MONTHLY

EPIC!

Supplementary reading material for MGP and Current Affairs classes of ForumIAS Academy

AN EXCLUSIVE CURRENT AFFAIRS MAGAZINE FOR

PRELIMS + MAINS

PREPARATION

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The 21ˢᵗ Edition

Dear Forumites,

The 21ˢᵗ Edition of the EPIC Magazine is here! The New Year brings new hopes and we expect that your preparation is in full swing. To further guide and assist you in your exam journey we have launched some new initiatives on our blog. Regular answer writing is one of the most crucial part of the preparation and you can participate in our Mains Marathon Answer Writing initiative to hone your answer writing skills.

This edition of EPIC showcases the analysis of issues related to Marital Rape which is in news due to ongoing hearing in the Delhi High Court. News related to the working of the Office of Governor and Election Commission, Cadre Rules of Civil Servants, need for a Fiscal Council, India's Foreign Trade etc. have been covered among others. The EPIC team has tried to bring you the most relevant content to give you an edge in your Civil Services Examination preparation.

A special shoutout to the aspirants who diligently write to us and provide their valuable feedback. Your opinion is important to us. Topics are regularly included in the subsequent editions of EPIC based on our readers' demands. Keep writing to us at feedback@forumias.academy.

Stay safe and Happy reading!

I was a part of ForumIAS MGP (Mains Guidance Program) and Essay Test Series. The detailed evaluation with remarks helped me immensely in improving my performance over the previous attempt. MGP comprises of sectional tests for each portion of GS papers, this ensured that I didn't leave any part of the Syllabus.

I am grateful to the entire ForumIAS team for their help and timely evaluation and uploading of answer sheets.

Mamta Yadav
AIR - 05, CSE-2020

FORUM IAS has been my friend, philosopher and guide during my tedious UPSC journey.
I joined the Mains Guidance Programme (MGP) and current affairs (online) classes.
Presence of mentors like Ayush sir and Dipin sir acts as a bonus. I am truly grateful to the entire Forum IAS team for being the building block of my preparation.
THANK YOU !!

APALA MISHRA
UPSC AIR- 09
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I had enrolled in the Mains Guidance Programme (MGP) 2020 for GS and Essay. The expansive coverage of questions, prompt correction of papers, toppers' answer copies and valuable feedback on answers, received from forum IAS has helped me in my answer writing.
I'm grateful to forum IAS for the same.

Karishma Nair
AIR 14
CSE 2020

(On a side note, very grateful for the long motivating emails by Neyawn sir as well)

55+ Students in Top 100 Ranks List of CSE 2020 are ForumIAS Academy students. 43+ ranks in Top 100 excluding Interview Guidance Program.

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#1 Gender Issues: Marital Rape

News: The Delhi High Court is hearing petitions that argue for removal of immunity provided to Marital Rape in India. Other High Courts have also issued Judgments on this issue in recent times which has once again brought the issue to the fore.

What is Marital Rape? – (1) Marital Rape is **act of forced sexual intercourse between a married couple without the consent of spouse**; **(2)** Till 1970s, laws in most countries granted a husband the right to have sex with his wife whenever he so desired and the **consent of wife was considered irrelevant**; **(3)** Sexual intercourse within marriage was regarded as a **right of spouses** and marital rape was not recognized; **(4)** After the anti-rape movement of 1970s and the subsequent change in the laws, marital rape is now **considered a form of domestic violence and sexual abuse**. The **lack of consent is the essential element** and need not involve physical violence

What is the legal position in India? – (1) In India, the **offence of rape is defined in the section 375 of the IPC**; **(2)** Under section 375, a man is said to have committed 'rape' when he has sexual intercourse with a woman **without her will and consent**; or with her consent when such a consent has been obtained through; **(a)** Fear, **(b)** Unsoundness of mind of woman or woman being under intoxication; **(c)** woman being below the age of 16; **(3)** However, the **exception to section 375** mentions that sexual intercourse by a **man with his own wife, the wife not being under fifteen years of age, is not rape**. Hence, marital rape is not recognized as an offence in Indian Law.

Why is there an exception to marital rape under Section 375? - Marital rape immunity is known to several post-colonial common law countries. It is premised on broadly two assumptions: **(1) Consent in perpetuity:** This is the assumption that on marriage a woman gives consent to her husband in perpetuity, which she cannot retract. This concept in colonial-era laws has roots in the antiquated idea that a woman is the property of her man; **(2) The expectation of sex:** This is the assumption that a woman is duty-bound or is obligated to fulfil sexual responsibilities in a marriage as the aim of a marriage is procreation. Since the husband has a reasonable expectation of sex in a marriage, the provision implies that a woman cannot deny it.

What is the status of Marital Rape in India? – (1) In a survey conducted by **International Centre for Research on Women** (2011) nearly 20% of Indian men have, reportedly, at least once carried out sexual violence against a female partner; **(2)** Another study conducted by the **Joint Women Programme**, an NGO, found that **one out of seven married women (14%)** had been raped by their husbands at least once. The women often **do not report** these rapes **because the law does not support** them; **(3)** As per study by **National Health**

and **Family Survey (NFHS-4)** for the year 2015-16, 5.6% of women have been reported as victims under the category of "physically forced to have sexual intercourse with husband even when she did not want to".

Globally almost 150+ countries have criminalized marital rape. India and China are one of the biggest exceptions. Apart from these two, marital rape is not a crime in most of the Middle Eastern and many African countries as well.
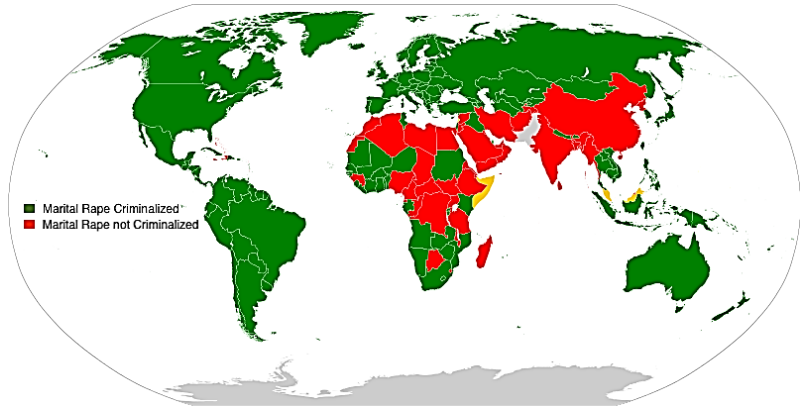
What has been the Judicial stand on the issue? – The Judiciary has taken varying stand on the issue: **(1)** *Nimeshbhai Bharatbhai Desai vs State of Gujarat (2018)*: The Gujarat High Court observed that a **husband cannot be permitted to violate the dignity of marriage by coercing his wife to engage in a sexual act without her full and free consent**. However, the Court didn't sentence the accused for rape as a wife cannot initiate proceedings against her lawfully wedded husband for the offence of rape punishable under Section 375, 376 of the IPC and called upon the legislature to intervene; **(2)** The **High Court of Kerala in August 2021** delivered a judgment ruling that **marital rape is a good ground to claim divorce**. The High Court said that treating a wife's body as something that is owed to the husband and committing sexual acts against her will is nothing but marital rape. The High Court also observed that the **need of the hour is that marriage and divorce must come under secular law** and that there cannot be any difficulty in **having a common code of law for all communities** at least for marriage and divorce; **(3)** *Independent Thought v. Union of India (2017)*: The Supreme Court **criminalised sexual intercourse with a minor wife** aged between 15 and 18 years. But, the SC refused to **delve into the question of marital rape** of adult women; **(4)** *Dilip Pandey and ors v. State of Chhattisgarh (2021)*: The Chhattisgarh High Court in August 2021 acquitted a man accused of raping his wife. The Court held that **sexual intercourse between legally wedded man and woman is not rape even if it is by force or against the wishes of the wife**; **(5)** In another case, a **Mumbai Sessions Court** had **acquitted a man charged with marital rape**. The Court observed that the grievance of a woman who had accused her husband of committing sexual intercourse with her against her wish **does not stand legal scrutiny**.

What are the arguments before the Court in the present case? – (1) The challenge to marital rape has been possible because of a number of Supreme Court Judgments: **(a)** Aadhaar Judgment (2017) that cemented the right to privacy; **(b)** Striking down of Triple Talaq as unconstitutional (2017); **(c)** *Navtej Johar Judgment* (2018) that ruled IPC Section 377 as unconstitutional to the extent it criminalised homosexuality; **(2)** The Marital rape **immunity stands against the right to equality**, the right **to life with dignity**, personhood, sexual, and personal autonomy: all fundamental rights protected under **Articles 14, 19 and 21** of the Constitution respectively; **(3)** The marital rape exemption **takes away the right of a married woman to give consent to sexual activity**; **(4)** The petitioners have argued that since courts have recognised that consent can be withdrawn even during/in-between a sexual act, the **assumption of "consent in perpetuity" cannot be legally valid**; **(5)** The petitioners have also argued that since the provision was inserted before the Constitution came into force, the provision cannot be presumed to be constitutional; **(6)** The Court also needs to consider whether the protection of marriage and family can be a compelling or legitimate interest for the State to the extent that it can make laws that violate fundamental rights.

The Delhi government has defended the law on the ground that married women who might be subjected to rape by their husbands **have other legal recourses** such as filing for divorce or a case of domestic violence. The Union Government too had defended marital rape immunity. Its arguments spanned from **protecting men from possible misuse of the law by wives, to protecting the institution of marriage**.

What are the challenges in criminalising marital rape? – (1) Eyewitness: There are issues as these crimes are committed in a private space where there are no eyewitnesses; **(2) Threat to life**: It might further increase the threat to a woman's life by her husband and her in-laws. Any attempt to go against them may lead to further atrocities and an attempt on her life; **(3) Institution of Marriage and Family**: There is an argument that criminalization of marital rape will destabilize the institution of marriage and family. This argument was put forward by the Union Government in an affidavit to the Delhi High Court in 2018; **(4) False cases**: Dissatisfied, angry, vengeful wives might **charge their innocent husbands with the offense of marital rape**. Further, it will be difficult for husbands to prove their innocence; (5) **Increase burden on judiciary**: Due to the near impossibility of proving marital rape, and false cases, its criminalisation might increase the burden on an already overburdened legal system; (6) **Implementation**: The implementation of law will be challenging. In Ireland, where marital rape was criminalized in 1990s, there were only 2 convictions till 2016. Gender norms, the idea of marriage, dependence on husbands etc. may make many women to refrain from filing complaints against husband.

How can the issue of Marital rape be addressed? – (1)(a) Implementing the recommendations of the Justice Verma Committee: The Committee was constituted in 2012 with an objective to strengthen the anti-rape laws in the country. The Committee had observed that marital rape is a criminal offence in most countries and had strongly **recommended that the exception for marital rape under IPC 375 be removed. (b)** The Committee also highlighted the **recommendations made by the Convention on the Elimination of All Forms of Discrimination Against Women** (CEDAW) with respect of India in 2007. The CEDAW asked for '**widening the definition of rape to reflect the realities** of sexual abuse experienced by women, and to **remove the exception to marital rape from the definition of rape**'. So, the Parliament can legislate a law to **bring the necessary changes**; **(2) Judicial interventions**: The Courts around the world and in India have played a great role in shaping Jurisprudence. The **European Commission of Human Rights (ECHR)** has held that "**a rapist remains a rapist, regardless of his relationship with the victim**". While **decriminalising adultery**, the **Supreme Court** in *Joseph Shine vs. Union of India (2018)* had observed that the legislation **that perpetuates stereotypes in relationships and institutionalises discrimination is a clear violation of the fundamental rights** guaranteed by the Constitution. The SC can **strike down the exception** to Section 375 using its powers under Article 142; **(3) Societal change**: The laws alone cannot be used to fight marital rape issues**, societal change is pivotal**. Societal change is important, as the notions related to consent withing marriage need to be challenged.

The Constitution of India in **Article 14** grants **no special recognition to any institution** like marriage. So the **rights that are extended to minor women can be extended to adult women too**. It is undisputed that **marriage in modern times is regarded as a partnership of equals**. It is an association of two individuals, each of whom has separate integrity and dignity. The violation of the bodily integrity of a woman is a clear violation of her autonomy under **Article 21**. The error under exception to Section 375 must be corrected.

General Studies Paper I

#1 Property Rights for Women

> **News**: The Supreme Court has ruled that the daughters will have equal rights to their father's property even prior to the enactment of the Hindu Succession Act (HSA) of 1956

What are the implications of the Judgment? – (1) The Supreme Court conferred **daughters with equal right to father's self-acquired property even prior to codification of Hindu Personal Laws** and enactment of the Hindu Succession Act in 1956. The Court said that the law of inheritance would apply to partition of properties even if the father had died intestate (without making any Will) before 1956; **(2)** The **daughters will get the property of the father as a matter of inheritance and not by survivorship** which was applicable before 1956. Daughters would, thus, inherit the property in preference to other claimants (e.g., sons of the brother of deceased father). The Supreme Court was hearing a case concerned with the right of the daughter to inherit the self-acquired property of her father in the absence of any other legal heir; **(3)** The Supreme

Court in 2020 **clarified that daughters had coparcenary rights by birth**. Coparcenary refers to a person who has the capacity to assume a legal right in ancestral property.

Why such interpretation was needed by the court? – (1) Women in India face s**ocial and legal hurdles to inheritance** due to deep patriarchal custom and rural-agrarian settings; **(2)** Property is seen as a primary source of wealth and generally passed on to male heirs. It deprives women of agency, financial independence and entrepreneurship; **(3)** The National Family Health Survey-5 observed that 43% of women respondents reported owning house/land alone or jointly. But there is **lack of ability to actually access and control property**. A 2020 University of Manchester working paper found only 16% of women in rural landowning households own land; **(4)** Complex inheritance laws for agricultural land with conflicting Central Personal laws and State laws make the scenario difficult for women. Many states like Punjab, Haryana, UP and Delhi have backward looking inheritance provisions. Haryana twice tried to take away the progressive rights given to women through HAS. In UP, since 2016 married daughters aren't considered primary heirs.

What is the way forward? – (1) There is need to remove complexities and legal challenges; (2) Women's empowerment and property rights remain an unfinished project. Hence, there is a need to bring societal change. The ground-level resistance to property rights to women must be removed.

#2 Role of Social Media in Spreading Radicalization and Misogyny

News: Some websites made by college students for communal targeting and harassment of women, were banned by host platforms and creators arrested by various state police.

What is the matter – – 'Bulli Bai' a website or online tool was created on technology platform GitHub. The website did **mock auction of Muslim women**, especially prominent journalists and activists with motives of **targeted harassment** and defamation. 102 women's names and photographs were fed into the code of the website. 'Sulli Deals' was a similar online tool that has been under police investigation.

What are the issues: - **(1)** Social media and internet's use as a tool for **spreading hatred, radicalization and harassment of women** requires **regulation of technology platforms**, online content and user behaviour; **(3)** The investigations in the case of Sulli Deals did not make progress for a lot of time due to apparent **lack of co-operation from the technology platform** GitHub; ;technology platforms and social media companies are often seen to **prioritize cosmopolitan values over local laws** (4) **Section 153A** of the IPC which deals with '**promoting enmity on grounds such as religion** etc. is controversial due to its effect on free speech (5) **Section 500** of the IPC criminalises **defamation**; many experts have argued that defamation should only be a civil offence or should not be an offence at all.

What is the way forward? – - **(1)** There is need to **make the online world inclusive**, especially for women and marginalised sections of society; **(2)** Internet should be utilised for **productive** purposes; **(3) Control over hate speech** requires action from technology platforms, governments as well as users; **(4) Interlinked effects of radicalization across offline and online world** require addressing issues of '**yellow journalism**' and communalisation in politics and society.

#3 Draft NCR Regional Plan 2041 and Degradation of the Aravalli Range

News: The Draft NCR Regional Plan 2041 gives flexibility to the concerned States in identifying Natural Zones for inclusion or exclusion in NCR.

What are salient provisions of the draft Regional Plan 2041? – The Plan has been prepared by the **National Capital Region Planning Board** (NCRPB). NCRPB was set up in 1985 with the objective of undertaking **balanced development of the NCR**. It has prepared the Regional Plan 2041 which will replace the Regional Plan 2021 that was approved in 2005. **(1)** The Plan proposes to **limit the NCR to 100 km radius measured from Rajghat** in Delhi; **(2)** Beyond 100 km radius and up to the existing NCR boundary, all **notified cities/towns along with a corridor of one km on either side of connecting expressways, national/state**

highways etc. will be included; **(3)** It proposes to allow the States to decide regarding the inclusion/exclusion of the tehsils partly covered under the new NCR; **(4)** The Regional Plan 2041 **gives flexibility to the States to identify Natural Zones**.

