievement of the Uruguay Round as an international trade agreement. At the trade negotiations, the developed countries were succeeded in linking intellectual property rights with trade.
- Until then, the World Intellectual Property Organisation (WIPO) was the exclusive international institution dealing with intellectual property.
- With TRIPs, the WTO also emerged as the institution for the protection and promotion of intellectual property globally.

What TRIPs instructs to member countries?

- As per the TRIPs provisions, the member countries are required to prepare the necessary legal framework spelling out the scope and standards of protection for rights in regard to intellectual property.
- Or in other words, the member countries have to adopt TRIPs provisions in their domestic intellectual property legislations like Patent Act, Copyright Act etc.
- WTO advocate necessary amendments to national IPR laws to accommodate the TRIPs provisions. TRIPs agreement is an effort to bring national legislations under common international rules.
- An important feature of TRIPs is that it is more specific and hard on 'patents' -the most important form of intellectual property. In the case of plant rights, geographical indications etc., members can adopt a sui-generis (own designed) IPR regime.
- WTO gives following areas of intellectual property – copyright and related rights, trademarks, protection of undisclosed information (trade secrets), geographical indications, industrial designs, integrated circuits, patents, and control of anti-competitive practices in contractual licences.
- Signing TRIPs means countries have to modify their Patent Act, Copy Right Act, Trade Mark Act etc., in accordance with the provisions of the TRIPs.
- In India, the government has made a major amendment to the 1970 Patent Act in 2005 to accommodate the TRIPs provisions. In 2010, the Copyright Act was amended and enforced from 2012. Other legislations with respect to Industrial designs also have been made.

Cinco de Mayo

(Source: [Indian Express](#))

Context: *With parties, parades and Mexican cuisine and music, Cinco de Mayo (May the fifth in Spanish) is a joyous celebration every year in Mexico and the United States. It is a day that celebrates Mexican national pride, marking Mexico's military victory on its soil over French forces in 1862.*

Why is Cinco de Mayo celebrated?



- In the 1860s, Mexico had been severely weakened by lengthy wars over the previous two decades — the Mexican-American War (1846-48) and the internal Reform War (1858-61).
- As a result, in 1861, President Benito Juárez announced a temporary moratorium of two years on repaying Mexico's foreign debts.
- In response, troops from Britain, Spain, and France invaded Mexico, demanding reimbursement.
- By April 1862, Britain and Spain negotiated with Mexico and withdrew, but France, which at the time was led by Emperor Napoleon III, decided to establish an empire in Mexican territories with the support of the local landowning classes. France also intended to curb US power in North America.

The Battle of Puebla

- In late 1861, a French fleet attacked the Mexican port of Veracruz on the country's eastern coast and landed a large army that drove the Juárez government into retreat.
- As they moved from Veracruz to the capital Mexico City, the French encountered stiff resistance from Mexican forces.
- At Puebla, over 100 km ahead of Mexico City, a poorly equipped and outnumbered Mexican force decisively defeated the advancing French troops on May 5, 1862, killing over a thousand.
- The event marked a significant political victory of Mexican republicans and President Juárez, and helped establish a sense of national unity in the country.

Russia approves one-dose 'Sputnik Light'

(Source: [The Hindu](#))

Context: *Russia has authorised Sputnik Light, a single dose vaccine against COVID-19, for use. Sovereign wealth fund Russian Direct Investment Fund (RDIF) said the move will pave way for immunisation of a larger number of people in a shorter timeframe.*

Details:

- Sputnik Light is the first component — recombinant human adenovirus serotype number 26 (rAd26) — of Sputnik V vaccine that has been approved by over 60 countries, including India.
- CEO Kirill Dmitriev said Sputnik Light will be “exported to our international partners to help increase the rate of vaccinations in the face of ongoing fight with the pandemic and new strains of coronavirus”.
- At less than \$10, the vaccine will also be affordable.
- There is a big interest already in Sputnik Light and it is likely to be registered in several countries as early as next week.
- It can be used as a booster shot for other vaccines. Cocktail of vaccines like Sputnik V is the way to go, and they work very well.
- A RDIF statement said Sputnik Light demonstrated 79.4% efficacy. The efficacy of Sputnik V was 92%.

What's Facebook's Oversight Board

(Source: [The Hindu](#))

Context: *Facebook's Oversight Board on Wednesday upheld the social media network's decision on January 7 to block the then-U.S. President Donald Trump from its platform. Facebook had decided to indefinitely block Mr. Trump for using the platform to, as its CEO Mark Zuckerberg put it then, “incite*

violent insurrection against a democratically elected government”. On January 21, Facebook referred the case to its Oversight Board.

