



APRIL 2021

IASBABA

MONTHLY

MAGAZINE

TRIBUNALS REFORMS ORDINANCE, 2021

NATIONAL ACTION PLAN (NAP) ON BUSINESS AND HUMAN RIGHTS

INDIA'S REFUGEE PROBLEM

ALL-INDIA SURVEY OF MIGRANT WORKERS

GLOBAL GENDER GAP REPORT 2021

NATIONAL POLICY FOR RARE DISEASES, 2021

BOAO FORUM FOR ASIA

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PREFACE

With the present shift in examination pattern of UPSC Civil Services Examination, 'General Studies – II and General Studies III' can safely be replaced with 'Current Affairs'. Moreover, following the recent trend of UPSC, almost all the questions are issue-based rather than news-based. Therefore, the right approach to preparation is to prepare issues, rather than just reading news.

Taking this into account, our website www.iasbaba.com will cover current affairs focusing more on 'issues' on a daily basis. This will help you pick up relevant news items of the day from various national dailies such as The Hindu, Indian Express, Business Standard, LiveMint, Business Line and other important Online sources. Over time, some of these news items will become important issues.

UPSC has the knack of picking such issues and asking general opinion based questions. Answering such questions will require general awareness and an overall understanding of the issue. Therefore, we intend to create the right understanding among aspirants – 'How to cover these issues?'

This is the **71st edition** of IASbaba's Monthly Magazine. This edition covers all important issues that were in news in the month of **APRIL 2021** which can be accessed from <https://iasbaba.com/current-affairs-for-ias-upsc-exams/>

VALUE ADDITIONS FROM IASBABA

- **Must Read and Connecting the dots.**
- **Also, we have introduced Prelim and mains focused snippets and Test Your Knowledge (Prelims MCQs based on daily current affairs) which shall guide you for better revision.**
- **'Must Read' section**, will give you important links to be read from exam perspective. This will make sure that, you don't miss out on any important news/editorials from various newspapers on daily basis.
- Under each news article, **'Connecting the dots'** facilitates your thinking to connect and ponder over various aspects of an issue. Basically, it helps you in understanding an issue from multi-dimensional view-point. You will understand its importance while giving Mains or Interview.

Must Read Articles: We have not included them in the magazine. Those following DNA on daily basis may follow it- <https://iasbaba.com/current-affairs-for-ias-upsc-exams/>

"Tell my mistakes to me not to others, because these are to be corrected by me, not by them."

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HISTORY/CULTURE/GEOGRAPHY

Committee formed to popularise the legacy of Anangpal II

Part of: GS Prelims and GS – I – History

In news

- The government has recently formed a committee to popularise the legacy of 11th-century Tomar king, Anangpal II.

Key takeaways

- **Aim:** To establish Anangpal II as the founder of Delhi.
- **Headed by:** Brij Bhushan Singh, BJP MP from UP's Gonda
- Its proposals include building a statue of Anangpal II at the Delhi airport and building a museum dedicated to his legacy in Delhi.
- There is also a proposal to make Lal Kot an ASI-protected monument.

Important value additions

- Anangpal II was popularly known as Anangpal Tomar.
- He belonged to the Tomar dynasty that ruled parts of present-day Delhi and Haryana between the 8th and 12th centuries.
- He is credited to have established and populated Delhi during his reign in the 11th century.
- It was he who built Lal Kot fort and Anangtal Baoli.
- He was succeeded by his grandson Prithviraj Chauhan, who was defeated by the Ghurid forces in the Battle of Tarain (present-day Haryana) after which the Delhi Sultanate was established in 1192.

World Cities Culture Forum

Part of: GS Prelims and GS – II – International

- The World Cities Culture Forum is a network of local governments and cultural sector leaders from 40 world cities.
- The World Cities Culture Forum was established in London in 2012 with eight cities (London, New York City, Tokyo, Shanghai, Paris, Istanbul, Sydney and Johannesburg) convened by the Mayor of London.
- The WCCF enables the policy makers of member cities to share research and intelligence, while exploring the vital role of culture in prosperity. Forum members collaborate via a program of events including themed symposia, regional summits and workshops.
- The World Cities Culture report is published by the forum every three years, with data and details on innovative projects from cities across the world.

Advanced Antiquities Management System (AAMS)

Part of: GS Prelims and GS – I – Culture

In news

- The Directorate of Archives and Archaeology (DAA) of the Goa government inaugurated the Advanced Antiquities Management System (AAMS).
- It has claimed that it is the first such system in India for storage of antiquities.

Key takeaways

- The system catalogues 83 antiquities at present.
- **Aim:** Providing quick information about an antiquity linked to the software, saving storage space and ensuring improved preservation of the objects of historical significance.
- AAMS is a software-driven automated storage used for the storage of various objects.
- So far it has been used for storage of industrial Equipment.
- The AAMS will ensure safety of antiquities, clean storage space, access control and data management and also enhance utilisation of space.
- It is placed at Goa's DAA in Panaji.



Baba's Foundation course (Baba's FC)

FACULTY PROFILE

 <p>Strategy Classes & Answer writing sessions by MOHAN KUMAR B.E (Telecommunications) Involved with Teaching and Mentoring students since 9 years</p>	 <p>Ethics, Society, Internal Security by SUNIL OBEROI Retd.IAS Has worked on Civil Services Reforms in India with UNDP and DoPT and Involved in teaching and mentoring students since 8 years</p>
 <p>Geography by ATYAB ALI ZAIDI B. Tech, NIT, Allahabad. Involved with teaching and mentoring students since 6 Years</p>	 <p>Polity & Governance by SUDEEP T B. Tech Involved with teaching and mentoring students since 6 Years</p>
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 <p>Ethics by SANDEEP MA in International Relations Published Paper's in International Journals and mentoring students since 7 years</p>	 <p>CSAT by MANJUNATH BADAGI MBA Renowned Mental Ability Expert Known for his book - Mental Ability</p>

POLITY/GOVERNANCE

Electoral Bonds Scheme

Context: In the wake of the upcoming State elections, the Association of Democratic Reforms (ADR) has filed a petition in the Supreme Court, seeking a stay in the electoral bond.

The Supreme Court recently flagged its concern that political parties could misuse crores of rupees received as donations through electoral bonds to bankroll violent protests or even terror.

About Electoral Bonds Scheme

- Electoral Bond is a financial instrument for making donations to political parties.
- The bonds are issued in multiples of Rs. 1,000, Rs. 10,000, Rs. 1 lakh, Rs. 10 lakh and Rs. 1 crore without any maximum limit.
- State Bank of India is authorised to issue and encash these bonds, which are valid for fifteen days from the date of issuance.
- These bonds are redeemable in the designated account of a registered political party.
- The bonds are available for purchase by any person (who is a citizen of India or incorporated or established in India) for a period of ten days each in the months of January, April, July and October as may be specified by the Central Government.
- A person being an individual can buy bonds, either singly or jointly with other individuals. Donor's name is not mentioned on the bond.

Misuse of Electoral Bonds as Pointed Out during SC case:

- **Anonymity:** Neither the donor (who could be an individual or a corporate) nor the political party is obligated to reveal whom the donation comes from.
- **Asymmetry of information:** Because the bonds are purchased through the SBI (Central PSU), the government is always in a position to know who the donor is. This asymmetry of information threatens to favour the scheme towards the political party that is ruling at the time.
- **Control Over usage:** The court asked the government whether there is any "control" over how these donations were used by political parties.
- **Scheme facilitates kickbacks:** Though the original purchase of bonds could be done using white money, somebody could anonymously re-purchase the bonds from the original buyer and drop it at a political party office. Nobody will know who purchased the bonds from the original buyer. The scheme facilitates kickbacks
- **Possibility of Money Laundering:** With doing away with all the safeguard that were present in Corporate donations to Political parties (through Companies Act), Indian, foreign and even shell companies can now donate to political parties without having to inform anyone of the contribution.
- **Question on procedure followed:** The scheme was brought in through amendments to finance bill as the government of the day did not have majority in the Rajya Sabha (that has less powers w.r.t finance bill)

Government's Defence:

- **Conditions for electoral bonds:** Only parties registered under the Representation of the People Act could receive donations through electoral bonds, and that they should not have secured less than 1% of the votes polled in the previous elections.
- **Tackles Menace of Black Money in Politics:** The Electoral Bond Scheme promotes white money into political funding (thus disincentivising black money) as it insists on cheque and digital paper trails of transactions

- **Election Commission of India's Support:** ECI was not opposed to the bonds but was only concerned about the aspect of anonymity. It also urged the court not to stay the bonds and said the scheme is one step forward compared to the old system of cash funding, which was unaccountable.

Way Forward

- Voters can also help bring in substantial changes by demanding awareness campaigns. If voters reject candidates and parties that overspend or bribe them, democracy would move a step higher.
- Electoral bonds have raised questions on the electoral legitimacy of the government and thus the whole electoral process has become questionable. In this context, the courts should act as an umpire and enforce the ground rules of democracy.
- It is essential that if democracy is to thrive, the role of money in influencing politics ought to be limited. Thus, it is imperative that the scheme of the electoral bonds should be revised.

Judicial Vacancies in High Courts

Part of: GS Prelims and GS – II – Constitution; Judiciary

In news

- The SC has asked the government to clarify on the status of 55 recommendations made by the Collegium for judicial appointments to High Courts

Important value additions

Appointment of Judges

- **Article 124(2):** President of India Shall appoint the judges after consultation with such number of Judges of the SC/HC as he deems necessary. For appointment of any Judge of SC (other than CJI), the CJI must be consulted.
- The three Judges case of 1981, 1993 & 1998 has formalised the collegium system for the purpose of consultation.
- The collegium for appointing SC judge consists of the CJI and 4 senior-most judges of SC.
- Memorandum of Procedure (MoP) was set up after the Third Judge Case of 1998 to provide the process of how the Collegium would recommend names to the Executive.
- The President of India can either accept the recommendation or send it back for reconsideration. The reconsidered advice must be accepted by the President.

Phase III of the eCourts Project

Part of: GS Prelims and GS-II - Judiciary

In news

- The eCommittee of the Supreme Court (SC) has prepared the draft vision document for Phase III of the eCourts Project under SC.

Key takeaways

- E-Courts Project is a mission mode project undertaken by the Department of Justice, Government of India.
- **Chairperson of eCommittee:** Dr Justice Dhananjaya Y Chandrachud, Judge, SC

- The eCommittee has been overseeing the implementation of the eCourts Project, conceptualized under the "National Policy and Action Plan for Implementation of Information and Communication Technology (ICT) in the Indian Judiciary-2005".
- Phase III of the eCourts Project in India is rooted in two central facets—access and inclusion.
- Phase III envisions a judicial system that is more easily accessible irrespective of geographical distances, efficient and equitable for every individual who seeks justice, makes more efficient use of human and other resources, and absorbs the latest technology for a positive environmental impact.

Vigilance Officers to have restricted tenure

Part of: GS Prelims and GS – II – Statutory Bodies

In news

- [Central Vigilance Commission \(CVC\)](#) officers will be transferred every 3 years from now onwards.

Key takeaways

- [CVC](#) has modified the guidelines pertaining to the transfer and posting of officials in the vigilance units of government organisations.
- The tenure may be extended to three more years, though at a different place of posting.
- According to the [CVC](#), undue long stay of an official in a vigilance department had the potential of developing vested interests, apart from giving rise to unnecessary complaints or allegations.
- The new guidelines ensure transparency, objectivity and uniformity in approach.
- The order said after transfer from the vigilance unit, there would be a compulsory cooling off period of three years before anyone could be considered again for posting in the unit.

Tribunals Reforms (Rationalization and Conditions of Service) Ordinance, 2021

Part of: GS Prelims and GS – II – Policies and Interventions

In news

- The President of India has promulgated the Tribunals Reforms (Rationalisation and Conditions of Service) Ordinance, 2021.
- According to the ordinance, the appellate authorities under nine Acts have been done away with and the right to hear appeals under the statute has been conferred to High Courts.

Key takeaways

- Section 184 of the Finance Act, 2017 has been amended to empower the Central Government to make rules for qualifications, appointment, term of office, salaries and allowances, resignation, removal and other terms and conditions of service of Members of Tribunals.
- The Ordinance omits following Tribunals/ Appellate Authorities from the purview of Finance Act:
 1. Airport Appellate Tribunal established under the Airport Authority of India Act, 1994
 2. Appellate Board established under the Trade Marks Act, 1999
 3. Authority for Advance Ruling established under the Income Tax Act, 1961
 4. Film Certification Appellate Tribunal established under the Cinematograph Act, 1952
- It substitutes the National Consumer Disputes Redressal Commission established under the Consumer Protection Act, 1986 with a National Consumer Disputes Redressal Commission established under the [Consumer Protection Act, 2019](#).

National Action Plan (NAP) on Business and Human Rights

Context: An NAP becomes more relevant in the wake of COVID-19 in that the pandemic has exposed several systemic vulnerabilities in how businesses operate. Informal migrant workers in India are the worst hit, abruptly thrown out of work without food, shelter, and social protection - overnight.

Background

- In June 2011, the UNHRC endorsed the UN Guiding Principles for Business and Human Rights (UNGPs).
- The UNGPs elucidate the duties and responsibilities of the State and businesses in addressing adverse business- related human rights impacts.
- The objective of the UNGPs is to enhance standards and practices with regard to business and human rights to achieve tangible results for affected individuals and communities, and thereby contribute to a socially sustainable globalization

UNGPs are broadly based on three pillars:

- Pillar I - The State Duty to Protect Human Rights.
- Pillar II - The Corporate Responsibility to Respect Human Rights.
- Pillar III - Access to Remedy.

What is NAP on Business and HRs?

- In June 2014, the UNHRC called upon its member States to develop a National Action Plan(NAP) to promote the effective implementation of the UNGPs.
- The NAP is a policy document by which a government articulates its action to fulfil its commitment to implementing the UNGPs.
- The vision of India's NAP stems from the Gandhian principle of trusteeship that defines that the purpose of business is to serve all stakeholders
- The Indian government has acknowledged the importance of responsible business conduct since 2011 by introducing the National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business (NVGs).
- The NVGs were recently updated to National Guidelines on Responsible Business Conduct (NGRBC).
- In addition to these voluntary measures, SEBI has had mandatory environment, social and governance (ESG) disclosures for the top 100 companies listed (gradually expanded to 1000 companies) on Indian stock exchanges since 2012.

Instances of HR and Environmental violations by Business

1. Several plants were shut down in the last two decades on charges of violating human rights and environmental rights:

- Coca Cola Co's plants in Plachimada (2004), Mehdiganj (2013) and Hapur (2016)
- Hindustan Unilever Ltd's (mercury) factory in Kodaikanal (2001)
- Sterlite Copper plant in Thoothukudi (2018)

2. In the Maggi case, Nestle SA justified the misleading 'No added MSG' label, stating: "Everyone in the industry was doing it".

3. There is a law that prevents companies from advertising tobacco near school premises. But tobacco giant ITC Ltd's notebooks, complete with its logo, are available right inside classrooms. Again, seemingly, there is nothing illegal about it.

4. More than a million people die in India each year from due to consuming tobacco. One of the investors of a tobacco company is LIC, owned by the Government of India — that has signed the WHO convention on tobacco control.

5. When children are glued to games like PUBG, the young ones and their parents are blamed. But in a class suit in Canada, parents alleged: “companies hire psychologists, who dig into the human brain and they really made the efforts to make the game as addictive as possible”.

Way Forward

1. A NAP should precisely target the following five objectives

- Encourage CAG to evolve auditing standards that seek to ensure human-rights compliance and extend the same to all public-private partnerships. This should ensure respect to human rights in all cases of public procurement and of public investment.
- Mandate the Central Election Commissions to regulate corporate funding of political parties, including directing mandatory disclosures of donations as well as of any conflict of interests by both businesses and political parties.
- Obligate UPSC to direct all public enterprises and companies invested with public funds or loans to organise diversity audits. They should put the findings and appropriate action plans in the public domain.
- Expand the powers of Human Rights Commissions to issue notices to businesses and to create business and human rights ombudsperson to monitor human rights situation in businesses.
- Authorise the National & State Commissions for SC/ST/Women/OBCs to issue notices to businesses on violations in their workspaces and value chains. These authorities, although working with limited powers, for sure, have the potential to create and facilitate narratives around business and human rights.

2. Changes at International Level: An indicator on human rights within the Ease of Doing Business Index would transform the way various Governments look at business

3. Changes in Educational Curriculum: There has to be proactive attempt to make Business and Human Rights a core part of management curriculum. Every business manager groomed should be a human rights defender: That should be the motto of all educational institutions.

4. Adoption by MSMEs: India has a significantly large number of micro, small, and medium (MSME) enterprises. The success of India's NAP rests on the ability of the MSME sector to adopt it. The government as well as large companies have a crucial role in building the capacity of the MSME sector through training, awareness and providing incentives

5. Adoption by Technology Companies: The rising influence and dominance of technology on future of work, privacy and inequality is a growing area of concern in India. The NAP should take steps to embed accountability of technology companies on human rights issues beginning with rights of workers in the gig-economy.

6. A smart mix of voluntary and mandatory provisions is crucial for the NAP to create a level playing field for companies by mandating necessary minimums such as a mandatory Human Rights Due Diligence mechanism.

7. Grievance Redressal Mechanisms: The lack of operational-level grievance mechanisms could be another stumbling block for the rights holders to access remedy mechanisms. Therefore, to make NAP success, a proper grievance redressal mechanism should be established at State & National level.

Conclusion

The NAP process is an opportunity for India to demonstrate leadership in achieving sustainable and inclusive growth and position itself as the world's largest sustainable and responsible economy. The NAP can serve as an important tool to guide Indian businesses to redefine their purpose and emerge out of this pandemic more humane

Abolition of Film Certification Tribunal

Context: The [Tribunals Reforms \(Rationalisation And Conditions Of Service\) Ordinance, 2021](#), which came into effect on April 4, has abolished the Film Certificate Appellate Tribunal (FCAT) by amending the Cinematograph Act, 1952

About the FCAT

- FCAT was a statutory body constituted set up by the Ministry of Information & Broadcasting in 1983, under Section 5D of the Cinematograph Act, 1952.
- Its main job was to hear appeals filed under Section 5C of the Cinematograph Act, by applicants for certification aggrieved by the decision of the Central Board of Film Certification (CBFC).
- The tribunal was headed by a chairperson and had four other members, including a Secretary appointed by the Government of India to handle.
- The Tribunal was headquartered in New Delhi.

What it did

- In India, all films must have a CBFC certificate if they are to be released theatrically, telecast on television, or displayed publicly in any way.
- The CBFC consists of a Chairperson and 23 members, all appointed by the Government of India.

The CBFC certifies films under four categories:

- U: Unrestricted public exhibition (Suitable for all age groups)
- U/A: Parental guidance for children under age 12
- A: Restricted to adults (Suitable for 18 years and above)
- S: Restricted to a specialised group of people, such as engineers, doctors or scientists.

The CBFC can also deny certification a film.

On several occasions when a filmmaker or producer has not been satisfied with the CBFC's certification, or with a denial, they have appealed to the FCAT. And in many cases, the FCAT has overturned the CBFC decision.

Some of key decision by FCAT are

- Lipstick Under My Burkha (2016): It had been denied certification in 2017, on the ground that it was “lady-oriented. Director Alankrita Shrivastava appealed to the FCAT, following whose ruling some scenes were cut and the film was released, with an ‘A’ certificate.
- Haraamkhor (2015): The film revolves around the relationship between a schoolteacher and a young female student. It had been denied certification by the CBFC for being “very provocative”. The FCAT cleared the film and said it was “furthering a social message and warning the girls to be aware of their rights”.
- There were other instances – like The Messenger of God (2015), Kaalakandi (2018) - where FCAT has overruled the decisions of CBFC thereby upholding creative freedoms of film makers

Impact of abolition of FCAT

- Approach High Court: The abolition means filmmakers will now have to approach the High Court whenever they want to challenge a CBFC certification, or lack of it.
- Increases burden of Courts as now the appeals against decisions of CBFC reaches the door of High courts
- Delay in grievance redressal of film makers as the court process for resolving the appeals will take much longer than it was before (in case of FCAT)
- Disproportionately impacts small film makers: film producers of small-budget movies may not have the means to approach the courts
- Arbitrary decision: The FCAT discontinuation feels arbitrary as the decision was taken without any consultation with the stakeholders involved.
- Restrictive: The move is seen as empowering the hands of CBFC, a government appointed body, which in turn increases state’s role in certifying films. This can be seen as limiting the creative freedoms of film makers impacting their freedom of speech & expression under Article 19(1)(a)

Connecting the dots

- Analyse the role of Cinemas in societies
- [New Social Media Code](#)

The Constitution (Scheduled Castes) Order (Amendment) Bill, 2021

Part of: GS Prelims and GS – II – Policies and interventions

In news

- Constitution (Scheduled Castes) Order (Amendment) Bill, 2021 has been passed.
- It seeks to put seven castes under one nomenclature of “Devendrakula Vellalars” with some exceptions for some of the castes in certain districts of Tamil Nadu.

Key takeaways

- The castes include Devendrakulathan, Kadaiyan, Kalladi, Kudumban, Pallan, Pannadi and Vathiriyar.
 - The change in nomenclature was a long pending demand of the community and did not involve either the deletion or addition of any community in its ambit.
-

Lok Adalats

About

- Access to justice for the poor is a constitutional mandate to ensure fair treatment under our legal system.
- Hence, Lok Adalats (literally, 'People's Court') were established to make justice accessible and affordable to all.
- It was a forum to address the problems of crowded case dockets outside the formal adjudicatory system.
- The Constitution (42nd Amendment) Act, 1976, inserted Article 39A to ensure "equal justice and free legal aid".
- To this end, the Legal Services Authorities Act, 1987, was enacted by Parliament and it came into force in 1995 "to provide free and competent legal services to weaker sections of the society" and to "organise Lok Adalats to secure that the operation of the legal system promotes justice on a basis of equal opportunity".
- As an alternative dispute resolution tool, Lok Adalats are regularly organised to help parties reach a compromise.
- Motor-accident claims, disputes related to public-utility services, cases related to dishonour of cheques, and land, labour and matrimonial disputes (except divorce) are usually taken up by Lok Adalats.
- The State Legal Services Authorities (SLSAs) have been organising Lok Adalats on a daily, fortnightly and monthly basis.
- Litigants are forced to approach Lok Adalats mainly because it is a party-driven process, allowing them to reach an amicable settlement.
- Lok Adalats offer parties speed of settlement, as cases are disposed of in a single day; procedural flexibility, as there is no strict application of procedural laws such as the Code of Civil Procedure, 1908, and the Indian Evidence Act, 1872; economic affordability, as there are no court fees for placing matters before the Lok Adalat; finality of awards, as no further appeal is allowed.
- Supreme Court, in *State of Punjab vs Jalour Singh* (2008), held that a Lok Adalat is purely conciliatory and it has no adjudicatory or judicial function.
- Data
- Lok Adalats organised across the country from 2016 to 2020 disposed of 52,46,415 cases.
- National Lok Adalats (NLAs) organised under the aegis of NALSA settle a huge number of cases across the country in a single day.
- For instance, NLAs conducted on February 8, 2020, disposed of 11,99,575 cases. From 2016 to 2020, NLAs have disposed of a total of 2,93,19,675 cases.

Concerns

- As compromise is its central idea, there is a concern, and perhaps a valid one, that in the endeavour for speedy disposal of cases, it undermines the idea of justice.
- In many cases, compromises are imposed on the poor who often have no choice but to accept them.

- In most cases, such litigants have to accept discounted future values of their claims instead of their just entitlements, or small compensations, just to bring a long-pending legal process to an end.
- Similarly, poor women under the so-called 'harmony ideology' of the state are virtually dictated by family courts to compromise matrimonial disputes under a romanticised view of marriage.

Way Ahead

- Besides efficiency and speed, Lok Adalats both online and offline should focus on the quality of justice delivered.
- A just outcome of a legal process is far more important than expeditious disposal.

[SC's views on religious conversions](#)

Part of: GS Prelims and GS – II – Fundamental Rights

In news

- The SC said that people are free to choose their religion and it lashed out at a petition claiming there is mass religious conversion happening “by hook or by crook” across the country.

Key takeaways

- It said that people have a right under the Constitution to profess, practise and propagate religion.
- **Article 25:** It grants Fundamental right to freely profess, practise and propagate religion, subject to public order, morality and health.
- Every person is the final judge of his/her choice of religion or who their life partner should be.
- Courts cannot sit in judgment of a person's choice of religion or life partner.
- Religious faith is a part of the fundamental right to privacy.
- The Constitution Bench judgment had earlier upheld inviolability of the right to privacy, equating it with the rights to life, of dignity and liberty.

[Personal Data Protection Bill](#)

Context: The pandemic has forced more people to participate in the digital economy that has brought focus into the [Personal Data Protection Bill](#) drafted by Union Government.

Unfortunately, the existing data protection regime in India does not meet this standard. Current data protection regime falls short of providing effective protection to users and their personal data.

Data Protection - Issues

- **Increasing Breaches:** The number of personal data breaches from major digital service providers has increased. Robust data protection regimes are necessary to prevent such events and protect users' interests.
- **Misuse of Terms & Conditions:** Entities could override the protections in the regime by taking users' consent to processing personal data under broad terms and conditions. This is problematic given that users might not understand the terms and conditions or the implications of giving consent.

- **Data Privacy:** Frameworks emphasise data security but do not place enough emphasis on data privacy.
- **Data Processing:** While entities must employ technical measures to protect personal data, they have weaker obligations to respect users' preferences in how personal data can be processed. Entities could use the data for purposes different to those that the user consented to.
- **Checks on Government Collection of Data:** The data protection provisions under the existing IT Act also do not apply to government agencies. This creates a large vacuum for data protection when governments are collecting and processing large amounts of personal data.
- The regime seems to have become antiquated and inadequate in addressing risks emerging from new developments in data processing technology.

How does the Personal Data Protection Bill, 2019 address above issues?

It could play a big role in providing robust protections to users and their personal data.

- **Applicable to all:** The Bill seeks to apply the data protection regime to both government and private entities across all sectors.
- **Covers Data Privacy:** The Bill seeks to emphasise data security and data privacy. While entities will have to maintain security safeguards to protect personal data, they will also have to fulfill a set of data protection obligations and transparency and accountability measures that govern how entities can process personal data to uphold users' privacy and interests.
- **Autonomy to Users:** The Bill seeks to give users a set of rights over their personal data and means to exercise those rights.
- **Independent Regulator:** The Bill seeks to create an independent and powerful regulator known as the Data Protection Authority (DPA). The DPA will monitor and regulate data processing activities to ensure their compliance with the regime. More importantly, the DPA will give users a channel to seek redress when entities do not comply with their obligations under the regime.