What are the issues with the Regional Plan 2041? – (1) The **Regional Plan 2021 had protected almost entire Aravalli Range** by classifying them under the **Natural Conservation Zone.** It identified Aravalli ridge in Delhi, Rajasthan and Haryana, forest areas, Yamuna, Ganga, Kali, Hindon, Sahibi and major lakes such as Badkal, Suraj Kund and Damdama as protected zones where no construction was allowed. The **Regional Plan 2041 gives flexibility to the States to notify the "Natural Zones"; (2)** Experts believe States might leave out many sensitive areas from the Natural zone e.g., Haryana Government has already claimed that there are no Aravallis in Haryana records since 2016; **(3)** Undertaking construction and other developmental activities in such areas may seriously damage the ecology and will have **adverse implications for the air quality, groundwater recharge, forest cover and wildlife habitat in the region**; **(4)** Moreover the word Conservation has been dropped altogether; **(5) Most**

The NCR, as of now

- Uttar Pradesh
- Haryana
- Rajasthan

Karnal, Shamali, Muzaffarnagar, Jind, Panipat, Baghpat, Meerut, Sonepat, Rohtak, Bhiwani, Jhajjar, **DELHI**, Ghaziabad, Hapur, Gautam Budh Nagar, Bulandshahr, Gurugram, Faridabad, Mahendergarh, Rewari, Palwal, Mewat, Alwar, Bharatpur

55,083 sqkm Total area

- Proposal to restrict the region within 100 kilometres radius of Rajghat (Delhi)
- NCR Planning Board says the redrawing of boundaries will aid development

Aravalli hill areas in Haryana are not notified and are classified as uncultivable wasteland in revenue records. Forest cover is neither notified nor mentioned as forest in the revenue records making it easier to undertake construction once new plan in implemented; **(6)** Similarly flood plains of rivers like Yamuna, Hindon, Kali and Sahibi have been excluded from the Natural Zones; **(7)** The Plan seeks the **interlinking of all green trails of the Aravalli range** and river Yamuna running in the region to become a **part of integrated cycle trails and drive corridors** in the region. This provision of 'drive corridors' in the Aravallis **will lead to motorised traffic and adversely impact the wildlife habitat**.
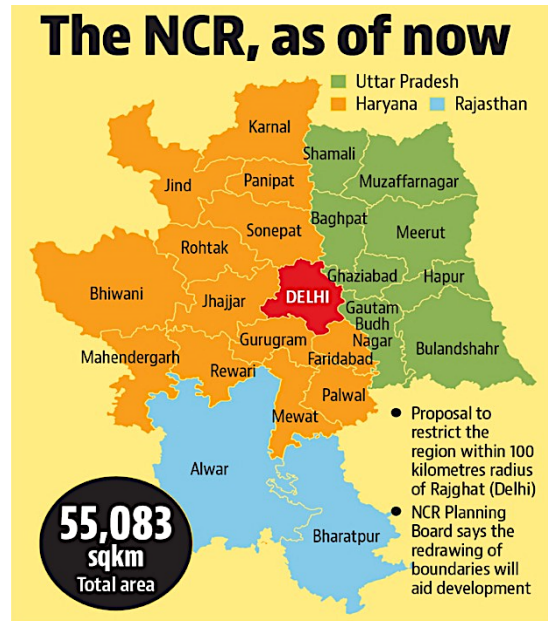
What has been the recent observations related to ecology in the Aravalli Range? – In recent years, Aravalli has seen **a lot of degradation**. This impact of degradation is evident right up to the NCR. According to a desertification-related study undertaken by the Central University of Rajasthan this **menace is only going to exacerbate due to climate change.** According to the Forest Survey of India, more than 30 hills in the Rajasthan segment of the Aravalli Range have vanished due to the flattening of land by the mining mafia.

What are the reasons behind degradation of Aravalli Range? – (1) The increasing pressure of population especially in the NCR; **(2) Over-exploitation of resources** and reckless urbanization; **(3) Clearing of land** for the construction of farm houses and residential colonies; **(4) Unchecked quarrying** and illegal felling of trees; **(5)** Flawed **plantation drives; (6)** Changes in the **rainfall pattern; (7) Desertification** and Spreading of sand dunes.

What are the implications of the degradation? – (1) The degradation has compromised the capacity of the Aravalli to control the **spread of the desert**. Due to this, desert is spreading towards the east, causing **aridity in the fertile plains; (2)** The **thinning of the vegetative cover** creates large openings for the sand-loaded winds to cross over to Delhi and nearby areas, **aggravating urban pollution** in the region; **(3)** The dusty winds from the desert are raising the **PM_{10} content of the NCR's air**, worsening pollution in Delhi. It is also posing a **grave threat** to the **ecology of the agriculturally vital north-western states; (4)** The degradation has a negative **impact on the rich biodiversity of the Aravallis** comprising a large variety of plants, animals, and birds.

What is the way forward? - The Draft NCR Regional Plan 2041 should **be revisited and suitably modified** to include the entire Aravalli range in the natural conservation zone. Ideally, the govt should prepare a **separate plan for rejuvenating the Aravallis** to allow it to play its inherent role as the Thar Desert's outer barrier.

General Studies Paper II

#1 Discretionary Powers of the Governors

News: In several States, there have been instances of friction between the Office of the Governor and the elected Government that has brought the discretionary powers of Governors into limelight.

What are the recent incidents related to the use of discretionary powers by the Governors? – (1) In Maharashtra, the **Governor has not fixed the date of the election of the Speaker of the Legislative Assembly**. The role of the Governor in fixing the date is a requirement under the **rules of the Maharashtra Legislative Assembly** and is not a Constitutional requirement under Art. 178. Maharashtra Assembly has been functioning without the Speaker since February 2021; **(2)** In Kerala, the Governor has alleged that he made the reappointment of Vice-Chancellor of a State University **under pressure from the State Government**. The Governor has also said that he does not want to hold the position of Chancellor of the University (Governor is ex-officio Chancellor of State University).

In the past, the role of the Governors has been criticized in dismissal of the State Governments under Art. 356, the most notable being the dissolution of the Bihar Legislative Assembly in 2005 based on the recommendation of Governor.

What has the Governor of Maharashtra has not fixed the date? – The Governor has not accepted the date recommended for the election by the Government. The Governor has cited that the **amendments made by the Rules Committee** of the State Legislature to the process of election of the Speaker are being **examined for Constitutional validity**. The Rules Committee had amended Rule 6 to include the words, "..to elect the Speaker on the recommendation of the Chief Minister." Rule 7 was also amended to replace the provision of election of the Speaker by 'secret ballot' with 'voice vote'.

> **PT BOX**
> **Article 178**
> Every Legislative Assembly of a State shall, as soon as may be, choose two members of the Assembly to be respectively Speaker and Deputy Speakers thereof...
> The **Constitution assigns no role to the Governor in the election of Speaker and Deputy Speaker**. The State Legislative Assemblies formulate their own rules regarding the election. Maharashtra Assembly has a rule that the Governor shall fix the date of election of the Speaker.
> Rule 6: **The Governor shall fix a date** *to elect the Speaker on the recommendation of the Chief Minister* and the Secretary shall send to every member notice of the date so fixed. (italics As amended)

What are the discretionary powers of the Governor? – The discretionary powers are two-fold: Constitutional (expressly mentioned in the Constitution) and Situational. **Constitutional**: **(1)** Reserving a Bill passed by the Legislative Assembly for the consideration of the President; **(2)** Recommending President's Rule in the State; **(3)** Certain functions with respect to Schedule VI States (Assam, Meghalaya, Tripura, Mizoram); **(4)** Seeking information from the Chief Minister on legislative and administrative matters; **(5)** While holding additional charge of a Union Territory. **Situational**: **(1)** Appointing the Chief Minister when no party has a clear majority; **(2)** Dismissal of Council of Ministers when unable to prove confidence of the Legislative Assembly; **(3)** Dissolution of Legislative Assembly when the Council of Ministers loses majority.

What has been the Judiciary's view regarding the discretionary powers? – (1) *Nabam Rebia vs Deputy Speaker And Ors (2016)*: The Supreme Court confirmed that **(a)** the **Governor does not enjoy wide discretionary powers,** the powers are **subject to constitutional standards** and discretionary actions should not be arbitrary; **(b)** The SC concluded that the Governor's discretion did not extend to the powers conferred under Article 174 and hence he could not summon the House, determine its legislative agenda or address the legislative assembly **without consulting the Chief minister or the Speaker**;

(c) The SC also noted that the framers of the Constitution expressly and consciously left out vesting powers to summon or dissolve the House solely with the Governor; **(2)** *Harish Chandra Singh Rawat vs Union Of India (2016)*: The Supreme Court ruled that when the majority of the ruling party is in question, a floor test must be conducted at the earliest available opportunity and the Governor can't recommend President's rule arbitrarily. Under no other circumstances can the Governor act without aid and advice. This is reiteration of the SC's earlier stand in **SR Bommai (1994)** and numerous other cases; **(3)** *Rameshwar Prasad And Others v. Union of India (2006)*: The Supreme Court held that the immunity granted to the Governor under Article 361 (1) does not affect the **power of the Supreme Court to judicially scrutinize** the use of powers on the ground of **mala fides and being ultra vires**.

> **PT BOX**
> **Article 163**
> (1) There shall be a Council of Ministers with the Chief Minister at the head to aid and advise the Governor in the exercise of his functions, except in so far as he is by or under this constitution required to exercise his functions or any of them in his discretion.
> (2) If a question arises that whether the Governor should act on his discretion in a particular matter, the Governor's decision in his discretion shall be final.

What should be the way forward? – (1) The Supreme Court Judgments have made it clear that as long as the Council of Ministers (CoM) enjoy the confidence of the Assembly, the Governor can't act without the aid and advice of the Chief Minister and the CoM. The SC has observed that a Governor must remember he is not a democratically elected representative. The **Judgments are guiding directions to the Governors to act dispassionately and disassociate themselves from the political affiliations** once they assume the constitutional posts; **(2)** There is a need to **de-politicize the Office of Governor**. **Sarkaria Commission** had recommended to appoint a person detached from politics as a Governor. **Punchhi Commission** had recommended; **(a)** A fixed tenure of 5 years; **(b)** Removal of Doctrine of Pleasure; **(c)** Appointment of the Governor through a Committee of the Prime Minister, the Home Minister, the Lok Sabha's speaker and the Chief Minister of the State. The recommendations should be implemented in true spirit.

#2 Functioning of the Election Commission and the appointment of the CEC

> **News**: A meeting between the Members of the Election Commission and the Principal Secretary to the Prime Minister to discuss electoral reforms has been questioned by several experts. Several other incidents in the recent past have raised concerns regarding the independence of the Commission.

What concerns have been raised regarding the meeting? – Experts have a divided view over the meeting; **(1)** Some experts feel there is no issue in a meeting between the Commission and the PMO. **Meetings, even if informal, are necessary for discussions on the electoral reforms** before providing final proposal to the Parliament; **(2)** Moreover, the independence of any functionary is defined by the conduct and integrity of the institution. Merely meeting the executives does not compromise the independence of anybody. However, some other experts have a differing view; **(3)** The Chief Election Commissioner (CEC) is much **higher in the order of precedence** (9th) compared to the Principal Secretary to the PM (23rd). So PMO shouldn't have 'summoned' the Election Commission, it should have been other way around; **(4)** The **usage of the word 'summon'** is also being questioned; (5) Election Commission (ECI) is an independent body and free, fair and credible elections are *sine qua non* of the ECI. Attending meetings or discussions called by officers of the Government **compromises the independence of the commission in the public eye**.

> **PT BOX**
> **Provisions related to the Election Commissioners**
> **Article 324** of the Constitution of India lists down the provisions related to the Election Commission and its Officers.
> Article 324(2) states that the **number of Election Commissioners** (other than the Chief Election Commissioner (CEC)) is **decided by the President of India**.
> Article 324(5) states that while the CEC can only be removed in a manner like a Judge of the Supreme Court, **other Election Commissioners can be removed on the recommendation of the CEC**.

What are the other concerns related to the functioning of the Commission? - (1) Madras High Court had **held the ECI responsible for spread of second wave of COVID-19 pandemic** in April-May 2021 for its **failure**

to halt political campaigns on time; **(2)** The Commission is criticized for failure to curb the use of money and muscle power in elections; **(3)** The Commission is reluctant to take stringent action on **repeated violations of Model Code of Conduct (MCC)** during the elections.

What are the issues associated with the functioning of the Commission? – **(1)** The CEC and the other Election Commissioners are appointed by the President on the recommendations of the Union Government. There is **no constitutional safeguard to make this process transparent and non-partisan** making the members susceptible to political influence; **(2) Only the CEC enjoys a secure tenure** like a Judge of the Supreme Court. The other two Election Commissioners (ECs) can be easily removed by the President on the recommendation of the CEC which lowers their stature; **(3)** The **Constitution has not debarred the retiring ECs from any further appointment by the Government**. In fact, some former CECs eventually went on to become Governors of States or Ministers in the Union Government. This influences the independence of members; **(4) The powers of the ECI are limited** e.g., the MCC is not legally enforceable. ECI can't derecognize a political party or debar someone from contenting elections in case of repeated violations of MCC; **(5) Lack of Political Will**: Political parties are not willing to bestow more powers to the ECI.

What can be done to improve the functioning of the Commission? – (1) The ECs must be **appointed by a collegium** as recommended by the **2ⁿᵈ Administrative Reforms Commission (ARC)**. The collegium should comprise the Prime Minister, Speaker of the Lok Sabha, the Leader of Opposition in the Lok Sabha, the Law Minister, and the Deputy Chairperson of the Rajya Sabha; **(2) Law Commission** in its **report on Electoral Reforms** (255ᵗʰ Report in 2015) recommended; **(a) Giving equal constitutional protection** to all members of the Commission in matters of removability; **(b)** Making the appointment process of the Election Commissioners and the CEC **consultative with a three-member collegium** or selection committee, consisting of the Prime Minister; the Leader of the Opposition of the Lok Sabha; and the Chief Justice of India*. (*The Supreme Court too directed the Government in 2017 to formalize the process of appointment via law); **(c) Elevation of an Election Commissioner should be on the basis of seniority**, unless the three member collegium/committee, for reasons to be recorded in writing, finds such Commissioner unfit; **(d)** Creating a permanent, independent Secretariat for the ECI. The recommendation regarding appointment of ECs was also made by **Justice Tarkunde Committee (1975) and Dinesh Goswami Committee (1990)**; **(2)** There must be a prudent **cooling-off period** for election commissioners post-retirement; **(3)** The **expenditure of EC should be charged** upon the Consolidated Fund of India similar to other constitutional bodies such as the UPSC; **(4)** In the context of the current controversy, the former CECs are of the opinion that the **ECI should refrain from attending meetings convened by the Ministers or Officials of the Government**. Instead Government officials should visit the ECI for formal discussions rather than 'informal' meetings.

#3 The Limit on Expenditure by Candidates in Elections

News: The Election Commission has increased the limit on expenditure in elections for the Lok Sabha and the State Legislative Assemblies

What are the new expenditure limits announced by the Commission? – (1) Expenditure limit refers to the amount a candidate is allowed to **legally spend on election campaigning,** including public meetings, rallies, advertisements, posters and banners, and vehicles; **(2)** The Commission has increased the expenditure limit to **INR 95 Lakhs** (up from INR 70 Lakhs) **for Lok Sabha elections** and **INR 40 Lakhs** (up from INR 28 Lakhs) for **State Assembly elections**. The limit for smaller states has been increased to INR 75 Lakhs for Lok Sabha Elections (up from INR 54 Lakhs) and INR 28 Lakhs (up from INR 20 Lakhs) for State Assembly elections; **(3)** All candidates are required to **submit their expenditure statement to the EC within 30 days** of completion of an election under **Section 78 of the Representation of the People Act, 1951** (RPA, 1951); **(4)** There is **no limit on how much a political party can spend on elections**, but they have to submit a statement of their expenditure to the EC within 90 days of completion of the elections. The money spent on star campaigners is credited to the party's account rather than the candidate.

What arguments have been provided to increase the limit? – The Commission has increased the limit based on the recommendations of a committee set up to review the limit as well as suggestions received from the Chief Electoral Officers and Election Observers and the political parties. The reasons are: **(1)** Number of **total voters in the country has increased from 834 million in 2014 to 936 million** in 2021 and the candidates have to reach out to more electors; **(2) The Cost Inflation Index (CFI) has gone up** from '240' in FY 2014-15 to '317' in FY 2021-22; **(3)** Political parties sought increase in the limit citing **digital campaigns and the restrictions due to COVID-19 pandemic**.