About the Board

- The Oversight Board has been set up as an independent body that will help Facebook figure out what content can be allowed on the platform and what ought to be removed.
- The board did uphold Facebook’s decision to block Mr. Trump but also said “it was not appropriate for Facebook to impose the indeterminate and standardless penalty of indefinite suspension”.
- Its point was that Facebook usually responded to violations by either removing such content, or suspending the user for a specific time-period, or effecting a permanent ban. Indefinite suspensions aren’t part of its response mix, which is what has been flagged.
- The Board has now given Facebook six months to come up with a “proportionate response that is consistent with the rules that are applied to other users of its platform.”
- The investigation showed that prior to the January 6 Capitol riots by Trump supporters, five of Mr. Trump’s posts had been found violating Facebook’s community standards.
- They were, therefore, removed. One of these posts, in August 2020, violated Facebook’s Covid-19 misinformation policy.
- Mr. Trump’s Facebook page received a ‘strike’ for this (a Facebook page is removed after a certain number of strikes). The Board said Facebook didn’t explain “why other violating content it had removed did not result in strikes.”
- Twenty other pieces of Mr. Trump’s content were marked as potential violations by the review system but were later found to be okay.
- Sometimes, Facebook allows violating content to be on its platform if it considers it to be newsworthy and in public interest. The Board revealed Facebook asserted that it “has never applied the newsworthiness allowance to content posted by the Trump Facebook page or Instagram account”.

Key recommendations

- The Board wants Facebook to act quickly when it comes to content of a political nature coming from influential users.
- Its idea is to escalate such content to specialised staff as also assess potential harms from such accounts.
- It also wants Facebook to be more transparent about its policies regarding assistance to investigations as well as its penalty rules.
- It also wants Facebook to comprehensively review its “potential contribution to the narrative of electoral fraud and the exacerbated tensions that culminated in the violence in the United States on January 6.
- This should be an open reflection on the design and policy choices that Facebook has made that may allow its platform to be abused.”

Mains

GS II

Social murder and the missing state

(Source: [The Hindu](#))

Context: *When people are placed under conditions which appeal to the brute only, said Friedrich Engels, what remains to them but to rebel or to succumb to utter brutality? The scenes that are being witnessed in India now are apocalyptic in tone. When a citizen attacks hospital personnel because a life was lost due to the absence of medical care, or a citizen struggles to breathe with an oxygen cylinder on the pavement, it is a crisis at multiple levels.*

Appalling discourse

- But what is concerning, more than the “collapse of the system” or the failure of the state, is the shocking discourse among the supporters of the government that it is not responsible for the present crisis, arguably, India’s gravest hour.
- This defence has consequences for India’s democracy.
- Engels had argued that the English ruling class and the state had created such horrendous working and living conditions for the workers, without the “necessaries of life”, that they suffer not only ill health but meet early deaths.
- Engels calls this social murder, the same as murder by an individual; the only difference is that this murder is “disguised”, for “no man sees the murderer” and the death appears to be a “natural one”.
- What we are seeing around, in our inability to make the state accountable, is social murder.
- The only difference between Engels’ England in the 1840s, when it was the working class which was devastated by pandemics, and India now, is that the pandemic in this wave is not just preying on the most vulnerable populations. Therefore, it is also not invisible any longer.

The state’s actions

- But in the first wave of the pandemic in India, the tragic plight of millions of inter-State migrant labour walking thousands of kilometres, remained invisible. That was a classic case of social murder.
- And it was justified then as well in narratives which argued that, after all, it was the responsibility of the workers themselves for “voluntarily” undertaking such a journey. Just as it is the responsibility of the people themselves for causing the second wave.
- Yet, ironically, when the successful defeat of COVID-19 was celebrated in February by an official resolution of the Bharatiya Janata Party, it was the leadership of Prime Minister Narendra Modi that was given credit, not the people.
- When ordinary people, without access to expert advice, are asked to own up to their mistakes, powerful actors such as the Election Commission of India holding an eight-phase election in Bengal, the Uttarakhand Chief Minister justifying the Kumbh mela and the Prime Minister exulting about the size of an election rally crowd in West Bengal on a day when over 2,00,000 Indians were newly infected by the novel coronavirus, are all unassailable actions of the state.
- By participating in the state’s abdication of responsibility, one is fostering conditions of social murder.
- The argument that cremations cannot be shown by the media because they are “sacred” to Hindus is a part of this act.
- Other than the obvious fallacy that Hindu cremations are not televised or recorded, here, the more critical questions such as how many deaths could have been prevented by a simple provision of oxygen,

why people are forced to cremate their loved ones in parking lots or pavements, and if that is any less dignified than telling the story to the world remain unanswered.

- As epidemiologists assert, obfuscating the real gravity of a pandemic is the dangerous path to a bigger disaster. If the Chinese state had not hidden the pandemic in its initial stages, the world probably would have not been at this juncture.
- That is why there has been such a sustained focus by the world media on hotspots where death tolls mounted: Italy, Iran, the United States, the United Kingdom, Brazil, Peru, etc.,. But the tragedy in India is sought to be portrayed as a cultural exceptionalism that cannot be televised.