Concerns with the Bill

- Several provisions in the Bill create cause for concern about the regime's effectiveness. These provisions could contradict the objectives of the Bill by giving wide exemptions to government agencies and diluting user protection safeguards.
- Central government can exempt any government agency from complying with the Bill. Government agencies will then be able to process personal data without following any safeguard under the Bill. This could create severe privacy risks for users.
- Users could find it difficult to enforce various user protection safeguards (such as rights and remedies) in the Bill. The Bill threatens legal consequences for users who withdraw their consent for a data processing activity.
- This could discourage users from withdrawing consent for processing activities they want to opt out of.
- Additional concerns also emerge for the DPA as an independent effective regulator that can uphold users' interests.

[Aadhar related problems](#)

Context: The Supreme Court recently asked the Centre to respond to allegations made in a PIL by a Dalit woman from Jharkhand that 3 crore ration cards have been cancelled in the country because of the insistence on Aadhaar linkage and biometric authentication.

Ever since Aadhaar-based biometric authentication was introduced in PDS, there have been numerous reports about

- People's fingerprints not getting confirmed by the e-PoS device at the ration shop,
- Iris scanners not being there as backup
- Poor Internet connection forcing people to spend on another trip to the shop leading to loss of one day's earnings

What has been the implication of such racancellation?

- Beneficiaries are denied foodgrains due to non-possession/production of an Aadhaar ID or because their Aadhaar biometric details didn't match or on account of technical or server issues.
- As a result, the inaccessibility to food has caused starvation deaths
- These administrative weaknesses has affected the food & nutritional security of our nation

Survey findings

- 28% of those from ration-card-holding households, or over one in four households had indeed experienced a situation where they were denied foodgrains due to non-possession/production of Aadhaar
- While in percentage terms this may not seem all that high a figure to some, in absolute terms (extrapolating to the general household population) it would be huge.
- **Rural & Urban:** Contrary to the notion that seeding and authentication problems are occurring mostly in remote areas, our data indicates that they are nearly of the same magnitude in villages and towns/cities
- **Disproportionate impact on poor:** In both rural and urban areas, the poorest were worst affected – 39% of households with a monthly income below Rs 2,000 said they were at some point denied PDS ration due to Aadhaar problems.
- **Hindi States most impacted:** In the Hindi belt — Bihar, Jharkhand, MP, Chhattisgarh, Rajasthan, UP and Uttarakhand -40% of RC-holding households reported a denial of ration due to Aadhaar issues compared to 20% households in the rest of the countr
 - Data also suggests that the problem may be less due to non-possession of Aadhaar and more due to biometric authentication and server issues, as respondents from 95% of RC-holding households in the 'Hindi' belt did report having Aadhaar.

[Fresh OCI card registration not required for renewing passport](#)

Part of: GS Prelims and GS – II - Citizenship

In news

- The Overseas Citizens of India (OCI) will not be required to register for a fresh OCI card every time a new passport is issued in their name.

Key takeaways

- At present, the OCI card is required to be reissued each time a new passport is issued up to 20 years of age and once after completing 50 in view of biological changes in the face of the applicant.

- With a view to facilitate the OCI cardholders, it has now been decided to dispense with this requirement.
- A person who has got registration as OCI cardholder prior to attaining the age of 20 years will have to get the OCI card reissued only once when a new passport is issued after his/her completing 20 years of age, so as to capture his/her facial features on attaining adulthood.
- If a person has obtained registration as OCI cardholder after attaining the age of 20 years, there will be no requirement of reissue of the OCI card.

Important value additions

- The OCI Card has proved to be very popular amongst foreigners of Indian Origin and spouses of OCI cardholders, as it helps them in hassle free entry and unlimited stay in India.
- So far about 37.72 lakh OCI Cards have been issued by the Government of India.
- As per the extant law, a foreigner of Indian origin or a foreign spouse of an Indian citizen or foreign spouse of an OCI cardholder, can be registered as an OCI cardholder.
- OCI card is a life-long visa for entry into and stay in India with a number of other major benefits attached to it which are not available to other foreigners.

Elections & MCC

Article 324 contains plenary powers to ensure free and fair elections and these are vested in the ECI which can take all necessary steps to achieve this constitutional object.

The model code of conduct (MCC)

- It issued by the ECI is a set of guidelines meant for political parties, candidates and governments to adhere to during an election.
- This code is based on consensus among political parties. Its origin can be traced to a code of conduct for political parties prepared by the Kerala government in 1960 for the Assembly elections.
- It was adopted and refined and enlarged by the ECI in later years, and was enforced strictly from 1991 onwards.

Challenges

- **Extent of Power:** There exists a considerable amount of confusion about the extent and nature of the powers which are available to the ECI in enforcing the code as well as its other decisions in relation to an election.
- **Lacks Statutory backing:** It is a code of conduct framed on the basis of a consensus among political parties, it has not been given any legal backing.
- **Utility of Status-quo vi-a-vis legal backing:** If MCC becomes a part of law, all matters connected with the enforcement of the code will be taken to court, which would delay elections.
- **Transfers of Civil Servants:** It is not clear whether the ECI can transfer a State government official in exercise of the general powers under Article 324 or under the model code.
- **Merely Guidelines:** The code does not say what the ECI can do; it contains only guidelines for the candidates, political parties and the governments.

Government of National Capital Territory of Delhi (Amendment) Act, 2021

Part of: GS Prelims and GS – II - Polity; Centre-State Relations

In news

- The Ministry of Home Affairs issued a gazette notification stating that the provisions of the [Government of National Capital Territory of Delhi \(Amendment\) Act, 2021](#), would be deemed to have come into effect from April 27.

Key takeaways

- The Bill amends the Government of National Capital Territory (NCT) of Delhi Act, 1991.
- It provides a framework for the functioning of the Legislative Assembly (LA) and the government of the NCT of Delhi.
- It amends certain powers and responsibilities of the LA and the Lieutenant Governor (LG).
- It provides that the term “government” referred to in any law made by the LA will imply LG.
- It allows the Legislative Assembly to make Rules to regulate the procedure and conduct of business in the Assembly.
- It provides that such Rules must be consistent with the Rules of Procedure and Conduct of Business in the Lok Sabha.

Do you know?

- It prohibits the LA from making any rule to enable itself or its Committees to:
 - consider the matters of day-to-day administration of the NCT of Delhi and
 - conduct any inquiry in relation to administrative decisions.
- **Assent to Bills:**
 - The Act requires the LG to reserve certain Bills passed by the LA for the consideration of the President.
 - It requires the LG to also reserve those Bills for the President which incidentally cover any of the matters outside the purview of the powers of the Legislative Assembly.
- **LG’s opinion for executive actions:**
 - The Act specifies that all executive action by the government, whether taken on the advice of the Ministers or otherwise, must be taken in the name of the LG.
 - The Bill adds that on certain matters, as specified by the LG, his opinion must be obtained before taking any executive action on the decisions of the Minister/ Council of Ministers.

[Strengthen Panchayati raj](#)

Local Bodies - Importance

- **Historical Roots:** The Cholas were the pioneers in the formation of local bodies as part of a well-organised hierarchy to oversee the implementation of progressive plans.
- **Voices of People heard:** Panchayati raj ensures that the voices of the people are heard loud and clear. “The voice of the people is the voice of god; The voice of the Panchayat is the voice of the people,” is the quote attributed to Mohandas Karamchand Gandhi.
- **Good Governance:** Seamless administration is impossible without power sharing.
- **Inclusive Governance:** To ensure that even the last man sitting in a remote corner of the last row should have access to benefits.
- **articipative Governance:** Every grama sabha meeting ensures the equal right to highlight the issues that disrupt life. Active participation of the people in governance.
- **Transparency & Accountability:** Elected members of the Panchayat are obliged to read out the financial statements and balance sheet to ensure transparency.

Issues

- **Inadequate deliberations:** Gram Sabhas Functioning like auction houses – Example Nadu government did not seek opinions and consensus of people on significant issues like the eight-lane highway project and hydrocarbon project.
- **Poor Participation:** Meetings marked by poor attendance and poor representation from the people.
- **Corporate Interests Dominates:** Several projects are being implemented for the benefit of private and corporate entities.
- **Role of Women:** Women do not find themselves in major administrative roles in the local bodies, though, on paper, women are shown to be a considerable force. Eg. Sarpanch Pati.

Way Ahead

- Ensuring the proper use of allotted funds.
- Ensuring the efficiency of administration and eligible member appointments.
- Need to strengthen our grama sabhas, hold area sabhas in cities, form ward committees, hold online Panchayat meetings
- Ensure decent remuneration to Panchayat chiefs and councillors.
- Bestow the grama sabha with the power to revoke appointed members and representatives.

Conclusion

- The demand for federal rule in the Centre and autonomous rule in the States should resonate along with the need to have autonomous local bodies too.
- Collectively ensure that Panchayati raj should be strengthened. This should be the outcome of a peoples' movement.

Connecting the dots

- 73rd & 74th Constitutional Amendment Acts

Prakash Singh Case: 2006 SC ruling on Police Reforms

Context: The recent allegations of lobbying by several IPS officers in Maharashtra and of 'power brokers' deciding on postings in nexus with the government shows that Political interference in police postings continues despite the landmark Prakash Singh judgment nearly decade-and-a-half ago

What is the SC's Prakash Singh judgment on police reforms?

- Prakash Singh, who served as DGP of UP Police and Assam Police besides other postings, filed a PIL in the Supreme Court post retirement, in 1996, seeking police reforms. In 2006, the Supreme Court gave 7 directives with a view to bring in police reforms
- The Court put on record the deep rooted problems of politicization, lack of accountability mechanisms and systemic weaknesses that have resulted in poor all round performance and fomented present public dissatisfaction with policing.

The directives are -

1. **Setting up of State Security Commissions (SSC)** – lays broad policy guidelines, evaluated performance of state police & ensures state government does not exercise unwarranted pressure
2. Fixing the tenure (minimum of two years) and merit based transparent selection of the DGP
3. A minimum tenure for the Inspector General of Police

4. Separation of investigation and law and order functions
5. **Setting up of Police Establishment Boards-** to decide transfers, postings, promotions and other service related matters of police officers of and below the rank of DySP and make recommendation with these matter of police officers above rank of DySP.
6. **Creating a Police Complaints Authority-** to inquire into public complaints against police officers of and above the rank of DySP
7. **Forming a National Security Commission-** at the union level to prepare a panel for selection and placement of Chiefs of the Central Police Organisations (CPO) with a minimum tenure of two years.

What has been the record of States implement SC directive?

- According to report by Commonwealth Human Rights Initiative (CHRI) notes that the efforts at implementing reforms remain slow, piecemeal and largely regressive. Not even one state was fully compliant with the apex court directives
- 18 states passed or amended their Police Acts in this time but not one fully matches legislative models.
- Not a single Union Territory is compliant with the directives, signalling the Central government's non-compliance.
- Only six States provide security of tenure for their police chief and only 13 States have instituted an internal mechanism to enable the police leadership to make decisions on transfers and postings of State police officers without political interference
- The CHRI found that 26 out of 28 States have constituted an SSC either through Police Acts or government orders. While Telangana and Odisha are the only two States that have not established SSCs on paper, Andhra Pradesh and Karnataka are the only States that make the recommendations of the SSC binding.

How State governments circumvent the SC directives to continue controlling the police?

- **Piecemeal Changes:** State legislations has been criticised for being "flawed" and only making piecemeal changes to save themselves from the ire of the Supreme Court that was pulling up states that had not followed its directives. It is also criticised that the state Acts were deliberately formulated in such a way that "it just gave legal garb to the status quo that existed before".
- **CM special powers retained:** In Maharashtra Police Act of 2014, a section 22(N)(2) had been added that gave the CM special powers to transfer officers at any point in case of 'administrative exigencies'. Thus, while the SC directive was that an officer should not be transferred before the given tenure, CM's have used this section for mid-term transfer thereby maintaining control on transfers.
- **Ineffective Police Establishment Boards:** Several senior officers, some of whom have been part of the five-member PEB, has told that the officers on the committee are 'unofficially' informed by the government about which officer would be preferred for which post. Among five officers, even if one or two do not agree, the majority usually sides with what the postings that the government of the day is interested in, thus rendering PEBs ineffective in its functioning


- **Inefficient State Police Complaints Authority (SPCA):** In those states in which it was set up, SPCA did receive complaints from public. However, SPCA was struggling to set up offices in rural areas. Several activists had alleged that the SPCA was toothless as it could recommend action against any officer found guilty (final decision rested with the government). Also, the body has struggled due to lack of staff members.

Conclusion

The court's intention in Prakash Singh directive was to bring this internal decision-making firmly to the police leadership. Continued non-compliance with this directive will only further undermine the authority of the police leadership, affect the morale of officers and blur accountability.

Connecting the dots

- Police [reforms and Custodial deaths](#)
- [Issues faced by Police](#)




IAS baba

**PRELIMS EXCLUSIVE
PROGRAMME (PEP) - 2021**

**PRELIMS STRATEGY
CLASSES BY
SUNIL OBEROI
- Retd. IAS**

Has worked on civil services reforms in India with UNDP and DOPT. Was associated with induction training of new entrants of civil services and in-service training of senior civil servants.



SOCIAL ISSUE/WELFARE

Launch of MyNEP2020

Part of: GS Prelims and GS – II – Education

In news

- “MyNEP2020” Platform of NCTE Web Portal was recently launched.
- **Ministry: Ministry of Education**

Key takeaways

- The platform seeks to invite suggestions from the stakeholders for preparing draft for development of National Professional Standards for Teachers (NPST) and National Mission for Mentoring Program membership (NMM).
- NPST and NMM are two major recommendations of [NEP 2020](#).
- The platform will be operational from 1st April 2021 to 15th May 2021.
- For preparing the documents, NCTE will work in close consultation with individuals/organizations.
- Expert committee will extensively review the inputs collected during the consultation period and will finally formulate the Drafts for public review.
- Comments will then be used to prepare a final Draft for notification.

Do you know?

- National Council for Teacher Education (NCTE) is a statutory body of Indian government set up under the National Council for Teacher Education Act, 1993 in 1995 to formally oversee standards, procedures and processes in the Indian education system.

All-India Survey Of Migrant Workers

Part of: GS Prelims and GS-II - Policies and Interventions

In news

- Government of India launched the All-India Survey of Migrant Workers and All-India Quarterly Establishment-based Employment Survey.
- **Ministry:** Labour and Employment Ministry

Key takeaways

- **Objective of All-India Survey of Migrant Workers:** To study the kind of employment-related migration undertaken by workers.
- The survey will provide the details of working and living conditions faced by Migrant Workers and impact of COVID 19 on their world of work.
- All-India Quarterly Establishment-based Employment Survey will provide the employment estimates for establishments employing ten or more workers and those employing nine or less workers.
- The survey will provide crucial data on the changes in employment situation across the selected sectors on a quarterly basis.
- These surveys will plug-in the data gap on various aspects of labour and employment and will aid evidence-based policy making processes.

Racism

Racism is a systematic ideology, a complex set of beliefs and practices that, on the presumed basis of biology, divides humanity into the 'higher' us and a lower 'them'.

In a nutshell, it is this: one can tell everything important about a person, his group, its past and future, by noting the colour of his skin.

Issues

- **More than HR Violation:** Racial discrimination, beyond being a breach of human rights, has harmful effects on human health and well-being, and risks wider disruptions to social cohesion.
- **Complex:** Current forms of racism and discrimination are complex and often covert. Structural forms of discrimination, including micro-aggressions and everyday indignities, remain widespread.
- **Growth of Social Media:** Anonymity of the Internet has allowed racist stereotypes and inaccurate information to spread online.
- **Techno-Racism:** The use of new technologies and artificial intelligence in security raise the spectre of 'techno-racism', as facial recognition programmes can misidentify and target racialised communities.
- **Aggravates Inequalities:** Racial discrimination deepens and fuels inequality in our societies. Prejudiced attitudes and discriminatory acts, whether subtle or overt, aggravate existing inequalities in societies.
- **Double Burden on Women:** Women and girls also carry a double burden of being exposed to racial and gender-based prejudices.

Way Ahead

- Public attitudes to anti-racism have improved, as expressions of racist ideology have become less socially acceptable.
- Multisectoral effort to tackle the root causes of racism through anti-racist laws, policies and programmes.
- UNESCO's actions against racism through education, the sciences, culture, and communication offer an example of a way forward.
- UNESCO promotes the role of education in providing the space for young people to understand processes that sustain racism, to learn from the past, and to stand up for human rights.
- Through new approaches to inter-cultural dialogue and learning, youth and communities can be equipped with skills to eradicate harmful stereotypes and foster tolerance.
- Racism will not be overcome with mere professions of good faith but must be combatted with anti-racist action.
- A global culture of tolerance, equality and anti-discrimination is built first and foremost in the minds of women and men.

Connecting the dots

- [Anatomy of Racism](#)

Niti Aayog's draft Migrant Labour Policy

Spurred by the exodus of 10 million migrants (as per government estimates) from big cities during the Covid-19 lockdown, NITI Aayog, along with a working subgroup of officials and members of civil society, has prepared a Draft National Migrant Labour policy.

Positives of Draft Policy

- **Due Recognition:** Intent to better recognise migrants' contribution to the economy and support them in their endeavours.
- **Radical Ideas:** It puts forward several radical ideas, including the adoption of a rights-based approach and establishing an additional layer of institutions to create a more enabling policy environment for migrants.
- **Dedicated Unit:** It proposes a new National Migration Policy and the formation of a special unit within the Labour Ministry to work closely with other ministries.
- **Helps bring Convergence across departments:** The new structure would bring about much-needed convergence across line departments and would be a huge step towards a universal understanding of the causes and effects of migration as well as the interventions needed.
- **Focus on implementation:** The draft policy calls for improving the record on the implementation of the country's many labour laws that have, by and large, failed to make a difference to the lives of labour migrants.
- **Multiple laws considered:** It discusses at length the provisions under the Equal Remuneration Act, The Bonded Labour Act, the Building and Other Construction Workers Act and the Interstate Migrant Workmen Act, among others.
- **International Responsibilities addressed:** It invokes the ILO's Decent Work Agenda as well as the Sustainable Development Goals which aim to protect labour rights.
- **Significance of data realized:** It acknowledges the challenges of welfare provision to a highly fragmented migrant workforce due to recruitment patterns and the lack of data. It refers to the importance of collective action and unions and there are detailed plans for improving the data on short-term migration, especially seasonal and circular migration.

Issues

- The policy does not delve deeper into the causes underlying the poor implementation of labour laws that are linked to the **political economy** of recruitment and placement.
- It does not talk about **gender differences** in employment.
- **Domestic workers** are one of the most important occupations for migrant women. They have been ignored.
- **Controlling tribal migration** goes against the objective of recognising migrant agency to help tribal migrants to access the opportunities offered by migration.

India's Refugee Problem

Context: Myanmarese citizens, including little children fleeing from a Myanmar's military, being turned away at the Indian border in the Northeast has once again revived the domestic debate about refugee protection in India.

India's Refugee Problem

- Refugee flows to India are unlikely to end any time soon given the geopolitical, economic, ethnic and religious contexts of the region.

- There is an urgent need to clinically address the issue of refugee protection in India and put in place appropriate legal and institutional measures.

Issues/Challenges

- **Lacks differentiation b/w Refugees & illegal Immigrants:** Illegal Immigration and Refugees are two different things. However, as per Indian law, both categories of people are viewed as one and the same and are covered under the Foreigners Act, 1946. Due to this, government's policies and remedies to deal with these issues suffer from a lack of clarity as well as policy utility.
- **Lack of Proper Legal Framework:** India is legally ill-equipped to deal with refugees and illegal immigrants separately due to a lack of legal provisions. India is not a party to the 1951 Refugee Convention and its 1967 Protocol the key legal documents pertaining to refugee protection.
- **Ad-hocism in dealing with refugees:** The absence of such a legal framework also leads to policy ambiguity whereby India's refugee policy is guided primarily by ad hocism which, of course, often has its own 'political utility'.
- **Domestic politicisation of refugee protection:** Absence of a legal framework and Ad hoc measures enable the government in office to pick and choose 'what kind' of refugees it wants to admit for whatever political or geopolitical reasons, and what kind of refugees it wants to avoid giving shelter, for similar reasons.
- **Complicates geopolitical faultlines:** Absence of legal framework & politicization of refugee problem opens the door for geopolitical considerations while deciding to admit refugees or not.
 - Example: Consider the most recent case of Myanmarese refugees fleeing to India for protection from the junta at home.
 - New Delhi's concern is that if it takes a decision that irks the Generals in Myanmar, Beijing would get closer to the junta and use the opportunity to hurt India's interests in Myanmar.
 - If New Delhi had a domestic legislation regarding refugees, despite not being a signatory to the relevant international conventions, it could have tempered the expectations of the junta to return the fleeing Myanmarese.
- **Credibility of India as responsible power questioned:** India, for the most part, has had a stellar record on the issue of refugee protection, a moral tradition that has come under great stress of late. New Delhi has been one of the largest recipients of refugees in the world in spite of not being a party to the 1951 Refugee Convention and its 1967 Protocol.

Why India has not signed 1951 Refugee Convention?

- Lop-sided definition of Refugee that favours West
- The definition of refugees in the 1951 convention only pertains to the violation of civil and political rights, but not economic rights, of individuals, for instance.
- The non-entrée regime is constituted by a range of legal and administrative measures that include visa restrictions, carrier sanctions, restrictive interpretations of the definition of 'refugee', withdrawal of social welfare benefits to asylum seekers, and widespread practices of detention

Way Ahead – New Domestic Law

- A domestic refugee law should allow for temporary shelter and work permit for refugees.
- This is crucial because in the absence of proper legal measures, refugee documentation, and work permit, refugees may end up becoming illegal immigrants using illicit means.
- Make a distinction between temporary migrant workers, illegal immigrants and refugees and deal with each of them differently through proper legal and institutional mechanisms.

Connecting the dots

- [Rohingya Refugee](#) Problem

Empowering Street Vendors

Benefits of Street Vendors

- Cost benefit for Consumers: By making goods and services available at doorsteps, or at places that are conveniently accessible, street vendors reduce the transaction costs of everyday purchases for consumers.
- Brings Equity in Supply Chain: The street-vending economy also ensures equitable distribution of economic gains across its production and distribution value chains.

Issues

- Institutionalized Neglect: With urban planners focusing on building cityscapes that are attractive for investments, street vendors experience systemic and institutionalized contempt.
- Debt trap due to COVID-19: The pandemic exacerbated the condition of street vendors, most of whom had to exhaust their savings to survive, with many forced to enter a steep debt cycle.
- Harassment by administration: Traditionally, street vendors have remained a neglected lot, and have been subject to harassment by police and local governments.
- Patchy implementation of Policies: Ground level implementation of the Street Vendors Act, 2014 has remained patchy.
- Market Failure to take care of Street Vendors: There is very little institutionalized support that street vendors could get, resulting in a market failure that needed to be addressed through government intervention.

Way Ahead

- The PM SVANidhi scheme of the Union government, under which street vendors are provided a micro-credit facility, is designed to enable them to jump-start their commercial activity. So far, 2 million vendors have availed of this credit facility, with 40% of the beneficiaries being women.
- Inclusion in Urban Developmental Planning: Street Vendors role needs and strengths must be factored into every aspect of urban development planning.
- Support from Civil Society: Indian street vendors also need robust public patronage for them to achieve their full potential. Such patronage would build a strong business case for their growth and help eliminate the market failures that mark the country's street-vending landscape.

Connecting the dots

- PM SVANidhi scheme
-

Protecting children in the age of AI

Context: Children and adolescents of today are born into a world increasingly powered by virtual reality and artificial intelligence (AI).

Like all fundamental technological change, AI is not only changing what humans can do, it is shaping our behaviours, our preferences, our perceptions of the world and of ourselves.

Concerns

- **Digital Divide:** Not everyone can tap into the opportunities offered by this transformation. According to UNICEF and the International Telecommunication Union (ITU), as many as two-thirds of the world's children do not have access to the Internet at home.
- **Amplify Societal Inequalities:** Unless we take rapid and concerted action to close this digital divide, AI will radically amplify societal inequalities among children of different races, socio-economic background, genders, and regions.
- **Complexity of technology:** The expansion and deployment of AI is far outpacing our ability to understand its implications, especially its impact on children. Elders themselves hardly understand the complexity of technology which is preventing us to equip children and young people with the knowledge, tools and awareness to protect themselves
- **Dangers of Child abuse:** While video gaming and chat forums offer an online space for children to socialise with their friends, multiple reports identify such virtual playgrounds as “honeypots” for child predators.
- **Challenges with oversight by parents:** Short of banning screen time entirely, parents are hard-pressed to keep tabs on just what their kids are doing online, and with whom. With online homework and both the parents working, this oversight has become even more difficult.
- **Business models causing digital addiction:** AI systems driving many video games and social networks are designed to keep children hooked, both through algorithms and gimmicks like “streaks”, “likes”, infinite scroll, etc. Even if this is an ancillary consequence of the underlying business model, the damage is done — children, from a tender age through adolescence, are becoming digitally addicted.
- **Reduced attention Span & Social Interactions:** Right when they need to be learning concentration skills, emotional and social intelligence, the digital addiction is causing children's attention to be spliced into ever-thinner slices, and increasingly virtualising their social interactions.
- **Unhealthy Shaping of Worldview:** Similarly, right when children and youth are forming their initial views of the world, they are being sucked into virtual deep space, including the universe of fake news, conspiracy theories, hype, hubris, online bullying, hate speech and the likes
- **Echo Chambers causing intolerance:** An echo chamber is an environment (aided by AI) where a person only encounters information or opinions that reflect and reinforce their own. Echo chambers can create misinformation and distort a person's perspective so they have difficulty considering opposing viewpoints and discussing complicated topics.
- **Data Harvesting and Privacy:** AI powered toys can offer playful and creative opportunities for children, with some even promoting enhanced literacy, social skills and language development.

However, they also listen and observe our children, soaking up their data, and with no framework to govern its use

Way Ahead- Simultaneously close the digital divide, and safeguard children's rights in the age of AI

- The next phase of the fourth Industrial Revolution must include an overwhelming push to extend Internet access to all children. Governments, private sector, civil society, parents and children must push hard for this now, before AI further deepens the pre-existing inequalities and creates its own disparities.
- And on mitigating on-line harms, we need a multi-pronged action plan:
 - we need legal and technological safeguards
 - we need greater awareness among parents, guardians and children on how AI works behind the scenes
 - we need tools, like trustworthy certification and rating systems, to enable sound choices on safe AI apps
 - we need to ban anonymous accounts
 - we need enforceable ethical principles of non-discrimination and fairness embedded in the policy and design of AI systems
 - we need “do no harm” risk assessments for all algorithms that interact with children or their data.
 - we need safe online spaces for children, without algorithmic manipulation and with restricted profiling and data collection.
 - we need online tools (and an online culture) that helps prevent addiction, that promotes attention-building skills, that expands children's horizons, understanding and appreciation for diverse perspectives, and that builds their social emotional learning capabilities.