What are the issues associated with electoral finance in India? – (1) According to Association of Democratic Reforms (ADR), **70% of the funds received by political parties** between 2004-05 to 2014-15 **were from unknown sources**; **(2)** The introduction of **electoral bonds** and the **amendments to the FCRA** (through a Finance Act in 2017) allowing political parties to receive funds from Indian subsidiary of a foreign company has further **increased the opacity related to electoral funding. Political parties are exempted from income tax**, which makes funding susceptible to channelling of black money; **(3)** Despite provisions under section 29 of RPA, 1951, **parties do not submit their annual audit reports to the Election Commission**; **(4)** The lack of restriction on the expenditure by the political

> **PT BOX**
> **Expenses during Elections**
> **Section 77** of the **Representative of the People Act, 1951** lists provisions related to the expenses during elections. It requires all candidates to keep an **account of the expenses incurred between the date of nomination and the date of declaration of the result**.
> Section 78 of the Act prescribes that every candidate must submit the account of such expense with the District Election Officer within 30 days of the declaration of result.

parties has led to **mounting expenses in elections**, e.g., an analysis has shown that **more than Rs 6,500 crore was spent on elections** by 18 political parties, including seven national parties and 11 regional parties, between 2015 and 2020. The increased expenses mean that: **(a)** Political parties have to raise more and more money to fight elections which gives rise to corruption; **(b)** Candidates who are not financially well-off have no chance to compete and win elections; **(5)** The **use of black money is also increasing in elections**. In the General Elections for Lok Sabha in 2019, **the ECI had caught ₹3,456 crore worth of cash, liquor and drugs**. This impacts the **fairness of elections**.

What are the suggestions to improve electoral funding? – **(1)** The **Law Commission in its 255ᵗʰ report on Electoral Reforms** (2015) had given suggestions on improving electoral finance. These include: **(a)** Public disclosure of electoral expenses documents submitted by the candidates; **(b) Submission of audited annual reports by Political Parties** detailing all the funds received and the expenditure incurred which shall be disclosed publicly by the ECI; **(c) Disclosure of contributions less than Rs. 20,000** if such contributions exceed Rs. 20 crore or 20 % of the party's total contributions, whichever is less; **(d)** Failure to disclose expenses results in disqualification for 3 years. This should be extended to 5 years to render the candidate ineligible for next election; **(e)** Penalty of 5 times the contribution received, if such contribution is received from an ineligible donor under Companies Act and RoPA; **(f)** State funding of elections not feasible. In-kind subsidies should be continued; **(g) Authorization of political funding** by a corporate should be done at **Annual General Meeting** and not Board of Directors meeting; **(2)** Apart from the above, there are arguments about **State Funding of elections: (a) Indrajit Gupta Committee (1998)** recommended **partial funding** of elections; **(b) Law Commission Report (170ᵗʰ Report) on Reform of Electoral Laws (1999)** observed that total state funding of elections is "desirable" so long as political parties are prohibited from taking funds from other sources; **(c) National Commission to Review the Working of the Constitution (2001)** did not endorse state funding of elections but concurred with the 1999 Law Commission report that the appropriate framework for regulation of political parties would need to be implemented before state funding is considered; **(d) Second Administrative Reforms Commission (2008)** recommended partial state funding of elections for the purpose of reducing "illegitimate and unnecessary funding" of elections expenses; **(e) Law Commission Report (255ᵗʰ) on Electoral Reforms (2015)** did not consider a system of complete state funding of elections or matching grants to be feasible, given the current conditions of the country. Instead, it supported the existing system of indirect in-kind subsidies, with section 78B of the RPA being possibly amended in the future to expand these subsidies.

#4 Anti-defection Law

News: Assembly elections are scheduled form 10 Feb. in 5 states: Uttar Pradesh, Goa, Manipur, Punjab, and Uttarakhand. Over the past few weeks, several lawmakers from the ruling party have defected to the other parties.

What is the Anti-defection law? - Anti-defection law is a law that **prohibits switching of political parties** by members of Parliament/State Legislatures by voluntarily giving up party membership or voting against the directions of party in the House. It is a law under the **Tenth Schedule** of the constitution inserted by the **52nd amendment** to the constitution. The **speaker of the house has the power** to disqualify members on basis of defection. It **covers independent as well as nominated members** of the legislature. However, **nominated** members can join a political party only within **six months**.

What are the objectives of the Anti-defection law? – Anti-defection law has **four** broad objectives: **(1) Promoting party discipline**: Anti-defection law tends to **promote ethics in the political sphere** and **disincentives' the switching of loyalties** from one party to another. It also enables unity, discipline and decisive leadership within political parties. This leads to swift decision making in the proceedings of the House and increases its productivity; **(2) Stability of the government**: Ensure the **stability of the governments** by avoiding fragmentation of the party in power; **(3) Promoting citizens trust in elected legislators**: Voters **exercise their preference** for a set of policies espoused by contesting candidates of a party. **(4) Reduce Political Corruption:** It is expected to reduce political corruption by preventing **horse-trading**.

What are the issues in the Anti-defection law? - Anti-defection law is criticized for a number of issues such as **(1) Violates freedom of expression**: It interferes with the individual members' freedom of speech and expression by **curbing dissent against party policies or party whip**; **(2) Lowers accountability of elected candidate towards his electorate:** Following party diktat every time, the legislator cannot vote in line with his conscience, judgements and interest of his electorate; **(3) Weakened Oversight:** The law weakens the **legislator's oversight** on the executive action as they are bound by party whip; **(4) Law fails to restrict defections:** The law was introduced to curb political defection. However, political defection continues to be common even today. **For example**, in 2020, 22 MLAs of INC resigned leading to fall of INC government in the state. Most of the MLAs got ticket to contest by-election on BJP ticket and became MLA once again; **(5) Role of presiding officer:** The presiding officer of the house is vested with adjudication powers related to the law. This is criticised on the following grounds because the presiding officer is accused of being **partisan/biased**; he/she **lacks adequate legal expertise** to exercise quasi-judicial powers; and the law **does not provide a time limit** for presiding officer to take decision regarding disqualifying a member; **(6) Individual vs Group Defection**: The law provides for an irrational distinction by **allowing group defection** by merger between political parties and disallowing **individual defections**.

How can this act be made more effective? - A number of commissions and committees have given recommendations for improving the functioning of Anti-defection law: **(1) Dinesh Goswami Committee on electoral reforms** (1990) recommended that the **President/Governor** should decide on the disqualification under the Tenth Schedule on the advice of the **Election Commission; (2)** The **Supreme Court in K Meghna Chandra Case** has suggested that the Parliament should amend the Constitution to substitute the Speaker with independent **permanent Tribunal** headed by a retired Supreme Court Judge or a retired Chief Justice of a High Court, or some other outside independent mechanism, so that these disputes can be resolved in fast manner and with impartiality; **(3) Law Commission (170th Report, 1999): Exceptions** to the law such as in the case of mergers should be **deleted**. Moreover, **pre-poll electoral alliances** should be considered as **political parties** under the law; **(4) National Commission for Review of Commission (**2002) recommended **prohibition of defectors** from holding **public office** for the duration of the remaining term; **(5) Halim Committee on anti-defection law (1998)** recommended **clearly defining** such phrases in the law as "voluntarily giving up membership of a political party".

Apart from implementing above recommendations, there is need of promoting **internal democracy within the political parties**. The Anti-Defection law should be applied for acts where the **stability of government is involved like No-Confidence Motion** and in normal functioning of legislature the MPs and MLAs should have independent voice on any issue differing to that of Political party.

#5 Customary International Law and India's approach

News: Parliamentary Committee on External Affairs has brought a report 'India and International Law' which discusses India's approach to the Customary International Law (CIL).

What is Customary International Law? – (1) According to the University of Cornell, Customary International Law refers to international obligations **arising from established international practices, as opposed to obligations arising from formal written conventions and treaties**; **(2)** Customary international law results from a general and consistent practice of states that they follow from a sense of legal obligation; **(3)** They are binding legal rules that have developed on global or region levels through continued practice; **(4)** Examples of customary international laws include the **doctrine of non-refoulement** and the **granting of immunity for visiting Heads of State**.

In legal terminology, Municipal law is the **national, domestic, or internal law of a sovereign state**. Municipal law includes national state, provincial, territorial, regional, or local law.

PT BOX

Principle of Non-refoulement
According to the Office of the United Nations High Commissioner for Human Rights, the Principle of Non-refoulement forms an essential protection under international human rights, refugee, humanitarian and customary law. It **prohibits States from transferring or removing individuals from their jurisdiction** when there are substantial grounds for believing that the person would be at risk of irreparable harm upon return, including persecution, torture, ill-treatment or other serious human rights violations.

Precautionary Principle
Precautionary Principle if an approach to new technologies and innovations when there is lack of scientific understanding on the potential negative outcomes. According to the National Centre for Biotechnology Information under the National Library of Medicine (US), Precautionary Principle has 4 pillars; **(a)** Taking preventive action in the face of uncertainty; **(b)** Shifting the burden of proof to the proponents of an activity; **(c)** Exploring a wide range of alternatives to possibly harmful actions; **(d)** Increasing public participation in decision making.

What has been India's approach towards CIL? – According to the report submitted by the Parliamentary Committee, India follows the **Principle of Dualism** with regards to the CIL. This means that international law does not automatically become part of India's domestic law. According to the **Article 253** of the Indian Constitution, an act of Parliament is necessary to transform an international law into a domestic law applicable in India. However, according to the analysis of the committee, **the Supreme Court has digressed from the principle of dualism.**

What has been the Supreme Court's stand on CIL? – (1) The Supreme Court's approach digresses from the **principle of dualism towards monism**; **(2)** The SC has been of the view that **customary international law (CIL),** unless contradictory to domestic law, is **part of the Indian legal regime** even if the Parliament has not enacted a law in this regard; **(3)** In **Vellore Citizens Welfare Forum v. Union of India** the Supreme Court held that CIL which is not contrary to India's domestic law shall be deemed to have been incorporated in India's domestic law; **(4)** This principle has been affirmed in subsequent decisions like in **Research Foundation for Science v. Union of India.** In this case the SC declared that the **Precautionary Principle** is part of the CIL and thus part of Indian Law.

What are the positive aspects of the Judicial view? – (1) Most countries have been incorporating CIL as part of the domestic legal regime, so the Supreme court's practice is **in line with international practice**; **(2)** It can help **make the domestic laws progressive** and in line with international conventions when there is lack of will (due to ideological and political reasons) in the Legislature and Executive.

What are the challenges associated with Supreme Court's view? – (1) This approach **lacks proper deliberation** which must happen before any international norm becomes a domestic law. The Parliament must debate whether a particular provision indeed constitutes a binding customary norm under international law before incorporating it in domestic law. Academics argue that **Precautionary Principle has not yet got a wide global acceptance to be classified as a part of CIL**; (2) The SC's approach has been inconsistent e.g., in Mohamad Salimullah v. Union of India Judgment the Court didn't accept the **Doctrine of Non-refoulement** which is part of CIL; **(3)** This also leads to **democratic deficit** as the law becomes incorporated through Judicial pronouncements and not via popular will; **(4)** Judicial incorporation of international law **violates the principle of Separation of Power** as international treaties are prerogative of the Parliament under Art. 253 and item 13 of Schedule 7.

What is the way forward? - (1) The report of the Parliamentary Committee has recommended that the **Executive** (Union Government) should try to fill in the vacuum in domestic legislation on customary international law and should develop adequate domestic law; **(2)** An Academic in International Law has recommended that the Judiciary should demonstrate greater analytical rigour in interpreting and applying CIL as part of the Indian legal regime.

#6 Proposed changes in the Rules of Central Deputation of Civil Servants

News: The Union Government has proposed certain changes in the Rules of Services related to deputation of the Civil Servants. The State Governments have expressed concerns regarding the proposed amendments.

What are the present rules for the deputation of cadre officers? – (1) The **Department of Personnel and Training (DoPT)** is the cadre controlling authority for the Officers of Indian Administrative Service. The same role is played by the **Police Division in the Ministry of Home Affairs (MHA)** and the **Ministry of Environment, Forests and Climate Change (MoEFCC)** with respect to the Officers of the Indian Police Service (IPS) and the Indian Forest Service (IFoS) respectively; **(2)** Under the Rule 6(1) of the IAS Cadre Rules, 1954, an **officer may be deputed** for service under the Central Government or another State Government **with the concurrence** of the State Government(s) and the Central Government; **(3)** In case of disagreement, the matter shall be **decided by the Central Government** and State Governments shall give effect to the decision of the Central Government; **(4)** The Central (DoPT) and State Governments coordinate to effect the deputation process including seeking nominations from States, scrutiny of applications and making offers for deputation. State Governments relieve the officers called for deputation after officers' concurrence; **(5)** States have to depute **All India Services (AIS) officers**, including the Indian Police Service (IPS) officers, to the Central government offices and at any point, **deputation cannot be more than 40% of the total cadre strength of the state**.

What are the proposed amendments? - Four amendments have been proposed to Rule 6 of the Indian Administrative Service (Cadre) Rules 1954; **(1)** If the State Government does not relieve the State Cadre officer within the specified time, the **officer shall automatically stand relieved** from the date specified by the Central Government. At present, the State Government provides no-objection clearance to the Officer before

relieving; **(2)** The **Centre Government will decide the number of officers to be deputed** in consultation with the State Government; **(3)** In case of dispute, the State Government have to **give effect to the decision of the Central Government within a specified time**. In the existing rules no time-limit has been stipulated to effect the decision; **(4)** In specific situations where **services of cadre officers are required by the Central Government in 'public interest'**, the State shall give effect to its decisions within a specified time.

Why did the Union Government propose the amendments? – (1) There is a **shortage of All India Services (AIS) officers** in the Union Ministries. There are ~950+ vacancies in in Central Staffing Scheme (CSS) posts at the Joint Secretary (19+ years experience), Director (14+ years) and Deputy Secretary (9+ years) level in various Union Ministries; **(2)** Only 10% of mid-level IAS officers were posted with the Union government in 2021, down from 19% in 2014; **(3) States are not fulfilling their obligation to depute adequate number of Officers to the Centre** e.g., only 5.9% of the officers from UP were on deputation while the corresponding proportion was 6.2% for Tamil Nadu, 13% for Bihar, 13.9% for Odisha and 16% for Kerala. The Central Deputation Reserve (CDR) utilisation has gone down from 25% in 2011 to 18% in 2021. This causes gap in cadre management; **(4)** Many officers are reluctant to take the centre's deputations as they enjoy better perks and powers in the States. According to the latest offer list from MHA, only 10 IPS officers from States have offered themselves to be available for Central deputation.

Why have State Government opposed the amendments? – (1) State Governments argue that the proposed changes **impact the independence, security and morale of IAS officers**. It will increase the interference of the Union Government in the affairs of the States; **(2)** State Governments consider the move **against the spirit of Cooperative Federalism**; **(3)** The Law Minister of Kerala has contended that the amendments lead to **centralization of the executive power with the Union Government**.

What can be done to facilitate the deputation of cadre officers? – Former IAS officers have recommended; **(1)** The centre can **make deputations mandatory** in order to be empanelled for particular ranks in future. In 2020, the DoPT **made it mandatory for IAS officers from the 2007 batch onwards to mandatorily serve for two years in Central deputation** within the first 16 years of their service for being empanelled for a Joint Secretary rank in the future. The same **can be extended to other All India Services**; (2) The Government can address the underlying reasons for shortage of IAS officers; **(3)** The shortage in Central deputation can be addressed by actively promoting lateral entry; **(4)** The State governments should provide no-objection clearance in a timely manner; **(5) Provide enough time for States to respond**: In July 2001, the Centre unilaterally 'placed at its disposal' the services of three IPS officers of Tamil Nadu cadre. In May 2021, the Centre unilaterally issued orders for the central deputation of the Chief Secretary of West Bengal just before his last day in service. Similar such instances, create a perception that the officers have been deputed to Centre on grounds of inefficiency or as a punishment. The Union Government can avoid such practices.

#7 The Issue of Hate Speech

News: There have been a spate of incidents where minority communities have been targeted including in a religious congregation and online platforms. This has brough focus on the laws to curb Hate Speech and issues in their implementation.