A different patrimonialism

- In the last seven years, the Indian state has acquired distinct tendencies of what sociologist Max Weber has called patrimonialism in which the ruler exercises a traditional form of authority which rests on the “sanctity of immemorial traditions”, in contrast to a rule based on a rational-legal bureaucracy or impersonal rules.
- But unlike in ideal typical patrimonialism, this highly personalised and centralised form of rule is not based on heredity, kinship ties or personal allegiances, rather on the ideology of religious majoritarianism as well as nationalism, and legitimised by election wins.
- Duty, patriotism, etc., become keywords here as was tellingly witnessed during the misery unleashed by demonetisation.
- Ironically, this patrimonial government, which prided itself as a ‘mai-baap sarkar’, the dispenser of benevolence towards subjects, overnight transforms itself into one which asks citizens to fend for themselves, whether it is by procuring oxygen cylinders or arranging ambulances.
- This has resulted in a Social Darwinism in which only the most powerful have some chance of survival.
- From the assertions of the Union Health Minister that there never was any shortage of oxygen, the Uttar Pradesh government charging people with First Information Reports (FIRs) for requesting oxygen, to the Haryana Chief Minister’s comment that the dead cannot return and, therefore, it was pointless to discuss many unaccounted deaths, all depict a state that has shed its professed benevolence during the novel coronavirus pandemic.
- As scholars identify, one of the fundamental problems in patrimonialism is ensuring accountability, something that becomes stark during a pandemic when the patrimonial state goes missing.
- On the one hand, we have the belated act of sanctioning oxygen plants by the Prime Minister, which, keeping in line with governance as benevolence, is met with cabinet Ministers expressing their gratitude in unison.
- On the other, the Prime Minister has not addressed a single press conference on COVID-19, quite a stunning fact globally for the head of a democracy.

Become citizens, not subjects

- While the Swedish Prime Minister was recently subject to questioning by a constitutional committee on COVID-19 handling, the present Indian state has no means of ensuring a critical scrutiny of the chronology of government decisions that led to the current crisis.
- For the moment, we will have to be content with scathing observations like those of the Allahabad High Court that deaths due to lack of oxygen are no “less than a genocide”.
- Engels had argued that the English ruling class’ “class prejudice and preconceived opinions” had enveloped it in a “mad blindness” about the social murder that was happening in its midst, which, in any case, did not affect it.
- India, under the pandemic, is seeing a different kind of prejudice, preconceived opinions and mad blindness in sanctioning social murder.
- Unless people become citizens and not subjects under a patrimonial rule, the calamitous clouds of the pandemic portend a bleak future for Indian democracy as well.

An issue of lives versus livelihoods

(Source: [The Hindu](#))

Context: *Strict to moderate lockdowns are being imposed again, this time in April 2021, terminating jobs in many an establishment employing large numbers of informal workers. Of those employed in the informal category, large numbers include migrants who face, like they did in March-April of 2020, a bleak future, with job losses, loss of rented accommodations, a lack of sustainable income and savings to ensure food, transportation back to villages or any other emergency including falling victim to COVID-19.*

Grim to grimmer

- Given their bitter experiences last year, migrants have already begun their journeys back to villages, paying exorbitant sums for their travel. Of course, no bright prospect awaits them there given the state of rural distress which initially pushed them to seek a better future in the urban areas.
- Nor do they expect new job opportunities, especially under shrinking National Rural Employment Guarantee Act allotments by the government.
- The continuing exodus unofficially records figures upward of 4 lakh (Western Railway) between April 1 and 12, while the Central Railways sent back 4.7 lakh migrants, all from Maharashtra, over the last few weeks. Such journeys will be recorded in history as those of destitution, offering no prospects of a better state.
- With multiple issues of serious sufferings on account of COVID-19- related distress, the country has less time to discuss the fate of these unwanted migrants on their path of reverse migration, fleeing from centres of livelihood toward dark holes of rural helplessness and poverty.
- To provide a narrative of who these people are, we may describe them as ‘mobile by default’, with growing rural distress and inadequate official policies failing to support the ailing rural economy.
- Providing a mirror image of the previous tragedy in 2020, this unwanted trek back to where they came from provides them no future worth mentioning.
- The conditions faced by these workers under a ‘curfew-to-lockdown’ status include the immediate termination of their livelihoods in terms of jobs, access to accommodation and near insolvency.
- That the situations faced by migrants are not a matter of concern in policy making is quite apparent. There has been no attempt to have an official estimate of such flows, either incoming or reverse.
- Nor has any thought, going by official announcements, been made visible to redress the miseries that await the returning migrants. The recent official announcement of free ration of 5 kg cereals to 80 crore families is the only sop visible so far.

Questions for the state

- Questions abound. It may not be too far-fetched to ask if this measure of using lockdowns and curfews to save lives also, simultaneously, take away the means of livelihood for the rootless and roofless migrants.
- If so, what are the measures the state has offered even to redress to some degree of their sufferings? Would it not have been more fair to provide for some short-term relief for these workers and their families not wanted any more in the urban areas?
- One can count the impact on urban centres. The flow provided a reserve army of cheap labour waiting to be hired at wages which, often, could dip lower than the statutory minimum, especially after meeting the demands of the mediating contractor who arranged for the migration from villages.
- With the formal organised industry employing as many as one half or more of employees with casual or informal status, it proved rather opportune for enterprises in factories, construction sites and other labour-intensive activities to make use of these migrants in their cost-cutting exercises.