Connecting the dots

- Fourth Industrial Revolution and its challenges

Launch of MANAS

Part of: GS Prelims and GS – I – Society

In news

- The Principal Scientific Adviser to the Government of India launched the “MANAS” App to promote wellbeing across age groups.

Key takeaways

- It was jointly executed by NIMHANS Bengaluru, AFMC Pune and C-DAC Bengaluru.
- MANAS which stands for Mental Health and Normalcy Augmentation System was endorsed as a national program by the Prime Minister's Science, Technology, and Innovation Advisory Council (PM-STIAC).
- It is a comprehensive, scalable, and national digital wellbeing platform.
- It is an app developed to augment mental well-being of Indian citizens.
- It integrates the health and wellness efforts of various government ministries, scientifically validated indigenous tools with gamified interfaces developed/researched by various national bodies and research institutions.

WOMEN ISSUE

Women and Cooperative Dairy Farming

Context: The achievements of women dairy farmers in contributing to India's 'White Revolution' are perhaps the greatest cause for celebrating the Women's History Month in March

Women and Cooperative Dairy Farming

- **Substantive Participation of Women:** There are more than 1,90,000 dairy cooperative societies across the country, with approximately 6 million women members.
- **Rise of women-led dairy unions and companies:** The NDDB has played a proactive role in setting up women-led producer enterprises like Shreeja Mahila Milk Producer Company, which was started with 24 women and now has more than 90,000 members, with an annual turnover of approximately ₹450 crore.
- **Helps overcome structural obstacles:** Many women who never had access to education or formal employment have experienced a life transformation after they became a member of the Cooperative Milk Union. This helped women, especially single parents, to increase their incomes and lead a dignified life.
- **Bridges information asymmetry:** Major challenge in Dairy sector is information asymmetry among farmers. Statistics indicate that small and marginal farmers have access to only 50-70% of the resources that large and medium farmers have. However, the presence of collectives in the form of cooperatives and milk unions plays a significant role in enhancing the knowledge and bargaining power of women.
- **Learning New Skills:** Many of women dairy farmers have not had a formal education, but through the process of dairying and working with larger collectives, such as milk unions and cooperatives, they have mastered the nuances of finance and marketing.

Conclusion

For women dairy farmers, cooperatives and unions are a pathway to financial stability

Connecting the dots

- Impact of [RCEP on India's dairy](#) sector
- How [India can push its dairy cart ahead](#)

Concerns over MTP Bill, 2020

Context: [Medical Termination of Pregnancy \(Amendment\) Bill](#) (MTP), 2020 was recently passed in Rajya Sabha.

Issues

- Lack of consultation with stakeholders
- Lack of inclusion of transgender people within the MTP framework
- Lack of emphasis on centring women's autonomy.
- Medical boards would constitute violations of privacy

- Cause inordinate delays in abortion access due to lack of specialists
- Lack of time limits for decision-making
- Ambiguous representation of women
- Extensive procedural hurdles
- Abortion under the MTP Amendment Bill will not be allowed at the request of a pregnant person, but is conditional on authorisation by the doctor. This goes against the Supreme Court's jurisprudence on reproductive autonomy and bodily integrity.
- The Bill will allow for abortions without any upper gestation limit only for foetuses with "abnormalities", thereby fostering the ableist rationale of the State.
- The Bill is also overwhelmingly cis-heteronormative, with only cisgender women being contemplated in it, and not persons with other gender identities.

Conclusion

- The **State continues to control women's reproductive and sexual rights** while wielding the argument of "progress".
- **The narrow understanding of women's rights**, which underpins the legislation, serves to explain much of the **hetero-patriarchal regulatory orientation** of the law.
- The co-option of "women's rights" in the rhetoric to promote the Bill is ironic, as its provisions continue to **criminalise abortion, and perpetuate harmful stereotypes and stigma around reproduction, sexuality and motherhood**.
- The persistent notion that women are "natural" mothers, as reiterated in the Rajya Sabha debates, furthers the **paternalistic idea that women need hand holding in making decisions related to their sexual and reproductive rights**.

Note – The Conclusion comes from the 'Feministic School of thought' Going with this conclusion might back fire, however you can use it PSIR and Sociology.

Connecting the dots:

- Reproductive rights of a women vs Rights (if any) of an unborn child

Global Gender Gap Report 2021

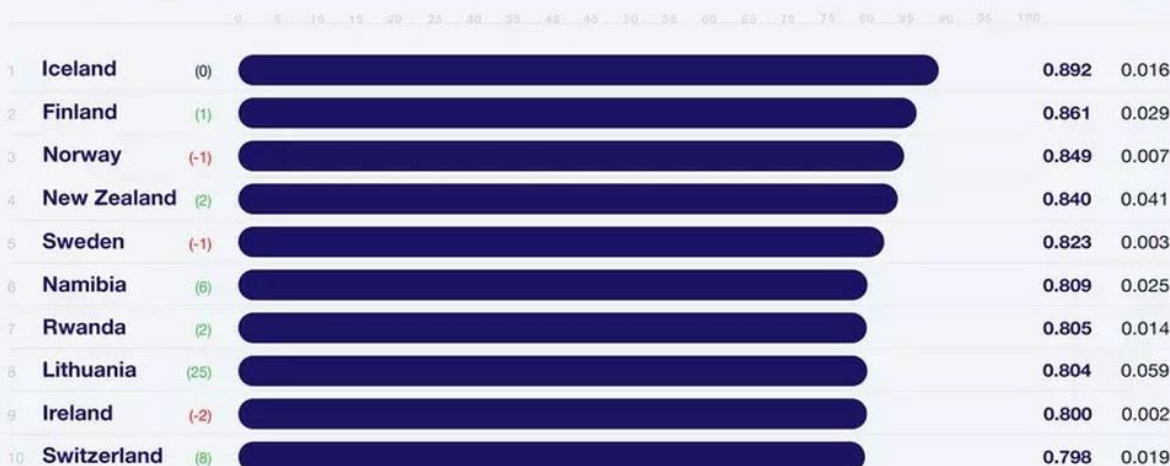
Part of: GS Prelims and GS-I - Society

In news

- Global Gender Gap Report 2021 was released recently.
- Released by: [World Economic Forum](https://www.weforum.org/)

THE GLOBAL GENDER GAP INDEX RANKING, 2021

Global, Top 10



Key takeaways

- India has fallen 28 places
- It is now one of the worst performers in South Asia,
- It is ranked below neighbouring countries - Bangladesh, Nepal, Bhutan, Sri Lanka and Myanmar.
- **India's rank:** 140 among 156 countries.
- South Asia incidentally is one of the worst performing regions, followed only by the Middle East and northern Africa.
- Overall, many countries have fared worse in this year's rankings compared to last year's, on account of economic performance.
- On its current trajectory, it will now take 135.6 years to close the gender gap worldwide.
- Women represent only 26.1% of some 35,500 parliament seats and just 22.6% of over 3,400 ministers worldwide
- In 81 countries, there has never been a woman head of state, as of January 15, 2021.

Women Issues

Context: India is amongst the most unequal countries in the world to be a woman according to the latest annual Global Gender Gap Index released by the World Economic Forum places India 17th from the bottom.

Issues

- **Missing Females:** In India discrimination starts in the embryo with the misuse of ultrasound technology for sex-selective abortion.
- **Inadequate Political Representation:** The share of women ministers has declined sharply from 23 to 9 per cent.
- **Poor Labour Participation:** Indian women's labour force participation has plummeted in the last decade to a mere 21 per cent.
- **Sexual Harassment at Workplaces:** Before the pandemic, Indian boardrooms had only 15 per cent of women, even as the #MeToo movement exposed the iceberg of sexual harassment in the workplace.

- **Poor implementation of Policies:** Workplace crèches, though legally mandatory in all offices with more than 50 employees and MNREGA worksites, are rare. Anganwadis, too, have yet to be expanded into crèches.
- **Child Marriages:** Patriarchy is largely instilled at home. Preliminary population weighted averages from 17 states reveals that even before the pandemic, child marriages have marginally increased since the previous survey in 2015-16.
- **Higher Education:** While education is now more inclusive, with three-fourths of women literate, only 37 per cent complete Class 10.
- **Financial Dependence:** Less than a third of Indian women earn an income.
- **Domestic Violence:** Compounded with the lack of economic independence, more than a quarter of married women also report spousal violence.
- **Rape:** The National Crime Records Bureau enumerated nearly 88 rapes daily in 2019, with Dalit women in Rajasthan and Uttar Pradesh the most vulnerable.

Green Shoots

- **Financial Inclusion:** Four out of every five women now operate their own bank accounts,
- **Awareness about personal hygiene:** More than two-thirds of young women use menstrual hygiene products,
- **Reproductive Rights:** More than half of married women use modern contraceptives that has helped women assert their reproductive rights
- **Access to Communication:** almost half have a mobile phone, though less than a third have ever been on the internet.

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Founder IASbaba

HEALTH ISSUE

Double Mutant Coronavirus Variant in India

Part of: GS Prelims and GS – II – Health & GS-III - Sci and Tech

In news

- A unique “double mutant” coronavirus variant — with a combination of mutations not seen anywhere else in the world — has been found in India.

Key takeaways

- However, it is still to be established if this has any role to play in increased infectivity or in making [COVID-19](#) more severe.
- Genome sequencing of a section of virus samples by a consortium of 10 laboratories across India, (Indian SARS-CoV-2 Consortium on Genomics - [INSACOG](#)), revealed the presence of two mutations, E484Q and L452R together, in at least 200 virus samples.
- Mutations in the virus per se are not surprising.
- Mutations that eliminate the effect of vaccines or the immune system or lead to increased cases are bigger causes of concern.
- These two mutations have been individually identified in other variants of SARS-CoV-2 globally
- They are also associated with a reduction in vaccine efficacy.
- Their combined effect and biological implications have not yet been understood.
- In the days ahead, the [INSACOG](#) will submit details of this variant to a global repository called GISAID and, if it merits, classify it as a “variant of concern” (VOC).

Do you know?

- **So far, only three global VOCs have been identified:** the U.K. variant (B.1.1.7), the South African (B.1.351) and the Brazilian (P.1) lineage.

Increase in maternal deaths and stillbirth due to COVID-19

Part of: GS Prelims and GS – II – Health

In news

- According to a study published in The Lancet Global Health journal, the failure of the health system to cope with [COVID-19](#) pandemic resulted in an increase in maternal deaths and stillbirths,

Key takeaways

- Overall, there was a 28% increase in the odds of stillbirth.
- The risk of mothers dying during pregnancy or childbirth increased by about one-third.
- There was also a rise in maternal depression.
- [COVID-19](#) impact on pregnancy outcomes was disproportionately high on poorer countries.
- The report is an analysis of 40 studies across 17 countries
- Inefficiency of the healthcare system instead of strict lockdown measures resulted in reduced access to care.

Do you know?

- In India, during the months of national lockdown between April and June 2020, compared to the same period in 2019, there was a 27% drop in pregnant women receiving four or more ante-natal check-ups, a 28% decline in institutional deliveries and 22% decline in prenatal services.

National Policy for Rare Diseases, 2021 released

Part of: GS Prelims and GS – II – Health

In news

- “National Policy for Rare Diseases 2021” was recently approved
- **Ministry:** Ministry of Health

Key takeaways

- **Aim:** (1) To lower the high cost of treatment for rare diseases with increased focus on indigenous research; (2) To strengthen tertiary health care facilities for prevention and treatment of rare diseases through designating 8 health facilities as Centre of Excellence (CoEs) .
- National Consortium shall be set up to provide the required help
- Department of Health Research, Ministry of Health & Family Welfare will be its convenor.
- **Vision:** Creation of a national hospital based registry of rare diseases so that adequate data about rare diseases is available.
- **Focus:** Early screening and prevention through primary and secondary health care infrastructure such as Health and Wellness Centres and District Early Intervention Centres (DEICs) and through counselling for the high-risk patients.
- Screening will also be supported by Nidan Kendras set up by Department of Biotechnology.
- CoEs will also be provided one-time financial support of up to Rs 5 crores for upgradation of diagnostics facilities.
- A provision for financial support up to Rs. 20 lakhs under the Umbrella Scheme of [Rashtriya Arogya Nidhi](#) is proposed for treatment of those rare diseases that require a one-time treatment (diseases listed under Group 1 in the rare disease policy).

Do you know?

- In India, [Haemophilia](#), [Thalassemia](#), Sickle cell anaemia and Primary Immuno Deficiency in children, auto-immune diseases, Lysosomal storage disorders such as Pompe disease and Gaucher’s disease are in the rare diseases list.

Launch of Integrated Health Information Platform (IHIP)

Part of: GS Prelims and GS-II - Health

In news

- Integrated Health Information Platform (IHIP) was recently launched.
- **Ministry:** Ministry of Health

Key takeaways

- IHIP is the next generation highly refined version of the presently used [Integrated Disease Surveillance Programme \(IDSP\)](#).
- India is the first country in the world to adopt such an advanced disease surveillance system.
- It will house the data entry and management for India’s disease surveillance program.
- In addition to tracking 33 diseases now as compared to the earlier 18 diseases, it shall ensure near-real-time data in digital mode.
- It is also the world’s biggest online disease surveillance platform.
- It is in sync with the [National Digital Health Mission](#).

Biological Threats

The country faces three major biological threats:

1. Naturally occurring infections in humans, plants, or animals

- India often faces naturally occurring agricultural infestations, such as the recent locust attacks; diseases that affect animals and have not yet infected humans, such as the bird flu outbreak and zoonotic infections that have jumped from animals to humans, such as COVID-19.
- Yet, the country does not have a proper strategy to tackle infections.
- Instead, it follows a reactive approach, convening emergency committees, ad hoc response panels and groups once a disaster has struck.

2. Unintentional release of pathogens from laboratories leading to diseases

- The country has so far not reported any case of accidental spilling of pathogens. But there has been illegal cultivation of transgenic crops in different regions.
- This illegal growth of transgenic crops challenges the implementation of guidelines for maintaining safety of biotechnological research.

3. Bioterrorism

- This category of risks involves terrorists or other bad actors deliberately misusing biotechnology to create biological weapons that can affect humans, animals or crops.
- India has been similarly fortunate not to experience bioterrorism, so far.

Is India Prepared?

India follows differing approaches to tackle biological threats emerging from both natural and human-made sources. However, there are some glaring gaps in its ability to manage these risks.

- **Poor disease-surveillance network** in India makes timely detection of outbreaks difficult.
- **Inadequate coordination** among ministries to prevent zoonotic infections complicates the response.
- **Dismal investment in scientific research** disincentivises researchers involved in the public health sector, who could help by developing capacities to identify, treat and vaccinate against threatening organism
- **Multiplicity of organisations** operating under different ministries makes it difficult to ensure the implementation of biosafety guidelines across the country.
- **Minimal interventions of experts:** Discussions regarding possible threats to national security due to deliberate biological attacks are often limited to closed policy circles with minimal or no intervention of experts from outside the government.
- **Poor biosecurity awareness** further complicates India's preparedness towards threats emerging from deliberate sources.

Way Ahead

- **Need for dedicated Governmental Body:** The spread of infectious diseases is a long-term, continually evolving threat and India needs a governmental body prevent and mitigate all three types of biological threats.
- **Integration with NDMA:** A full-time office of biological threats preparedness and response under the National Disaster Management Authority can be one possible alternative in this regard. This office could become the nodal agency that brings together experts from the various ministries, representatives from the private sector, and professionals from the academic and the scientific communities.

Connecting the dots

- [Universal Bio-deterrence](#)

[Sputnik V recommended for emergency use](#)

Part of: GS Prelims and GS – II – Health

In news

- Russia's COVID-19 vaccine — Sputnik V — has been recommended for emergency use authorisation in India following a meeting of the Subject Expert Committee (SEC).

Key takeaways

- If approved by the Drug Controller General of India (DCGI), Sputnik V would be the third vaccine to be made available in India after the Serum Institute of India's [Covishield](#) and Bharat Biotech's [Covaxin](#).
- Sputnik V is developed by Russia's Gamaleya Research Institute of Epidemiology and Microbiology
- It claims to be one of the three vaccines in the world with efficacy of over 90%.
- The vaccine supplies for the global market will be produced by the Russian Direct Investment Fund (RDIF) international partners in India, Brazil, China, South Korea and other countries.

[Launch of Aahaar kranti](#)

Part of: GS Prelims and GS – II – Health

In news

- 'Aahaar Kranti' Mission was launched recently.
- Ministry: Ministry of Health

Key takeaways

- Aim: To spread the message of the need for a nutritionally balanced diet and to understand the importance of access to all local fruits and vegetables.
- Launched by: Vijnana Bharati (Vibha) and Global Indian Scientists' and Technocrats' Forum (GIST)
- Motto: 'Good Diet-Good Cognition'
- It is designed to address the problem of 'hunger and diseases in abundance'
- Council of Scientific and Industrial Research (CSIR)'s Pravasi Bharatiya Academic and Scientific Sampark (Prabhaas) is collaborating along with various central and state government ministries and agencies
- Focus: Training teachers, who, in turn, will pass on the message to the multitudes of students, and through them to their families and finally the society at large.
- Such a strategy was adopted for the eradication of Polio and it turned out to be a grand success.

Do you know?

- Studies estimate that India produces as much as two times the amount of calories that it consumes.
- However, many in the country are still malnourished.
- The root cause of this strange phenomenon is a lack of nutritional awareness in all sections of our society.
- The United Nations has also declared 2021 as the International Year of Fruits and Vegetables
- [UN sustainable goal](#) # 3 emphasizes on human well-being.

Launch of Poshan Gyan

Part of: GS Prelims and GS – II – Health

In news

- Poshan Gyan was launched recently.
- It is a national digital repository on health and nutrition.
- **Launched by:** NITI Aayog, in partnership with Bill and Melinda Gates Foundation and Centre for Social and Behaviour Change, Ashoka University,

Key takeaways

- The Poshan Gyan repository is conceptualized as a resource.
- It shall enable search of communication materials on 14 thematic areas of health and nutrition across diverse languages, media types, target audiences and sources
- Content for the repository was sourced from the Ministries of Health and Family Welfare and Women and Child Development and developmental organizations
- It introduces a unique crowdsourcing feature that allows anyone to submit communication material for inclusion on the website, followed by a review by a designated committee.

Covid-19 Vaccination: Challenges, Chinese Model & Way Forward

Context: Eight months ago, India had begun a decline in daily Covid-19 infections to the extent that many experts believed that a devastating second wave was unlikely in India. However, the second wave of Covid-19 has brought health infrastructure to a near collapse

Moreover, India's options for containing the pandemic are narrowing as it can ill-afford another lockdown now. In this context, the combination of panic, public pressure, and the magnitude of the crisis has prompted the Union Government to authorize vaccines to anyone above 18 and give states more control over procurement.

Issues with Accelerated Rollout of the Vaccine

- **Vaccine Shortage:** Problems in scaling up production, and in the supply and management of vaccines continue amid the surge in cases. At the optimistic rate of three million doses a day, it would take at least 260 days from April for every adult to get at least a single shot.
- **Changing Vaccination Policy:** The processes initiated by the government in early January 2021 to expand India's manufacturing capacity were under the assumption that it would be at least August before vaccines could be fully opened up for all. Given the shortage of vaccines, India cannot afford to have a single or universal policy and needs to make it more targeted.
- **Weak Bargaining Power of States:** Leading international vaccinators such as Pfizer and Moderna have supply commitments already tied up and it is unclear if merely the policy move of liberalising vaccine supply will leave States in India with the finances and negotiating power to procure enough stocks of vaccines.
- **Unequal Access between States:** Leaving states to their own means will only increase policy incoherence and unequal access between states with different fiscal capacities and healthcare infrastructure
- **Shortage of Raw Material:** The inability of getting the much-needed raw materials from the United States – bags, vials, cell culture media, single-use tubing, specialized chemicals, etc. that have now been banned for export has disrupted the vaccine production in India.
- **Balancing Global Commitments:** Another issue is concerning international obligations. Of the 38 million doses the global alliance program Covax has so far distributed to 84 countries, 28 million

doses were from India. That obligation may have to be followed up perhaps as they would need for their second dose.

How China Contained COVID-19 Virus? – Stellar role by Residential Committees

- At the grassroots, the most critical role was played by the residential committees (RCs). Though officially not part of the state and **defined as institutions of self-governance**, these committees are the instruments of the communist party for effective governance and political control.
- They are mandated to perform administrative tasks, implement policy, mediate local disputes, and assist government agencies with maintaining public surveillance, health and sanitation, care for the elderly, etc.
- **Central leadership made provisions** for the benefit of the workers like subsidies, provision of health equipment, insurance, publicity, and other institutional support. Clear channels were established by Central Leadership to pass down resources and authority from central to local organisations.

Way Ahead

- **Massive Multimedia Campaigns:** If fresh lockdowns are to be avoided, we need to enforce masks by investing in massive multimedia campaigns for information, education, and communication, like it was done for polio and HIV.
- **Strengthening Vaccine Supply Chain:** Enhancing Electronic Vaccine Intelligence Network (eVIN) system will enhance real-time information on vaccine stocks and storage temperatures across all country's cold chain points.
- **Boosting Domestic Production:** Government should provide necessary financial packages for ramping up domestic production of vaccine manufacturers for expanding their production facilities and improving upon their supply chains.
- **Learning from China's RC Model:** Many urban areas have residential associations and local governments that can undertake similar mobilisation as RCs in China. However, this cannot be done without a centralised plan of action, which is the key aspect of this model.

Legislation & Covid-19 vaccine pricing

Context: During the hearing on issues related to the pandemic, the Supreme Court flagged differential pricing for vaccines, and directed the central government to clarify in its affidavit the basis and rationale for pricing.

How does the government regulate the pricing of drugs?

- To ensure accessibility, the pricing of essential drugs is regulated centrally through **The Essential Commodities Act, 1955**. Under Section 3 of the Act, the government has enacted the **Drugs Prices Control Order (DPCO)**
- The DPCO lists over 800 drugs as “essential” in its schedule, and has capped their prices.
- The capping of prices is done based on a formula that is worked out in each case by the **National Pharmaceutical Pricing Authority (NPPA)**, which was set up in 1997.

Can the government regulate the price of Covid-19 vaccines through DPCO?

- Regulation through DPCO is **not applicable for patented drugs** or fixed-dose combination (FDC) drugs.
- This is why the price of the antiviral drug remdesivir, which is currently in great demand for the treatment of serious cases of Covid-19, is not regulated by the government.

- Recently, a government said that upon its request major manufacturers/marketers of the remdesivir injection had reported voluntary reduction in the Maximum Retail Price (MRP).
- Globally, the American biotechnology firm Gilead Sciences owns the patent for the drug. Several pharma companies have obtained a licence from Gilead to manufacture remdesivir.
- To bring vaccines or drugs used in the treatment of Covid-19 such as remdesivir under the DPCO policy, an **amendment can be brought**.

What legal avenues are available for the government to address differential pricing for vaccines?

1. THE PATENTS ACT, 1970

- The law has two key provisions that could be potentially invoked to regulate the pricing of the vaccine.
- Section 100 of the Patents Act **gives the central government the power to authorise** anyone (a pharma company) to use the invention for the “purposes of the government”. This provision enables the government to license the patents of the vaccine to specific companies to speed up manufacturing and ensure equitable pricing.
- Under **Section 92 of the Act, which deals with compulsory licensing**, the government can, without the permission of the patent holder, license the patent under specific circumstances prescribed in the Act (national emergency or in circumstances of extreme urgency or in case of public non-commercial use)
- After the government issues a notification under Section 92, pharma companies can approach the government for a licence to start manufacturing by reverse engineering the product.

Challenges w.r.t COVID-19 Vaccines: However, in the case of biological vaccines like Covid-19, even though ingredients and processes are well known, it is **difficult to duplicate the process from scratch**. The process will also entail **new clinical trials to establish safety and efficacy**, which makes compulsory licensing less attractive.

2. THE EPIDEMIC DISEASES ACT, 1897:

- Another legal route suggested by experts to regulate the pricing of vaccines is the Epidemic Diseases Act. This has been the main legal weapon for the government in dealing with the pandemic.
- Section 2 of this law gives the government “power to take special measures and prescribe regulations for the better prevention of the spread of dangerous epidemic disease”.
- This broad power can be used to take measures to regulate pricing. However, the law lacks the teeth to implement such an important policy framework.

Way Ahead

- Apart from these legislative options, experts suggest that the central government procuring directly from the manufacturers could be the most beneficial route to ensure equitable pricing. As the sole purchaser, it will have greater bargaining power.

Connecting the dots

- [Epidemic Diseases Act](#)

[Virafin receives emergency use approval](#)

Part of: GS Prelims and GS –II - Health & GS-III - Sci & tech

In news

- [Drug Controller General Of India \(DCGI\)](#) gave a restricted emergency use approval to the Zydus Cadila's 'Virafin' for treating the patients showing moderate COVID-19 symptoms.

Key takeaways

- Virafin is a pegylated interferon alpha-2b(PegIFN), which when subcutaneously injected to the patient in the early stages of infection, resulted in their faster recovery.
- The clinical trials have confirmed the safety, tolerability and efficacy of Virafin.
- The studies also reported that Viarfin reduces viral load and aid in managing the disease in a better way, such as reduction in the need for supplemental oxygen.



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GOVERNMENT SCHEMES

Launch of AIM-PRIME

Part of: GS Prelims and GS – III – Innovation; Entrepreneurship

In news

- **Atal Innovation Mission** (AIM), NITI Aayog launched AIM-PRIME (Program for Researchers on Innovations, Market-Readiness & Entrepreneurship).
- It is an initiative to promote and support science-based deep-tech start-ups & ventures across India.

Key takeaways

- In this regard, AIM has joined hands with Bill & Melinda Gates Foundation (BMGF) to launch this nationwide program.
- It will be implemented by Venture Center - a non-profit technology business incubator.
- The first cohort of the program is open to technology developers with strong science-based deep tech business ideas.
- It is also open to CEOs and Senior incubation managers of AIM Funded Atal Incubation Centers that are supporting deep tech entrepreneurs.

Do you know?

- Deep technology is an outcome of very intense research and development (R&D) with high knowledge content.
- The benefits of this program are aimed at addressing specific issues through training and guidance over a period of 12 months.