What is Hate Speech? – There is no formal definition of Hate Speech in Indian Legal framework; **(1) Black's Law Dictionary** has defined it as '*speech that carries no meaning other than the expression of hatred for some group, such as a particular race.....is likely to provoke violence.*'; **(2)** The Supreme Court of India put forward its definition in ***Pravasi Bhalai Sangathan v. Union of India (2014)***, '*an effort to marginalise individuals based on their membership in a group.......seeks to delegitimise group members in the eyes of the majority, reducing their social standing and acceptance within society.*'; **(3)** According to the **Law Commission**: Hate speech generally is an incitement to hatred primarily against a group of persons defined in terms of **race, ethnicity, gender, sexual orientation, religious belief**.

What are the legal provisions related to Hate Speech in India? – (1) Article 19(2) of the Constitution of India **puts reasonable restrictions on the Freedom of Speech** including public order, decency or morality, defamation or incitement to an offence; **(2) Section 153(a)** of the **Indian Penal Code (IPC)** punishes **promotion of enmity between different groups** on grounds of religion, race, place of birth, residence, language, etc. with imprisonment up to 3 years; **(3) Section 153(b)** punishes **assertions prejudicial to national integration** (e.g., asserting that a class of persons cannot bear true faith and allegiance to the Constitution of India) with imprisonment up to 3 years; **(4) Section 295(a)** punishes deliberate and malicious acts, **intended to outrage religious feelings** of any class by insulting its religion or religious beliefs with imprisonment up to 3 years; **(5) Section 505(2)** punishes statements creating or promoting enmity, hatred or ill-will between classes with imprisonment up to 3 years.

What is the judicial view regarding hate speech? – The major challenge is the **determining the balance between Freedom of Speech vis-à-vis the hate speech**. The Judiciary, both the Supreme Court of India and the State High Courts have provided directions regarding the treatment of hate speech; **(1)** *Pravasi Bhalai Sangathan v. Union of India (2014)*: The Supreme Court adopted the **Canadian Principles** (Canada Supreme Court's Judgment) that lay down three principles to determine hate speech; **(a)** The courts must **apply the hate speech prohibition objectively**. The question courts must ask is whether **a reasonable person, aware of the context and circumstances**, would view the expression as exposing a group to hatred; (b) The term 'hatred' or 'hatred or contempt' must be interpreted as being restricted to those extreme manifestations of emotion described by the words 'detestation' and 'vilification'; **(c)** Focus on the **effect of the expression**, whether it is likely to **expose the targeted person or group to hatred by others**; **(2)** *Amish Devgan vs Union of India (2020)*: The Supreme Court noted that it is **difficult to define the boundary of freedom of speech** beyond which it becomes a criminal offence as restricted by other democratic values and public law considerations; **(3)** *Maridhas v. State (2021)*: The Madras High Court quashed an FIR alleging hate speech involving targeting of minorities by holding that the 'YouTuber' is entitled to protection under Article 19(1)(a) of the Constitution. However in *Fr. P. George Ponnaiah v. Inspector of Police (2022)*, the Madras High Court gave no relief to the petitioner by holding him to be a person of influence.
Such varying interpretations have created a confusion and contribute further vagueness in the interpretation of hate speech.

What are the various recommendations to counter hate speech? – (1) Law Commission in its 267ᵗʰ report recommended adding two new provisions under IPC; **(a) Section 153(c)** to cover offences related to **use of threatening words to cause fear or hatred** for the purpose of inducing violence on grounds of race, caste, religion, sex, gender identity and other characteristics; **(b) Section 505(A)** to include provisions penalising **causing of fear, alarm, or provocation of violence**. The Report also suggested that the anti-hate speech provisions should be **implemented in a 'non-selective, non-arbitrary and transparent manner'; (2)** The **Parliamentary Standing Committee on Home Affairs** in its

> **PT BOX**
> **The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**
> Social Media intermediaries, with registered users in India above a notified threshold, have been classified as Significant Social Media Intermediaries (SSMIs). SSMIs are required to appoint designated personnel for compliance of these rules. SSMIs need to enable the identification of the first originator of the information on its platform under certain conditions. SSMIs need to deploy technology-based measures on a best-effort basis to identify certain types of content. All intermediaries are required to provide a grievance redressal mechanism for resolving complaints from users or victims. A three-tier grievance redressal mechanism has been prescribed.

189th Report in 2015 **recommended the incorporation of separate and specific provisions in the Information Technology Act** to deal with online hate speech; **(3)** The **T K Vishwanathan Committee** (2017) recommended setting up of Cyber Crime Coordinator in each State headed by an officer of IG rank of the State Police. It also recommended for Each district to have a District Cyber Crime Cell; **(4)** The **Bezbaruah Committee** (2014) set up to look into hate crimes against the people of the North East India had recommended a slew of legislative measures, special police initiatives for safety and security of North Eastern

people living in Delhi, NCR and other parts of the country, educating people about the North East and addressing their grievances of accommodations etc.

What can be the way forward? – A prominent lawyer from the Madras High Court has recommended; **(1)** The Parliament need to undertake a review and formulate a comprehensive law to counter the hate speech. The existing laws under the IPC remain ambiguous and must be changed; **(2)** Australia's Federal Law **Criminal Code Amendment Act 2019** imposes liability upon Internet service providers, if any violent material that a reasonable person would regard as offensive, is accessible through the service provided by them. Indian laws can be amended to put an onus on Social Media Platforms to curb hate speech.

#8 China's Law on Land Borders

News: China has enacted a new Law on Land Borders which became effective from January 01, 2022. This comes in the backdrop of India-China Border Stand-off in Ladakh and enhancing of border infrastructure by China.

What are the features of the Law? – (1) The Law was passed by the Standing Committee of China's National People's Congress for the **protection** of the country's land border areas; **(2)** The asserts that the **sovereignty and territorial integrity of the People's Republic of China are sacred and inviolable**; **(3)** The State shall **take measures to safeguard territorial integrity** and land boundaries and guard against and combat any act that undermines territorial sovereignty and land; **(4)** The responsibility of securing the borders is assigned to **People's Liberation Army (PLA) and the Chinese People's Armed Police Force**; **(5)** The Law prohibits any party from indulging in any activity in the border area which could 'endanger national security or affect China's friendly relations with neighbouring countries'; **(6)** The Law provides for following the **principle of equality, mutual trust and friendly consultation** to handle land border-related affairs with neighbouring countries and resolve border-related issues through negotiations; **(7)** Operationally, it enjoins the Chinese military to carry out border drills and provides state support for construction of border towns, strengthening of border defences and better integration of populations inhabiting border areas.

What led to the enactment of this law? – (1) The ongoing **China-India military standoff** in eastern Ladakh has raised concerns for Chinese Army. Through the **"Go West" campaign** since 1999 China has improved its land and rail connectivity to support its western border infrastructure and similar measures by India to improve its infrastructure has made China wary of India; **(2)** China is concerned about **illegal migration** from Taliban-controlled Afghanistan and Central Asian countries after the withdrawal of forces by the **US** from Afghanistan. UNSC's report highlights that the 'East Turkistan Islamic Movement' fighters are also in Badakhshan province of Northern Afghanistan which is very proximate to Xinjiang via the Wakhan Corridor. China worries about the possible spill over from Afghanistan, destabilising the restive Xinjiang Autonomous Administrative Region; **(3)** China is also worried about illegal immigration from Vietnam and Myanmar, which could perhaps bring more Covid-19 cases into the country.

What are the implications for India? – (1) Impact on boundary dispute resolution: With the law China appears to be signalling determination to resolve the border disputes on its preferred terms. Some experts feel the new law will **make China stick to its position**, in the ongoing standoff as well as in the resolution of the larger boundary issue. China will try to **convert a territory dispute over borders into a sovereignty dispute** and prevent any give or take of territory; **(2) Demography of border areas**: The new border law is in sync with the policy of settlement of Han Chinese in newly constructed Chinese border towns. The "**dual civil and military use" of border villages** is a concern for India as it would impact the border negotiations and settlement as China would claim sovereignty over areas with Han Population. According to the **Border Defence Cooperation Agreements of 2005 and 2012**, any negotiations for border settlements will be done keeping in mind the convenience of the local population in the border regions. The land border law encourages this approach by making it **politically legitimate**; **(3)** While the Law gives the **responsibility of the border to the PLA,** in India there is a lack of clarity on who among the Ministries of Home and Defence is responsible for border management.

What steps should be taken by India? - (1) The temporary on-ground adjustments like the establishment of the no-patrolling zone at Pangong Tso should be continued; **(2)** Strengthening the presence and enhancing border patrol measures to prevent further Chinese transgressions; (3) India must build massive infrastructure in the border region to counter any aggression from the Chinese.

How has China strengthened its border infrastructure? – **(1)** Since 1999, China has constructed **dual-use infrastructure** in Tibet under its western development strategy. After 2015 the speed of development has increased many folds due to introduction of military reforms in China; **(2)** China has initiated many projects for border infrastructure like construction of **feeder roads** on the border, **railway lines, airports, helipads** and **border villages** across India-China and Bhutan-China borders; **(3)** It has built **628 border villages** in the areas bordering India and Bhutan. China plans to strategically connect these border points to the nearest border defensive unit regiment HQs.

How will these projects be advantageous to China? – (1) On completing these projects, China would be able to **assert its sovereignty on the disputed territories with India.** This infrastructure along with along with renaming 15 places in Arunachal and the implementation of the land border law will help China to **consolidate its claims on Indian territories; (2)** It would **reduce the turn-around time for mobilisation and deployment of forces** from the interior; **(3)** It would help **support the forward-deployed border forces** for a longer duration through **improved logistics capabilities;**

What steps have been taken by India to counter the Chinese? - (1) Construction of **long-pending border roads and bridges** for swift troop movement; **(2)** Raising of **strike corps for emergency action**; **(3)** Attempts to **modernise armed forces**; **(4)** Raising the strike and **surveillance capabilities; (5)** Building capacity to **expand the theatre of conflict** to the high seas.

What are the challenges that India needs to overcome? - India needs to ensure that following challenges are overcome; (1) Bureaucratic inertia; **(2)** Lack of coordination between civilian and military establishment**; (3)** Budgetary limitations; **(4)** Reactionary nature of weapons acquisition policy and streamline it so that the demand and supply gap is plugged.

PT BOX
Integrated Battle Groups (IBGs)
Integrated Battle Groups are agile, brigade sized, and self-sufficient combat formations. In case of hostilities, they can swiftly strike against the enemies. The Indian Army is giving the final touch to the creation of IBGs. It will make the Indian Army more lethal and suitable to fight a modern war with the support of technology. Every IBG will be tailor made and will be based on three Ts viz. Threat, Terrain, and Task. In words of present Army Chief (as of today on 31st Jan 2022) General M M Naravane "Creation of IBGs is a logical step towards our operational thought process on how to conduct future operations in an integrated all-arms paradigm.

#9 Pakistan's National Security Policy and Implications for India

News: Pakistan has released it National Security Policy in January 2022 which reflects its establishment's approach to internal and external security challenges. The Policy has implications for India as well.

What is the focus of Pakistan's National Security Policy (NSP)? – Only a part of the Policy has been made public. The Policy is valid for a five-year period (2022-2026) and is subject to annual revisions. The Policy underlines the ambition of Pakistan's military and political leadership to **integrate economic development into the traditional military conception of national security**. The features include: **(1)** The policy focuses on **economic diplomacy** in the immediate neighbourhood. It mentions that Pakistan remains **committed to normalisation of relations with its neighbours** based on mutual respect, sovereign equality, and a collective effort for conflict resolution. The Policy also mentions that **shared economic opportunities are cornerstones for achieving prosperity in Pakistan and the region; (2)** The policy **seeks peace with India** without any hostility for the next 100 years; **(3)** The policy leaves the door open for **trade and business ties with India without a final settlement of the Kashmir dispute** provided there is progress in the talks; (4) The NSP underlines the State's Islamic credentials though it **describes Pakistan as a diverse country** that would

ensure equality for all; (5) The NSP accords just one sentence to the South Asian Association for Regional Cooperation, though it has offered to host the next summit.

What are the reasons behind change in Pakistan's approach? – (1) Pakistan **approach of State sponsorship of terror has backfired**. Terrorist groups which were once viewed as an asset have turned against the State. Religious extremism within Pakistan is also getting out of control. Pakistan is facing international censure and penalties due to its role in terror funding; **(2)** Pakistan's **economy is crumbling** and no major reforms have been undertaken to revive it. Bangladesh (GDP USD 350 billion) has surpassed Pakistan in economic terms (GDP USD 280 billion); **(3)** Pakistan used to play a significant role in the politics of Middle East and Islamic nations. But its **role has continuously diminished**. The US President Joe Biden hasn't called Pakistan's PM even once despite persistent efforts by Pakistan's foreign ministry even though he has been in the Office for more than a year now; **(4)** Although China is an all-weather ally of Pakistan but **China is extracting huge economic costs from Pakistan for its support**. Pakistan is getting increasingly indebted to China and had to pay Rs. 26 billion as interest to China in 2021 for its failure to repay a maturing debt on time. The **China Pakistan Economic Corridor (CPEC)** is caught between corruption, terrorism and an uprising in Baluchistan. China forced Pakistan to pay compensation for the loss of lives of Chinese personnel killed by terrorists in Khyber-Pakhtunkhwa; **(5) 'Bajwa Doctrine'** put forward by Chief of Army calls for restoring peace within Pakistan, reviving economic growth, reconciling with the neighbours, rebuilding ties with the US without abandoning the strategic partnership with China, and regaining its traditional political goodwill in the Gulf.

What is the significance of NSP for India? – (1) NSP offers India an opportunity to engage with Pakistan as the Policy envisages economic cooperation even without settlement of Kashmir issue. This is a major shift from Pakistan's earlier stance. There has been **no demand for the reversal of status in Kashmir on Art 370**; **(2) Closer economic ties** with Pakistan will allow India to play a constructive and mutually beneficial role in facilitating linkages with the rest of South Asia and maximise the potential of its own infrastructure investments. This can also help revive stalled projects like IPI and TAPI Pipelines; **(3)** If Pakistan acts credible on the Policy, **normalization of relationship with Pakistan can allow India to focus more on challenges posed by China**, as India's security establishment has also started viewing China as biggest external threat.

What are the concerns and challenges associated with NSP? – (1) The NSP is a **"policy", not a "doctrine"**, which basically translates into an aspirational document. Moreover **almost 50% of the policy is classified** and out of public reach; (2) Pakistan's support to terrorist activity in Kashmir is on the rise since the US exit from Afghanistan in August 2021. It is **hard to assume that Pakistan will shed terrorism as an instrument of state policy**. Pakistan is desperately trying to revive the Khalistan movement as well; (3) Pakistan is also closely cooperating with China and is buying Chinese weapons at scale. Pakistan is **actively supporting Chinese power projection in the Arabian Sea and Western Indian Ocean**.

What should be India's approach? – (1) India has to adopt a **wait and watch approach and keep the expectations grounded**. Only if there is credible adherence to the Policy via tangible actions should India move forward. Political dominance of the army has cornered most of the economic resources of Pakistan, in the name of protecting the nation from the "Indian threat". As long as Pakistan's Army is calling the shots in Pakistan's internal politics, India should remain cautious; **(2)** India must work on countermeasures to Pakistan and China. Between 2017-20, India-Afghan trade bypassed Pakistan, via Chabahar and air corridor **India can focus on Chabahar and UAE as trading hub** to access Central and West Asian markets, it can build up an effective counter to Pakistan's moves.

#10 India's Foreign Policy Challenges in 2022

News: India's Foreign Policy in 2021 followed a style of openness and readiness to deal with the friends and foes alike. Recent developments globally pose new challenges to Indian diplomacy in 2022.

What were the major developments of 2021? – (1) The US and its allies: India took active engagements with the U.S. and the allies. There were increased **commitments to QUAD**, acceptance of **AUKUS** and the

formation of Western QUAD along with the US, Israel and the UAE; **(2) Russia**: Major agreements were signed with Russia, despite the threat by the US of **CAATSA** against **S-400 missiles** and the rising proximity between Russia and China; **(3) China**: There was limited success. China is confident that the growing economic and military hard power gives it the luxury to dispense with diplomatic niceties: **(a)** China has not shown willingness to disengage in Ladakh and withdraw to the previous positions behind the Line of Actual Control; **(b)** China changed the names of various places in Arunachal Pradesh; **(c)** China kept on building villages on the unpopulated border with India; **(d)** Sought to undermine India's influence neighbouring countries (Nepal) and the Indian Ocean Region (Sri Lanka and Maldives); **(4) Afghanistan**: The exit of the US from Afghanistan has increased challenge for India and now India has to face China-Pakistan axis there. Already there is an increase in terrorist activity in Kashmir since August 2021; **(5) COP 26, Glasgow**: India stood out with its *Panchamrit* strategy and commitment to NET ZERO but was criticized for committing only to phasing down of coal; **(6) United Nations**: India took the presidency of the **UN Security Council** in August 2021 and provided significant contributions. But, India showed less interest in the demand for United Nations reform in 2021.