- On the whole, the presence of the rural migrants benefited the urban economy by providing cheap labour to manufacturing units and cheap services to households.
- However, these jobs provided did not entail further obligations on the part of the employers or the state, given that the ‘footloose’ migrants never had any legal status as a working population.

No labour safeguards

- One last question. Has there been any attempt ever to ensure some legal safeguards to these people? Pieces of legislation, as available, do not provide any evidence of addressing the issue especially in the current crisis, a pattern indicative of a minimalist state with close alliances with capital in the process.
- The Contract Labour (Regulation and Abolition) Act 1970 conferred on casual labour a legal status by providing a mechanism for registration of contractors engaging 20 or more workers. While it was never effective, the Occupational Safety, Health and Working Conditions Code, 2020 has replaced all such Acts.
- Seeking, rather ineffectively, to regulate the health and safety conditions of workers in establishments with 10 or more workers, the Code has replaced 13 prevailing labour laws.
- One can raise questions as to what happened to the various laws still operative. It is thus more than obvious that none of the so-called corrective measures was of any significance in relation to what the migrants have been experiencing today since partial or total lockdowns have been imposed over the last few weeks.
- Can we justify the situation as a step to save lives when it does not work for large sections of migrant people who also experience a loss of their livelihoods at the same time? Could there be some safeguards for such people before sending them off to such a bleak future?

A COVID blot on India's foreign policy canvas

(Source: [The Hindu](#))

Context: *The second wave of COVID-19 and its agonising consequences, prompting the country to accept foreign aid after a gap of 17 years, is bound to have far-reaching strategic implications for India. While the world realises that India is too important to ignore, which perhaps explains the rush to help, there is little doubt that the country will not be the toast of the western world until it is able to get back on its feet. As a direct consequence of the pandemic, New Delhi's claim to regional primacy and leadership will take a major hit, its 'leading power' aspirations will be dented, and accentuate its domestic political contestations. These in turn will impact the content and conduct of India's foreign policy in the years to come.*

Regional primacy

- COVID 2.0 has quickened the demise of India's regional primacy.
- Regrettably, the country's geopolitical decline is likely to begin in the neighbourhood itself, a strategic space which New Delhi has been forced to cede to Beijing over the past decade or so, a phenomenon that was intensified by the aggressive regional policies of Modi 1.0. India's traditional primacy in the region was built on a mix of material aid, political influence and historical ties.
- Its political influence is steadily declining, its ability to materially help the neighbourhood will shrink in the wake of COVID-19, and its historical ties alone may not do wonders to hold on to a region hungry for development assistance and political autonomy.
- As a result, South Asian states are likely to board the Chinese bandwagon, if they haven't already. COVID-19, therefore, comes at a time when India's standing in the region is already shrinking: the pandemic will unfortunately quicken the inevitable.

- In July 2015, External Affairs Minister S. Jaishankar, who was then the Foreign Secretary, stated that India aspires to be a “leading power, rather than just a balancing power”.
- How will COVID-19 impact India’s great power/leading power aspirations? Being boxed in a China-dominated region will provide New Delhi with little space to pursue its regional, let alone global, geopolitical ambitions except in the Indo-Pacific region.
- While the Indo-Pacific is geopolitically keen and ready to engage with India, the pandemic could adversely impact India’s ability and desire to contribute to the Indo-Pacific and the Quad.
- COVID-19, for instance, will prevent any ambitious military spending or modernisation plans (called for in the wake of the stand-off at the Line of Actual Control (LAC)) and limit the country’s attention on global diplomacy and regional geopolitics, be it Afghanistan or Sri Lanka or the Indo-Pacific.
- With reduced military spending and lesser diplomatic attention to regional geopolitics, New Delhi’s ability to project power and contribute to the growth of the Quad will be uncertain.
- While the outpouring of global aid to India shows that the world realises India is too important to fail, the international community might also reach the conclusion that post-COVID-19 India is too fragile to lead and be a ‘leading power’.
- New Delhi is pivotal to the Indo-Pacific project, but with India’s inability to take a lead role and China wooing smaller states in the region away from the Indo-Pacific with aid and threats, the Indo-Pacific balance of power could eventually turn in Beijing’s favour.

Domestic politics

- Domestic political contestations in the wake of the COVID-19 devastation in the country could also limit New Delhi’s strategic ambitions. General economic distress, a fall in foreign direct investment and industrial production, and a rise in unemployment have already lowered the mood in the country.
- The central political leadership, therefore, is likely to focus on COVID-19 recovery and the Assembly elections in Uttar Pradesh in 2022.
- The U.P. election and the run up to the 2024 general election, both crucial for the Narendra Modi regime, could fan communal tensions in the country, triggering more political violence.
- A depressed economy, politically volatile domestic space combined with a lack of elite consensus on strategic matters would hardly inspire confidence in the international system about India.
- Domestic political preoccupations will further shrink the political elite’s appetite for foreign policy innovation or initiatives. Post-COVID-19, Indian foreign policy is therefore likely to be a holding operation.
- These strategic consequences of the pandemic will shape the content and conduct of India’s foreign policy in several important ways.