Launch of Sankalp Se Siddhi

Part of: GS Prelims and GS – II – Policies and Interventions

In news

- “Sankalp se Siddhi” - Village and Digital Connect Drive was recently launched.
- **Launched by:** **TRIFED**
- **Ministry of:** Ministry of Tribal Affairs

Key takeaways

- It is a 100 day drive which was started from April 1, 2021.
- It will entail 150 teams visiting ten villages each.
- **Aim:** To activate the Van Dhan Vikas Kendras in these villages.
- The visiting teams will also identify locations and shortlist potential Van Dhan Vikas Kendras for clustering as TRIFOOD, and **Scheme of Fund for Regeneration of Traditional Industries-(SFURTI)** units as larger enterprises.
- TRIFOOD aims to enhance the income of tribals through better utilization of and value addition to the Minor Forest Produce collected by the tribal forest gatherers.

SAAMAR Campaign by Jharkhand government

Part of: GS Prelims and GS – II – Policies and interventions

In news

- SAAMAR (Strategic Action for Alleviation of Malnutrition and Anemia Reduction) campaign has been launched by Jharkhand government to tackle malnutrition in the state.

Key takeaways

- The campaign aims to identify [anaemic](#) women and malnourished children and converge various departments to effectively deal with the problem
- It has a 1000 days target, under which annual surveys will be conducted to track the progress.
- To tackle severe acute malnutrition children, every Anganwadi Centres will be engaged to identify these children and subsequently will be treated at the Malnutrition Treatment Centres.
- In the same process the anaemic women will also be listed and will be referred to health centres in serious cases.
- Angawadi's Sahayika and Sevika will take them to the nearest Health Centre where they will be checked again and then registered on the portal of State Nutrition Mission.

Uttarakhand's Char Dham Board

Context: Uttarakhand Char Dham Devasthanam Management Act was enacted by Uttarakhand State legislature in 2019.

Under the same Act, the State government constituted the **Uttarakhand Char Dham Devasthanam Board** on January 15, 2020.

- Under this board, at present there are 53 temples, including four shrines – Badrinath, Kedarnath, Gangotri and Yamunotri – and other temples located around these shrines.
- The shrine board is the **highest governing body for the management** of the temples with powers to frame policies, make decisions to give effect to the provisions of this Act, of budget formulation and to sanction expenditure, among others.
- The board may also give directions for the safe custody, prevention and management of funds, valuable securities, jewellery and properties vested in the temples.
- Through the Devasthanam board, the government has taken control over the financial and policy decisions

What was the previous arrangement?

- Earlier, the Shri Badrinath-Shri Kedarnath Act, 1939 was in place for the management of two shrines (Badrinath and Kedarnath) and 45 temples by Shri Badrinath- Shri Kedarnath Mandir Samiti.
- The Samiti was chaired by a government appointed person whereas an official of all India service used to be the CEO.
- All the decisions related to utilization of the donations, funds and development works in and around those 45 temples including Badrinath and Kedarnath were taken by that committee and the government did not intervene into it.
- In Gangotri and Yamunotri, management of the shrines was earlier in the control of local trusts and the government was not getting any share from the donations made by devotees.

Who are protesting and why?

- Priests, Pandas, Dimris and others who run dharmshalas and shops at the Badrinath and Kedarnath shrines staged protests in Dehradun.
- They alleged that with the shrine board, the government will get control of the entire area and donations.
- Some argue that Hindu temples should be governed by the Hindu society and the governments should not have any control over management of temples, its properties and religious systems.

What does the government say?

- **Constitutional Validity of Act upheld by Judiciary:** The [Uttarakhand High Court in July 2020 had dismissed a PIL](#) challenging the constitutional validity of 2019 Act. The Court held that Char Dham and associated temples are public temples whose secular functions can be regulated by a law made by the competent legislature.
- **Responsibility & Right of Government:** When the government looks after the security and other arrangements for convenience of pilgrims, the government should have control over utilization of funds and planned development of the area. Devasthanam board gives such power to the government
- **Enhances Public Services:** The State government argues that the public is in support of the devasthanam board because they want good services there and the government only provides these services to them
- **Stakeholders Rights Safeguarded:** The government has introduced the clause protecting the rights of teerth-purohits, rawals and pandas. The act is therefore not interfering with the traditions & religious activities but only regulating the secular functions of the Temples

[Launch of Online Grievance Management Portal of NCSC](#)

Part of: GS Prelims and GS –II – Policies and interventions

In news

- Government of India launched the “Online Grievance Management Portal of National Commission for Scheduled Castes (NCSC)”.

Key takeaways

- This NCSC Grievance Management portal would make it easier for Scheduled Castes population to register their complaint from any part of the country.
- The portal is designed in collaboration with the Bhaskaracharya Institute for Space Applications and Geoinformatics (BISAG-N), a Centre of Excellence under the Ministry of Electronics and Information Technology.

Do you know?

- NCSC was set up under Article 338 of the Constitution of India
- **Objective:** To investigate and monitor all issues pertaining to the safeguards provided for the Scheduled Castes under any law for the time being in force or under any order of the Government of India.

[Education and Exams: Formative Assessment](#)

Context: Faced with a massive surge in COVID-19 cases, the Central government cancelled the Central Board of Secondary Education’s (CBSE) Class X examination and postponed the Class XII examination scheduled to be held from May 4.

What are the challenges?

- **Implications on entrance into High Education:** Aligning examinations of various Boards is a practical necessity since admission to higher education courses must be done uniformly and entrance examinations have to be conducted for professional courses.
- **Challenges with Traditional method of assessment:** The challenge now is to take up formative assessments where pen-and-pencil annual examinations cannot be held.

- **Ambiguity with regard to assessment:** Students are left wondering about the nature of formative academic assessment that will be applied to their Class X performance during the year gone by, which was marked by a shift to online classes and TV-based instruction.

What is formative assessment?

- The annual high-stakes public school examination is referred to as a **summative assessment**. It had to be cancelled or deferred this year due to the pandemic.
- Presently, the academic system had to fall back on **continuous evaluation techniques** or other metrics. This is known as formative assessment.
- According to UNESCO, the key aspects of this pattern are use of observation, quizzes, assignments and feedback.

How have schools responded?

- After the latest move by the Centre, prominent CBSE schools say **they will not face disruption** because they conducted periodic **internal examinations**, practicals, as well as “pre-Board” testing for Class X. This will be useful to evaluate students.
- The CBSE introduced a formative assessment system through a **Continuous and Comprehensive Evaluation (CCE) framework in 2009-10**, but abandoned it in favour of a compulsory public examination for Class X, eight years later.
- The decision to reintroduce a public examination for Class X in CBSE was defended by the government as the removal of discrimination against 1.93 crore secondary students of State and other Boards who continued to take an exit examination.

Can all schools assess fairly?

- The question of schools’ capabilities to conduct sound formative assessments has become important because not all have similar facilities.
- While CBSE schools may be more urbanised, the picture for other Boards is mixed.
- The Unified District Information System for Education data show that in 2017-18, there were 1,88,742 rural schools and 83,207 urban schools under all managements.
- Data from the National Sample Survey (NSS) for the same year indicate that **only 4% of rural households and 23% of urban households had a computer**.
- Internet access was restricted to 15% of rural and 42% of urban households.

Way Ahead

- In fact, even the National Policy on Education, 1986, had de-emphasised rote learning and recommended a CCE-like framework.
- The NEP 2020 emphasises (formative) assessment for learning and critiques existing Board examinations as forcing students “to learn a very narrow band of content/material in a single stream”.
- Future reforms would, therefore, have to work on two fronts — **to ensure access to learning** for every student, in classrooms or remotely, and **make formative assessment possible** through a scientifically designed set of metrics.

Connecting the dots

- [Criticism of Board Exams](#)

Infant Toddler and Caregiver-Friendly Neighbourhoods (ITCN) Training and Capacity Building Programme

Part of: GS Prelims and GS – II - Policies and interventions

In news

- The 'Infant Toddler and Caregiver-friendly Neighbourhoods (ITCN) Training and Capacity Building Programme' was launched recently.
- **Launched by:** National Institute of Urban Affairs (NIUA) in partnership with Bernard van Leer Foundation (BvLF).

Key takeaways

- The Programme is designed to help build capacities of city officials and young professionals for developing young children and family-friendly neighbourhoods within cities in India.
- NULP is the platform developed for knowledge dissemination by MoHUA and NIUA.

Important value additions

- The National Institute of Urban Affairs (NIUA), is a premier Institute of Ministry of Housing and Urban Affairs, for research and capacity building for the urban sector in India.
- It was established in 1976.
- The National Urban Learning Platform (NULP) is envisioned as a means of digitally consolidating key skills and knowledge required by urban stakeholders and making these available to all actors on a channel of their choice

MMDR Amendment Bill

Part of: GS Prelims and GS-II -Policies and interventions

In news

- The Mines and Minerals (Development and Regulation) Amendment Bill, 2021 was passed in Lok Sabha to streamline the renewal of the auction process for minerals and coal mining rights.

Key takeaways

- The amendment proposes to allow captive miners of both coal and other minerals to sell up to 50% of their production after meeting the requirements of the end-use plant and on paying additional royalty to the state government.
- Operators are currently only allowed to use coal and minerals extracted from captive mines for their own industrial use.
- This increased flexibility would allow miners to maximise output from captive mines as they would be able to sell output in excess of their own requirements.
- It proposes to fix additional royalty payments to states for the extension of mining leases for central public sector enterprises.
- It proposes to empower the central government to conduct auctions or re-auction processes for the grant of a mining lease if a state government fails to complete the auction process in a specified period.

Maharashtra's Two-Child Norm

Context: A woman officer from the Maharashtra Prison Department was dismissed from service after an inquiry revealed that she violated the Maharashtra Civil Services (Declaration of Small Family) rules because she suppressed the information from the authorities that she has three children.

What is the 'two children' service rule for Maharashtra government employees?

- Maharashtra is one of the few states in the country that have a 'two children' policy for appointment in government jobs or even for the elections of some local government bodies.
- The definition of child under these rules **does not include adopted children**.
- The rules also **empower the state government to give relaxation** in 'just and reasonable' manner and mandates recording such reasons.
- Other states such as Rajasthan, Madhya Pradesh, Andhra Pradesh and Telangana, Gujarat, Odisha, Uttarakhand and Assam have similar kind of children policy for appointment to government services

Analysis of the Provision

- **Leading by example:** These mandatory norms were formulated for Civil servants with an intention to set an example before citizens for following two-child policy for population control.
- **Tool of Population Control:** As a policy it was also meant to discourage people from having more than two children by barring them from the prospects of government service.
- **Penal Provisions to deter violations:** There have been many cases in the past where employees have continued lying about the number of children by using various means. Some people have also been charged with IPC provision for 'criminal breach of trust by public servants
- **Lackadaisical Implementation:** The disqualifications of serving employees under the rules has been done in rare cases. In most instances, cases come to light when someone complains to authorities about an employee having more than two children.

Conclusion

While only a few states in the country have made mandatory rules for government employees and local level elections, the two child norm is something that calls for more informed consensus on the issue and wider implementation.

National Pension System: Government Tweaks & its impact

Context: Given the dominance of informal employment in India, the Employees' Provident Fund Organisation, which is contingent on a formal employer-employee relationship, only covers a fraction of the workforce.

About New Pension Scheme

- Started as the New Pension Scheme for government employees in 2004 under a new regulator called the Pension Fund Regulatory and Development Authority (PFRDA), the National Pension System (NPS) has been open for individuals from all walks of life to participate and build a retirement nest-egg
- The NPS has been gradually growing in size and now manages ₹5.78 lakh crore of savings and **4.24 crore accounts in multiple savings schemes**.

What overhaul is the PFRDA planning?

- **Annuitisation of Savings:** The law regulating the NPS allows members to withdraw just 60% of their accumulated savings at the time of retirement. With the remaining 40%, it is mandatory to buy an annuity product that provides a fixed monthly income to retirees till their demise.
- **Exemption to annuitisation:** Members who accumulate **up to ₹2 lakh** in their NPS account at the time of retirement are exempted from the mandatory annuitisation, and can withdraw the full amount.
- **Proposal for New Exemption Limit:** Recently, PFRDA chairman said this limit will soon be revised to ₹5 lakh.

- Suppose somebody reached ₹2.1 lakh at retirement, he will get an annuity component of ₹84,000 (40% of corpus), which, today, will give an income of ₹400 or ₹450 a month. So, now, PFRDA will allow those with savings up to ₹5 lakh to take the entire corpus out if they choose
- **Additional Fund Managers:** At least three more fund managers are expected to be appointed soon, which will take the total managers to ten.
- While this change shall need Parliament's nod, the expansion of the annuity-free withdrawal limit from ₹2 lakh to ₹5 lakh is being done immediately

What prompted this rethink?

- **Complaints from NPS Subscribers:** Falling interest rates and poor returns offered by annuity products had triggered complaints from some members and experts about the compulsory annuitisation clause.
- **Poor returns:** Since annuities are taxable, deducting the tax and factoring in the inflation means annuities are yielding negative returns. With retail inflation running at about 5%-6% over the past year, the returns on annuities are, in fact, negative, even if one does not factor in the tax.

What is the impact of changes being made?

- To avoid forcing people into such an unattractive investment, the regulator has tweaked its rules so as to allow better returns to its pension subscribers.
- The flexibility of the pension system will enable more people to invest in NPS as it will be considered as safe & risk free return on their savings.
- Appointment of additional fund managers shows that government is serious about expanding the user base of NPS and make it more attractive to them through efficient utilization of funds.

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INTERNATIONAL

World Immunisation and Logistics Summit

Part of: GS Prelims and GS – II – International Relations; Health

In news

- Recently, Union Minister for Health and Family Welfare digitally participated in a panel discussion on vaccine production and distribution across Asia at the “World Immunisation and Logistics Summit”.

Key takeaways

- Initiative by:** HOPE Consortium
- Objective:** To enhance collaboration in the world’s approach to tackle [COVID-19](#) and ensure a healthier future for all.
- Hosted by:** Abu Dhabi
- Acclaimed global healthcare and philanthropic leaders, decision-makers, experts and senior government officials participated to explore a unified global approach to fighting the [COVID-19](#) pandemic.

Important value additions

HOPE Consortium

- Spearheaded by:** Department of Health – Abu Dhabi
- It brings together leading brands to deliver an end-to-end solution to distribute [COVID-19](#) vaccines globally

Joint Comprehensive Plan of Action (JCPOA)

Part of: GS Prelims and GS – II – International Relations

In news

- USA and Iran would begin negotiations through intermediaries to try to get back into an accord limiting Iran’s nuclear programme.

Key takeaways

- The announcement marked the first major progress in efforts to return both countries to the 2015 accord, which bound Iran to restrictions on its nuclear programmes in return for relief from U.S. and international sanctions.
- USA's previous President Donald Trump had pulled the USA out of the accord in 2018 and imposed tougher sanctions on Iran.
- Iran responded by intensifying its enrichment of uranium and building of centrifuges, while maintaining its insistence that its nuclear development was for civilian and not military purposes.
- Iran’s moves increased pressure on major world powers and raised tensions among U.S. allies and strategic partners in West Asia.
- Agreement on the start of indirect talks came after the EU helped broker a virtual meeting of officials from Britain, China, France, Germany, Russia and Iran, which have remained in the [Joint Comprehensive Plan of Action \(JCPOA\) accord](#)

China's Digital Currency

Context: China in February 2021 launched the latest round of pilot trials of its new digital currency, with reported plans of a major roll-out by the end of the year and ahead of the Winter Olympics in Beijing in February 2022.

While several countries have been experimenting with digital currencies, China's recent trials in several cities have placed it ahead of the curve and offered a look into how a central bank-issued digital tender may impact the world of digital payments.

About China's Digital Currency

- Officially titled the Digital Currency Electronic Payment (DCEP), the digital RMB (or Renminbi, China's currency) is, as its name suggests, a digital version of China's currency.
- It can be downloaded and exchanged via an application authorised by the People's Bank of China (PBOC), China's central bank.
- China is among a small group of countries that have begun pilot trials; others include Sweden, South Korea and Thailand.

How is it different from an e-wallet?

- Unlike an e-wallet such as Paytm in India, or Alipay or WeChat Pay in China, the Digital RMB does not involve a third party.
- For users, the experience may broadly feel the same. But from a legal perspective, the digital currency is different. This is **legal tender guaranteed by the central bank**, not a payment guaranteed by a third-party operator.
- There is no third-party transaction, and hence, no transaction fee.
- Unlike e-wallets, the digital currency **does not require Internet connectivity**. The payment is made through Near-field Communication (NFC) technology.
- Also, unlike non-bank payment platforms that require users to link bank accounts, this **can be opened with a personal identification number**, which means "China's unbanked population could potentially benefit".

How widely is it being used in China?

- Following trials launched last year shortly after the COVID-19 pandemic struck, 4 million transactions worth \$300 million had used the Digital RMB, the PBOC said in November.
- In the latest round of trials in February to coincide with the Chinese New Year holiday, Beijing distributed around \$1.5 million of the currency to residents via a lottery, with "virtual red envelopes" worth 200 RMB each (around \$30) sent to each resident.
- Shenzhen and Suzhou were other cities that distributed currency as part of pilot trials, which the Ministry of Commerce said will be expanded in coming months, with a wider roll-out expected before the Winter Olympics.

What are the reasons behind the push?

- **Tame Private dominating Digital Payment Market:** While digital payment platforms have helped to facilitate commerce in China, they have placed much of the country's money into the hands of a few technology companies.
- By 2019, Alibaba (which is behind Alipay) controlled 55.1% of the market for mobile payments in China. Tencent (which owns WeChat Pay) controlled another 38.9%.

- The trials by Chinese authorities coincided with moves by Chinese regulators to tame some of its Internet giants, like Alibaba and Tencent.
- **Financial Stability:** A key objective of China's sovereign digital currency was "to maintain financial stability should 'something happen' to Alipay and WeChat Pay.
- **Counter rise of Cryptocurrencies:** Chinese regulators have also warily viewed the rise of cryptocurrencies. The central bank-issued digital RMB will turn the logic of decentralised cryptocurrencies on its head, without the privacy and anonymity they offer, by giving regulators complete control over transactions.
- **Global motivations:** Beyond China's borders, DCEP could help facilitate the internationalisation of the renminbi.

Connecting the dots

- Blockchain Technology

E9 Partnership meeting

Part of: GS Prelims and GS – II – Education; International Relations

In news

- Minister for Education (India) addressed the consultation meeting of Education Ministers of E9 countries on E9 initiative: Scaling up digital learning to accelerate progress towards [Sustainable Development Goal \(SDG\) 4 – Quality Education](#).

Important value additions

- Spearheaded by the United Nations (UN), the E9 Partnership was first established in 1993.
- **E9 Countries:** Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Nigeria, and Pakistan.
- **Aim:** To advance the SDG 4 agenda by driving rapid change in education systems in three of the 2020 Global Education Meeting priorities: (i) support to teachers; (ii) investment in skills; and (iii) narrowing of the digital divide.

State of World Population report 2021

Part of: GS Prelims and GS – I – Society; GS-II - International Relations

In news

- The [United Nations Population Fund's \(UNFPA\)](#) flagship 'State of World Population Report 2021' titled 'My Body is My Own' was launched.

Key takeaways

- This is the first time a United Nations report has focused on bodily autonomy.
- Bodily autonomy is defined as the power and agency to make choices about your body without the fear of violence or having someone else decide for you.
- Nearly half the women from 57 developing countries do not have the right to make decisions regarding their bodies, including using contraception, seeking healthcare or even on their sexuality.
- In countries where data is available, only 55% of women are fully empowered to make choices over healthcare, contraception and the ability to say yes or no to sex.
- Only 75% of countries legally ensure full and equal access to contraception.
- Some examples of violation of bodily autonomy include, child marriage, female genital mutilation, a lack of contraceptive choices leading to unplanned pregnancy, unwanted sex exchanged for a home and food

- Under its ambit also fall people with disabilities stripped of their rights to self-determination, to be free from violence and to enjoy a safe and satisfying sexual life.
- Women around the world are denied the fundamental right of bodily autonomy with the COVID-19 pandemic further exacerbating this situation.

Middle Powers and Multipolarity

New Cold War

- US vs China: U.S. continues to view China as its principal adversary on the world stage and that it will use the [Quad](#) to challenge China in the Indo-Pacific, possibly as part of a “new Cold War”.
- Realignment of geopolitical theatre: The new Cold War is now being reflected in a new geopolitical binary — the Indo-Pacific versus Eurasia.

Middle Powers

- The final shape of this divide will be determined by four nations, namely Japan, Iran, Turkey and India, which, as “middle powers”, have the capacity to project power regionally, build alliances, and support (or disrupt) the strategies of international powers pursuing their interests in the region.
- Japan and India are deeply entrenched in the Quad and have substantial security ties with the U.S.
- Iran has for long been an outcaste in western eyes and has found strategic comfort with the Sino-Russian alliance.
- Turkey, a NATO member, has found its interests better-served by Russia and China rather than the U.S. and its European allies.
- The four middle powers, whose choice of alignment will impart a political and military binary to world order, are reluctant to make this a reality.
- These nations could find salvation in “strategic autonomy” — defined by flexible partnerships, with freedom to shape alliances to suit specific interests at different times.
- These four middle powers will thus make multipolarity, rather than a new Cold War, the defining characteristic of the emerging global order.

Connecting the dots

- [Russia-India-China](#)
- [China-Russia ties](#)

The Council of The European Union

Part of: GS Prelims and GS – II - International Relations

In news

- The Council of the European Union approved conclusions on a [European Union](#) strategy for cooperation in the Indo-Pacific.
- The strategy shall reinforce its strategic focus to contribute to regional stability at a time of rising challenges and tensions in the region.

- The EU will aim to promote effective rules-based multilateralism, reiterating its support for ASEAN (Association of South East Asian Nations) centrality.

Do you know?

- The Council of the European Union is the third of the seven Institutions of the [European Union \(EU\)](#) as listed in the Treaty on European Union.
- It is one of three legislative bodies and together with the European Parliament serves to amend and approve the proposals of the European Commission, which holds legislative initiative.
- It was founded on 1 July 1967.

[India Should Be a 'Country of Particular Concern': U.S. Panel](#)

Part of: GS Prelims and GS – II - International Relations; Fundamental Rights

In news

- The [U.S. Commission on International Religious Freedom \(USCIRF\)](#), an independent bi-partisan commission, has recommended for the 2nd year in a row that the State Department put India on a list ('Countries of Particular Concern' or CPCs) for the worst violations of religious freedoms in 2020.

Key takeaways

- The USCIRF recommended that the administration impose targeted sanctions on Indian individuals and entities for "severe violations of religious freedom".
- A second recommendation was for the administration to promote inter-faith dialogue and the rights of all communities at bilateral and multilateral forums "such as the ministerial of the Quadrilateral [the Quad]".
- Another recommendation was to raise issues in the U.S.-India bilateral space, such as by hosting hearings, writing letters and constituting Congressional delegations.

Do you know?

- The USCIRF recommendations are non-binding.
- The key concerns of the 2021 report include the Citizenship (Amendment) Act.

[India on U.S.'s Currency Watchlist](#)

Part of: GS Prelims and GS-II International Relations

In news

- The U.S. Treasury Department recently retained [India on a watchlist for currency manipulators](#) submitted to the U.S. Congress, citing higher dollar purchases (close to 5% of the GDP) by RBI.

Key takeaways

- Another trigger for the inclusion on the currency watchlist is a trade surplus of \$20 billion or more.
- India's trade surplus with the U.S. grew by about \$5 billion to \$23 billion in 2020-21 as imports fell more sharply than exports in the COVID-affected year.
- According to India, the RBI had been taking necessary steps to maintain stability in the financial markets and not accumulating forex reserves.
- It is a mandate of the central bank to provide stability in the currency as a result of which central banks buy and sell foreign currency.
- India's overall reserves have been fairly steady at \$500 billion to \$600 billion.

Boao Forum for Asia

Part of: GS Prelims and GS –II - International Relations

In news

- Boao Forum was held recently.

Important value additions

Boao Forum for Asia (BFA)

- **Headquarter:** China
- It is an international organization jointly initiated by 29 member states.
- It holds its annual conference in Boao, Hainan, China on a regular basis.
- **Founding purpose:** To promote economic integration in Asia.
- **Mission:** To pool positive energy for the development of Asia and the world.
- **First conference:** Feb. 26-27, 2001
- It is modelled on the [World Economic Forum held annually in Davos, Switzerland](#).

Data and A New Global Order

Digital Data Revolution – Strategic Implications

- Military and civilian systems are symbiotic due nature and pervasiveness of digital data
- Cybersecurity is national security, and this requires both a new military doctrine and a diplomatic framework.
- Massive amounts of data generated by people & economic activities give a sustained productivity advantage to Asia.
- Data streams are now at the centre of global trade and countries' economic and national power.
- India, thus, has the capacity to negotiate new rules as an equal with the U.S. and China.

China and Digital Sector

- Innovation based on data streams has contributed to China's rise as the second-largest economy and the "near-peer" of the U.S.
- China formed a joint venture with SWIFT for cross-border payments and suggested foundational principles for interoperability between central bank digital currencies at the Bank for International Settlements.

Dynamics

- With Asia at the centre of the world, major powers see value in relationships with India.
- India fits into the U.S. frame to provide leverage. China wants India, also a digital power, to see it as a partner, not a rival.
- India must be prepared to play a key role in moulding rules for the hyper-connected world, facing off both the U.S. and China to realise its potential of becoming the second-largest economy.

Global Minimum Corporate Tax Rate

Context: US has proposed for a global corporate minimum tax rate and is working with G20 countries to agree on a global minimum, which it said could help end a "30-year race to the bottom on corporate tax rates.

WHY A GLOBAL MINIMUM TAX?

- Major economies are aiming to discourage multinational companies **from shifting profits - and tax revenues - to low-tax countries** regardless of where their sales are made.

- Increasingly, income from intangible sources such as drug patents, software and royalties on intellectual property has migrated to these jurisdictions, allowing companies to avoid paying higher taxes in their traditional home countries.

WHERE ARE INTERNATIONAL TAX TALKS?

- The Paris-based OECD has been coordinating tax negotiations among 140 countries for years on two major efforts: setting rules for taxing cross-border digital services and curbing tax base erosion, with a global corporate minimum tax part of the latter.
- The minimum tax is expected to make up the bulk of the \$50 billion-\$80 billion in extra corporate tax that the OECD estimates companies will end up paying globally if deals on both efforts are enacted.

HOW WOULD A GLOBAL MINIMUM TAX WORK?