What are the global risks and challenges in 2022? – (1) Rise in **authoritarian regimes worldwide** and attacks on democratic tenets. The US, as bulwark of democracy, is retreating and becoming weak; **(2)** The **rise of China is concerning**. China is demanding to be recognized as equal to the US in world affairs and is openly challenging the U.S. supremacy in many areas, including 'state-of-the-art weaponry' such as hypersonic technology. China's **unwelcome attitude towards Hong Kong** and the **existent threat for Taiwan** posed by China could become one of the flashpoints of conflict in 2022. The Indo-Pacific has emerged as a conflict zone due to China's assertiveness and could lead to new tensions in the Asia-Pacific region in 2022. China

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Unrest in Kazakhstan, 2022

There were a series of protests in Kazakhstan in January 2022. The immediate cause for the protests was a sudden sharp increase in the liquefied gas prices following the lifting of a government-enforced price cap. Oil-producing city of Zhanaozen was the epicenter of the protests which then spread to many other parts of the country. The protests gained momentum due to rising inequality in the country. The week-long protests saw deaths of more than 200 people, while over 10,000 people were reported injured. According to the New York Times, protestors wanted leaders of the regions of Kazakhstan to be directly elected rather than appointed by the President. To control the situation the Russian-led Collective Security Treaty Organization (CSTO) troops were called into Kazakhstan by the country's President.

is also unrelenting and becoming **increasingly aggressive in border dispute with India**; **(3) Russia-Ukraine Conflict**: With Ukraine backed by the U.S. and the NATO, the Russia-Ukraine conflict could result in a possible war. In the past three decades, NATO has expanded its reach almost 1,000 miles to the east in violation of an earlier tacit understanding. Russia might not be willing to concede more; **(4)** Peace is getting disturbed in many regions. Kazakhstan is the latest development and it will pose a challenge to India's interest in Central Asia. It demonstrates increasing friction between the U.S.-led West and its principal opponents, Russia and China; **(5)** India faces threat from rising Islamist activities in Pakistan and Afghanistan.

How can the challenges be addressed? – According to a renowned foreign policy expert: **(1)** Along with diplomatic relations, India has to rush the military modernisation and **strategic coordination with its Quad partners**; **(2)** At the economic level, India will need to move rapidly to **end its isolation in the global trade domain**. India must expedite the negotiations of **bilateral free trade agreements with strategic partners** like the UK, Australia, the UAE, and Israel; **(3)** At a domestic level, India must take steps to revive the economy and target rapid economic recovery and growth. A sound domestic economy is a must for rise as a global power.

#11 The China-Lithuania dispute

News: China has taken exception to the formation of Taiwanese Representative Office in Lithuania. China calls it a violation and disregard of One China Policy.

Why are China and Lithuania engaged in a standoff? - (1) In November 2021, a **Taiwanese Representative Office** was opened in Lithuania; **(2)** It is a significant development because it is for the first time that Taiwan

was allowed to use its own name to open an office within the EU; **(3)** Following this, China has downgraded its diplomatic relations with Lithuania, calling it a violation of the **"One China Policy"**; **(4)** China has also un-officially boycotted products from Lithuania, whether **is** sourced directly or in-directly from the country; **(5)** In what has been termed as the **"David vs Goliath"** battle Taiwan, the U.S., and the EU have expressed their support to Lithuania.

Why Lithuania is supporting Taiwan? - (1) Lithuania, being the first constituent of the Soviet Union to break out as an independent state, has its own historical context for standing up to **China**; **(2)** The new government pf Lithuania espouses a **"value based"** foreign policy based on democracy and freedom; **(3)** This government had offered support for the cause of Taiwan in 2020 as well; **(4)** Lithuania, within EU, is one of the biggest critics of China over the Xinjiang and Hong Kong issues; **(5)** Lithuania had earlier also supported Taiwan's efforts to become an **observer at the World Health Organization** in 2020 in the wake of COVID-19 pandemic; **(6)** The **growing Sino-Russian partnership** against the West is also a cause of concern for Lithuania; **(7)** Citing security reasons, Lithuania has **(a)** advised its population against purchasing Chinese smartphones; **(b)** have kept China at bay in its 5G infrastructure bids; **(c)** has also prevented China from gaining controlling stakes in its **Klaipeda seaport**; **(8)** Lithuania insists that economic partnerships can be sustainable only between democratic regimes and this stand of Lithuania has further antagonized China.

What is the present diplomatic status between the two countries? - **(1)** In May of 2021, Lithuania exited from the **16+1 dialogue format**, initiated in 2012 by China as a multilateral forum for engagement with the countries of Central and Eastern Europe; **(2)** As a reaction, China, by the end of November 2021, downgraded its relationship with Lithuania by permanently recalling its ambassador from the country and by downgrading diplomatic relation from ambassador level to that of charge-d-affaires.

What will be the impact of China's countermeasures in Lithuania? - **(1)** China accounts for one percent of Lithuania's exports and imports of Lithuania from China are at least 5 times more; **(2)** However, the spat with China has put strain on Lithuania's trade with partners in the rest of Europe, which are **highly dependent on China; (3)** About 80-90% of Lithuania's exports are based on manufacturing contracts with the rest of the EU; **(4)** The custom authorities in China have apparently stopped processing such direct and indirect goods sourced from Lithuania; **(5)** Through such aggressive measures China is trying to push Lithuania out from the **global supply chains**.

What is the reaction of other countries/stakeholders? - (1) The European Commission on its part has warned of raising the Lithuania issue at the **World Trade Organization** by filing a complaint against China; **(2)** Countries like the U.S. and Germany have expressed concerns over the **coercive behaviour of China** in this issue; **(3)** Taiwan has reacted by showing financial support for Lithuania. It has come up with a **200 million USD plan** to help cover Lithuania's economic losses due to China's actions; **(4)** At the same time, Taiwan is also planning to introduce a **1 billion USD credit program** aimed at benefitting Lithuanian businesses,

#12 Pravasi Bhartiya Diwas (PBD)

News: 9th January was celebrated as Pravasi Bhartiya Diwas.

What is PBD? (1) *Pravasi Bhartiya Divas* (PBD) is celebrated **on 9th January every year** to mark the contribution of **Overseas Indian community** in the development of India; **(2)** January 9 was chosen as the day to celebrate this occasion since it was on this day in 1915 that Mahatma Gandhi, the greatest Pravasi, returned to India from South Africa, led India's freedom struggle and changed the lived of Indians forever.

What is the format of PBD? - **(1)** PBD conventions are being held every year since 2003; **(2)** Since 2015, its format has been revised to celebrate the PBD **once every two years** and to hold theme-based PBD conferences during the intervening period with participation from overseas diaspora experts, policy makers and stakeholders; **(3)** These conventions are a way to for the overseas Indian community to **engage** with the

government and people of the land of their ancestors for mutually beneficial activities; **(4)** These conventions also **aid in networking among the overseas Indian community** residing in various parts of the world and enable them to share their experiences in various fields.

What is the Regional *Pravasi Bhartiya Diwas* **(RPBD) – (1)** External affairs ministry, along with PBD, also organises RPBD to reach out to a vast majority of our diaspora, who for various reasons, are **unable to attend** the main biennial event in India**; (2)** There was a wide demand from the overseas Indian community to hold RPBD; **(3)** These conventions have gained support from state governments as well**; (4)** Such conventions are an ideal way to bring together the Indians abroad to enrich knowledge, expertise, and skills to be shared in a common platform.

What is the *Pravasi Bhartiya Samman* **Award (PBSA)? –** The PBSA is the **highest honour** conferred on overseas Indians. PBSA is conferred by **the President of India** as a part of the PBD conventions on a Non-Resident Indian, Person of Indian Origin or an organization or institution established and run by the Non-Resident Indians or Persons of Indian Origin, who has made significant contribution in any one of the following fields: **(1)** Better understanding abroad of India; **(2)** Support to India's causes and concerns in a tangible way; **(3)** Building closer links between India, the overseas Indian community and their country of residence; **(4)** Social and humanitarian causes in India or abroad; **(5)** Welfare of the local Indian community; **(6)** Philanthropic and charitable work; **(7)** Eminence in one's field or outstanding work, which has enhanced India's prestige in the country of residence; **(8)** Eminence in skills which has enhanced India's prestige in that country (for non-professional workers).

General Studies Paper III

#1 The Need for Fiscal Council in India

News: In a reply to the Parliament, the Government ruled out setting up of a Fiscal Council as recommended by the FRBM Review Committee. 13th, 14th and 15th Finance Commissions had also given similar recommendations to set-up and independent body for Budget review.

What is the debate surrounding the Fiscal Council? – Public finance and Government Budgeting are the **key functions involving both the Executive and Legislature**. **(1)** At present, the Budgetary process is heavily **tilted towards the Government** (Executive). The function of the Parliament in the Budget process is to discuss and debate the demands and pass them with utmost care. However **most of the Budget is not even discussed in the Parliament** because; **(a)** Most MPs lack expertise with regard to ascertaining financial matters; **(b)** There is a **lack of access to high quality research** and the Parliament lacks independent resources in terms of high quality researchers, libraries and reference material etc. to guide the MPs on budgetary matters; **(2)** The **dependence on government data and inputs is very high** in the absence of other research without any credibility of this information; **(3)** There are **questions of comprehensiveness, transparency and accountability in the Budgets**. The targets under the FRBM act have been repeatedly postponed and re-adjusted. Off-budget financing is used to show lower deficits. The report of the Comptroller and Auditor General (CAG) of India in 2018 on the compliance of the Fiscal Responsibility and Budget Management (FRBM) Act for 2016-17, highlights various **obfuscations done to keep the liabilities hidden**. Such practices raise questions about the quality of the data and analysis; **(4)** The Government has responded that the functions related to scrutiny and analysis are undertaken by the bodies like CAG, National Statistical Commission and the Finance Commission. However, these institutions do the **ex-post analysis whereas the Fiscal Council will do the ex-ante analysis** including the robustness of budget forecasts, work out costs of various budget proposals to evaluate the accuracy of the budget estimates, and monitor progress and conformity to fiscal rules. Hence the functions of Fiscal Council are different.

What will be the functions of the proposed Fiscal Council? – The 15th Finance Commission has listed the following functions for the Fiscal Council; **(1)** Providing multi-year **macro-economic and fiscal forecasts**; **(2)**

Evaluating fiscal performances vis-à-vis targets across all levels of Government; **(3)** Assessing the appropriateness and consistency of fiscal targets in the States; **(4)** Undertake an **independent assessment of long-term fiscal sustainability**; **(5) Assessing Fiscal Policy Statements** by the Government under the FRBM; **(6)** Advising on the conditions for using escape clauses under fiscal responsibility legislations; **(7)** Policy costing of new measures with significant fiscal implications; **(8)** Providing analytical **support to the Finance Commissions** and publishing all their reports and underlying methodologies.

What has been the international experience? – (1) According to the International Monetary Fund (IMF), there were **36 countries with Independent Fiscal Institutions (IFIs)** in 2014 with a mandate **to promote stable and sustainable public finances**; **(2)** These are called Congressional Budget Office in the US, Office of Budget Responsibility in the UK, Parliamentary Budget Office in Australia, and Fiscal Council in many other countries; **(3)** While most of the IFIs are in advanced countries, **emerging economies too have started establishing** such independent bodies; **(4)** A study by the IMF ("The Functions and Impact of Fiscal Councils", July 2013), documents that the existence of IFIs is associated with: **(a)** Stronger primary balances; **(b)** Countries with IFIs tend to have **more accurate macroeconomic and budgetary forecasts**; **(c)** IFIs are likely to raise public awareness and raise the level of public debate on fiscal policy; **(5)** Case studies in Belgium, Chile and the UK show that IFIs have significantly contributed to **improved fiscal performances**.

What will be the benefits of the Fiscal Council? – The 14th Finance Commission recommended the establishment of an **independent Fiscal Council** which should be appointed by and **report to the Parliament** by inserting a new section in the FRBM Act. Such a Council will have following benefits: **(1)** An unbiased report to Parliament helps to **raise the level of debate and brings in greater transparency and accountability**. It will **enhance the effectiveness of the Parliament to question the Government** on its fiscal policies; **(2)** Costing of various policies and programmes can help **to promote transparency over the political cycle to discourage populist shifts in fiscal policy** and improve accountability; **(3)** Scientific estimates of the cost of programmes and assessment of forecasts could help in **raising public awareness about their fiscal implications** and make people understand the nature of budgetary constraint; (4) The Council will **work as a conscience keeper in monitoring rule-based policies**, and in raising awareness and the level of debate within and outside Parliament.

#2 Shortfall in Disinvestment Target

News: The Government is set to miss the disinvestment target for the FY 2021-22. This comes in the backdrop of demand of enquiry into the sale of Air India. Both developments indicate tough environment for the disinvestment in India.

How much has been the shortfall in disinvestment target set by the Government? – (1) In FY 2020-21, the Government could **realize only 16% of the target**; **(2)** Over the last decade, the Government was able to **achieve the disinvestment target only twice in FY 2017-18 and 2018-19**; **(3)** Since FY 2010-11, the Government has been able to **achieve only 61.5% of the target** (INR 5 Lakh Crore against target of INR 8.15 Lakh Crore) it had set out; **(4)** For FY 2021-22, the Government had set target of INR 1,75,000 Crore. As of December 2021, there was a shortfall of INR 60,000 Crore from the target. The Government had hoped to achieve the target through the IPO of LIC and disinvestment in BPCL. While there is possibility of LIC IPO happening before March 2022, the chances of disinvestment in BPCL in FY2021-22 are bleak.

Year	Budget Estimate (INR Cr)	Actuals (INR Cr)	% of estimate
2010-11	40,000	22,846	57%
2011-12	40,000	18,088	45%
2012-13	30,000	25,890	86%
2013-14	54,000	29,368	54%
2014-15	58,425	37,737	65%
2015-16	69,500	42,132	61%
2016-17	56,500	47,743	85%
2017-18	72,500	1,00,045	138%
2018-19	80,000	94,727	118%
2019-20	1,05,000	50,304	48%
2020-21	2,10,000	32,886	16%

What are the challenges to the Disinvestment process in India? – (1) The privatization of public enterprises is **opposed by trade unions** and employee organizations. **Protests and strikes** delay the process and **make the potential investors/buyers wary**; **(2)** Over the last couple of years, the **global markets are facing increased uncertainty due to COVID-19 pandemic** and the corporate sector is putting **potential investments on hold**; **(3)** Many deals are dragged to Courts on various grounds. Given the slow judicial process in India, the **litigation can go on for years hampering investor sentiment**. A Member of Parliament has approached the Delhi High Court demanding an enquiry into the recent sale of Air India to the TATA Group terming the process of disinvestment as arbitrary, unconstitutional, unfair and discriminatory; **(4)** There is a **lack of political will** on certain issues. Threat of litigation, popular backlash make the Governments wary of taking bold decision. Sale of Air India was a bold step but it remains one-off case; **(5)** Loss making PSUs do not attract investments and may require higher concessions from the Government to attract investors, e.g., the Government had to own almost 75% debt in case of Air India; **(6) Bureaucratic risk aversion** is also one of the reasons, as Government officials are concerned regarding future enquiries into decisions related to fair pricing, valuation of deals etc.; **(7)** There are other internal factors that are stumbling blocks. These include certain preparatory activities at the level of the PSU such as addressing issues around the land title, identifying and carving out non-core assets; **(8)** Slow process of disinvestment due to bureaucratic controls leading to stretched timelines; **(9)** Selecting the time of sale is challenging for the Government. Sale at a time of slowdown in the market may lead to lower realization which can attract enquiries and litigation in future.

What should be the approach of the Government? – A renowned economist has suggested: **(1)** Government must **ensure there is minimal loss of livelihood**. This was ensured in the Air India sale with **no lay-offs as a pre-condition of the deal**. The Government can also **re-deploy people in other PSUs**. This may help sell the loss making PSUs; **(2)** In order to address the concerns of the bureaucracy, **more assurances need to be given** through the Ministry of Finance and the PMO and they must back the officers in-charge of the process; **(3)** The Government has to **take steps to speed-up the process** as inordinate delays in decision making may erode the value of entity to

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DIPAM
The Department of Investment and Public Asset Management, earlier named as department of disinvestment, aims at proper management of Centre's investment in equity including its disinvestment in Central Public Sector Undertakings. Initially set up as an independent ministry in 1999, the Department of Disinvestments came into existence in May 2004. The department was renamed as 'DIPAM' in the 2016-17 budget.

be sold. Timely divestment can increase the sale value and stakeholder returns. NITI Aayog has recommended appointment of Advisors and Asset valuers to speed up the process; **(4)** Government should avoid disinvestment in all PSEs especially those that are high performers in core economic sectors. Companies which either have monopoly power or have sector benefits shouldn't be divested as they provide revenue and resources to the Government; **(5) Mergers with other entities** is one possible solution as is being done in the Banking sector; **(6)** NITI Aayog has recommended **appointment of independent professional agency to speed up the Asset Monetization Programme**.