India-China equations

- One potential impact of COVID-19’s devastating return and the damage it has done would be that India might be forced to be more conciliatory towards China, albeit reluctantly.
- From competing with China’s vaccine diplomacy a few months ago, New Delhi today is forced to seek help from the international community, if not China, to deal with the worsening COVID-19 situation at home.
- For one, China has, compared to most other countries, emerged stronger in the wake of the pandemic.
- Second, the world, notwithstanding its anti-China rhetoric, will continue to do business with Beijing — it already has been, and it will only increase. Third, while one is yet unsure of the nature of China-U.S. relations in the days ahead, the rise of China and India’s COVID-19-related troubles could prompt Washington to hedge its bets on Beijing.
- Finally, claims that India could compete with China as a global investment and manufacturing destination would remain just that — claims.
- **Thanks to its monumental mismanagement of the second wave, India’s ability to stand up to China stands vastly diminished today: in material power, in terms of balance of power considerations,**

and political will. This might require New Delhi to be more conciliatory towards China. If the Bharatiya Janata Party-led government's rather muted response to the LAC stand-off in the summer of 2020 is anything to go by, we are likely to see a conciliatory China policy from here on.

Depressed foreign policy

- Post-COVID-19, Indian foreign policy is unlikely to be business as usual. Given the much reduced political capital within the Modi government to pursue ambitious foreign policy goals, the diplomatic bandwidth for expansive foreign policy goals would be limited, leading thereby to a much depressed Indian foreign policy.
- The remainder of Mr. Modi's current term is unlikely to emerge unscathed from such acute foreign policy depression. This, however, might take the aggressive edge off of India's foreign policy under Mr. Modi.
- Less aggression could potentially translate into more accommodation, reconciliation and cooperation especially in the neighbourhood, with Pakistan on the one hand and within the broader South Asian Association for Regional Cooperation (SAARC) framework on the other.
- The aftermath of the pandemic may kindle such a conciliatory tone in Indian foreign policy for other reasons as well. For one, COVID-19 has forced us to reimagine, to some extent at least, the friend enemy equations in global geopolitics.
- While the United States seemed hesitant, at least initially, to assist India even as the pandemic was wreaking havoc in the country, Moscow was quick to come to New Delhi's aid. Even though New Delhi did not accept the aid offers from Pakistan and China, these offers sounded more than the usual diplomatic grandstanding that states engage in during natural calamities.
- The argument here is not that these will lead to fundamental shifts in India's strategic partnerships, but that they could definitely moderate the sharp edges of India's pre-existing geopolitical articulations.

Strategic autonomy

- Finally, the pandemic would, at the very least indirectly, impact India's policy of maintaining strategic autonomy.
- As pointed out above, the strategic consequences of the pandemic are bound to shape and structure New Delhi's foreign policy choices as well as constrain India's foreign policy agency.
- It could, for instance, become more susceptible to external criticism for, after all, New Delhi cannot say 'yes' to just aid and 'no' to criticism. A post-COVID-19 New Delhi might find it harder to resist demands of a closer military relationship with the U.S.
- And yet, every crisis opens up the possibility for change and new thinking. What COVID-19 will also do is open up new regional opportunities for cooperation especially under the ambit of SAARC, an initiative that already saw some small beginnings during the first wave of the pandemic.
- New Delhi might do well to get the region's collective focus on 'regional health multilateralism' to promote mutual assistance and joint action on health emergencies such as this.
- Classical geopolitics should be brought on a par with health diplomacy, environmental concerns and regional connectivity in South Asia. COVID-19 may have opened precisely such an opportunity to the world's least integrated region.

A 'One Health' approach that targets people, animals

(Source: [The Hindu](https://www.thehindu.com/news/national/article-one-health-approach-targets-people-animals.html))

Context: *The father of modern pathology, Rudolf Virchow, emphasised in 1856 that there are essentially no dividing lines between animal and human medicine. This concept is ever more salient as the world continues to grapple with the COVID-19 pandemic. Discussions that took place around World Veterinary Day, on*

April 24, 2021, focused on acknowledging the interconnectedness of animals, humans, and the environment, an approach referred to as “One Health”.

Across the species barrier

- Studies indicate that more than two-thirds of existing and emerging infectious diseases are zoonotic, or can be transferred between animals and humans, and vice versa, when the pathogen in question originates in any life form but circumvents the species barrier.
- Another category of diseases, “anthropozoonotic” infections, gets transferred from humans to animals.
- The transboundary impact of viral outbreaks in recent years such as the Nipah virus, Ebola, Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS) and Avian Influenza has further reinforced the need for us to consistently document the linkages between the environment, animals, and human health.