- The global minimum tax rate would apply to companies' overseas profits. Therefore, if countries agree on a global minimum, governments could still set whatever local corporate tax rate they want.
- But if companies pay lower rates in a particular country, their home governments could "top-up" their taxes to the agreed minimum rate, eliminating the advantage of shifting profits to a tax haven.
- US has said it wants to **deny exemptions** for taxes paid to countries that don't agree to a minimum rate
- The OECD said last month that governments broadly agreed already on the basic design of the minimum tax although the rate remains to be agreed. International tax experts say that is the thorniest issue.
- Other items still to be negotiated include whether industries like investment funds and real estate investment trusts should be covered, when to apply the new rate and ensuring it is compatible with the 2017 U.S. tax reforms aimed at deterring tax-base erosion.

WHAT ABOUT THAT MINIMUM RATE?

- The Biden administration wants to raise the U.S. corporate tax rate to 28%, so it has proposed a global minimum of 21% - double the rate on the current GILTI tax. It also wants the minimum to apply to U.S. companies no matter where the taxable income is earned.
- That proposal is far above the 12.5% minimum tax that had previously been discussed in OECD talks - a level that happens to match Ireland's corporate tax rate.
- The US is eyeing to get \$2.5 trillion in 15 years by raising corporate tax rates from 21% currently to 28%. However, doing so in isolation will put the US at a disadvantage vis-à-vis tax havens. Therefore, it wants everyone to follow its lead.

Not Good for Low Income/Middle Income Countries

- Multinationals are a source of foreign direct investment. These corporations help to generate demand with efficient utilisation of resources and create employment in low-income countries.
- A lower tax rate is a **tool for India to alternatively push economic activity**. If the proposal comes into effect, India may experience a longer economic hangover than other developed nations with less ability to offer mega stimulus packages.
- The policy itself puts a question on globalisation as it will be beneficial only for the US to become a monopoly.

Connecting the dots

- Base Erosion and Profit Sharing (BEPS)

Supply Chain Resilience Initiative (SCRI)

Part of: GS Prelims and GS – II - International Relations

In news

- India, Japan and Australia formally launched the [Supply Chain Resilience Initiative](#) (SCRI) to build resilient supply chains in the Indo-Pacific region as they seek to reduce dependence on China.

Key takeaways

- Aim:** To create a virtuous cycle of enhancing supply chain resilience with a view to eventually attaining strong, sustainable, balanced and inclusive growth in the region.
- Some of the joint measures shall include:** (1) Supporting the enhanced utilisation of digital technology; (2) Trade and investment diversification
- It will also focus on sharing best practices on supply chain resilience, holding investment promotion events, buyer-seller matching events to provide opportunities for stakeholders to explore the possibility of diversification of their supply chains.
- Expansion of the SCRI may be considered based on consensus, if needed, in due course.

Human Rights Watch (HRW)

Part of: GS Prelims and GS-II - International Relations

In news

- Human Rights Watch said that Israel is committing the crime of “apartheid” by seeking to maintain Jewish “domination” over Palestinians and its own Arab population.

Important value additions

Human Rights Watch (HRW)

- It is an international NGO,
- Headquarters: New York City.
- It often works on behalf of refugees, children, migrants, and political prisoners.

Do you know?

- Human Rights Watch in 1997 shared in the Nobel Peace Prize as a founding member of the International Campaign to Ban Landmines and it played a leading role in the 2008 treaty banning cluster munitions.
- It was co-founded by Robert L. Bernstein and Aryeh Neier as a private American NGO in 1978, under the name Helsinki Watch, to monitor the then-Soviet Union's compliance with the Helsinki Accords.



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INDIA AND THE WORLD

17th BIMSTEC Ministerial Meeting

Part of: GS Prelims and GS – II – International Relations

In news

- 17th [BIMSTEC](#) Ministerial Meeting was held virtually.
- India remains committed to further building the momentum of regional cooperation under the [BIMSTEC](#) framework.

Key takeaways

- BIMSTEC Convention on Cooperation in Combating International Terrorism, Transnational Organized Crime and illicit Drug Trafficking has come into force in March 2021.
- These Conventions will provide a robust legal basis to further strengthen our cooperation in this sector.
- BIMSTEC Centre for Weather and Climate, being hosted in India, is fully functional with state of the art facilities to provide Disaster Early Warning.

Important value additions

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)

- It is a regional organization comprising seven Member States lying in the areas of the Bay of Bengal.
- This organization came into being in 1997 through the Bangkok Declaration.
- **Member States:** Bangladesh, Bhutan, India, Nepal, Sri Lanka, Myanmar and Thailand.

India – Seychelles Relations

Part of: GS Prelims and GS – II – International Relations

In news

- [Indian PM and Seychelles President](#) jointly inaugurated several Indian projects in Seychelles.

Key takeaways

- Seychelles is central to India's vision of '[SAGAR](#)' - '[Security and Growth for All in the Region](#)'.
- India has contributed towards the construction of the new Magistrates' Court Building in Seychelles.
- The virtual Summit between the two sides also saw the handing over of 10 High Impact Community Development Projects (HICDPs) implemented by the High Commission of India in collaboration with local bodies, educational and vocational institutions.

Do you know?

- Present President of Seychelles, Wavel Ramkalawan is a Person of Indian origin (PIO) with his roots in Gopalganj, Bihar.

India -Netherlands Virtual Summit

Part of: GS Prelims and GS – II – International Relations

In news

- Indian Prime Minister and Prime Minister of the Netherlands held a Virtual Summit.

Key takeaways

- It was the first high level Summit attended by Netherlands' PM Mark Rutte after the general elections held in March 2021.
- During the Summit, the two leaders exchanged views on further expanding the relationship in trade and economy, water management, agriculture sector, smart cities, science & technology, healthcare and space.
- The two Prime Ministers also agreed on instituting a 'Strategic Partnership on Water' to further deepen the Indo-Dutch cooperation in the water related sector, and upgrading the Joint Working Group on water to Ministerial-level.
- Netherlands' Indo-Pacific Policy was also welcomed.

INS Sarvekshak on a deployment to Mauritius

Part of: GS Prelims and GS – II – International Relations

In news

- INS Sarvekshak, a hydrographic survey ship, is on a deployment to Mauritius for undertaking joint hydrographic surveys along with their Mauritian counterparts.

Key takeaways

- During the deployment, training of Mauritian personnel on advanced hydrographic equipment and practices will also be undertaken.
- The ship commenced the hydrographic survey of 'Deep sea area off Port Louis'.
- INS Sarvekshak, a specialised survey ship is fitted with state-of-the-art survey equipment like Deep Sea Multi-Beam Echo Sounder, Side Scan Sonars and a fully automated digital surveying and processing system.
- In addition, the ship carries an integral Chetak helicopter, which would be extensively deployed during the survey.
- INS Sarvekshak has undertaken various foreign cooperation surveys over the last few years in Mauritius, Seychelles, Tanzania and Kenya.

USA carries out Freedom of Navigation Operation (FONOP) in the Indian EEZ

Part of: GS Prelims and GS – II – International Relations

In news

- India has protested the U.S. decision to conduct a patrol in the Indian Exclusive Economic Zone (EEZ) in the western Indian Ocean.

Key takeaways

- U.S. Navy announced that its ship, USS John Paul Jones, had carried out Freedom of Navigation Operation (FONOP) in the Indian EEZ, adding that its operations had "challenged" what the U.S. called India's "excessive maritime claims".
- The ship asserted navigational rights and freedoms approximately 130 nautical miles west of the Lakshadweep Islands, inside India's exclusive economic zone, without requesting India's prior consent, consistent with international law.
- The Government of India's stated position on the [United Nations Convention on the Law of the Sea \(UNCLOS\)](#) is that the Convention "does not authorise other States to carry out in the EEZ

and on the continental shelf, military exercises or manoeuvres, in particular those involving the use of weapons or explosives, without the consent of the coastal state.

- While India ratified UNCLOS in 1995, the U.S. has failed to do it so far.

E-visa facility for foreigners from 156 countries

Part of: GS Prelims and GS – II – International Relations

In news

- The Union Home Ministry has restored the electronic visa (e-visa) facility for foreigners from 156 countries who intend to visit India for business, conferences and medical reasons, including for medical attendants. E-visa for tourists is yet to be restored

Important value additions

- An e-visa is provided in five categories — tourist, business, conference, medical, and medical attendant.
- Under the arrangement, a foreigner can apply online four days prior to travel.
- After the details are verified, an electronic travel authorisation (ETA) is generated, which has to be presented at the immigration checkpost on arrival
- Entry through e-visas is allowed only at 28 designated international airports and five major seaports in India.
- Though available to people of 171 countries before restrictions were announced in 2020, the facility has been restored only for 156.
- China, the U.K., Canada, Hong Kong, Indonesia, Iran, Malaysia and Saudi Arabia are notable exclusions.
- The relaxation comes in the wake of a deadly [second wave of the COVID-19 pandemic](#).

BIMSTEC

About

- **Bangkok Declaration of 1997:** Established as a grouping of four nations — India, Thailand, Bangladesh and Sri Lanka — through the Bangkok Declaration of 1997 to promote rapid economic development, BIMSTEC was expanded later to include three more countries — Myanmar, Nepal and Bhutan.
- **Alternative to SAARC:** New Delhi chose to treat it as a more practical instrument for regional cooperation over a faltering SAARC.
- The shared goal now is to head towards “a Peaceful, Prosperous and Sustainable Bay of Bengal Region”.

Hurdles

- **Bilateral Issues:** A strong BIMSTEC presupposes cordial and tension-free bilateral relations among all its member-states. This has not been the case, given the trajectory of India-Nepal, India-Sri Lanka, and Bangladesh-Myanmar ties in recent years.
- **Uncertainties over SAARC complicating matters:** Both Kathmandu and Colombo want the SAARC summit revived, even as they cooperate within BIMSTEC, with diluted zeal.

- **China's increasing footprint in subcontinent:** China's decisive intrusion in the South-Southeast Asian space has cast dark shadows about the cohesiveness of the grouping on issues like trade pacts, investments & security.
- **Poor implementation of FTA:** BIMSTEC Free Trade Area Framework Agreement, signed in 2004, are yet to bear fruit. In contrast, much has been achieved in Humanitarian Assistance and Disaster Relief and security, including counterterrorism, cyber security, and coastal security cooperation.

Way Ahead

- **Reinvent:** The grouping needs to reinvent itself, possibly even rename itself as 'The Bay of Bengal Community'.
- **Comprehensive Economic Agreement:** BIMSTEC urgently needs a comprehensive Free Trade Agreement to be a real game changer. Ideally it should cover trade in goods, services and investment; promote regulatory harmonisation; adopt policies that develop regional value chains; and eliminate non-tariff barriers.
- **Political will & Regular Meetings:** It should consider holding regular annual summits. Only then will its leaders convince the region about their strong commitment to the new vision they have for this unique platform linking South Asia and Southeast Asia.

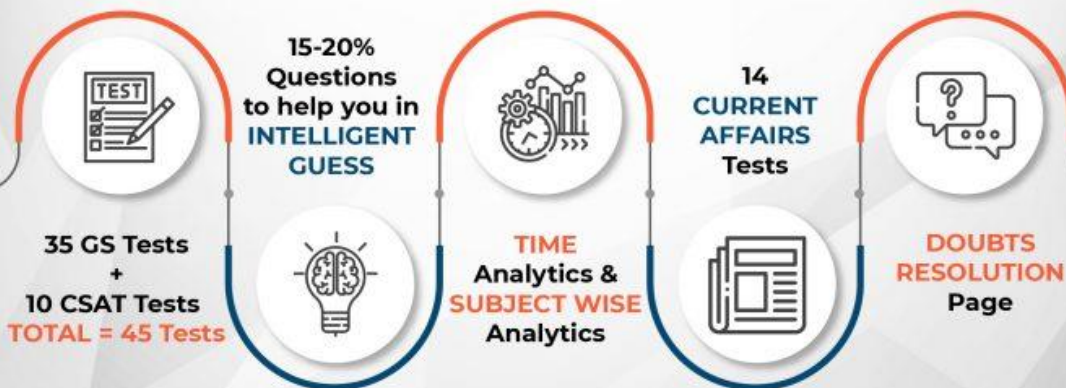
Connecting the dots

- SAARC
- Do you think [BIMSTEC has the real potential](#) to transform the collective future of South Asia? Examine. What are the challenges therein? Discuss.



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ECONOMY

Rates on all small savings instruments reduced

Part of: GS Prelims and GS – III – Economy

In news

- The government has sharply reduced the rates on all small savings instruments for the first quarter of 2021-22.

Key takeaways

- **Rate of return on the Public Provident Fund:** Down from 7.1% to 6.4%
- **Quarterly interest rate paid on one-year term deposits:** Down from 5.5% to 4.4%
- **Rate of return on the Senior Citizen Savings' Scheme:** Down from 7.4% to 6.5%,
- **Sukanya Samriddhi Account Scheme's return:** Down from 7.6% to 6.9%.
- **Interest rate paid on National Savings Certificate:** from 6.8% to 5.9%
- **Kisan Vikas Patra:** Down from 6.9% to 6.2%.
- Kisan Vikas Patra, which used to mature in 124 months, will now mature in 138 months.
- **Savings deposits:** Down from 4% to 3.5%.
- The highest returns at this point is the Sukanya Samriddhi Account Scheme, followed by the Senior Citizens' Savings Schemes and the Public Provident Fund.

What does it mean?

- While the government resets the interest rate on small savings instruments every quarter, this round of rate cuts assumes significance as the government is keen to lower interest rates to make it easier to execute its borrowing plans for the year and increase growth.
- The government plans to borrow ₹12.05 lakh crore in 2021-22, on the back of a record gross borrowing of ₹13.71 lakh crore in 2020-21.
- High small savings rates have been cited by the central bank as a major barrier in ensuring policy rate cuts get transmitted into the banking system.

Special Purpose Acquisition Companies (SPACs)

Part of: GS Prelims and GS – III – Economy

In news

- Earlier this month, the US Securities and Exchange Commission (SEC) issued an investor alert, which was the first warning of sorts for special purpose acquisition companies (SPACs).

Important value additions

- A SPAC, or a blank-cheque company, is an entity specifically set up with the objective of acquiring a firm in a particular sector.
- **Aim:** To raise money in an initial public offering (IPO), and at this point in time, it does not have any operations or revenues.
- Once the money is raised from the public, it is kept in an escrow account, which can be accessed while making the acquisition.
- If the acquisition is not made within two years of the IPO, the SPAC is delisted, and the money is returned to the investors.
- Certain market participants believe that, through a SPAC transaction, a private company can become a publicly-traded company with more certainty as to pricing and control over deal terms as compared to traditional IPOs.

Indian scenario:

- In India, renewable energy producer ReNew Power last month announced an agreement to merge with RMG Acquisition Corp II, a blank-cheque company.
- It became the first involving an Indian company during the latest boom in SPAC deals.

HSN Code

Part of: GS Prelims and GS – III- Economy

News: The ministry of finance has announced that businesses with turnover of Rs 5 crore and above will have to furnish six-digit HSN or tariff code on the invoices issued for supplies of taxable goods and services

About

- HSN stands for Harmonised System of Nomenclature code. It is mandatory for both B2B and B2C tax invoices on the supplies of Goods and Services.
- This was introduced in 1988 by the World Customs Organization (WCO).
- This was introduced for a systematic classification of goods both national and international.
- The HSN code contains 21 sections. These are divided into 99 chapters which are divided into 1244 sections. This system helps in making GST simpler and globally accepted. HSN codes for goods at 6 digits are universally common. Common HSN codes apply to Customs and GST. Codes prescribed in the Customs tariff are used for the GST purposes. In Customs Tariff, HS code is prescribed as heading (4 digits HS), sub-heading (6 digits HS) and tariff items (8 digits).

SAC HSN code

- SAC code stands for Services Accounting.
- This is issued by Central Board of Indirect Taxes and Customs (CBIC) to classify each service under GST.
- Each service has a unique SAC.
- These SAC codes can be used in invoices created by you for the services you delivered. HSN and SAC codes are used to classify goods and services under GST regime.

Government on Inflation Targets

Context: On the last day of the financial year 2020-21, the Finance Ministry announced that the inflation target for the five years between April 2021 and March 2026 will remain unchanged at 4%, with an upper tolerance level of 6% and a lower tolerance level of 2%

Why is this important?

- India had switched to an inflation target-based monetary policy framework in 2015, with the 4% target kicking in from 2016-17.
- In adopting a target for a period of five years, the central bank has the visibility and the time to smoothly alter and adjust its policies in order to attain the targeted inflation levels over the medium term, rather than seek to achieve it every month.

Analysis of Government's targets

- **Worrying Trend:** Volatile food prices and rising oil prices had already driven India's consumer price index (CPI)-based inflation past the 6% tolerance threshold several times in 2020. Retail inflation has remained below 6% since December 2020. However, it accelerated from 4.1% in January 2021 to 5% in February 2021. Core CPI inflation also increased to a 78-month high of 6.1% in February 2021.
- **Pressure of Oil Prices:** With oil prices staying high inflation headwinds remain.
- **Growth Vs Inflation:** There was some speculation that the Central government, whose topmost priority now is to revive growth in the COVID-19 pandemic-battered economy, may ease up on the inflation target by a percentage point or two. This would have given RBI more room to cut interest rates even if inflation was a tad higher.
- **Welcome Step:** That the government has desisted from doing this and left the inflation target untouched has been welcomed by economists who believe that the new framework has worked reasonably well in keeping inflation in check over the last five years. They attribute the few recent instances when the upper target was breached to the exceptional nature of the COVID-19 shock.

What is the RBI's position on this?

- The RBI had, in recent months, sought a continuance of the 4% target with the flexible tolerance limits of 2%.
- The 6% upper limit, it argued, is consistent with global experience in countries that have a large share of food items in their consumer price inflation indices.
- Accepting inflation levels beyond 6% would hurt the country's growth prospects, the central bank had asserted.

How are consumers impacted by this?

- Suppose the inflation target were to be raised to 5% with a 2% tolerance band above and below it, for consumers, that would have meant that the central bank's monetary policy and the government's fiscal stance may not have necessarily reacted to arrest inflation pressures even if retail price rise trends would shoot past 6%.
- For instance, the central bank has been perhaps the only major national institution to have made a pitch for both the Centre and the States to cut the high taxes they levy on fuels that have led to pump prices for petrol crossing ₹100 a litre in some districts.
- Thus, the inflation target makes the central bank a perennial champion for consumers vis-à-vis fiscal policies that, directly or indirectly, drive retail prices up.

Connecting the dots

The [perils of RBI's fixation on inflation](#)

Copyright (Amendment) Rules , 2021

Part of: GS Prelims and GS – II – Economy

In news

- The Government of India has notified Copyright (Amendment) Rules, 2021.

Key takeaways

- In India, the copyright regime is governed by the Copyright Act, 1957 and the Copyright Rules, 2013.
- The Copyright Rules, 2013 were last amended in the year 2016.
- **Objective of the amendments:** To bring the existing rules in parity with other relevant legislations.
- Publication of a copyrights journal has been incorporated eliminating the requirement of publication in the Official Gazette.
- The journal would be available at the website of the Copyright Office.
- In order to encourage accountability and transparency, new provisions have been introduced to deal with the undistributed royalty amounts and use of electronic and traceable payment methods while collection and distribution of royalties.

Do you know?

- The copyright societies will be required to draw up and make public an Annual Transparency Report for each financial year.
- The Copyright Board has been merged with Appellate Board.
- The compliance requirements for registration of software works have been reduced.
- The applicant has now the liberty to file the first 10 and last 10 pages of source code, or the entire source code if less than 20 pages, with no blocked out or redacted portions.
- The time limit for the Central Government to respond to an application for registration as a copyright society is extended to 180 days

Drone use permission granted to Central Mine Planning and Design Institute

Part of: GS Prelims and GS – III – Economy; Sci & tech

In news

- Drone use permission granted to Central Mine Planning and Design Institute for coalfield survey.

Key takeaways

- Ministry of Civil Aviation (MoCA) and Directorate General of Civil Aviation (DGCA) have granted conditional exemption to Central Mine Planning and Design Institute (CMPDI) for surveying in coalfield areas of Coal India Ltd.
 - As per the permission, the drones will be deployed for acquisition of data for monitoring of Mapping and Surveying activity using UAV Based Optical, LiDAR and Thermal Payloads, volumetric measurement, and, inspections in coalfield areas of Coal India Limited.
 - It is valid till 04 April 2022 from the date of issue of the letter or until the full operationalization of Digital Sky Platform (Phase-1), whichever is earlier.
 - Exemption from Ministry of Civil Aviation must be obtained from UAS Rules, 2021 before operation.
-

DGFT 'Trade Facilitation' mobile App

Part of: GS Prelims and GS – III - Economy

In news

- DGFT 'Trade Facilitation' Mobile App was recently launched for promoting ease of doing business and providing quick access to information to importers/exporters.
- Ministry: Ministry of Commerce & Industry Minister

Key takeaways

- Developed by: Tata Consultancy Services (TCS), as per the directions of the Directorate General of Foreign Trade (DGFT).

It provides:

- Real-time trade policy updates, notifications, application status alert, tracking help requests
- Explore item-wise Export-Import policy & statistics, Track IEC Portfolio
- AI-based 24*7 assistance for trade queries
- DGFT services made accessible to all
- Your Trade Dashboard accessible anytime & anywhere

PLI Scheme for Promotion Of Domestic Manufacturing of Critical KSMS/Drug Intermediates and APIs

Part of: GS Prelims and GS-III - Economy

In news

- Approvals have been accorded to 16 applicants under [Production Linked Incentive \(PLI\) Scheme](#) for Promotion of Domestic Manufacturing of critical Key Starting Materials (KSMs)/ Drug Intermediates and [Active Pharmaceutical Ingredients](#) (APIs) in the country.

Key takeaways

- The setting up of these 16 plants will lead to investment of Rs.348.70 crore and employment generation of about 3,042 by the companies.
- The commercial production shall commence from 1st April, 2023 onward.
- The scheme has been launched by the Department of Pharmaceuticals for promotion of domestic manufacturing of KSMs/APIs.
- This will be achieved by setting up greenfield plants with minimum domestic value addition

Do you know?

- The Indian pharmaceutical industry is the 3rd largest in the world by volume.
- However, India is significantly dependent on the import of basic raw materials, viz., Bulk Drugs that are used to produce medicines.
- In some specific bulk drugs, the import dependence is 80 to 100%.

1st meeting of National Startup Advisory Council (NSAC)

Part of: GS Prelims and GS-III - Economy; Start up

In news

- Minister of Commerce & Industry chaired the first meeting of [National Startup Advisory Council \(NSAC\)](#).

Important value additions

National Startup Advisory Council

- **Constituted by:** Department for Promotion of Industry and Internal Trade (DPIIT)
- **Objective:** To advise the Government on measures needed to build a strong ecosystem for nurturing innovation and startups in the country to drive sustainable economic growth and generate large scale employment opportunities.

- The council has representations from various stakeholders such as founders of successful startups, veterans who have grown and scaled companies in India, persons capable of representing interest of investors into startups, and representatives from industry associations.

Value of Dogecoin cryptocurrency increases

Part of: GS Prelims and GS – III - Economy

In news

- Just as the virtual currencies Bitcoin and Ethereum have surged in value this week, so has Dogecoin– a [cryptocurrency](#) started in 2013 as an internet parody.

Key takeaways

- It is Based on the “Doge” meme and started as a “fun” alternative to Bitcoin.
- It's now valued at \$34 billion.
- **Created by:** software engineers Billy Markus and Jackson Palmer
- Unlike Bitcoins, whose maximum possible number is fixed at 21 million (a figure that is estimated to be reached by 2040), Dogecoin numbers do not have an upper limit, and there are already more than 100 billion in existence.

Launch of e-SANTA

Part of: GS Prelims and GS – III – Economy

In news

- e-SANTA was inaugurated recently.
- It is an electronic marketplace providing a platform to connect aqua farmers and the buyers.
- **Launched by:** Ministry of Commerce and Industry

Key takeaways

- It will enable the farmers to get a better price.
- It will enable the exporters to directly purchase quality products from the farmers enhancing traceability.
- The term e-SANTA was coined for the web portal, meaning Electronic Solution for Augmenting NaCSA farmers' Trade in Aquaculture.
- National Centre for Sustainable Aquaculture (NaCSA) is an extension arm of Marine Products Export Development Authority (MPEDA), Govt. of India, Ministry of Commerce & Industry.
- e-SANTA will 'RAISE' the lives & income of farmers by:
 1. Reducing Risk
 2. Awareness of Products & Markets
 3. Increase in Income
 4. Shielding Against Wrong Practice
 5. Ease of Processes

Startup India Seed Fund Scheme (SISFS)

Part of: GS Prelims and GS – III - Start ups

In news

- Startup India Seed Fund Scheme (SISFS) was recently launched.
- **Ministry:** Ministry of Commerce and Industry

Key takeaways

- **Aim:** To provide financial assistance to startups for proof of concept, prototype development, product trials, market entry and commercialization.
- An amount of 945 crore rupees corpus will be divided over the next 4 years for providing seed funding to eligible startups through eligible incubators across India.
- The scheme is expected to support an estimated 3,600 startups through 300 incubators.
- The SISFS will Secure seed funding, Inspire innovation, Support transformative ideas, Facilitate implementation, and Start startup revolution.
- This Scheme will create a robust startup ecosystem, particularly in Tier 2 and Tier 3 towns of India, which are often deprived of adequate funding.

E-Commerce

- With their efficient, quick and reliable logistics network, e-commerce platforms have nudged consumer behaviour patterns from an offline to an online shopping mode.
- The utility was also made evident during the pandemic when the world came to a standstill.
- E-commerce emerged as an enabler in ensuring the availability of essentials to the masses.
- E-commerce is going to be increasingly important in the future of retail shopping in India and the world over.
- The trend will continue to grow with the government's impetus on digital literacy, also supported by the increasing penetration of internet and smartphone users.

Importance of E-Commerce

- Small businesses employing an exceptionally large number of workers need to use e-commerce more and more to augment their sales.
- These businesses compete against cheap imported goods while they face many disadvantages that unfairly dilutes their competitiveness.
- With GST and the drive towards digitisation, more small traders need to be enabled to make the transition and take advantage of the expanding opportunities.

Way Ahead

- Need for a comprehensive FDI policy on trade that takes care of the needs of all the stakeholders: Producers, consumers, service providers in the supply chain and small traders.
- Public policy on e-commerce needs to place an equal premium on the views and interests of all the stakeholders in the ecosystem to strengthen our domestic businesses and create many more jobs and livelihood opportunities in the country to fulfil the dreams of Atmanirbhar Bharat.