#3 Vodafone-Idea Issue

News: The board o**f Vodafone Idea (VI)** has approved to pay the spectrum auction instalments and **Adjusted Gross Revenue (AGR)** dues (an estimated Rs 16,000 crore) in the form of equity to the Government. This will make the Government the biggest shareholder with a 36% stake in the company.

Why did the government acquire equity in Vodafone Idea? - The beleaguered telecom company, Vodafone Idea faces liabilities of close to Rs. 2 trillion. Due to a number of challenges in the telecom sector, the **Department of Telecommunications (DoT)** had provided various options to telecom firms in October 2021 as a part of its Telecom Reforms Package to clear their dues (Spectrum charges and AGR). One of the offers was to defer payment of spectrum auction instalments and Adjusted Gross Revenue (AGR)-related dues by four years. The interest arising out of the deferred payment could be paid to the government in the form of equity shares. The Vodafone Idea board accepted the offer and approved deferring payment in the form of

equity. The move will provide immediate cash flow relief to the company and help them to expand their 4G spectrum.

What are the benefits of the government acquiring a stake in a private telecom company? - The benefits are as follows: **(1) Avoid duopoly** in the Telecom Sector: Without VI, India would have had a private duopoly (Jio and Airtel), which may have denied citizens the benefits of genuine competition; **(2)** To **support the economy**: The move will provide short-term support to **insulate the economy from the cascading effect** of a drawn-out implosion of a large firm; **(3)** Failure of VI could have **accentuated the bad-loan** problem in the economy; **(4) Global Precedent:** This kind of transient support has precedent in India and elsewhere. Following the global financial crisis in 2008, the US government supported General Motors (GM) and Chrysler and at one stage held 61% stake in GM.

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Adjusted Gross Revenue (AGR)

AGR is a fee-sharing mechanism between the government and the telecom companies who shifted to the **'revenue-sharing fee'** model in 1999, from the **'fixed license fee'** model. It is basically the usage and licensing fee that telecom operators are charged by the Department of Telecommunications (DoT). It is divided into **spectrum usage charges** and **licensing fees** that are fixed between 3-5% and 8% respectively.

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What are the drawbacks of such an acquisition? - The drawback of such acquisition is as follows: **(1)** The government has **acquired the majority stake without management control**, which **lays down public money into the hands of a private corporation without any responsibility**. Even if the government tries to manage the company in future, its own track-record is poor in telecom PSUs (BSNL and MTNL); **(2)** The move has come up at a time when the government has been trying to divest equity in many PSUs. **Taking a major stake in a private company runs contrary to the disinvestment policy**, spelled out at the start of this fiscal, that the government will exit all commercial activities except those which are strategic in scope; **(3)** The agreement with VI could also set a **precedent for struggling companies** in other sectors to seek a **similar rescue plan**, overturning pro-market, reformist policies of the last three decades.

#4 The Issue of Unemployment in India

> **News**: Multiple surveys have highlighted the rising unemployment in India. Several Experts have called for quick addressal of the issue as the problem is reaching critical stage.

What is the status of unemployment in India? – (1) Unemployment rate: India's unemployment rate has increased to 7.91% in December 2021 from 6.3% in 2018-2019. 10 million young Indians enter the job market every year and rising proportion of unemployed youth means that more and more young Indians are idle; **(2) Unemployment rate (Urban vs rural)**: In urban areas, unemployment has gone up to 9.30% (December 2021) from 8.09% (January 2021). In rural areas, it has gone up to 7.28% from 5.81%; **(3) Ruralisation:** The manufacturing sector has lost 9.8 million jobs in the last 1 year and jobs in agricultural sector jumped by 7.4 million. Workers are back in their villages, even though urban jobs provide better wages; **(4) Decreasing quality of jobs:** 9.5 million people have left the formal sector and have become jobless or part of the informal sector; **(5) India's Labour Force Participation (LPR) is low compared to other emerging countries:** According to the World Bank, India's LPR stood at 46% in 2020, while that of Brazil was 59%; **(6) Large number of the Youth between 20 and 24 years are unemployed**: According to the NSSO, in 2019, when India had the highest unemployment rate in the last 45 years, 34% of youths remained unemployed. This severely affects India's Demographic dividend; **(7) Inverse relation between Education and Employment**: The more educated the people, the more unemployed they were e.g., 63.4% of graduates falling in the age bracket of 20-24 years were unemployed; **(8) Gender divide**: Unemployment among women is higher than men, both in urban as well as rural areas. For women, the average unemployment was 14.28% and for men, it was 7.88%. **LPR for women continues to decline over the years**. This is happening even though more and more women are attending school and college in the country.

What are the reasons for decreasing LPR for Women? – (1) Most women were **involved in agricultural jobs** in rural areas. The **mechanisation of these jobs** has had a huge impact on female labour force participation

in the country; **(2)** India's manufacturing sector is not labour-intensive. This has made it difficult to accommodate women who got displaced from agricultural jobs; **(3)** Women's **role as primary caregivers** and ownership of domestic chores is a reason for the low participation of women in the workforce. The cultural norms and deep roots of patriarchy apparently limit women's labour participation in India.

What is the issue with unemployment rate as metric? – Some economic analysts suggest that unemployment metric is not a correct parameter for analysing the health of the economy; **(1)** The unemployment rate merely tells the proportion of the working-age **population that wants to be employed** to earn some wages. The unemployment rate of 7.9 % does not mean that the remaining 92.1% were employed. It does not take into account those **who do not want to be employed** and those who do not try to find work. Many adult Indians simply don't express any desire to work to earn wage; **(2)** The **employment rate is a more useful indicator**. It is a ratio of the **employed to the total working-age population**. The employment rate is a measure of success; **(3)** India's success rate on this count is low. The global employment rate was 55% in 2020 (58% in 2019) compared to 43% in India. Only West Asia and North Africa by World Bank classification have a lower employment rate than India; **(4)** The implications are that **almost 60% of the working-age population does not want to work**. India's path to prosperity is in finding employment for this population. To reach global employment rate standards, India needs to employ an additional 187.5 million people; **(5)** Out of the 60%, 9 million women were willing to work, although they were not actively looking for work. There is a need to investigate why so many women are not looking for work, though they are willing to work; **(6)** The immediate challenge is to provide employment to the 7.9% (35 million) who were not employed and were actively looking for employment.

What are the factors hampering India's employment generation potential? – (1) Low private investments: The investment rate has been declining since 2011. It has dropped from 34.3% in 2011 to 27% in 2020; **(2) Weak demand:** Most companies are reluctant to invest. There has been decrease in consumer demand especially from the middle class; **(3) Access to credit:** Banks are affected by NPA's and the ongoing inflation problem have led to increasing in interest rates. This in turn affects business aces to low interest rate capital.

How can employment opportunities be improved in India? – According to a Senior Academic in IIM Ahmedabad there is strong empirical evidence that more jobs in India are created by young, small and local firms, and not large established ones. However, this is not strong enough to provide work to India's large workforce. India has to promote entrepreneurship opportunities in Tier-2, 3 cities. This would require: **(1) Scaling up investments in human and physical infrastructure** in smaller cities to improve connectivity, access to electricity etc.; **(2)** There is an urgent need to dramatically **improve the reach, quality, and timeliness of access to education and health**. This could be done by promoting and **forming global partnerships** with leading education and health institutions; **(3)** Huge distortions in factor markets have made it **difficult for young enterprises to access land, labour and capital**, as they are often crowded out by established firms. Recent reforms in labour regulations will encourage start-ups and job creation, but **more reforms are needed in land acquisition and access to finance through capital markets**; **(4)** Focus has to be on **generating jobs in the services sector**. These include tourism, entertainment and leisure, IT Services, health-care etc.; **(5)** India's energy sector especially the green energy initiatives have large potential to create livelihood opportunities.

#5 Review of the BITs: Recommendations of the Parliamentary Committee

News: The Standing Committee on External Affairs had submitted its report on India and Bilateral Investment Treaties. The Committee reviewed the existing BITs framework and provided suggestions for improvement

What are the Bilateral Investment Treaties (BITs)? – (1) BITs are **reciprocal agreements** between two countries to **promote and protect foreign private investments in each other's territories**; **(2)** BITs **establish minimum guarantees** between the two countries **regarding the treatment of foreign investments**, such as

national treatment (treating foreign investors at par with domestic companies), **fair and equitable treatment** (in accordance with international law), and **protection from expropriation** (limiting each country's ability to take over foreign investments in its territory); **(3)** BITs typically include a **dispute resolution mechanism** listing down the remedies available to the aggrieved parties in case of a dispute. The most preferred mode of settling such disputes is arbitration; **(4)** As a consequence of these provisions, BITs have a potential to **attract foreign investment by providing a higher degree of confidence to the prospective investors** in their investments.

What are the findings of the report? – (1) India has **signed only 4 new BITs since 2015** after the revision of the Model BIT Text. Prior to 2015, India had signed 83 BITs (based on Model BIT of 1993) of which 74 were in force. India has terminated 77 old BITs since 2015 and 6 old BITs are in force. 37 BITs are under negotiation. The **number of signed/under negotiation BITs are inadequate**; **(2)** The Committee noted there have been **37 notices of dispute** against India under various BITs. Although only one case resulted in India paying an arbitral award, the said award resulted in a significant cost to the exchequer; **(3)** The Committee observed that there is **scope for improvement in the Model BIT 2015** such as those regarding the investor-state dispute settlement

> **PT BOX**
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> **Investor-State Dispute Settlement (ISDS)**
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> **Investor-state dispute settlement (ISDS)** or **investment court system (ICS)** is a system through which investors can sue countries for discriminatory practices concerning foreign direct investment. The protection provided by ISDS acts as a **lever to boost foreign investment**. ISDS is an instrument of public international law and is included in a number of bilateral investment treaties (BITs).
>
> ISDS often takes place under international arbitral tribunals governed by different rules or institutions, such as the **London Court of International Arbitration** (LCIA), the **International Chamber of Commerce** (ICC), the **Hong Kong International Arbitration Centre** (HKIA), or the **UNCITRAL Arbitration Rules**.

mechanism; **(4)** India **does not have sufficient number of lawyers/judges with the requisite expertise/experience in investment arbitration**. Consequently, huge fees are paid to foreign lawyers and law firms engaged to represent India in investment arbitration.

What are the recommendations of the Committee? – (1) India should **expedite the signing of the BITs**. The Committee recommended this can be achieved by; **(a)** Signing new BITs with countries with which India had such treaties in the past; **(b)** Signing BITs selectively in identified priority sectors; **(c)** Early completion of treaty negotiations by the Ministry of External Affairs in coordination with other Ministries; **(2)** There should be **timely settlement of investment disputes through pre-arbitration** consultation or negotiations; **(3)** The Ministry of External Affairs has signed an agreement with the Permanent Court of Arbitration (PCA), under which an arbitration administered by PCA can be conducted in India. The **Ministry must ensure early implementation of the agreement** as it can help make **India a hub for international arbitration**; **(4)** The Committee has recommended that: **(a)** The Model BIT 2015 be suitably **amended in light of new experience** gained in disputes arising out of BITs; **(b)** It should be reviewed continuously to ensure that it is balanced and comprehensive; **(c) Best practices from BITs adopted by advanced countries** can be incorporated after detailed review; **(5)** The Committee recommended that **BITs should be drafted without any ambiguity**, so as to avoid: **(a)** ambiguous interpretation by arbitrators and tribunals; **(b)** Investment disputes or claims against India; **(c)** Abuse of certain provisions by investors; **(6)** The Committee recommended **developing domestic capabilities in investment arbitration** including professionals with experience/expertise, **training government officials** in the field of investment treaties, and **promoting the New Delhi International Arbitration Centre** as a world-class arbitration centre.

What are other suggestions to minimize disputes? – According a renowned academic expert **most ISDS dispute claims against India are due to poor governance**. This includes **retrospective taxation laws** in case of Vodafone and Cairn Energy, annulment of Devas deal and **judicial delay in enforcement of award** in case of White Industries. There is a need of **greater regulatory coherence, policy stability and robust governance structures** to avoid disputes and claims.

#6 India and Trade Negotiations

News: Trade negotiations are underway for signing FTAs with the UK, Australia, UAE, and the EU. This reflects a recalibration in approach to a greater acceptance of bilateral and plurilateral arrangements.

What is the status of India's Foreign Trade? – (1) India's overall exports (Merchandise and Services combined) in April-December 2021 are estimated to be USD 479.07 billion; **(2)** Merchandise exports rose to USD 37.8 billion in December 2021, recording a **growth of 39% over last year**. Exports were USD 27.22 billion in December 2020 and USD 27.11 in December 2019 indicating recovery to pre-pandemic levels; **(2)** The mark of exports worth **$300 billion has been achieved in the first nine months alone,** which was the amount of exports trade for the whole year in 2019 (*Pre pandemic*); **(3)** Imports have **risen by almost 22% over the 2019 levels**, leading to a widening of the trade deficit; **(4)** In FY 2020-21, India's exports and imports stood as USD 291.8 billion and USD 394.4 billion respectively indicating **trade deficit of USD 102.6 billion** of which **USD 44 billion deficit was with China (43% of total deficit)**; **(5)** According to a report by UNCTAD, the value of global trade in goods is about 15% higher than the pre-pandemic level though trade in services is yet to recover to earlier levels.

What has been India's approach towards trade negotiations? – (1) India favours multilateral approach to trade **where decisions are undertaken on the basis of consensus among all parties** (like in the WTO). India's contention is that the plurilateral agreements are more favourable to developed countries as they have greater negotiating power; **(2)** India has also **opposed the plurilateral agreements** on e-commerce, domestic services regulations, and investment facilitation by member countries of the WTO. India is contesting the advent of **Joint statement initiatives (JSIs)** that are broadly defined as a plurilateral negotiating tool initiated by a group of WTO members on certain issues **without adhering to the rules on consensus decision-making of the multilateral body**. The concern is over the introduction of new trade rules to the WTO framework surreptitiously through the JSI agreements despite not having consent of all member nations; **(3)** India had also exited from RCEP signed in 2020 because of concerns related to China's dominance and India's domestic industries.
However, India's initiation of talks on signing FTAs with several countries indicate a possible recalibration of approach and acceptance of bilateral and plurilateral agreements.

What are the possible reasons for change in approach? – (1) The Government has shifted focus on export-oriented economic growth and is setting ambitious targets for goods and services exports. This indicates signs of a **more offensive strategy focusing on Indian export potential**, rather than a **defensive approach prioritising protection of domestic industry** from import competition; **(2)** The Government may have realised the **missed opportunity to get preferential access for Indian exports** subsequent to the decision to stay out of the Regional Comprehensive Economic Partnership (RCEP); **(3)** WTO multilateral negotiations are stalled for some time now and plurilateral negotiations are more focused on regulatory issues rather than core trade concerns. All these reasons have led to India making a renewed **push for pursuing trade liberalisation on preferential basis through the FTA route**.
While the negotiations are underway for full-fledged FTAs which might take some time, there is possibility of signing Early Harvest Deals to immediately lower trade barriers in some areas.

What are the concerns associated with the Early Harvest agreements? - Early harvest agreements initiate bilateral trade by focusing on a restricted list of goods and services. In the early harvest deal trading partners reduce tariff barriers on limited goods to promote trade. They act as a precursor for a comprehensive FTA. However there are certain concerns related to early harvest deals; **(1)** They can result in delaying a comprehensive FTA e.g., India had signed a **restricted trade agreement with Thailand in 2004** but has been unable to convert this into an FTA. Similarly with **Sri Lanka** India was not able to conclude an agreement on services and investments. Trade Experts note that early harvest deals generally **reduce the incentive of one or both sides towards a full FTA**; **(2)** Early harvest agreements can be **challenged in WTO**, as only comprehensive FTA's are exempt from WTO rules. **Article XXIV.8(b) of GATT exempts** only those **deals which cover substantially all the trade between two countries**.