India’s framework, plans

- India’s ‘One Health’ vision derives its blueprint from the agreement between the tripartite-plus alliance comprising the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE), the World Health Organization (WHO) and the United Nations Environment Programme (UNEP) — a global initiative supported by the United Nations Children’s Fund (UNICEF) and the World Bank under the overarching goal of contributing to ‘One World, One Health’.
- In keeping with the long-term objectives, India established a National Standing Committee on Zoonoses as far back as the 1980s.
- And this year, funds were sanctioned for setting up a ‘Centre for One Health’ at Nagpur. Further, the Department of Animal Husbandry and Dairying (DAHD) has launched several schemes to mitigate the prevalence of animal diseases since 2015, with a funding pattern along the lines of 60:40 (Centre: State); 90:10 for the Northeastern States, and 100% funding for Union Territories.
- Hence, under the National Animal Disease Control Programme, ₹13,343 crore have been sanctioned for Foot and Mouth disease and Brucellosis control. In addition, DAHD will soon establish a ‘One Health’ unit within the Ministry.
- Additionally, the government is working to revamp programmes that focus on capacity building for veterinarians and upgrading the animal health diagnostic system such as Assistance to States for Control of Animal Diseases (ASCAD).
- In the revised component of assistance to States/Union Territories, there is increased focus on vaccination against livestock diseases and backyard poultry. To this end, assistance will be extended to State biological production units and disease diagnostic laboratories.
- WHO estimates that rabies (also a zoonotic disease) costs the global economy approximately \$6 billion annually. Considering that 97% of human rabies cases in India are attributed to dogs, interventions for disease management in dogs are considered crucial.
- DAHD has partnered with the Ministry of Health and Family Welfare in the National Action Plan for Eliminating Dog Mediated Rabies. This initiative is geared towards sustained mass dog vaccinations and public education to render the country free of rabies.

Need for coordination

- Scientists have observed that there are more than 1.7 million viruses circulating in wildlife, and many of them are likely to be zoonotic, which implies that unless there is timely detection, India risks facing many more pandemics in times to come.
- To achieve targets under the ‘One Health’ vision, efforts are ongoing to address challenges pertaining to veterinary manpower shortages, the lack of information sharing between human and animal health institutions, and inadequate coordination on food safety at slaughter, distribution, and retail facilities.
- These issues can be remedied by consolidating existing animal health and disease surveillance systems — e.g., the Information Network for Animal Productivity and Health, and the National Animal Disease Reporting System — developing best-practice guidelines for informal market and slaughterhouse

operation (e.g., inspections, disease prevalence assessments), and creating mechanisms to operationalise ‘One Health’ at every stage down to the village level.

- Now, as we battle yet another wave of a deadly zoonotic disease (COVID-19), awareness generation, and increased investments toward meeting ‘One Health’ targets is the need of the hour.

GS III

Public buildings and fire safety rules

(Source: [The Hindu](#))

Context: Fires occur in many public buildings in India every year, killing a large number of people and injuring many. Over the past year, there have been deadly fires in hospital buildings, including those treating COVID-19 patients. Recent infernos in hospitals at Bharuch in Gujarat, Virar, a suburb of Mumbai, and Mumbra near Thane, killed at least 37 people. The National Crime Records Bureau (NCRB) says 330 people died in commercial building fires in 2019, while fatalities for residential or dwelling buildings were much higher at 6,329. Electrical faults are cited as the leading cause of fires but State governments are widely criticised for being lax with building safety laws and for failing to equip public buildings with modern technology. Hospital ICUs (intensive care units) are a great fire risk because they are oxygen-suffused, and need to meet high standards.

What fire safety compliance is expected in public buildings, including hospitals?

- At the centre of all standard-setting is the National Building Code of India. Part 4 of the Code deals with Fire and Life Safety.
- The document provides specifications and guidelines for design and materials that reduce the threat of destructive fires. Under the Code, all existing and new buildings are classified by nature of use, such as residential, educational, institutional, assembly (like cinemas and auditoria), business, mercantile, industrial, storage and hazardous.
- Hospitals come under the institutional category. The Union Home Ministry’s Directorate-General for Fire Services, Civil Defence & Home Guards says on its website that the National Building Code (NBC), published by the Bureau of Indian Standards, is a “recommendatory document”, and States have been asked to incorporate it into their local building bylaws, making the recommendations a “mandatory requirement”.
- Evidently, fire safety rules exist in every State, but the provisions of the Code are ignored in practice, and even mandatory certifications do not reflect compliance.
- Queries on hospital fires prompted the Centre to announce in Parliament on March 23 this year that a Fire Safety Committee conducts periodical audits on fire installation, heating, ventilation and air-conditioning, electrical sub-stations and other electrical equipment in the Union government’s hospitals.
- The Health Ministry said it had circulated strict guidelines in September 2020 stipulating third-party accreditation for fire safety and that a fire response plan should be in place.
- The National Disaster Management Authority (NDMA) has also stipulated requirements for fire safety in public buildings, including hospitals, which incorporate elements of the NBC, besides design

guidelines on maintaining minimum open safety space, protected exit mechanisms, dedicated staircases, and crucial drills to carry out evacuations.

What does the Code specify?