Andaman and Nicobar gets Large Area Certification

Part of: GS Prelims and GS – III - Economy

In news

- 14,491 ha area under Car Nicobar and Nancowry group of islands in Union Territory of Andaman & Nicobar Islands becomes the first large contiguous territory to be conferred with organic certification under 'Large Area Certification' scheme.
- Department of Agriculture, Cooperation and Farmers Welfare (DAC&FW) is working to identify Traditional Organic Areas to transform them into certified organic production hubs.

Important value additions

Large Area Certification (LAC) programme

- Department of Agriculture and Farmers Welfare under its flagship scheme of Paramparagat Krishi Vikas Yojna (PKVY) has launched a unique quick certification programme "Large Area Certification" (LAC) to harness these potential areas.
- LAC is a Quick certification process that is cost-effective and farmers do not have to wait for 2-3 years for marketing organic certified products.
- Under LAC, each village in the area is considered as one cluster/group.
- Documentations are simple and maintained village-wise.
- All farmers with their farmland and livestock need to adhere to the standard requirements and on being verified get certified en-mass without the need to go under conversion period.
- Certification is renewed on annual basis through annual verification by a process of peer appraisals

RBI fixes the tenure of top functionaries in a private sector bank

Part of: GS Prelims and GS-III - Banking

In news

- The RBI has fixed the tenure of MD, CEO and whole-time director (WTD) in a private sector bank at 15 years and prescribed the maximum age of 70 years for such functionaries.

Key takeaways

- These directives form part of the instructions issued by the RBI with regard to the chair and meetings of the board, composition of certain committees of the board, age, tenure and remuneration of directors, and appointment of the WTDs.
- The RBI would also come out with a Master Direction on Corporate Governance in banks in due course.
- The post of the MD & CEO or WTD cannot be held by the same incumbent for more than 15 years.
- Thereafter, the individual will be eligible for re-appointment as MD & CEO or WTD in the same bank, if considered necessary and desirable by the board, after a minimum gap of three years, subject to meeting other conditions.
- It added that during this three-year cooling period, the individual shall not be appointed or associated with the bank or its group entities in any capacity, either directly or indirectly.
- Also, the maximum age limit for chairman and non-executive directors has been fixed at 75 years.

Ways and Means Advances scheme of State Governments/ UTs

Part of: GS Prelims and GS – III - Economy

In news

- The RBI decided to continue with the existing interim Ways and Means Advances (WMA) scheme limit of ₹51,560 crore for all States/ UTs shall for six months i.e., up to September 30, given the prevalence of COVID-19.

Key takeaways

- Ways and means advances (WMA) is a mechanism used by RBI under its credit policy to provide to States, banking with it, to help them tide over temporary mismatches in the cash flow of their receipts and payments.
- This is guided under Section 17(5) of RBI Act, 1934.
- Based on the recommendations of the Advisory Committee on WMA to State Governments, 2021 (chaired by Sudhir Shrivastava), the RBI had revised the WMA Scheme of States and Union Territories (UTs)
- The WMA limit arrived at by the Committee based on total expenditure of States/ UTs, works out to be ₹47,010 crore.
- The RBI said it would review the WMA limit thereafter, depending on the course of the pandemic and its impact on the economy.

High-yielding and pest-resistant variety of soybean developed

Part of: GS Prelims and GS-III - Economy

In news

- Indian Scientists have developed a high-yielding and pest-resistant variety of soybean.
- Scientists from MACS- Agharkar Research Institute (ARI), Pune, an autonomous institute of the Department of Science & Technology, in collaboration with Indian Council of Agricultural Research (ICAR) have developed this variety.

Key takeaways

- This newly developed variety is called MACS 1407.
- It is suitable for cultivation in Assam, West Bengal, Jharkhand, Chhattisgarh and North-Eastern states.
- Its seeds will be made available to farmers for sowing during the 2022 Kharif season.
- In 2019, India produced around 90 million tons of soybean.
- Soybean is widely cultivated as oil seeds and a cheap source of protein for animal feed and many packaged meals.
- India is striving to be among the world's major producers of soybean.
- High-yielding, disease resistant varieties of the legume can help achieve this target.

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AGRICULTURE

The System of Rice Intensification (SRI)

About SRI

- The System of Rice Intensification involves cultivating rice with as much organic manure as possible, starting with young seedlings planted singly at wider spacing in a square pattern; and with intermittent irrigation that keeps the soil moist but not inundated, and frequent inter cultivation with weeder that actively aerates the soil.
- SRI is not a standardised, fixed technological method.
- It is rather a set of ideas, a methodology for comprehensively managing and conserving resources by changing the way that land, seeds, water, nutrients, and human labour are used to increase productivity from a small but well-tended number of seeds.

SRI is initially labour intensive

- Needs 50% more man-days for transplanting and weeding.
- Mobilises labour to work for profit.
- It offers an alternative to the resource poor, who put in their family labour.
- Once the right skills are learnt and implemented, the labour costs will be lesser.

Benefits of SRI

- Higher yields - Both grain and straw
- Reduced duration (by 10 days)
- Lesser chemical inputs
- Less water requirement
- Less chaffy grain %
- Grain weight increased without change in grain size
- Higher head rice recovery
- Withstand cyclonic gales
- Cold tolerance
- Soil health improves through biological activity

Disadvantages

- Higher labour costs in the initial years
- Difficulties in acquiring the necessary skills
- Not suitable when no irrigation source available

MoU between Spices Board India and UNDP India

Part of: GS Prelims and GS – III – Economy; Supply chains

In news

- [Spices Board India](#) and UNDP India's Accelerator Lab signed a MoU.
- **Aim:** To build a blockchain based traceability interface for Indian spices to enhance transparency in supply chain and trade.
- It will start with over 3,000 farmers engaged in chilli and turmeric farming in select Districts of Andhra Pradesh.
- [Blockchain](#) is a decentralized process of recording transactions on an open and shared electronic ledger.

- This allows for ease and transparency in data management across a complex network, including, farmers, brokers, distributors, retailers and consumers, thus simplifying the supply chain.

Do you know?

- Spices Board is one of the five Commodity Boards functioning under the Ministry of Commerce & Industry.
- It is an autonomous body.
- It is responsible for the export promotion of the 52 scheduled spices and development of Cardamom (Small & Large).

India's Food Wastage Problem

Context: Food wastage has been a problem for decades, and is worsening with time. It has now acquired environmental dimension where by excess food waste usually ends up in landfills, creating potent greenhouse gases which have dire environmental implications.

Data on Food Wastage in India

- According to the Food Waste Index Report 2021 published by the United Nations Environment Programme, 50 kg of food is thrown away per person every year in Indian homes.
- Nearly 40% of the food produced in India is wasted every year due to fragmented food systems and inefficient supply chains — a figure estimated by FAO. This is the loss that occurs even before the food reaches the consumer.

Pandemic induced lockdown and food wastage

- **Rotting in godowns:** In the wake of the lockdown imposed last year, surplus stocks of grain — pegged at 65 lakh tonnes in the first four months of 2020 — continued to rot in godowns across India
- **Farmers access to market affected during lockdown causing wastage:** Although essential commodities were exempt from movement restrictions, farmers across the country struggled to access markets, resulting in tonnes of food waste. Meanwhile, instinctive hoarding by the middle class disrupted the value chain, further aggravating the situation.

Way Ahead- Steps to minimize food wastage

- Irresponsible consumption patterns by household members means that change needs to **begin in our own homes.**
- **Calculated purchasing** when buying groceries to avoid amassing more products than we actually need
- Minimising **single-use packaging** wherever possible
- **Ordering consciously** from restaurants
- Reconsidering extravagant **buffet spreads at weddings**
- One must be open to incorporating **nose-to-tail cooking** when it comes to meat and seafood so as to avoid wastage arising from meat industry
- One has to start **influencing simple decisions** about own food consumption, and then get people in your immediate community to join.

First-ever Electric Tractor

Part of: GS Prelims and GS – III - Economy; Agriculture

In news

- Central Farm Machinery Training & Testing Institute, Budni (Madhya Pradesh) has tested the first-ever electric Tractor in the Institute.

Key takeaways

- The institute received the application for an electric tractor under Confidential Test initially.
- Accordingly, the institute has tested the tractor & released the Draft Test Report in February, 2021.
- Electric tractor will be more environment friendly than other types of tractors.

ENVIRONMENT/POLLUTION

New Emission Norms for Coal-Fired power Plants

Part of: GS Prelims and GS-III - Pollution

In news

- The Central government has pushed back deadlines for coal-fired power plants to adopt new emission norms by up to three years.
- It has also allowed utilities that miss the new target to continue operating after paying a penalty.

Key takeaways

- India had initially set a 2017 deadline for thermal power plants to install Flue Gas Desulphurization (FGD) units that cut emissions of sulphur dioxides.
- But that was postponed to varying deadlines for different regions, ending in 2022.
- In case of non-compliance, a penalty of up to ₹0.20 will be levied for every unit of electricity produced.

Aristotle & Environmental Ethics

The Nicomachean Ethics is the name normally given to Aristotle's best-known work on ethics

In Nicomachean Ethics, Aristotle distinguished three forms of justice, namely distributive, commutative and corrective.

Distributive justice

- It pertains to how resources should be distributed in terms of principles of equality, equity and merit.
- Climate action of major developed countries is incompatible with the goals of the Paris Agreement.
- It is only a few developing countries, including India, who are taking adequate climate action.
- Therefore, the focus should be on ensuring ambitious climate action by developed countries in the near-term to ensure distributive climate justice in the implementation of the Paris Agreement.

Commutative justice

- It refers to agreements or commitments, and other kinds of social contracts.

- In the climate change discourse, it would refer to the honouring of past commitments in good faith.
- The developed country delivery of finance, technology transfer, and capacity building support to developing countries is not up to the mark.
- They are not even close to meeting their climate finance goal of jointly mobilising at least \$100 billion per year by 2020 to support climate action in developing countries.
- The fulfilment of these past commitments would be a critical precursor to any enhancement of climate ambition by developing countries.

Corrective justice

- It pertains to the righting of wrongs.
- Climate justice demands that every individual who is born on this earth has a right to development and dignified living.
- For this, developed countries need to repay the climate debt by shouldering greater mitigation responsibilities and providing finance, technology and capacity building support to safeguard the interest of the poor and vulnerable people in developing countries.

World Energy Transitions Outlook: 1.5°C Pathway

Part of: GS Prelims and GS – III – Climate change

In news

- The [International Renewable Energy Agency](#) (IRENA) released the World Energy Transitions Outlook report.

Key highlights of the report:

- The report proposes energy transition solutions for the narrow pathway available to contain the rise of temperature to 1.5 degree Celsius.
- It estimated that by 2050, 90% of total electricity needs would be supplied by renewables, followed by 6% from natural gas and the remaining from nuclear.
- The agency has identified 30 innovations for the integration of wind and solar PV in power systems.

Important value additions

The International Renewable Energy Agency (IRENA)

- It is an intergovernmental Organisation.
- **Mandate:** To facilitate cooperation and promote the adoption and sustainable use of renewable energy.
- **Founded in:** 2009
- Its statute entered into force in 2010.
- **Headquarter:** Masdar City, Abu Dhabi.
- IRENA is an official United Nations observer.

As a tri-polar nation, India has a critical role in the Arctic

India's Arctic attention has a brief-but-significant timeline

- 2007: Started with expeditions to the Arctic Ocean

- 2008: Opening of a research station, Himadri, at the international research base at Ny-Alesund in Svalbard, the northernmost island in the world belonging to Norway;
- 2013: India was granted Observer Status to the Arctic Council in 2013 along with other Asian countries such as China, Japan, Singapore and South Korea.

Significance of Three Poles

- The Hindu-Kush Himalaya mountains, referred to as the Third Pole, with maximum snow and ice accumulation outside the two polar regions, is a critical water store for socio-economic development in India and its neighbourhood.
- The physical changes in the Arctic are highly likely to impact the Indian monsoon or “tele-connection” as it is described.
- Likewise, the emissions from the Gangetic plains partly explain the black carbon events witnessed recently in the Arctic.

Rising importance of Arctic region

- Unlike the Antarctic, where the legacy of peace and science prevails, the Arctic has politico-strategic challenges and competitive economic and commercial interests.
- Rich Resource: Arctic region contains 13% of the world’s undiscovered oil resources and 30% of undiscovered natural gas resources. Vast deposits of strategic metals have also been discovered.
- Potential to alter global trade routes: As the ice extent declines due to global warming, navigation in the Arctic Ocean will become significantly wider with the potential to become the world’s largest logistics intersections.

Way Ahead for India

- **Integrate Science & Diplomacy:** India would do well to leverage the tri-polar geographical expression and its scientific engagement (with the Antarctic Treaty System and the Arctic Council) into its diplomacy. This is necessary given India’s own climate vulnerability and its efforts to foster climate-resilient economic development.
- **Careful engagement w.r.t resource rush in Arctic:** The opening up of the Arctic in terms of economic opportunity is in India’s interest, but has to be carefully weighed. Rather than engaging in a resource rush, it would be better to draw home new investments in clean energy from the Arctic states.
- **Prioritise Science over Resource:** The Arctic emphasis, thus, should continue to be one of scientific enterprise with efforts to build India’s knowledge profile. Expanding its scientific footprint will require a state-of-the-art polar research vessel and Indian government should work in this direction.
- **Bilateral Polar Science Cooperation:** Joint projects on polar research should become part of the bilateral arrangement with the Arctic states such as Russia and Canada. There is already abiding polar science cooperation with the Norwegian Polar Institute.

Conclusion

For India, the Arctic has a deep civilisational connect. It enshrines a consciousness of human social evolution as a response to the physical environment as Bal Gangadhar Tilak expressed in his work, The Arctic Home in the Vedas (1903).

Connecting the dots

- Arctic Council and its importance in managing Arctic
- National Action Plan on Climate change

Eight-member National Task Force constituted by NGT

Part of: GS Prelims and GS – III – Climate change

In news

- The [National Green Tribunal](#) (NGT) has constituted an eight-member National Task Force (NTF) to combat air pollution and monitor remedial steps to improve air quality.

Key takeaways

- **Composition:** Senior officials from the Ministry of Environment, Forests and Climate Change, Ministries of Housing and Urban Affairs, Petroleum, Transport, Power, Agriculture, Health and the Central Pollution Control Board.
- The Chief Secretaries of all States and Union Territories may continue to monitor progress in execution of action plans at the State-level with the assistance of monitoring cells in their offices and the Air Quality Monitoring Committee.

Important value additions

The National Green Tribunal (NGT)

- It is a specialized body.
- It was formed under the NGT Act, 2010.
- **Objective:** (1) Effective and expeditious disposal of cases related to the protection and conservation of the environment; (2) To give relief and compensations for any damages caused; (3) To handle various environmental disputes that involve multi-disciplinary issues.
- India is the third country in the world after Australia and New Zealand, for setting up a specialized environmental Tribunal.
- **Places of sittings:** Bhopal, Pune, New Delhi (Principal place), Kolkata, and Chennai.
- **Composition:** Chairperson, Judicial Member and Expert Members.
- There should be a minimum of 10 and a maximum of 20 fulltime Judicial as well as Expert members in the NGT.
- **Term:** 5 years and are not eligible for reappointment.
- The Chairperson is appointed by the Central Government in accordance with the Chief Justice of India.
- A Selection Committee is formed by the central government of India for the appointment of Judicial Members and Expert Members.
- Civil cases are handled under the following seven laws:
 1. Water Act (Prevention and Control of Pollution), 1974
 2. Water Cess Act (Prevention and Control of Pollution), 1977
 3. Forest Act (Conservation), 1980
 4. Air Act (Prevention and Control of Polluti
 5. on), 1981
 6. Environment (Protection) Act, 1986
 7. Public Liability Insurance Act, 1991
 8. Biological Diversity Act, 2002

India-Germany Agreement on 'Cities Combating Plastic Entering the Marine Environment'

Part of: GS Prelims and GS – II - International Relations

In news

- The Ministry of Housing and Urban Affairs (MoHUA), Government of India and German Federal Ministry of Environment signed an agreement on Technical Cooperation titled 'Cities Combating Plastic Entering the Marine Environment'.

Key takeaways

- The project's outcomes are in line with the objectives of [Swachh Bharat Mission-Urban](#) focusing on sustainable solid waste management and India's vision to phase out single use plastic by 2022.
- This project is envisaged on the outlines of the Joint Declaration of Intent regarding cooperation in the field of 'Prevention of Marine Litter' signed between India and Germany in 2019.
- **Aim:** Enhancing practices to prevent plastic entering the marine environment.
- It will be undertaken at the national level, selected states (Uttar Pradesh, Kerala and Andaman & Nicobar Islands) and in the cities of Kanpur, Kochi and Port Blair for a period of 3.5 years.

Foundation stone of the Integrated Solar Dryer and Pyrolysis pilot laid down

Part of: GS Prelims and GS-III - Sci & tech; Waste management

In news

- The foundation stone of the Integrated Solar Dryer and Pyrolysis pilot was laid by the Director, CSIR- Central Leather Research Institute (CLRI), Chennai.

Key takeaways

- The pilot is part of the Indo-German project 'Pyrasol' launched to transform urban organic waste into biochar and energy in smart cities.
- It was awarded to CSIR-CLRI by the Indo-German Science & Technology Centre.
- It will ultimately lead to technology development for the joint processing of Fibrous Organic Waste (FOW) and Sewage Sludge (SS) of Indian smart cities into hygienic and highly valuable biochar associated with energy recovery, carbon sequestration and environmental improvement.

Do you know?

- Indo-German Science & Technology Centre (IGSTC) was established by India and Germany to facilitate Indo-German R&D networking with emphasis on industry participation, applied research and technology development.
- IGSTC through its flagship program '2+2 Projects', catalyses innovation centric R&D projects by synergising the strength of research and academic institutions and public/private industries from India and Germany.

ANIMALS/NATIONAL PARKS IN NEWS

Population of dolphins in Chilika lake doubled this year

Part of: GS Prelims and GS – III – Biodiversity; Environment

In news

- The population of dolphins in Chilika, India's largest brackish water lake, and along the Odisha coast has doubled this year compared with last year.

Key takeaways

- The State Environment Department released the final data on the dolphin census conducted in January and February 2021, indicating a spectacular growth in numbers.
- The endangered Irrawaddy dolphins are mostly found in [Chilika lake](#).
- The highest growth has been noticed in the case of humpback dolphins with a population of 281.
- These humpback dolphins were not part of any riverine systems, so they cannot be identified as residential mammals. They were spotted travelling along the Odisha coast and the number is likely to fluctuate in the next census.

[Meghalay yields India's first bamboo-dwelling bat](#)

Part of: GS Prelims and GS – III - Environment; Biodiversity

In news

- Meghalaya has yielded India's first bamboo-dwelling bat with sticky discs.
- The count of the bats in India has reached now to 130.

Key takeaways

- The disc-footed bat (*Eudiscopus denticulus*) was recorded near the Nongkhylllem Wildlife Sanctuary.
- The extent of adaptation for bamboo habitat in this species is not seen in the others.
- Scientists analysed the very high frequency echolocation calls of the disc-footed bat, which was suitable for orientation in a cluttered environment such as inside bamboo groves.
- It has raised Meghalaya's bat count to 66, the most for any State in India.
- It has also helped add a genus and species to the bat fauna of India.

[Species in news: Rewaconodon Indicus](#)

Part of: GS Prelims and GS – III - Environment; Biodiversity

In news

- The Tiki Formation in Madhya Pradesh, a treasure trove of vertebrate fossils, has now yielded a new species and two genera of cynodonts, small rat-like animals that lived about 220 million years ago.

**Key takeaways**

- Researchers from the IIT Kharagpur, used scanning electron microscopy to study about 10 teeth samples collected from Shahdol District, Madhya Pradesh.
- The results showed that they had found a new species, and they named it Rewaconodon indicus, indicating India, the country it was discovered from.
- The team also identified two new genera from the area.
- The first was named Inditherium floris, after India and the Latin word therium meaning beast.
- As the teeth had a flower-shaped crown, it earned the species name floris.
- The second was named Tikiodon cromptoni, after Tiki Formation and Greek word odon meaning tooth.
- The species name is after paleontologist A.W. Crompton.

Do you know?

- The Tiki Formation is a Late Triassic (Carnian to Norian) geologic formation in Madhya Pradesh.

INFRASTRUCTURE/ENERGY

Upgradation of Kargil Zaskar road

Part of: GS Prelims and GS – III – Infrastructure

In news

- Union Minister for Road Transport & Highways has approved a 780 Crore rupees project for upgradation of Kargil Zaskar road.

Key takeaways

- The 2 lane Kargil Zaskar NH 301 road is sanctioned under Engineering, Procurement and Construction (EPC) mode.
- Zaskar- Kargil road was declared National Highway in 2017.
- This road from Zaskar valley, also connects Suru valley, Sankoo valley of Kargil Ladakh with the Highway.
- It will be a key for economic development of the remote region of Ladakh.

India Energy Dashboards (IED) Version 2.0

Part of: GS Prelims and GS-III - Energy sector

In news

- The India Energy Dashboards Version 2.0 was launched by NITI Aayog.

Key takeaways

- India Energy Dashboards (IED) is an endeavour to provide single-window access to the energy data for the country.
- Energy data published/provided by Central Electricity Authority, Coal Controller's Organisation, and Ministry of Petroleum and Natural Gas is compiled in the Dashboards.
- NITI Aayog launched the Version 1.0 in May 2017.
- The key features of the enhanced version, India Energy Dashboards Version 2.0, are -
 1. The IED provides time series data from FY 2005-06 until FY 2019-20;
 2. Enhanced data download – It enables easy downloading of data into convenient spreadsheet formats in a cleaner, more intuitive way;

3. IED provides data at sub-yearly frequencies as well. This includes monthly data and API linked data from some portals maintained by the government agencies.
4. The monthly data is sourced from the monthly reports that are regularly published for the electricity, petroleum and natural gas sectors.
5. API linked data from Saubhagya, UJALA, PRAAPTI, and Vidyut PRAVAH has been incorporated in the portal.

Pressure Swing Adsorption (PSA) Oxygen Plants

Part of: GS Prelims and GS-II -Policies and interventions & GS – III - Sci & tech

In news

- The Health Ministry said that 162 Pressure Swing Adsorption, PSA oxygen plants have been sanctioned by Government of India for installation in public health facilities in all States and these will augment medical oxygen capacity by over 154 Metric Tonnes.

Important value additions

- Pressure swing adsorption (PSA) is a technology used to separate some gas species from a mixture of gases under pressure according to the species' molecular characteristics and affinity for an adsorbent material.
- It operates at near-ambient temperatures and differs significantly from cryogenic distillation techniques of gas separation.
- Specific adsorbent materials (e.g., zeolites, activated carbon, molecular sieves, etc.) are used as a trap, preferentially adsorbing the target gas species at high pressure.
- The process then swings to low pressure to desorb the adsorbed material.

Low-carbon future through sector-led change

Context: In the build-up to the 'Leaders' Climate Summit' organised by the United States this week (April 22-23), there has been a flurry of articles about whether India should announce a 'net-zero' emissions target, and by when

What is the dilemma faced by India?

- Taking only modest steps until richer countries do more is not viable in the context of a global climate crisis.
- Yet, announcing an Indian 2050 net-zero commitment risks taking on a much heavier burden of decarbonisation than many wealthier countries, and could seriously compromise India's development needs

What should be the strategy to overcome the above dilemma?

- We should focus on concrete, **near-term sectoral transformations** through aggressive adoption of technologies that are within our reach, and an earnest effort to avoid high carbon lock-ins.
- This is best accomplished by focusing on **sectoral low-carbon development pathways** that combine competitiveness, job-creation, distributional justice and low pollution in key areas where India is already changing rapidly
- This approach is directionally consistent with India moving towards net-zero, which should be our long-term objective.
- Over time, India can and should get more specific about future economy-wide net-zero targets and date

- We will take the example of Electricity Sector to understand the above path. A similar approach should be adopted for other sectors.

Electricity Sector

1. Decarbonise Power Sector

- To achieve net-zero emissions, a key piece of the puzzle is to decarbonise the electricity sector, which is the single largest source (about 40%) of India's greenhouse gas emissions.
- So far, our efforts in the electricity sector have focused on expanding renewable electricity capacity, however one need to go beyond expanding renewables to limiting the expansion of coal-based electricity capacity.

2. Ceiling for Coal Sector

- A first, bold, step would be to pledge that India will not grow its coal-fired power capacity beyond what is already announced, and reach peak coal electricity capacity by 2030, while striving to make coal-based generation cleaner and more efficient
- Such a pledge would give full scope for development of renewable energy and storage, and send a strong signal to investors.
- India will need to work hard to become a leader in technologies of the future such as electricity storage, smart grids, and technologies that enable the electrification of other sectors such as transportation.

3. Multi-stakeholder Just Transition Commission

- The next necessary step is to create a multi-stakeholder Just Transition Commission representing all levels of government and the affected communities to ensure decent livelihood opportunities beyond coal in India's coal belt.
- This is necessary because the transition costs of a brighter low-carbon future should not fall on the backs of India's poor.

4. Improve energy services

- Air conditioners, fans and refrigerators together consume about 60% of the electricity in households.
- Today, the average fan sold in the market consumes more than twice what an efficient fan does, and an average refrigerator about 35% more.
- India could set aggressive targets of, say, 80% of air conditioner sales, and 50% of fan and refrigerator sales in 2030, being in the most efficient bracket.
- In addition to reducing green house gas emissions, this would have the benefit of lowering consumer electricity bills.

Conclusion

Such a sector-by-sector approach empowers India to insist that developed countries complement their distant net-zero targets by enacting concrete near-term measures that are less reliant on unsure offsets.

Draft Standards for Road-Trains

Part of: GS Prelims and GS-III Infrastructure

In news

- Ministry of Road Transport & Highways has published Draft Standards for Road-Trains.

Key takeaways

- To revolutionize the transport of goods and reduce the overall logistic costs, the Automotive Industry Standards Committee has amended its AIS-113 Standard to include the safety requirements of Road-Trains.
- The standards have been prepared after examining European benchmarks, keeping in mind Indian operating conditions.

Important value additions

- Road-Train is a motor vehicle wherein the traction is provided by the puller, which is connected to a serial combination of trailers or semi- trailers.
- These shall ply on select stretches to reduce congestion, save fuel and reduce noise & air-pollution.
- The Automotive Industry Standards Committee has representatives from the relevant Ministries, Testing Agencies, Industry stakeholders, BIS etc.