What should be the approach? – (1) India has traditionally been **wary of linking non-trade issues with trade negotiations**, both bilaterally and multilaterally at the WTO. Non-trade issues that have been included in trade negotiations include environment regulations and sustainability, poverty alleviation and labour issues etc. While there is a realization that certain issues like environment and sustainability are unavoidable, India should remain careful about how far these issues are incorporated in the bilateral agreements (FTAs) so that they do not compromise India's stand at the WTO. India must remain cautious of not over-committing to onerous and sweeping new rules on WTO-plus matters in its zeal for early finalisation of PTAs; **(2)** As far as Early Harvest Deals are concerned **GATT allow countries to sign interim agreements** subject to certain conditions. India can **design and present these as** "**interim agreements**". The interim agreement should **include a plan or a schedule for the formation of an FTA within a reasonable period of time**. It should be notified to WTO members, who can make recommendations if they believe that the interim agreement is not likely to lead to the formation of an FTA.

#7 China's Status as Developing Country at the WTO

News: China's classification as Developing Country in the China's Trade Policy Review at the WTO has made other countries, including India and the US, to question the status.

How does the World Bank categorises countries based on income? – The World Bank classifies the world's economies to four income groups: Low, Lower-middle, Upper-middle, and High-income countries. The classifications are updated each year on July 1 and are based on GNI (Gross National Income) per capita (in current $) of the previous year. China's per capita income of $10,435 for 2020, makes it an upper middle income country, while India's per capita income of $1,928 makes it a low middle income country.

Categorization	Per Capita Income (PCI)	Example
High Income	> $12,696	US ($63,413)
Upper Middle Income	$4,096-$12,695	China ($10,435)
Lower Middle Income	$1,046-$4,095	India ($1,928)
Low Income	< $1,045	Malawi ($550)

What is the significance of this classification? – (1) Owing to the lack of proper definitions, **WTO members themselves declare whether they are "developed" or "developing" countries.** Members can challenge each other's declared status; **(2)** WTO has special provisions for developing countries under the Special and Differential Treatment provisions which include **(a)** Longer time periods for implementing Agreements and commitments; **(b)** Measures to increase trading opportunities for developing countries; **(c)** Provisions requiring all WTO members to safeguard the trade interests of developing countries; **(d)** Support to help developing countries build the capacity to carry out WTO work, handle disputes, and implement technical standards; **(3)** However the classification as developing country **does not automatically provide access to unilateral preference schemes** of some of the developed country members such as the Generalized System of Preferences (GSP). **Generalized System of Preferences**, or **GSP**, is a preferential tariff system which provides tariff reduction on various products. Under the GSP, differential tariff could be imposed by a nation on various countries depending upon factors such as whether it is a developed country or a developing country. Under the GSP, several developed countries like the US, Australia, the EU etc. levy zero tariffs on products from certain developing and least developed countries.

How has China responded to the criticism? – (1) Apart from India, the US, the EU, Brazil and Indonesia have also questioned the status of China. China has responded to India that the concept of developing countries is relative to developed countries, and international organisations do not have a unified definition of developing countries; **(2)** India had asked China to explain its claims of shift from a stage of **high-speed growth to a stage of high-quality development**. China replied that under 'high-quality development' innovation becomes the first driving force. Entering the stage of high-quality development, the main characteristics of China's economic development are: **(a)** Shifts from **high-speed to medium-high speed** in economic growth; **(b)** From pursuit of **scale** and **speed** to quality and **efficiency** in economic development; **(c)**

From a focus on capacity increase to a **balance between adjusting existing resources and optimising additional resources**; **(3)** To the EU, China has said though its economic and social development has made great progress after decades of reforms, the problem of unbalanced and inadequate development remains; **(4)** However, **China has recently indicated that it may be willing to forego many benefits of being a developing country**. It may forego all exemptions available to developing countries in negotiations aimed at cutting fishing subsidies to curb overfishing. This will have an impact on future WTO negotiations.

#8 Challenges in Regulation of Cryptocurrency

News: Regulators across the world have come up with various definitions of cryptocurrencies. But there is no consensus even among the major economies on how to treat the decentralized virtual currencies.

What is the global status regarding use and regulation of cryptocurrencies? – (1) El-Salvador is the only country where Bitcoin has been recognized as legal tender; **(2)** 9 countries including China have completely banned the cryptocurrencies; **(3) Forty-two countries** have **banned it 'implicitly'**, wherein banks are prohibited from dealing in crypto directly or indirectly and crypto exchanges are banned. Cryptocurrencies are finding acceptance in mainstream corporate sector e.g., **(1) Goldman Sachs** has started **trading Bitcoin futures**; **(2)** Tesla has invested $1.5 billion in Bitcoin and plans are underway to accept Bitcoins as payment; **(3)** PayPal had announced in March 2021 that it would **allow its U.S. customers to use cryptocurrency** to pay its online merchants. PayPal had also launched a service in October 2020 to **enable its users to buy, sell and hold cryptocurrency**; **(4)** Big-name brands like **AT&T, Home Depot, Microsoft and Starbucks** now accept bitcoin payments.

Why regulation of cryptocurrencies is necessary? – (1) In the absence of regulation, **cryptocurrencies can render fiscal and monetary policies ineffective** e.g., the Government will not be able tax transactions undertaken in cryptocurrencies and there will be widespread tax evasion. Similarly Central Banks won't be able to control supply. Widespread use of **cryptocurrencies can cause macroeconomic instability**; **(2)** Lack of regulation has **created bubbles in cryptocurrency valuation** and the **prices are highly volatile** e.g., the price of 1 Bitcoin has varied from ~INR 24 Lakhs in July 2021 to INR

ASSET, PROPERTY OR COMMODITY?

US | No federal regulatory framework. CFTC calls it commodity, while for taxation it is seen as property

UK, Australia | Crypto assets can be owned but can't be used as legal tender. Tax and anti-money laundering laws are applicable

Singapore | Has regulation since 2020. Crypto is treated as asset class. City-state is known as crypto safe haven as long-term gains are not taxed

China | Ban on crypto trade, use, exchanges and even mining

India | RBI has sought full ban. Govt is yet to firm up its view, given that all wings are not in sync. Legislation was postponed recently

EU | Comprehensive regulatory framework called MiCA being developed. Trading is legal and gains are taxed

S Korea | Not legal tender but other uses are tightly regulated

Source: Investopedia, Library of Congress

49.95 lakhs in November 2021 and again falling to INR 26 Lakhs by mid-January 2022. The eventual bursting of bubble will badly hurt the investors; **(3)** Cryptocurrencies could be **misused to launder black money or finance terrorist and other illicit activities like drug trafficking through Darknet**; **(4)** The environmental impact of mining cryptocurrencies is huge because **mining cryptocurrencies is an energy intensive process**. As per Bitcoin Energy Consumption Index from Digiconomist, (an online tool), the **carbon footprint of Bitcoin is equivalent to that of New Zealand**, with both emitting nearly **37 megatons** of CO_2 into the atmosphere every year. Bitcoin's total **annual power consumption to be around 204.50 terawatt-hours**, equivalent to the **power consumption of Thailand**. The carbon footprint of a single Ethereum transaction as of December 2021 was **102.38 kilograms of CO_2**.

What are the challenges in regulation of Cryptocurrencies? – (1) Lack of any precedent has made it difficult to classify the cryptocurrencies. Countries are opting for bans but that also seem ineffective; **(2)** Regulators and Lawmakers are **not able to fully comprehend the technical aspects of cryptocurrencies** and their likely impacts on the economy in general; **(3) Classifying crypto as a commodity** can tackle market and compliance risks, but **not illicit activities**, financial stability, systemic and capital flight risks; **(4)** Laws regulating or banning the cryptocurrencies are difficult to implement to ensure compliance as technology can easily bypass controls.

What are the concerns in legalizing of cryptocurrencies? – **(1)** There is an argument that **cryptocurrencies can be legalized as an asset just like land**. Land is not medium of exchange because it not fungible and is illiquid. Moreover assets are not easily divisible and portable. However **cryptocurrencies are easily divisible, are portable** (they are digital, hence no need to carry or exchange physically). Hence once legalized, they'll quickly become medium of transaction, which will pose a challenge from the perspective of monetary policy; **(2) Cryptocurrencies are largely speculative assets**. If the Government legalises a purely speculative asset, it provides a **green signal to investors to invest in it and blow into the bubble**. When the bubble bursts, lot of investors will lose their money; **(3)** There is an **argument that cryptocurrencies are not an asset**. An asset is something that has a **tangible value**. Even if its immediate utility is intangible, an asset should have some tangible benefits. Proponents of cryptocurrencies talk of blockchain technology but it is just a technique to account for transactions. It has nothing to do with cryptocurrencies, except that the cryptocurrencies' digital exchange is being maintained in blockchain format. Blockchain has thousands of applications other than crypto. Hence, **cryptocurrencies have absolutely no value and cannot be considered an asset**; **(4)** Any **underlying value** of cryptocurrencies is only in terms of an expectation of its **widespread acceptance as a medium of exchange** in the future. By legalising Crypto assets, Government will inadvertently be promoting this expectation.

IMF and WEF have noted that though crypto can help make cross-border payments efficient and improve financial inclusion, its operational and systemic risks means that **regulation needs to be on the global agenda**.

#9 Xenotransplantation: Opportunities and Challenges

News: Heart from a genetically modified pig was transplanted into a 57-year-old patient in New York. Although a remarkable scientific achievement, it has sparked debate about its implications.

What is Xenotransplantation? – **(1)** According to the US Food and Drug Administration (US-FDA) Xenotransplantation is any procedure that involves the **transplantation, implantation or infusion** of live cells, tissues, or organs **from a nonhuman animal source** into a human recipient; **(2)** Many earlier attempts of animal-to-human heart transplants had failed, largely because **patients' bodies rapidly rejected the animal organs**. The most notable example was that of American infant Baby Fae, a dying infant in 1984 who lived 21 days with a baboon heart; **(3)** The latest attempt in the US in January 2022 involved the transplantation of **heart from a genetically modified pig**. The gene-editing was undertaken to **remove sugar** in its cells that's responsible for the hyper-fast rejection of organs.
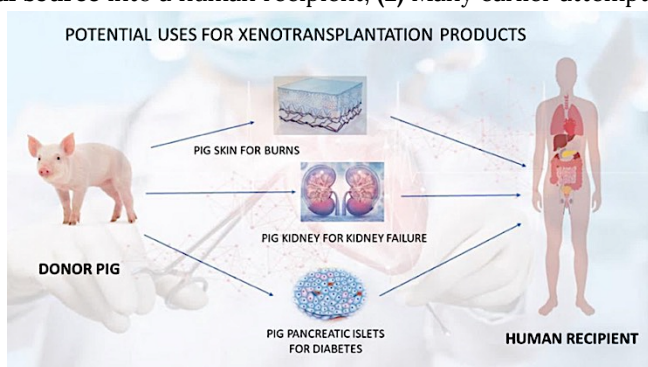
What is the need for Xenotransplantation? – **(1) Organ shortage**: According to the WHO, more than 114,000 organ transplants are carried out annually in the world, but they **fulfil only less than 10% of global needs**. In India, against a requirement of ~30,000 liver transplants annually only 1,500 transplants are performed due to scarcity. Similarly, nearly 50,000 persons suffer from heart failures annually but only about 10-15 heart transplants are performed every year. **Organ donation has remained low even in developed countries with highly-education population** e.g., in Japan, the organ donation rate is only 4 per million; **(2)** Organ shortage has led to **wide increase in organ trafficking**. It is estimated that 5–10% of kidney transplants worldwide result from commercial transactions between a potential recipient and a paid

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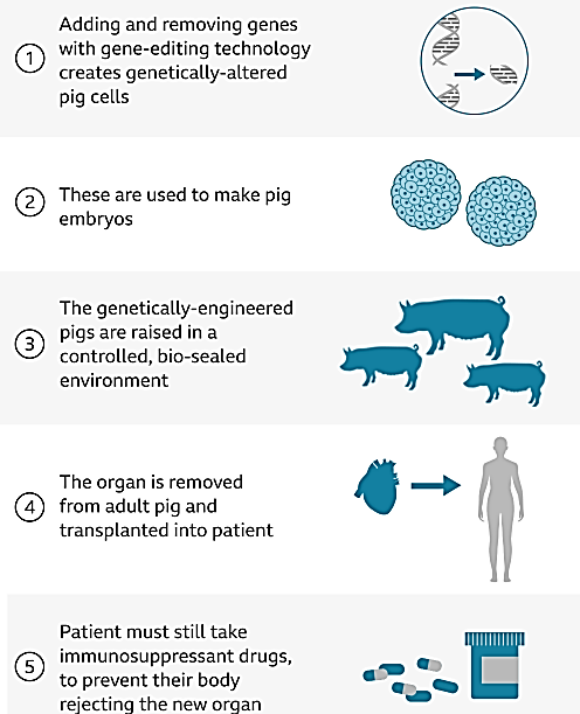**Allotransplantation and Syngeneic Transplantation**
Allotransplantation involves transplantation of organs, tissues, or cells between members of same species that the genetically non-identical.
Syngeneic Transplantation involves transplantation between two genetically identical individuals of same species.

living donor. Some countries have allowed use of organs from executed prisoners; **(3) Increasing disease burden**: Due to advancements in medicine, the average life expectancy has increased. Many persons are facing **organ failure due to old age and lifestyle issues which has increased the demand for organ transplant**. The most frequently transplanted organ is the kidney, which accounts for 68% of the total organ transplants; **(4)** Some organs can only be obtained from deceased or brain-dead donors like the heart, liver etc.

What are the advantages of Xenotransplantation? – (1) With Xenotransplantation, organs will be **available immediately and electively**; (2) It will **eliminate illegal organ trafficking and the use of organs from executed prisoners**; **(3)** The requirement of obtaining consent from the donor will be eliminated. However animal right activists are opposed to this approach; **(4)** The increased availability of organs will provide the doctors a fighting chance in those patients who have very low probability of survival as doctors tend not to recommend organ transplant if the chances of survival are grim; (5) The detrimental **effects of brain death on donor organs** will be avoided. There is very narrow window after death in which the organs must be harnessed else they become unfit for transplantation; **(6)** It will **eliminate the 'cultural' barriers to donation of organs from deceased human** present in some countries like Japan.

What are the potential advantages of Pigs in Xenotransplantation? – (1) Pig **organs have similarities** to human organs in respect of anatomy and physiology e.g., cardiac output and stroke volume, which are major indicators of cardiac function, have been reported to be comparable in pigs and humans; **(2)** Pigs **can provide a relatively large supply of organs, tissues, and cells**, e.g., it is easy to raise and achieve adult human organ size in six months from pigs; **(3)** Pigs are **easy to breed and have large litters**, **(4)** From a scientific viewpoint, pigs are **genetically modifiable to reduce the chances of rejection** by the human body. There are now companies that are breeding genetically modified pigs. A US based company Revivicor supplied the heart in the recent heart transplant in New York; **(6)** Pig farms already raise pigs only for meat and food, so **using them for organs raises fewer ethical concerns; (7) Some** breakthroughs have already been achieved like; **(a)** Pigskin grafts are used on burns; **(b)** Chinese surgeons have used pig corneas to restore vision in an operation in 2017; **(c)** US experts have attached a genetically-altered kidney to a brain-dead person.

Genetically engineering pigs as organ donors

1. Adding and removing genes with gene-editing technology creates genetically-altered pig cells
2. These are used to make pig embryos
3. The genetically-engineered pigs are raised in a controlled, bio-sealed environment
4. The organ is removed from adult pig and transplanted into patient
5. Patient must still take immunosuppressant drugs, to prevent their body rejecting the new organ

What are the challenges associated with Xenotransplantation? – (1) Disease transmission: It raises concerns regarding the **transmission of known and unknown animal diseases** to the recipient human and the possible subsequent transmission to the general human population. Moreover, new infectious agents **may not be readily identifiable with current techniques**. Sometimes, the **disease might occur years after the transplantation**; **(2) Long term functioning of organs**: Many animals like **pigs have a shorter lifespan** than humans, meaning that their tissues age at a quicker rate. Hence, there is a question of whether the organ will function in the long term or not; **(3) Medical Implications:** Animal to human transplantation brings with it huge risks for the patient. Even well-matched human donor organs can be rejected after they are transplanted – and with animal organs, the danger is likely to be higher; **(4) Ethical concerns**: Activists say it is **wrong to modify the genes of animals** to make them more like humans. PETA has condemned the pig heart

transplant. It said: "Animals aren't tool-sheds to be raided but complex, intelligent beings. It would be better for them and healthier for humans to leave them alone and seek cures using modern science."