- At the macro level, the NBC recommends the location of buildings by type of use in specific zones to ensure that industrial and hazardous structures do not coexist with residential, institutional, office and business buildings.
- It specifies, among other things, the technical requirements for special buildings, high rises, educational and institutional buildings higher than 9 metres, and those with an area of over 300 square metres.
- Next, the Code drills down into the specifics of fire resistance based on the materials used — exterior walls, interior bearing walls, floor, roof, fire check doors, fire enclosure exits, and so on. Technologies to sound alerts in case of a fire and also to fight it are expected to be incorporated into buildings.
- Examples given in the Code are automatic fire detection and alarm system, down-comer pipelines connected to a roof tank, dry riser pipelines that fire-fighters can use to douse upper floors, automatic sprinklers and water sprays, fireman's lift, fire barriers, escape routes, markings, and so on.
- Incorporating these into a proper design and ensuring that certified fire-resistant materials are used in the construction can avert deadly fires, giving occupants sufficient time to exit safely.
- However, the NBC also says that for various types of buildings, “in case of practical difficulty or to avoid unnecessary hardship, without sacrificing reasonable safety, local head, fire services may consider exemptions from the Code”.

Do State governments follow the Code?

- Maharashtra, which has been hit by a series of fires, has a Fire Prevention and Life Safety Measures Act since 2008. Section 3 of the Act makes the provisions of the NBC mandatory and Schedule I of the State's law is borrowed from the Code.
- However, reports in the wake of recent fire accidents indicate that the authorities have been unable to keep up with inspection requirements for thousands of buildings.
- A Comptroller and Auditor General (CAG) report for the period 2010 to 2015 noted that in Maharashtra, after a “joint physical inspection by audit of 53 government buildings/hospitals/educational institutions/commercial establishments in eight selected MCs [municipal corporations] revealed that only fire extinguishers were installed in 11 of 53 buildings and the remaining 42 buildings were not equipped with any of the fire-fighting installations”.
- Fire department professionals had earlier demanded third-party audits by licensed professionals.
- In Kerala, obtaining an NOC [no-objection certificate] from the fire department, given in form H-3 for hospitals that are between 15 metres and 24 metres high, requires furnishing exhaustive information on design and infrastructure. The rules prescribe firefighting equipment and installations that meet “Indian Standards”, but do not contain a direct reference to the NBC.
- Tamil Nadu's form for a fire licence, required under the Fire Service Act read with municipal law, is even broader, and no reference is found for compliance with the Code.

What is the future course?

- In December last year, the Supreme Court directed all States to carry out fire safety audits of dedicated COVID-19 hospitals.
- It has become evident that State forces lack the manpower to inspect and ensure compliance with safety codes, including the NBC, where it is mandatory.
- One option is to make heavy fire liability insurance compulsory for all public buildings, which would offer protection to occupants and visitors and bring about external inspection of safety.

Current Affairs Quiz

1) Consider the following statements with respect to Oxygen Concentrators:

1. They are simple devices which contains fixed amount of pressurized oxygen to help individuals access it through a mask or cannula.
2. Oxygen concentrators can work 24 x 7 without refilling.
3. The device can be easily used on our own when oxygen levels are falling, without a medical guidance.

Which of the statements given above is/are correct?

- a. 1 only
- b. 2 only
- c. 1 and 3 only
- d. 2 and 3 only

Answer : b

Atmospheric air has roughly 78% nitrogen and 21% oxygen.

Oxygen concentrators are simple devices which take in ambient air and increase the oxygen concentration, by filtering out and throwing away nitrogen.

These Oxygen concentrators work the same way in supplying oxygen needed by the body such as oxygen tanks or cylinders, with the use of a cannula, oxygen masks or nasal tubes.

The difference is that, while the cylinders need to be refilled, the Oxygen Concentrators can work 24 x 7.

2) Which of the following statements is/are correct with respect to State Disaster Response Fund (SDRF)?

1. The Central Government contributes 75% of SDRF allocation for general category States/UTs and 90% for special category States/UTs.
2. The annual Central contribution to the fund is released in two equal installments as per the recommendation of the NITI Aayog.
3. The fund shall be used only for meeting the expenditure for providing immediate relief to the victims.

Select the correct answer code:

- a. 1 only
- b. 1 and 2 only
- c. 1 and 3 only
- d. 2 and 3 only

Answer : c

The Central Government contributes 75% of SDRF allocation for general category States/UTs and 90% for special category States/UTs (NE States, Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir).

The annual Central contribution is released in two equal installments as per **the recommendation of the Finance Commission.**

3) Which of the following statements is/are correct with respect to ozone hole over Arctic?

1. It has reached a maximum extension of around 1 million sq km.
2. Recently, German Aerospace Centre observed closure of ozone hole mainly because of the reduced pollution levels due to covid-19 lockdown.

Select the correct answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

The European Union's Copernicus Atmosphere Monitoring Service (CAMS) announced that a hole in the Arctic ozone layer has closed.

- 4) A permanent Space Station module called "Harmony of the Heavens" has been recently launched by-
- Japan
 - European Union
 - China
 - None of the above

Answer : c

The module, named "Tianhe", or "Harmony of the Heavens", was launched by the China on the Long March 5B, China's largest carrier rocket.

- 5) Global Electric Vehicle Outlook 2021 was recently released by-
- Ministry of New and Renewable Energy
 - European Union
 - International Energy Agency
 - None of the above

Answer : c

This report is an annual publication that identifies and discusses recent developments in electric mobility across the globe.