SCIENCE AND TECHNOLOGY

Baikal-GVD: Underwater neutrino telescope

Part of: GS Prelims and GS-III - Sci and Tech

In news

- Russian scientists launched one of the world's biggest underwater neutrino telescopes called the Baikal-GVD (Gigaton Volume Detector) in the waters of Lake Baikal.
- Lake Baikal is the world's deepest lake situated in Siberia.



Key takeaways

- **Mission:** To study in detail the fundamental particles called neutrinos and to possibly determine their sources.

- It is one of the three largest neutrino detectors in the world along with the IceCube at the South Pole and ANTARES in the Mediterranean Sea.

Important value additions

Lake Baikal

- Lake Baikal is a rift lake located in southern Siberia, Russia.
- It is the largest freshwater lake by volume in the world, containing 22 to 23% of the world's fresh surface water.
- It is the seventh-largest lake in the world by surface area.
- **Maximum depth:** 1,642 m (5,387 ft)
- It is the world's oldest (25–30 million years) and deepest lake.
- It has a long, crescent shape.
- The region to the east of Lake Baikal is referred to as Transbaikalia or as the Trans baikal.
- The loosely defined region around the lake itself is sometimes known as Baikalia.
- UNESCO declared Lake Baikal a World Heritage Site in 1996.

National Super Computing Mission (NSM)

Part of: GS Prelims and GS-III - Sci & tech

In news

- India is fast emerging a leader in high power computing with the [National Super Computing Mission \(NSM\)](#).

Important value additions

- The [NSM](#) was launched to enhance the research capacities and capabilities in India by connecting them to form a Supercomputing grid, with National Knowledge Network (NKN) as the backbone.
- **Guided by:** Department of Science and Technology (DST) and the Ministry of Electronics and Information Technology (MeitY)
- **Implemented by:** Centre for Development of Advanced Computing (C-DAC), Pune, and the Indian Institute of Science (IISc), Bengaluru.
- Completion of Phase II of NSM in September 2021 will take the country's computing power to 16 Petaflops (PF).

Do you know?

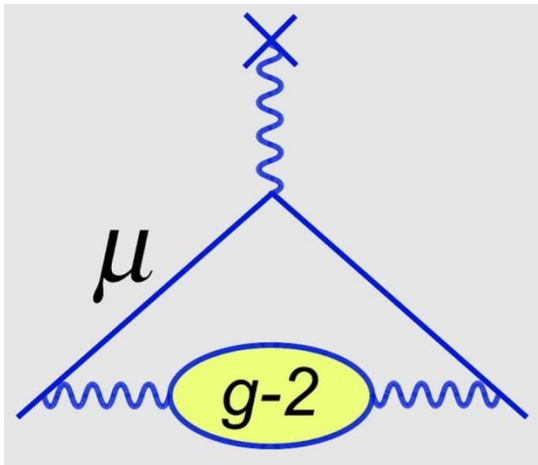
- PARAM Shivay, the first supercomputer assembled indigenously, was installed in IIT (BHU), followed by PARAM Shakti, PARAM Brahma, PARAM Yukti, PARAM Sanganak at IIT-Kharagpur, IISER, Pune, JNCASR, Bengaluru and IIT Kanpur respectively.
- [PARAM Siddhi - AI](#), the high-performance computing-artificial intelligence (HPC-AI) supercomputer, has achieved global ranking of 63 in TOP 500 most powerful supercomputer systems in the world, released on 16th November 2020

Muon g–2: New physics governing the laws of nature

Part of: GS Prelims and GS – III – Sci & tech

In news

- Newly published results of an international experiment hint at the possibility of new physics governing the laws of nature.
- The experiment, called Muon g–2 (g minus two), was conducted at the US Department of Energy's Fermi National Accelerator Laboratory (Fermilab).



Key takeaways

- The experiment studied a subatomic particle called the muon.
- Its results do not match the predictions of the Standard Model, on which all particle physics is based.
- The results instead reconfirm a discrepancy that had been detected in an experiment 20 years ago.
- Concluded in 2001, the Brookhaven experiment came up with results that did not identically match predictions by the Standard Model.
- The Muon g-2 experiment measured this quantity with greater accuracy.

What is the Standard Model?

- The Standard Model is a rigorous theory that predicts the behaviour of the building blocks of the universe.
- It lays out the rules for six types of quarks, six leptons, the [Higgs boson](#), three fundamental forces, and how the subatomic particles behave under the influence of electromagnetic forces.
- The muon is one of the leptons.
- It is similar to the electron, but 200 times larger, and much more unstable, surviving for a fraction of a second.

What quantity was measured?

- g-factor was measured.
- This value is known to be close to 2, so scientists measure the deviation from 2. Hence the name g-2.
- The new experimental results (combined from the Brookhaven and Fermilab results) announced are:
 1. g-factor: 00233184122
 2. anomalous magnetic moment: 00116592061.

[Launch of NanoSniffer](#)

Part of: GS Prelims and GS – III – Security; Sci & tech

In news

- Union Education Minister launched NanoSniffer.
- It is the world's first Microsensor based Explosive Trace Detector (ETD).
- **Developed by:** NanoSniff Technologies, an IIT Bombay incubated startup

- **Marketed by:** Vehant Technologies, a spin-off from a former IIT Delhi incubated startup Kritikal Solutions.

Key takeaways

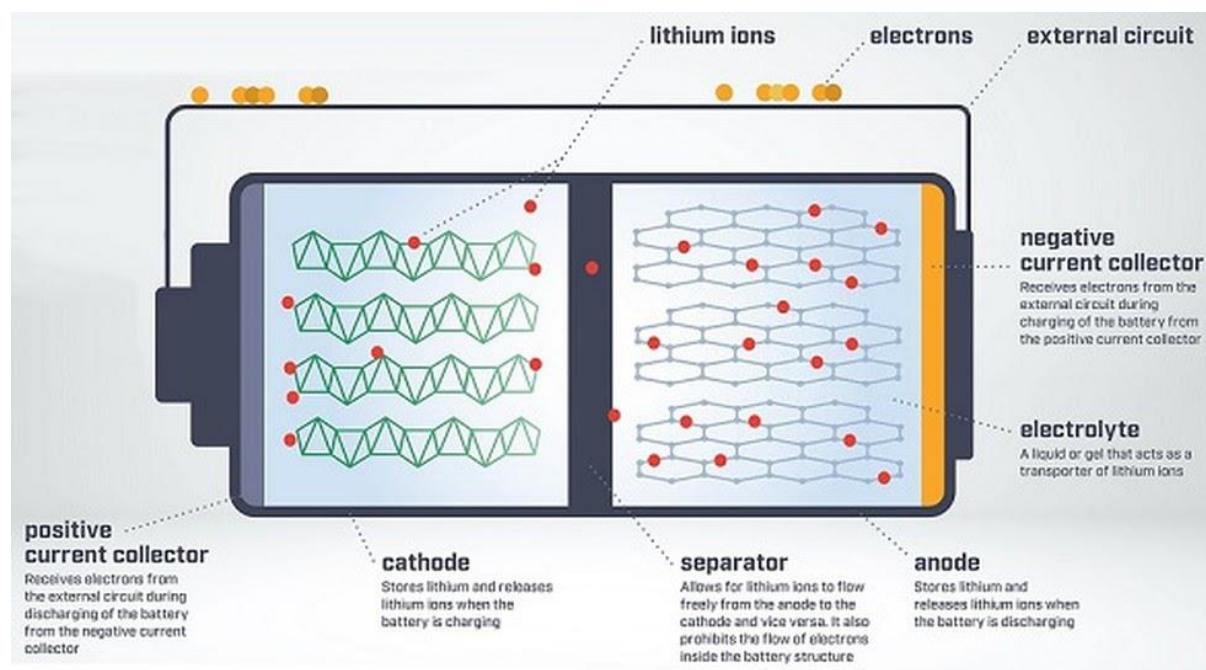
- This home-grown Explosive trace detector device (ETD) - NanoSniffer can detect explosives in less than 10 seconds.
- It also identifies and categorizes explosives into different classes.
- It detects all classes of military, conventional and homemade explosives.
- It gives visible & audible alerts with sunlight-readable color display.
- NanoSniffer is a 100% Made in India product in terms of R&D and manufacturing.
- This affordable device will reduce India's dependence on imported explosive trace detector devices.

Technique to improve the performance of lithium-ion batteries developed

Part of: GS Prelims and GS – III Sci & tech

In news

- Researchers from IIT Guwahati have developed a technique to improve the performance of rechargeable [lithium-ion batteries](#), which power most of the portable devices used today.



Important value additions

- The [2019 Nobel Prize in Chemistry](#) was jointly awarded to Stanley Whittingham, John Goodenough and Akira Yoshino for work that led to the development of lithium-ion batteries.
- These batteries can also be used to store solar and wind power, which means that with their widespread use it may even be possible to live in a fuel free society.

Disadvantages

- Li-ion batteries are susceptible to overheating and are prone to damage at high voltages since they are made with flammable and combustible materials.

- Such batteries also start losing their capacity over time

Alternatives to Li-ion batteries

- In January 2020, researchers from Australia claimed that they developed the world's most efficient lithium-sulfur (Li-S) battery, capable of powering a smartphone for five continuous days
- Li-S batteries are generally considered the successors of Li-ion batteries because of their lower cost of production, energy efficiency and improved safety.
- Their cost of production is lower because sulfur is abundantly available.

Electronic nose to detect hydrogen sulphide developed

Part of: GS Prelims and GS – III – Sci & tech

In news

- An electronic nose with biodegradable polymer and monomer that can detect hydrogen sulphide (H₂S) has been developed.
- **Developed by :** Scientists from the Centre for Nano and Soft Matter Sciences (CeNS), Bangalore, an autonomous institute of the DST

Key takeaways

- They have developed an exceptionally sensitive and selective H₂S Gas sensor developed by impersonating the neuron responsible for identification of airborne molecules or olfactory receptor neuron (ORN).

Do you know?

- Hydrogen sulphide is a poisonous, corrosive, and flammable gas produced from swamps and sewers.
- H₂S is the primary gas produced from the microbial breakdown of organic matter in the absence of oxygen.
- This necessitates easy detection of its emission from sewers and swamps

Three initiatives inaugurated under National Internet Exchange of India (NIXI)

Part of: GS Prelims and GS – III - Information technology

In news

- Three initiatives for National Internet Exchange of India (NIXI) were recently inaugurated.
- **Inaugurated by:** Ministry of Electronics & Information Technology (MeitY)

Key takeaways

- **IPv6 Expert Panel (IP Guru):**
- IP Guru is a group to extend support to all the Indian entities who are finding it technically challenging to migrate and adopt IPv6.
- It's a joint effort of DOT, MeitY & community to promote IPv6.
- The expert panel group comprises members from government and private organizations.
- **NIXI Academy:** NIXI Academy is created to educate technical/non-technical people in India to learn and relearn technologies like IPv6 which are normally not taught in Educational Institutes.
- **NIXI-IP-INDEX:** NIXI has developed an IPv6 index portal for the Internet community. NIXI-IP-INDEX portal will showcase the IPv6 adoption rate in India and across the world.

Important value additions

National Internet Exchange of India (NIXI)

- It is a not-for-profit organization (section 8 of the Companies Act 2013) working since 2003 for spreading the internet infrastructure to the citizens of India through the following activities:
 1. Internet Exchanges through which the internet data is exchanged amongst ISP's, Data Centers and CDNs.
 2. .IN Registry, managing and operation of .IN country code domain and .भारत IDN domain for India.
 3. IRINN, managing and operating Internet protocol (IPv4/IPv6).

Do you know?

- Internet Protocol version 6 is the most recent version of the Internet Protocol, the communications protocol that provides an identification and location system for computers on networks and routes traffic across the Internet

Aditya-L1 Support Centre (ASC)

Part of: GS Prelims and GS – III - Sci & tech; Space

In news

- The Indian programme to study the Sun and the region between the Sun and the Earth from space – Aditya-L1 – is due to be launched next year.

Key takeaways

- It will carry seven payloads which have been developed by various institutions across the country.
- Once the mission is launched, there will be a need for a ground support centre to monitor and coordinate the work on its various payloads.
- This role will be played by the ARIES facility (short for Aryabhata Research Institute for observational Sciences), situated near Nainital.
- The Aditya-L1 Support Centre (ASC) will provide training through regular workshops for the guest users.
- Apart from this, it will provide ready-to-use Python and Java apps for the satellite data and demos and handouts to facilitate the guest users.

Narrow-Line Seyfert 1 (NLS1) Galaxy

Part of: GS Prelims and GS-III - Space; Achievements of Indians in Sci & tech

In news

- Scientists from ARIES, an autonomous institute of the Department of Science & Technology (DST) studied around 25,000 luminous Active galactic nuclei (AGN) from the Sloan Digital Sky Survey (SDSS), a major optical imaging and spectroscopic survey of astronomical objects in operation for the last 20 years.
- It is about 31 billion light-years away.
- The new gamma-ray emitting NLS1 was formed when the Universe was only about 4.7 billion years old as compared to its current age of about 13.8 billion years

Ingenuity performs its first flight

Part of: GS Prelims and GS – III - Space

In news

- NASA announced that Ingenuity had performed its first flight.

Key takeaways

- Ingenuity is the first helicopter to fly on Mars.
- It was carried by NASA's rover called [Perseverance](#) that was launched in July 2020.
- Ingenuity is able to fly using counter-rotating blades that spin at about 2,400 rpm.
- It has a wireless communication system, and is equipped with computers, navigation sensors, and two cameras.

Do you know?

- [Perseverance](#) will help collect samples from the surface from locations where the rover cannot reach.
- It landed at the Jezero Crater of Mars in February.
- It will remain on Mars for about two years and look for finding past signs of life.
- The rover is designed to study signs of ancient life, collect samples that might be sent back to Earth during future missions and test new technology that might benefit future robotic and human missions to the planet.

Bioethics: Human cells grown in monkey embryos

Context: Researchers at the Salk Institute for Biological Studies in the US have for the first time grown human cells in monkey embryos. The results of their work were published in the journal Cell on April 15. While the results might imply progress for this particular field of research called “chimera research”, they have also ignited a debate about how ethical studies of this kind are.

What have the researchers done?

- By integrating human cells into the embryos of macaque monkeys, researchers have created what is called a **chimeric tool**.
- **Chimeras are organisms that are made up of the cells of two distinct species**, in this case humans and monkeys.
- In this study, the monkey embryos containing human stem cells stayed alive and grew outside the body for a period of 19 days.

Has such type of research done before?

- Previously, in a 2017 study researchers **integrated human cells into pig tissues** as they thought that pigs, whose organ size, physiology and anatomy are similar to that of humans, could help them in creating organs that could ultimately be transplanted to humans.
- Therefore, after this experiment, they decided to pick a species that was more closely related to humans, hence macaque monkeys were chosen.

What's the purpose of chimeric research?

- Researchers believe that this ability to grow cells of two different species together offers scientists a powerful tool for research and medicine, advancing current **understanding about early human development**, disease onset and progression and ageing.
- Researchers note how chimeric tools provide a **new platform to study how certain diseases arise**.
 - For instance, a particular gene that is associated with a certain type of cancer could be engineered in a human cell.
 - Researchers could then study the course of disease progression using the engineered cells in a chimeric model, which may be able to tell them more about the disease than results obtained from an animal model.

But what are the ethical concerns about this?

- **Survivability & Infertility of hybrid animals:** In 2014, “Geep”, a hybrid between a goat and a sheep, was born (unintentional breeding) in an Irish farm. Mules are another example of a hybrid animal (intentional breeding) that are the result of mating between a female horse and a male donkey. Generally, different species don’t cross-breed and if they do, their offspring don’t survive for long and are prone to infertility.
- **Acceptance by Society:** While further research into chimeras might lead to progress, which could mean that they could be used as a source of organs for humans, these chimeras would still be a mix of human and non-human cells, a thought that makes many uncomfortable.
- **Treatment of other lifeforms:** some argue that chimera research has the potential to worsen injustice against animals and also point out the fairness in using part-human animals to meet human needs

Connecting the dots

- Genetically Modified Crops

RESPOND Programme of ISRO

Part of: GS Prelims and GS – III - Sci & tech; Space

In news

- IIT, Delhi said that the Indian Space Research Organisation (ISRO) has announced that it will support eight joint research projects mooted by the Space Technology Cell (STC), IIT-Delhi.

Key takeaways

- The ISRO will support the projects under its RESPOND programme with varying duration of 1-3 years.
- STC was set up at IIT, Delhi under an MoU signed between the ISRO and IIT-D in November 2019.
- **Aim of STC:** To strengthen the research collaboration between the two organisations and to carry out focused research projects in the space technology domain with specific deliverables.
- Since then, eight collaborative research projects have been announced.
- Some of the projects include developing a system for drought and flood forecasting and understanding land-atmosphere interactions.
- **Main objectives of the RESPOND Programme:** To establish strong links with premiere academic institutions in India to carry out research and developmental projects which are of relevance to Space and derive useful outputs of such R&D to support ISRO programmes.

Breakthrough Infection

Part of: GS Prelims and GS – II - Health & GS-III - Sci & tech

In news

- The [Indian Council of Medical Research \(ICMR\)](#) has reported that around two to four of 10,000 people given two doses of the [COVID-19 vaccine](#) have tested positive for the disease.
- Contracting [COVID-19](#) after vaccination is known as breakthrough infection.

Important value additions

- Breakthrough infections are infections that occur in people who have been vaccinated.
- In the AstraZeneca trial, for instance, 30 out of 5,807 vaccinated — about 0.5% — were symptomatic and tested positive 14 days after the second shot.

Oxygen extracted from the carbon dioxide in Martian atmosphere

Part of: GS Prelims and GS-III - Sci & tech; Space

In news

- NASA has extracted oxygen from the carbon dioxide in the thin Martian atmosphere.

Key takeaways

- The unprecedented extraction of oxygen on Mars was achieved by a device called Mars Oxygen In-Situ Resource Utilization Experiment (MOXIE)
- It is aboard [Perseverance](#), a six-wheeled science rover.
- It produced about 5 grams of oxygen, equivalent to roughly 10 minutes' worth of breathing for an astronaut.
- The expectation is that it can produce up to 10 grams of O₂ per hour.
- This is the first extraction of a natural resource from the environment of another planet.

Russia's withdrawal from International Space Station

Context: After more than two decades of international cooperation in space research, Russia announced that it would be withdrawing from the International Space Station in 2025.

What does the International Space Station do?

- A space station is essentially a large spacecraft that remains in low-earth orbit for extended periods of time.
- It is like a **large laboratory in space**, and allows astronauts to come aboard and stay for weeks or months to carry out experiments in **microgravity**.
- The ISS has been in space since 1998, and has been known for the exemplary **cooperation between the five participating space agencies** that have been running it: NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe), and CSA (Canada).
- As per NASA, 243 people from 19 countries have so far visited the ISS, and the floating laboratory has hosted more than 3,000 research and educational investigations in various disciplines, including biology, human physiology, and physical, material and space science.

The recent US-Russia space rivalry

- Russia has been a crucial player in making the ISS a success, with other space agencies relying on advanced Russian modular space station construction technology to build the space station in the initial years.
- Russia was also indispensable because of its Soyuz passenger vehicle, which served as the only way for transporting astronauts to the ISS ever since the US retired its Space Shuttle Program in 2011
- This reliance on Russia ended last year, however, when the US started to use the [SpaceX system developed by Elon Musk](#).
- This was a major blow for Roscosmos, as this meant an end to the funding it received from NASA for carrying astronauts to the space station. Between 2011 and 2019, NASA had spent \$3.9 billion on the Soyuz flights.
- Next year, the US is also expected to have another domestic option apart from SpaceX, as Boeing's delayed Starliner capsule is expected to become operational.
- Last year, Russia rejected a US offer to be a part of the **Artemis program** (NASA's program to return astronauts to the lunar surface), but in March 2021 signed an agreement with China to jointly develop a lunar base.

Growing US-Russia Tensions

- The development also comes at a time when relations between the West and Russia have been going from bad to worse.
- The US has blamed the Kremlin for carrying out the “SolarWinds” hack and interfering in the 2020 election.
- Recently, Russia received flak from the NATO alliance after it was accused by the Czech Republic of being involved in a 2014 explosion at an arms depot.
- Last year, the US accused Russia of carrying out a weapons test after a projectile was said to have been fired from a Russian satellite. Russia, in return, blamed the US for treating space as a “military theatre”.

So, what does Russia plan to do now?

- Russia now plans to build and manage its own space station, which it aims to launch into orbit by 2030. Its space module is being assembled by the Energia corporation, and is set to cost at least \$5 billion.
- The station will reportedly orbit the Earth at a higher latitude, enabling it to better observe the polar regions, especially since **Russia plans to develop the Arctic sea route as the ice melts.**
- Building a new station would also help Russia tide over challenges that its cosmonauts currently face on the ageing ISS, such as conducting experiments and adapting the latest technology to a hardware architecture that is over two decades old.
- Russia would manage the space station itself, but has left the door open for other countries to join.

Connecting the dots

- NAVIC
- [Space exploration in the era of Privatisation](#)

China launches the core module of its space station

Part of: GS Prelims and GS – II - International Relations & GS-III - Sci & tech

In news

- China launched the core module of its space station, starting a series of key launch missions that aim to complete the construction of the station by the end of next year

Key takeaways

- The Long March-5B Y2 rocket, carrying the Tianhe module, blasted off from the Wenchang Spacecraft Launch Site on the coast of the southern island province of Hainan.
- The Tianhe module will act as the management and control hub of the space station Tiangong, (meaning Heavenly Palace), with a node that could dock with up to three spacecraft at a time for short stays, or two for long
- It has a designed lifespan of 10 years, but experts believe it could last more than 15 years with appropriate maintenance and repairs.

Do you know?

- The Chinese space station is expected to be a competitor to the aging International Space Station (ISS) which is a modular space station in low Earth orbit.
- ISS is a multinational collaborative project involving five participating space agencies which included NASA, (US), Roscomos (Russia), JAXA (Japan), ESA (Europe), and CSA (Canada).

DISASTER MANAGEMENT

Forest Fires

Context: April-May is the season when forest fires take place in various parts of the country. Since the start of 2021, there has been a series of forest fires in Himachal Pradesh, Nagaland-Manipur border, Odisha, Madhya Pradesh, and Gujarat, including in wildlife sanctuaries

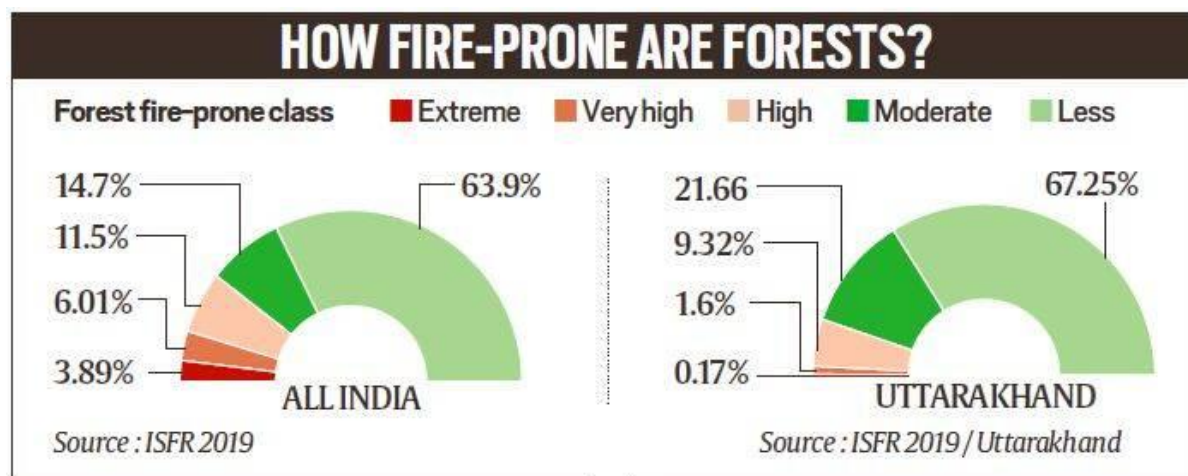


Image Source: [Indian Express](#)

How prone to fire are India's forests?

- As of 2019, about 21.67% (7,12,249 sq km) of the country's geographical area is identified as forest, according to the India State of Forest Report 2019 (ISFR) released by the Forest Survey of India. Tree cover makes up another 2.89% (95, 027 sq km).
- Based on previous fire incidents and recorded events, forests of the Northeast and central India regions are the most vulnerable areas to forest fires
- Forests in Assam, Mizoram and Tripura have been identified as 'extremely prone' to forest fire.
- States with large forest areas under the 'very highly prone' category include Andhra Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Maharashtra, Bihar and Uttar Pradesh.
- Uttarakhand and Himachal Pradesh are the two states that witness the most frequent forest fires annually. In Uttarkhand, 24,303 sq km (over 45 per cent of the geographical area) is under forest cover.

What causes forest fires?

- Forest fires can be caused by a number of natural causes, but officials say many major fires in India are triggered mainly by human activities.
- Emerging studies link climate change to rising instances of fires globally, especially the massive fires of the Amazon forests in Brazil and in [Australia](#) in the last two years.
- Fires of longer duration, increasing intensity, higher frequency and highly inflammable nature are all being linked to climate change.
- For example, in Odisha, which saw a major fire recently in [Simlipal forest](#), villagers are known to set dry leaves to fire in order to collect mahua flowers, which go into preparation of a local drink

Why are forest fires difficult to control?

- **Difficult Terrain:** The locality of the forest and access to it pose hurdles in initiating firefighting efforts.
- **Manpower Shortage:** During peak season, shortage of staff is another challenge in dispatching firefighting teams. Timely mobilisation of forest staff, fuel and equipment, depending on the type of fire, through the thick forests remain challenges.
- **Outdated Techniques:** As it is impossible to transport heavy vehicles loaded with water into the thick forests, a majority of fire dousing is initiated manually, using blowers and similar devices. But there have been incidents when forest fires were brought under control using helicopter services.
- **Weather Factors:** Wind speed and direction play a critical role in bringing a forest fire under control. The fire often spreads in the direction of the winds and towards higher elevations

What factors make forest fires a concern?

- **Forest's role in mitigation and adaptation to climate change:** They act as a sink, reservoir and source of carbon. A healthy forest stores and sequesters more carbon than any other terrestrial ecosystem.
- **Endangers Livelihood of people:** In India, with 1.70 lakh villages in close proximity to forests (Census 2011), the livelihood of several crores of people is dependent on fuelwood, bamboo, fodder, and small timber.
- **Impacts regeneration capacity of Ecosystem:** Forest fires can have multiple adverse effects on the forest cover, soil, tree growth, vegetation, and the overall flora and fauna. Fires render several hectares of forest useless and leave behind ash, making it unfit for any vegetation growth.
- **Shrinkage of Forests:** Heat generated during the fire destroys animal habitats. Soil quality decreases with the alteration in their compositions. Soil moisture and fertility, too, is affected. Thus forests can shrink in size. The trees that survive fire often remain stunted and growth is severely affected.