- 6) Consider the following statements with respect to Wood snakes:
- They are harmless, sub-fossorial and often found while digging soil in farms and under the logs in the Western Ghat forests.
 - They feed on earthworms and possibly other invertebrates.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Answer : c

Both statements are correct

- 7) Who releases Asian Development Outlook?
- New Development Bank
 - Asian Development Bank
 - SCO Interbank Consortium
 - Asian Infrastructure Investment Bank

Answer : b

- 8) In which of the following country the Lag B'omer Festival is celebrated?
- Egypt
 - Israel
 - Bhutan
 - Turkey

Answer : b

- 9) Which of the following statements is/are correct with respect to SUTRA Model?
- It is a model for saturated-unsaturated, variable-density ground-water flow with solute or energy transport.
 - It has been used to simulate the effects of saltwater intrusion, contaminant transport, and thermal pollution.

Select the correct answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

Both statements are correct

10) Which of the following organisations has launched PRAYAAS Initiative?

- a. Indian Council of Medical Research
- b. Indian Council for Cultural Relations
- c. Employees' Provident Fund Organization
- d. Tribal Cooperative Marketing Development Federation of India

Answer : c

PRAYAAS is initiative of the EPFO to disburse pension payment order on the very day of retirement/superannuation.

11) Which of the following statements is/are correct with respect to North East Centre for Technology Application and Reach (NECTAR)?

- 1. It will look at harnessing and leveraging niche frontier technologies available with central scientific departments and institutions.
- 2. It is headquartered at Guwahati, Assam.
- 3. It is an autonomous body under the Department of Science & Technology (DST).

Select the correct answer code:

- a. 1 only
- b. 1 and 2 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer : c

It is headquartered in Shillong, Meghalaya.

12) Which of the following statements is/are correct with respect to Deepor Beel Lake?

- 1. It is a permanent freshwater lake, in a former channel of the Brahmaputra River.
- 2. It is the only wetland in Assam designated as a site of importance under Ramsar Convention on Wetlands.

Select the correct answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

Both statements are correct

13) India and which of the following countries has recently adopted "Roadmap 2030" to elevate bilateral ties to 'Comprehensive Strategic Partnership'?

- a. Japan
- b. France
- c. United Kingdom
- d. United States of America

Answer : c



14) Which the following statements is/are incorrect with respect to Integrated Goods and Services Tax (IGST)?

1. It is levied on all the inter-state transfer of goods and services and is governed by the IGST Act.
2. The revenue out of IGST is shared by state government and central government as per the rates fixed by the authorities.

Select the correct answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : d

Both statements are correct

15) Which of the following statements is/are correct with respect to Biodiesel?

1. It is an alternative fuel produced from vegetable oils, animal fats, tallow and waste cooking oil.
2. A significant advantage of Biodiesel is its carbon-neutrality which is, the oilseed absorbs the same amount of CO₂ as is released when the fuel is combusted in a vehicle.
3. Biodiesel is rapidly biodegradable and completely non-toxic.

Select the correct answer code:

- a. 1 and 2 only
- b. 1 and 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

Answer : d

16) Which of the following statements is/are correct with respect to Asiatic Lions?

1. The population estimation of Asiatic Lions is conducted at an interval of every four years.
2. They are listed as critically endangered under the IUCN Red List.
3. Gir National park and its surrounding areas in Gujarat are the only abode of Asiatic Lion.

Select the correct answer code:

- a. 3 only
- b. 1 and 2 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer : a

They are listed as endangered under the IUCN Red List.

The population estimation of Asiatic Lions is conducted at an interval of every five years.

The last population estimation exercise report was released during June 2020.

17) Which of the following statements is/are correct with respect to Appointment of Chief Minister?

1. The Constitution does not require that a person must prove his majority in the legislative assembly before he is appointed as the Chief Minister.
2. The term of the Chief Minister is not fixed and he holds office during the pleasure of the governor.

Select the correct answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

Both statements are correct

18) Purchasing Manager's Index is released by-

- a. Office for National Statistics under MoSPI
- b. Ministry of Economic Affairs
- c. Economic Adviser in the Ministry of Commerce and Industry.
- d. Independent International Agencies

Answer : d

19) Consider the following statements with respect to TRIPS Agreement:

- 1. It is an international legal agreement between all the member nations of the World Trade Organization (WTO).
- 2. It was negotiated at the end of the Geneva Round of the General Agreement on Tariffs and Trade (GATT) between 1989 and 1990.
- 3. The agreement allows compulsory licensing and government use of a patent without the authorization of its owner.

Select the correct answer code:

- a. 3 only
- b. 1 and 2 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer : c

TRIPS was negotiated at the end of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) between 1989 and 1990 and is administered by the WTO.

20) Which of the following statements is/are correct with respect to Central Mechanical Engineering Research Institute (CMERI)?

- 1. It is the only national level research institute in the field of mechanical engineering in India.
- 2. It is a constituent laboratory of the Council of Scientific and Industrial Research (CSIR).

Select the correct answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

Both statements are correct