What efforts are being taken to protect forests from fire?

- Since 2004, the FSI developed the Forest Fire Alert System to monitor forest fires in real time. In its advanced version launched in January 2019, the system now uses satellite information gathered from NASA and ISRO.
- Real-time fire information from identified fire hotspots is gathered using MODIS sensors (1km by 1km grid) and electronically transmitted to FSI.
- This information is then relayed via email at state, district, circle, division, range, beat levels. Users of this system in the locality are issued SMS alerts. The FSI system in January 2019 had over 66,000 users.

Connecting the dots

- [Simlipal Forest Fires](#)

ROPAX Jetty Project, Odisha

Part of: GS Prelims and GS – III - Infrastructure

In news

- Rs. 110 crore ROPAX Jetty Project shall be constructed on river Dhamra in Odisha.

Key takeaways

- Ministry of Ports, Shipping & Waterways (MoPSW) has accorded administrative approval for developing all-weather ROPAX (Roll-on/Roll-off Passenger) Jetty and allied Infrastructure.
- It shall connect Kaninali in Bhadrak district & Talachua in Kendrapara district, Odisha under the [Sagarmala initiative](#).
- This project will reduce travel time for passengers from 6 hours by road to 1 hour by waterway.
- Kaninali in Bhadrak district and Talachua in Kendrapada district, are located on the northern and southern banks of River Dhamra respectively.

DEFENCE/INTERNAL SECURITY/SECURITY

Chaff technology by DRDO

Part of: GS Prelims and GS-III - Defence and security

In news

- Defence Research and Development Organisation (DRDO) has developed an Advanced Chaff Technology to safeguard the naval ships against enemy missile attack.

Key takeaways

- Defence Laboratory Jodhpur (DLJ), a DRDO laboratory, has indigenously developed three variants of this technology - Short Range Chaff Rocket (SRCR), Medium Range Chaff Rocket (MRCR) and Long Range Chaff Rocket (LRCR) meeting Indian Navy's requirements.
- Chaff is a passive expendable electronic countermeasure technology used worldwide to protect naval ships from enemy's radar and Radio Frequency (RF) missile seekers.
- The importance of this development lies in the fact that very less quantity of chaff material deployed in the air acts as decoy to deflect enemy's missiles for safety of the ships.

SC's judgement on Terror Financing

Part of: GS Prelims and GS – II – Judiciary & GS-III - Terrorism

In news

- Extortion money paid to a terrorist organisation to protect one's business is not terror funding, the Supreme Court has said in a judgment.

Key takeaways

- With this, Supreme Court granted bail to a Jharkhand coal transporter who had paid huge amounts to the Titiya Prastuti Committee (TPC), a breakaway faction of the CPI (Maoist).
- The [Financial Action Task Force on Money Laundering \(FATF\)](#) has made recommendations to members relating to counter terrorism financing (CTF).
- It has created a Blacklist and Greylist of countries that have not taken adequate CTF action.
- FATF is an intergovernmental organisation founded in 1989 on the initiative of the G7 to develop policies to combat money laundering.
- In 2001, its mandate was expanded to include terrorism financing.

Maiden trial of Python-5 conducted

Part of: GS Prelims and GS – III - Defence and security

In news

- DRDO conducts maiden trial of Python-5 Air to Air Missile.

Key takeaways

- Tejas, India's indigenous Light Combat Aircraft, added the 5th generation Python-5 Air-to-Air Missile (AAM) in its air-to-air weapons capability
- Trials were also aimed to validate enhanced capability of Derby Beyond Visual Range (BVR) AAM on Tejas.
- The trials also validated its performance under extremely challenging scenarios.
- The trials met all their planned objectives.

MISCELLANEOUS

In News	Description
1. Parosmia	<ul style="list-style-type: none"> • Some people may experience parosmia as a symptom of COVID-19. • Affected individuals experience “distortions of the sense of smell”. • A person with parosmia can detect certain odours, but they might experience the smell of certain things as different and often unpleasant. • For instance, to someone with parosmia, coffee may smell like burnt toast. • Parosmia is a temporary condition and is not harmful. • Some common triggers: Roasted, toasted or grilled foods, coffee, onions, chocolate, garlic and eggs. • It is likely that parosmia manifests itself due to the damage caused to the olfactory neurons when “the delicate and complex structure in the nose is attacked by a virus.”
2. Jordan	<ul style="list-style-type: none"> • Prince Hamzah bin Al Hussein, the former crown prince and half-brother of ruling monarch Abdullah, has reportedly been placed under house arrest as part of a crackdown on critics. • Jordan is an Arab country in the Levant region of Western Asia, on the East Bank of the Jordan River. • It is bordered by Saudi Arabia, Iraq, Syria, Israel and Palestine (West Bank). • The Dead Sea is located along its western borders • Capital city: Amman. • It is a constitutional monarchy, but the king holds wide executive and

	legislative powers.
3. Chenab Bridge	<ul style="list-style-type: none"> • Arch closure of the Chenab Bridge was completed recently. • Chenab bridge is the World's highest Railway Bridge • Location: Jammu & Kashmir • Developed by: Indian Railways. • The bridge is part of an ambitious 272-km rail link project being constructed by the Northern Railway at an estimated cost of ₹28,000 crore. • The bridge will be able to withstand earthquakes with a magnitude of up to eight and high-intensity blasts. • The bridge will have a design speed of around 100 km/hr with a lifespan of 120 years.
4. B.1.617	<ul style="list-style-type: none"> • The “double mutant” virus that scientists had flagged last month as having a bearing on the spread of the pandemic in India, has a formal scientific classification: B.1.617. • So far, only three global "Variants Of Concerns" have been identified: the U.K. variant, the South African and the Brazilian (P.1) lineage.
5. Whitsun Reef	<ul style="list-style-type: none"> • Whitsun Reef, also known as Whitson Reef, Whitsum Reef, and Julian Felipe Reef • It is a reef at the northeast extreme limit of the Union Banks in the Spratly Islands of the West Philippine Sea. • It is the largest reef of the Union Banks.
6. 2001 Mars Odyssey	<ul style="list-style-type: none"> • NASA's Mars Odyssey spacecraft marks 20 years of mapping it. • It is the oldest spacecraft still working at the Red Planet. • It was sent to map the composition of Mars in 2001. • The feasibility of humans traveling to Mars was also the focus of an instrument aboard Odyssey that measured how much space radiation astronauts would have to contend with • The most complete global maps of Mars were made using Odyssey's infrared camera, called the Thermal Emission Imaging System, or THEMIS.
7. Umngot River	<ul style="list-style-type: none"> • Umngot is considered India's clearest river. • Umngot flows through Dawki, a town in West Jaintia Hills district, Meghalaya. • The river is the natural boundary between Ri Pnar (of Jaintia Hills) and Hima Khyrim (of Khasi Hills). • Dawki Bridge is a suspension bridge over the Umngot River.

8. Seroja (Cyclone)	<ul style="list-style-type: none"> • Tropical cyclone Seroja has ripped across a 1,000km stretch of Western Australia, leaving a trail of damage. • The name Seroja means lotus in Indonesian.
9. Diatom test	<ul style="list-style-type: none"> • Diatoms are photosynthesizing algae which are found in almost every aquatic environment including fresh and marine waters, soils, in fact, almost anywhere moist. • Diagnosis of death by drowning is deemed as a difficult task in forensic pathology. • The test entails findings if there are diatoms in the body being tested. • A body recovered from a water body does not necessarily imply that the death was due to drowning. • If the person is alive when he enters the water, the diatoms will enter the lungs when the person inhales water while drowning. • These diatoms then get carried to various parts of the body, including the brain, kidneys, lungs and bone marrow by blood circulation. • If a person is dead when he is thrown in the water, then there is no circulation and there is no transport of diatom cells to various organs.
10. Gayatri Mantra	<ul style="list-style-type: none"> • The Gāyatrī Mantra is also known as the Sāvitrī Mantra. • It is a highly revered mantra from the Rig Veda, dedicated to Savitr also known as Vedmata. • Maharshi Vishvamitra had created the Gayatri mantra. • The mantra is an important part of the upanayana ceremony for young males in Hinduism, and has long been recited by dvija men as part of their daily rituals. • Modern Hindu reform movements spread the practice of the mantra to include women and all castes and its use is now very widespread. • The Department of Science and Technology (DST) has funded a clinical trial at the AIIMS, Rishikesh, to determine if the chanting of the Gayatri Mantra and performing pranayama can aid the quality of recovery and cure COVID-19 quicker in a subset of patients.
11. Cholistan Desert	<ul style="list-style-type: none"> • The Cholistan Desert, also locally known as Rohi, is a large desert in the southern part of Punjab, Pakistan. • It forms part of the Greater Thar Desert, which extends to Sindh province and Rajasthan. • It is one of two large deserts in Punjab, the other being Thal Desert. • Derawar Fort is located in the Cholistan Desert.
12. INAS 323	<ul style="list-style-type: none"> • Indian Naval Air Squadron (INAS) 323, the first unit of the indigenously built ALH Mk III aircraft, was commissioned into the

	<p>Indian Navy.</p> <ul style="list-style-type: none"> • The squadron will operate three state-of-the-art ALH Mk III. • It is a multirole helicopter with Shakti engine manufactured by Hindustan Aeronautics Limited (HAL). • The Mk III version of the ALH has an all glass cockpit and will be used for Search and Rescue, Special Operations and Coastal Surveillance.
13. My Octopus Teacher	<ul style="list-style-type: none"> • The 85-minute documentary feature, My Octopus Teacher, won the best documentary award at the recent Academy Awards. • It is about the relationship that developed between a human being and a wild octopus. • It is a 2020 Netflix Original documentary film directed by Pippa Ehrlich and James Reed • It documents a year spent by filmmaker Craig Foster forging a relationship with a wild common octopus in a South African kelp forest.
14. Kelp forests	<ul style="list-style-type: none"> • Kelp forests are under water areas with a high density of kelp, which covers a large part of the world's coastlines. • They are recognized as one of the most productive and dynamic ecosystems on Earth. • Smaller areas of anchored kelp are called kelp beds. • Kelp forests occur worldwide throughout temperate and polar coastal oceans. • Kelps are large brown algae seaweeds that make up the order Laminariales.

(TEST YOUR KNOWLEDGE)

Model questions: (Answers are provided at the end)

Q.1 Zabarwan range is situated between:

- a) Pir panjal range and Great Himalayan Range
- b) Zaskar range and Dhauladhar range
- c) Shiwalik Hills and Ladakh range
- d) Pir Panjal range and East Karakoram range

Q.2 HOPE Consortium is an initiative by Abu Dhabi for which of the following?

- a) Deep tech start ups
- b) Ending Israel Palestine conflict
- c) Solution for COVID-19 vaccines
- d) Solving Syrian refugee crisis

Q.3 Which of the following country has for the first time found double mutant coronavirus variant

- a) India
- b) UK
- c) Brazil
- d) South Africa

Q.4 One of the three largest neutrino detectors in the world was recently launched at which of the following ml

- a) Lake Baikal
- b) South Pole
- c) Mediterranean Sea
- d) Dead Sea

Q.5 Where is Lake Baikal situated?

- a) Israel
- b) Russia
- c) Tajikistan
- d) Turkey

Q.6 Which of the following was one of the factors for establishment of Delhi Sultanate in 1192?

- a) Battle of Tarain
- b) Battle of Kili
- c) Battle of Amroha

d) First Battle of Panipat

Q.7 Which of the following is not a member of BIMSTEC?

- a) Bangladesh
- b) Bhutan
- c) India
- d) China

Q.8 Which of the following country is not a part of Joint Comprehensive Plan of Action (JCPOA)?

- a) China
- b) France
- c) USA
- d) Germany

Q.9 Which of the following is the currency of China?

- a) Ringgit
- b) Renminbi
- c) Yen
- d) Dong

Q.10 Consider the following statements regarding digital currency:

1. It is a legal tender guaranteed by the central bank.
2. It involves transaction fee.

Which of the above is or are correct?

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

Q.11 H-1B visa is associated with which of the following type of people?

- a) Student
- b) Migrants travelling permanently to USA
- c) Skilled workers
- d) Temporary workers travelling on behalf of US government

Q.12 Which of the following is listed under Rare diseases List?

- a) Sickle cell anaemia
- b) Hypothyroidism
- c) Diabetes
- d) Blood cancer

Q.13 Jordan is flanked by which of the following river on its western borders?

- a) Mediterranean Sea
- b) Dead sea
- c) Red Sea
- d) Caspian sea

Q.14 Consider the following statements regarding Spices Board of India:

- 1. It comes under Ministry of Finance.
- 2. It is an autonomous body.

Which of the above is or are correct?

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

Q.15 Global gender Gap Report is released by which of the following?

- a) International Monetary Fund
- b) United Nations
- c) World Economic Forum
- d) Amnesty International

Q.16 Consider the following statements regarding Central Vigilance Commission

- 1. It is a statutory body
- 2. It consists of a chairperson and three Vigilance Commissioners

Which of the above is or are correct?

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

Q.17 Consider the following statements regarding Consumer Protection Act 2019:

- 1. The act establishes central Consumer Protection authority
- 2. Every e-commerce entity is required to provide information relating to return, refund, exchange, warranty, etc. for enabling the consumer to make an informed decision

Which of the above is or are correct?

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

Q.18 Consider the following statements regarding Integrated Health Information Platform (IHIP):

- 1. It shall ensure near-real-time data in digital mode.
- 2. It is also the world's biggest online disease surveillance platform.

Which of the above is or are correct?

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

Q.19 What is the meaning of Repo Rate?

- a) When a bank is in need of cash it can discount bills of exchange and avail loan facilities from the Reserve Bank of India.
- b) When a bank has excess cash, they buy securities from RBI against cash on the condition that they resell the securities to RBI on a pre fixed day and price
- c) It is the rate at which RBI allows temporary loan facilities to commercial banks against government securities on the condition that the bank will repurchase the securities within a short period.
- d) It is a rate that is offered by banks to their most valued customers or prime customers.

Q.20 Consider the following statements regarding Development Finance institution:

1. The government will give Rs 5 crore as grant to the institution.
2. DFI will be fully government-owned initially and will be brought down to 50% in the next few years

Which of the above is or are correct?

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

Q.21 Where is the Headquarter of International Renewable Energy Agency (IRENA) situated?

- a) India
- b) Japan
- c) Germany
- d) Abu Dhabi

Q.22 Seychelles is an archipelago of 115 islands located in which of the following Ocean?

- a) Indian Ocean
- b) Atlantic Ocean
- c) Pacific Ocean
- d) Arctic Ocean

Q.23 Consider the following statements regarding Muon:

1. It is similar to the electron.
2. It is less stable than an electron

Which of the above is or are correct?

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

Q.24 Consider the following statements regarding Nanosniffer:

1. It also identifies and categorizes explosives into different classes.
2. It detects all classes of military, conventional and homemade explosives.

Which of the above is/are correct?

- e) 1 only

- f) 2 only
- g) Both 1 and 2
- h) Neither 1 nor 2

Q.25 Whitsun Reef is located in which of the following sea?

- a) Bering Sea
- b) Red Sea
- c) Caribbean Sea
- d) Philippine Sea

Q.26 Which of the following is the largest brackish water lake in India?

- a) Dal Lake
- b) Chilika Lake
- c) Sambhar Lake
- d) Vembanad lake

Q.27 Which of the following is the IUCN status of Irrawaddy dolphin?

- a) Endangered
- b) Critically endangered
- c) Least concerned
- d) Vulnerable

Q.28 Which of the following article deals with Fundamental right to freely profess, practise and propagate religion, subject to public order, morality and health?

- a) Article 26
- b) Article 25
- c) Article 27
- d) Article 28

Q.29 SAAMAR (Strategic Action for Alleviation of Malnutrition and Anemia Reduction) campaign has been launched by which of the following state government?

- a) Rajasthan
- b) Madhya Pradesh
- c) Jarkhand
- d) Uttar Pradesh

Q.30 Consider the following statements regarding Umngot river:

1. It is India's clearest river.
2. It is situated in Arunachal Pradesh.

Which of the above is or are correct?

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

Q.31 Which of the following is incorrect regarding Ganges Dolphins?

- a) Ganges River dolphins are classified as 'Endangered' species by the IUCN.
- b) It is a Schedule I animal under the Indian Wildlife (Protection) Act 1972
- c) It has been included in Annexure – I of Convention on International Trade in Endangered Species (CITES).
- d) None of the above

Q.32 Which of the following is incorrect regarding Aluminium-air battery?

- a) Aluminium-air battery-based electric vehicles are expected to offer much greater range of 400 km or more per battery.
- b) The aluminium plate in an aluminium-air battery is converted into aluminium trihydroxide over time and that aluminium can be reclaimed.
- c) Such batteries are also expected to be cheaper than lithium-ion batteries.
- d) They can be recharged like lithium-ion batteries.

Q.33 UN has declared Year 2021 as the year of:

- a) Artificial Intelligence
- b) Small and Medium Industries
- c) Fruits and vegetables
- d) Non-communicable diseases

Q.34 Ahaar Kranti mission aims at which of the following?

- a) Nutritionally balanced diet
- b) Access to all local fruits and vegetables
- c) Clean drinking water
- d) Both (a) and (b)

Q.35 Poshan Gyan, a national digital repository on health and nutrition, was launched by which of the following?

- a) Ministry of health and family welfare
- b) NITI Aayog
- c) Ministry of Electronics and Information technology
- d) Infosys

Q.36 MANAS was launched for which of the following?

- a) To promote COVID-19 vaccination awareness
- b) To promote wellbeing across age groups
- c) To provide assistance to school going children amidst lockdown
- d) To provide mental health assistance to recovered Covid-19 patients

Q.37 Consider the following statements regarding hydrogen sulphide:

1. It is a flammable gas.
2. It is produced from swamps and sewers

Which of the above is or are correct?

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

Q.38 Consider the following statements regarding National Internet Exchange of India (NIXI):

1. It is a not-for-profit organization.
2. It works for spreading the internet infrastructure to the citizens of India.

Which of the above is or are correct?

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

Q.39 State of World Population report 2021 was launched by which of the following?

- a) World Bank

- b) World Economic Forum
- c) United Nations Population Fund (UNFPA)
- d) ASEAN

Q.40 In which of the following categories is e visa provided?

- 1. Tourist
- 2. Business
- 3. Conference

Select the correct code:

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

Q.41 Consider the following statements regarding National Startup Advisory Council:

- 1. The chairman of the Council is a joint secretary, Department for Promotion of industry and Internal Trade.
- 2. The term of the non official members is for a period of 2 years

Which of the above is/are correct?

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

Q.42 Consider the following statements regarding National Green tribunal:

- 1. It is an autonomous body.
- 2. It comprises of chairperson, Judicial Member and Expert Members

Which of the above is/are correct?

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

Q.43 India's first bamboo-dwelling bat with sticky discs was found in which of the following state of India?

- a) Maharashtra
- b) Gujarat
- c) Meghalaya

- d) Sikkim

Q.44 Consider the following statements regarding Heparin-induced thrombocytopenia (HIT):

- 1. In this, Heparin causes blood clots.
- 2. A fall in the platelet count is also caused.

Which of the above is/are correct?

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

Q.45 Tiki formations are found in which of the following state of India?

- a) Madhya Pradesh
- b) Chhattisgarh
- c) Goa
- d) Uttar Pradesh

Q.46 Which of the following is/are type of crypto currency?

- 1. Bitcoin
- 2. Litecoin
- 3. Ethereum
- 4. Dogecoin

Select the correct answer:

- a) 1 and 2 only
- b) 1 only
- c) 2, 3, 4 only
- d) 1, 2, 3 & 4

Q.47 Consider the following statements regarding Cholistan Desert:

- 1. It is located in Pakistan.
- 2. It forms a part of Thar Desert.

Which of the above is/are correct?

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

Q.48 Consider the following statements regarding Startup India Seed Fund Scheme (SISFS):

1. It will create a robust startup ecosystem, particularly in Tier 2 and Tier 3 towns of India.
2. It was launched by Ministry of Electronics and Information Technology.

Which of the above is/are correct?

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

Q.49 Which of the following Sea does not border Germany on its northern side?

- a) Dead Sea
- b) Mediterranean Sea
- c) Baltic sea
- d) Both (a) and (b)

Q.50 Consider the following statements:

1. Ingenuity is the first helicopter to fly on Mars
2. Jezero Crater is located on Jupiter

Which of the above is/are correct?

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

Q.51 Which of the following states border Bangladesh?

1. West Bengal
2. Assam
3. Nagaland
4. Manipur

Select the correct code:

- a) 1 and 2 only
- b) 1 and 3 only
- c) 2 and 3 only
- d) 2 and 4 only

Q.52 World Press Freedom Index is released by which of the following?

- a) Doctors without borders
- b) Amnesty International
- c) World Economic Forum
- d) Reporters without borders

Q.53 Consider the following statements:

1. A part of the coronavirus's spike protein is called the fusion peptide.
2. This compound varies among coronaviruses.

Which of the above is/are correct?

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

Q.54 Consider the following statements regarding RESPOND programme:

1. It is a program by DRDO.
2. To establish strong links with premiere academic institutions in India is one of the objectives of the programme.

Which of the above is/are correct?

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

Q.55 Headquarter of Boao Forum is situated in?

- a) China
- b) Philippines
- c) Vietnam
- d) Japan

Q.56 Which of the following article deals with appointment of ad-hoc judges in High Courts?

- a) Article 26
- b) Article 330
- c) Article 224A
- d) Article 32

Q.57 What was the theme of this year's Earth Day?

- a) Environmental and climate education
- b) Restore Our Earth
- c) End Plastic Pollution
- d) Protect Our Species.

Q.58 Consider the following statements regarding Codex Alimentarius Commission (CAC)

1. It was established by WHO alone.
2. Its objective is to protect the health of consumers and ensure fair practices in the food trade.

Which of the above is/are correct?

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

Q.59 Consider the following statements regarding Codex Committee On Spices And Culinary Herbs (CCSCH):

1. India is the host country.
2. The committee has developed and finalized standards for dried or dehydrated forms of black/white/green pepper, cumin, thyme, and garlic in its last four session

Which of the above is/are correct?

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

Q.60 Which of the following is/are NPCI operated systems?

1. National Automated Clearing House (NACH)
2. Immediate Payment Service (IMPS),
3. Aadhaar enabled Payment System (AePS)
4. Bharat Bill Payment System

Select the correct code

- a) 1 and 3 only
- b) 1 and 2 only
- c) 2 and 4 only
- d) 1, 2, 3 and 4

Q.61 Consider the following statements regarding Ways and means advances (WMA)?

1. It is a credit policy by RBI
2. It is provided to States to help them tide over temporary mismatches in the

cash flow of their receipts and payments.

Which of the above is/are correct?

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

Q.62 Where is Lake Chad located?

- a) Africa
- b) North America
- c) South East Asia
- d) Europe

Q.63 Which of the following is/are Rabi crops?

1. Wheat
2. Barley
3. Mustard
4. Rice

Select the correct code

- a) 1, 2 and 4 only
- b) 2, 3 and 4 only
- c) 1, 2 and 3 only
- d) 1, 2, 3 and 4

Q.64 Consider the following statements regarding liquid oxygen:

1. It is strongly paramagnetic
2. Organic materials burn very slowly in liquid oxygen.

Which of the above is/are correct?

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

Q.65 Exercise varuna is held between India and which of the following country?

- a) France
- b) UK
- c) Russia
- d) USA

Q.66 Which Union Territory became the first large contiguous territory to be conferred with

organic certification under 'Large Area Certification' scheme?

- a) Puducherry
- b) Daman and Diu
- c) Jammu and Kashmir
- d) Andaman and Nicobar Islands

Q.67 Consider the following statements regarding Large Area Certification (LAC) programme:

- 1. It is programme under scheme of Paramparagat Krishi Vikas Yojna (PKVY).
- 2. Under LAC, each village in the area is considered as one cluster/group.

Which of the above is/are correct?

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

Q.68 Which of the following is correct about Breakthrough infection?

- a) It is an infection that occurs in people who have been vaccinated with two doses.
- b) It is an infection that occurs in people who have not been vaccinated.
- c) It is an infection that occurs in people who have been vaccinated once.
- d) It is an infection that occurs in people who have been infected with Covid-19 once.

Q.69 On which Planet was oxygen extracted recently from its atmosphere for the first time?

- a) Jupiter
- b) Neptune
- c) Mars
- d) Saturn

Q.70 Which of the following country is not a part of Supply Chain Resilience Initiative (SCRI)?

- a) India
- b) Japan
- c) Australia

- d) South Africa

Q.71 Consider the following statements regarding Kelp forests:

- 1. They occur worldwide throughout Tropical coastal oceans.
- 2. They are recognized as one of the most productive and dynamic ecosystems on Earth.

Which of the above is/are correct?

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

Q.72 Which of the following Organisation has launched global immunization strategy to save 50 million lives by 2030?

- a) WHO
- b) UNICEF
- c) Gavi
- d) All of the above

Q.73 Consider the following statements regarding newly developed high-yielding and pest-resistant variety of soybean:

- 1. It is suitable for cultivation in Assam, West Bengal, Jharkhand, Chhattisgarh and North-Eastern states.
- 2. Its seeds will be made available to farmers for sowing during the 2022 Kharif season.

Which of the above is/are correct?

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

Q.74 Which of the following countries are part of 'Net Zero Producers Forum'?

- 1. United States
- 2. Canada
- 3. Norway
- 4. Qatar
- 5. China

Select the correct code:

- a) 1, 2 and 3 only
b) 2, 4 and 5 only

- c) 1, 2, 3 and 4 only
d) 4 and 5 only

2021 APRIL MONTH CURRENT AFFAIRS MCQs SOLUTIONS

1 A	20 D	39 C	58 B
2 C	21 D	40 C	59 C
3 A	22 A	41 B	60 D
4 A	23 A	42 B	61 C
5 B	24 C	43 C	62 A
6 A	25 C	44 C	63 C
7 D	26 B	45 A	64 A
8 C	27 A	46 D	65 A
9 B	28 B	47 C	66 D
10 A	29 C	48 A	67 C
11 C	30 A	49 D	68 A
12 A	31 D	50 A	69 C
13 B	32 D	51 A	70 D
14 B	33 C	52 D	71 B
15 C	34 D	53 A	72 D
16 A	35 B	54 B	73 C
17 C	36 B	55 A	74 C
18 C	37 C	56 C	
19 C	38 C	57 B	