What should be the approach? – (1) Promote research in xenotransplantation: The Government should support the study of potential of xenotransplantation, ensure adequate trials before approving the procedures; **(2) Promote organ donation**: The Government can **adopt the Spanish system of "presumed consent"** where everyone, post-death, is considered a donor unless one has opted out of the process during his lifetime. This will help plug the demand-supply gap; **(3) Curb organ trafficking**: Organs should be made available to patients on the basis of medical need and not on the basis of financial or other considerations. Further, **giving or receiving payment** (including any other compensation or reward) for organs **should be prohibited**.

#10 Applications of Drones

News: The Ministry of Civil Aviation (MoCA) has sent a note on the use of drones across various sectors to different ministries at the Center.

What is a drone? – A drone is an aircraft that carries no human pilot or passengers, so it is also known as an **Unmanned Aerial Vehicle (UAV)**. Drones can be fully or partially autonomous, but they are more often controlled remotely by a human pilot.

What are the different applications of drones? – The uses of drones are limitless. They can be used in the areas like **(1) Enforcement of law and order**, as they can be used for surveillance, situational analysis, crime control, VVIP security, and disaster management; **(2) Healthcare services** such as the delivery of vaccines and medicines, collection of samples from remote or epidemic/pandemic-affected areas, road accident monitoring, and response; **(3) Environment protection** activities such as anti-poaching actions, monitoring of forests and wildlife, pollution assessment, and evidence gathering; **(4) Urban development** where they can be used for terrain mapping, project monitoring, land records, etc.; **(5) Agricultural activities** such as crop and soil health monitoring, anti-locust and pest control work, insurance claim survey; **(6) Military operations** such as combat operations, communication in remote areas, target tracking, and battlefield reconnaissance.

What are the threats posed by Drones? – UAVs are generally called **attackers' delight and defender's nightmare** because **(1)** UAVs can **take-off/ operate from difficult terrain** without being restricted by conditions of the environment; **(2)** Drones **fly low** and have a **small cross-section** therefore cannot be detected easily by any radar system; **(3) Asymmetric warfare:** They do not match the cost of the kill vs the cost of the target. For example, killing the $1000 UAV with the million-dollar sophisticated missile. So, the defender needs soft kill systems like LASER, Radio Frequency jamming, etc.; **(4)** UAVs can be controlled from a remote distance and do not endanger any member of the attacking side; **(5)** UAVs can be used to drug trafficnking, **supply arms and ammunition** to terrorists.

How are Drones regulated in India? - To regulate drone operations in India, the **Ministry of civil aviation** has come out with **Drone Rules 2021**. Some important provisions under rules are as follows: **(1)** The number of forms to be filled to seek authorization before operating a drone has been reduced from 25 to 6; **(2) Digital Sky platform** will also be developed as a business-friendly single-window online system with minimal human interference and most permissions will be self-generated. It will also serve as a unified platform for users to obtain the mandatory registration number and remote pilot license; **(3)** No such approvals will be required for drones used for R&D by entities and educational institutions recognized by the government; **(4)** Many important approval requirements have been abolished, like unique prototype identification number, certificate of maintenance, Import clearance, etc.; **(5)** The airspace has been divided into 3 zones for Drone operations: the **Green zone** (No permission required for flying drones), the **Yellow zone** (Permission required for a flying drone from Air traffic controller authority), and **Red zone** (flying of drones restricted).

#11 India State of Forest Report 2021

News: The State of Forest Report 2021 has been released by the Ministry of Environment, Forest and Climate Change. While the overall forest cover in India has increased, there are concerns related to fall in forest cover in Northeast India and the general degradation of natural forests.

What is the India State of Forest Report 2021 (ISFR)? – **(1)** It is an assessment of India's forest and tree cover, **published every two years by the Forest Survey of India (FSI)** under the Ministry of Environment, Forest and Climate Change; **(2)** The **first survey was published in 1987**, and ISFR 2021 is the 17th report; **(3)** The ISFR is used in **planning and formulation of policies** in forest management as well as forestry and agroforestry sectors; **(4)** The India State of Forest Report (ISFR) 2021 provides information on **forest cover, tree cover, carbon stock in India's forests** etc. This information **provides inputs for various global level inventories, reports** such as GHG Inventory, international reporting to UNFCCC targets for planning and scientific management of forests; **(5)** Three types of forests have been surveyed: **Very dense** (pristine), **Moderately dense** (natural forests close to human habitation) and **open forests**. Scrubs have also been surveyed, but they are not categorised as forests; **(6)** The FSI has assessed forest cover in tiger reserves, tiger corridors and the Gir forest (which houses the Asiatic lion) for the first time in IFSR 2021.

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Defining Forests
The Survey defines **forests as all lands of more than 1 hectare in an area with a tree canopy density of more than 10%**, including trees, orchards, bamboo, palms etc., occurring over Government and private lands. This covers all land, irrespective of legal ownership and land use. 'Recorded forest area' includes only those areas recorded as forests in government records, as well as the pristine forests.
Area-wise Madhya Pradesh has the largest forest cover in the country followed by Arunachal Pradesh, Chhattisgarh, Odisha and Maharashtra.
India has set a target of bringing 33% of its geographical area under forest cover, as envisaged in the National Forest Policy, 1988.

What are the key findings of the report? – **(1)** The total forest and tree cover is **80.9 million hectare, which is 24.62% of the geographical area** of India; (2) The Forest and tree cover has increased by 0.28% in comparison to the previous assessment in 2019; **(a)** Increase in forest cover has been observed in open forest followed by very dense forest, while moderately dense forests *(natural forests)* have declined; **(b)** The gain in forest cover may be attributed to **better conservation measures, afforestation activities,** tree plantation drives and agro-forestry; **(3) States in the North East have recorded the highest loss in forest cover**. This is due to numerous **natural calamities**, particularly landslides and heavy rains, and **anthropogenic activities such as shifting agriculture, pressure of developmental activities and felling of trees.** Unlike other states, where forests are managed by the Forest Department and State Governments, the North-eastern States follow **a system based on community ownership and protected tribal land**. This makes conservation activities challenging; **(4)** An **increase of 17 sq. km in mangrove cover** has been observed as compared to the previous assessment of 2019; **(5)** There has been an **increase of 79.4 million tonnes in the carbon stock** of India, as compared to the last assessment of 2019. Current carbon stock is 7,204 million tonnes. Carbon stock refers to the **amount of carbon stored in forests** in the form of biomass, soil, deadwood and litter. More **carbon stock indicates a higher forest capacity to absorb and sequester carbon dioxide** (CO_2), through photosynthesis; **(6)** The **Growing Stock** from forests and trees outside forests is around 6,167.50 million cubic metres. The growing stock has increased by 251.74 million cubic metres compared to 2019.

PT BOX
Growing Stock
According to the Forest Survey of India, Growing Stock is the **measure of tree wealth and includes distribution of stems in different diameter class, volume, bio-mass and carbon stock** within and outside the forest areas. It is measured as volume of all living trees in a given area of forest or wooded land that have more than a certain diameter. It is usually measured in solid cubic metres (m^3). It is also a **basis for estimating the amount of carbon contained**. The world's total growing stock is estimated at 434 billion m^3, of which some 30% are found in South America.
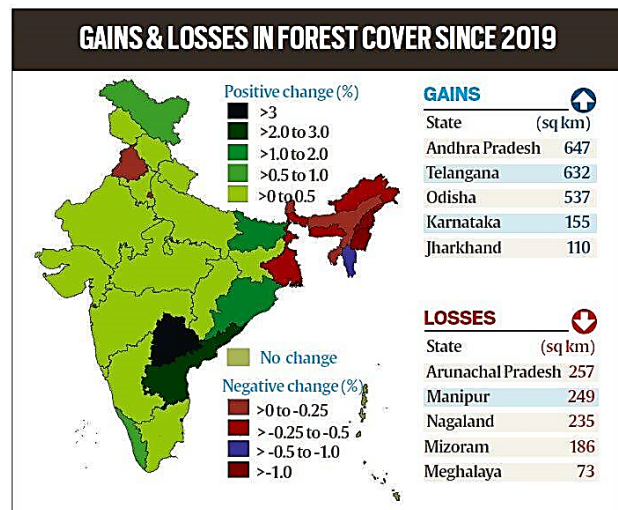
PT BOX
Surveying the Forests
The Report uses the data computed through wall-to-wall mapping of India's forest cover via remote sensing techniques. *Satellite data used in the assessment is based on interpretation of* Linear Imaging Self-Scanning Sensor **(LISS)-III** *data from Indian Remote Sensing satellite data* (**Resourcesat-II**)

Growing stock quantifies forest resources and is an indicator of forest productivity; **(7)** The f**orest cover in tiger corridors has increased** between 2011-2021, but **decreased by 0.04% in tiger reserves**. Pakke Tiger Reserve in Arunachal Pradesh has the highest forest cover, at nearly 97%; **(8)** The India State of Forest Report, estimates that **by 2030, 45-64% of forests in India will experience the effects of climate change and rising temperatures**, and forests in all states (*except Assam, Meghalaya, Tripura and Nagaland*) will be **highly vulnerable climate hot spots**. Ladakh is likely to be the most affected. It has predicted that Himalayan states and UTs like Ladakh, Jammu and Kashmir, Himachal Pradesh and Uttarakhand will record the maximum increase in temperature and also possibly experience decrease in rainfall; **(9)** The survey has found that **35.46 % of the forest cover is prone to forest fires**.

What are the concerns related to the forest cover? – (1) The growth rate in forest cover has been marginal. This marginal growth in India's forest cover is primarily due to an **increase in the area under open forests** (canopy density 10-40%). The increase in open forests is led by **commercial plantations** which are considered to be of inferior quality as they are **poor in biodiversity**; **(2)** Despite a marginal overall increase in mangrove cover, **very dense mangrove cover has decreased in Sunderbans**. This is also a cause of concern because very dense mangrove cover acts a barrier against cyclones, protecting West Bengal from directly bearing the brunt of storms that originate in the Bay of Bengal. The mangrove also acts as a **source of livelihood** for locals by acting as a spawning ground for several fish and other aquatic animals such as crabs and prawns; **(3) Degradation of forests**: The decline in natural forests in conjunction with an increase in open forest areas shows a degradation of forests in the country. **Natural forests are degrading to less dense open forest**s. Also, **increase in scrub area**, indicates the complete degradation of forests in these areas; **(4)** Since 2003, more than **19,000 sq. km of dense forests have become non-forests in the country**. The decadal rate of this destruction of natural forests has doubled from ~7,000 sq. km in 2003-13 to 12,700 sq. km since 2013; **(5) Loss of forest cover in NE region**: This loss is of great concern, as the **North-eastern States are repositories of great biodiversity**. Loss of forest cover will increase the impact of landslides. It will also impact water catchment in the region, which is already seeing degradation of its water resources.

What are some issues with the survey? – (1) As per experts, **survey results could be misleading** as it **includes plantations** (coffee, coconuts or mango and other orchards) **under forest cover**. These plantations are distinctly different from natural forests which are much richer in bio-diveristy, whereas commercial plantations house only one species of tree (monoculture). This is done apparently to show compliance with domestic forest policy and international climate targets; **(2)** According to a researcher with Centre for Policy Research, the Report is '**simply a quantification of green cover largely based on satellite data**'. Forest Reports must reflect forests with all their complexities. In 2019, the FSI had **revised its methodology to include trees outside officially recorded forests**, which has **masked the deforestation underway in India**.

GAINS & LOSSES IN FOREST COVER SINCE 2019

Positive change (%)
- >3
- >2.0 to 3.0
- >1.0 to 2.0
- >0.5 to 1.0
- >0 to 0.5

No change

Negative change (%)
- >0 to -0.25
- >-0.25 to -0.5
- >-0.5 to -1.0
- >-1.0

GAINS ⬆

State	(sq km)
Andhra Pradesh	647
Telangana	632
Odisha	537
Karnataka	155
Jharkhand	110

LOSSES ⬇

State	(sq km)
Arunachal Pradesh	257
Manipur	249
Nagaland	235
Mizoram	186
Meghalaya	73

Polity

#1 Suspensions of MLAs from the Legislative Assembly: Supreme Court's View

News: 12 MLAs were suspended in the Maharashtra Legislative Assembly for a year who have approached the Supreme Court.

About the Issue

The 12 MLAs were suspended for unruly behaviour in July 2021 by a **resolution of the Maharashtra Legislative Assembly**. The suspended MLAs filed a writ petition in the Supreme Court against the Maharashtra Legislative Assembly and the State of Maharashtra and asked for the suspension to be quashed.

Arguments of the MLAs

The 12 MLAs argued that they were not given an opportunity to present their case. They contended that the **suspension violated their fundamental right to equality** before law under Article 14 as it was not clear how they had been identified in the large crowd that had gathered in the chamber.

The MLAs have also contended that under Rule 53 of the Maharashtra Legislative Assembly Rules, the **power to suspend can only be exercised by the Speaker, and it cannot be put to vote in a resolution** as was done in this case.

Arguments of the Legislative Assembly

The State has referred to Article 194 on the powers and privileges of the House, and argued that any member who transgresses the legislative privileges can be suspended through the inherent powers of the House. It has denied that the power to suspend a member can be exercised only through Rule 53 of the Assembly.

The State has stated that, under Article 212, **Courts do not have jurisdiction to inquire into the proceedings of the Legislature**.

Supreme Court's View

SC has observed that the suspension of MLAs for a period of 1 year is prima facie unconstitutional. Because there is a constitutional bar to it.

Under **Article 190(4) of the Constitution**, if a member of a House is absent from all meetings without its permission for a period of 60 days, the **House may declare the seat vacant**.

SC further said that while the House has power to suspend a member, **it cannot be for more than 59 days**. Each constituency has an equal amount of right to be represented in the House, and **no representation of a constituency for a year becomes unconstitutional**.

The Court is yet to pass the final order.

Maximum suspension

Lok Sabha: it is for five consecutive sittings or the remainder of the session, whichever is less.

Rajya Sabha: under Rules 255 and 256, maximum suspension does not exceed the remainder of the session.

State legislative assemblies and councils: Prescribe a maximum suspension not exceeding the remainder of the session.

#2 Writ Petition against proceedings by Banks for recovery of loans

News: The Supreme Court has observed that a writ petition by borrowers challenging proceedings under the SARFAESI Act initiated by Bank/Asset Reconstruction Companies (ARC) is not maintainable.

About the Case

A writ petition was filed in the Karnataka High Court by borrowers challenging proceedings under the SARFAESI Act initiated by Asset Reconstruction Company (ARC). Admitting the petition, the High Court granted an interim stay on the proceedings.

The ARC challenged the stay and filed an appeal before the Supreme Court.

Supreme Court's view

The Supreme Court dismissed the interim stay provided by the High Court.

The Court said that if proceedings are initiated under the SARFAESI Act and if the borrower is aggrieved by any of the actions of the bank/ARC, borrower has to avail the remedy under the SARFAESI Act and no writ petition would lie or is maintainable or entertainable.

This is because the **activity of the bank/ARC** (*of lending the money to the borrowers*) **cannot be said to be performing a public function** which is normally expected to be performed by the State authorities.

#3 Criteria for determining the Economically Weaker Sections

News: A three-member panel set up by the Government of India to review the eligibility criteria of the **Economically Weaker Sections** (EWS) has submitted its report.

Recommendations of the Panel – (1) Drop the existing criteria on residential asset size. This is because mere possession of a residential house may not correctly reflect the economic condition of the candidate or his family, especially if it is used only as a dwelling unit and not for generating any income. However, the panel has backed **excluding all candidates with agricultural land over 5 acres**; **(2)** It has suggested **retaining the existing gross family annual income limit of Rs 8 lakh as it is 'just and fair'** in the present circumstances. Moreover, income criteria of EWS and OBC cannot be compared as EWS criteria is more stringent than the one for the OBC creamy layer because: **(a)** EWS's criteria relates to the financial year prior to the year of application, whereas the income criterion for the creamy layer in the OBC category is applicable to gross annual income for three consecutive years; **(b)** In the case of the OBC creamy layer, income from salaries, agriculture and traditional artisanal professions are excluded from the consideration whereas the ₹8 lakh criteria for EWS includes all sources, including farming; **(3) A three-year feedback loop cycle** may be used to **monitor the actual outcomes of these criteria** and then be used to adjust them in future; **(4)** Data exchange and information technology can be used actively to verify income and assets and improve targeting for EWS reservations.

The panel has suggested that its recommendations be implemented only from the next admission cycle and not the ongoing one as any sudden change will cause major disruption across educational institutes and create complications for both beneficiaries and the authorities.

Policy

#1 Draft National Air Sports Policy

News: The Ministry of Civil Aviation has released draft National Air Sports Policy (NASP) for public feedback.

Purpose of the Draft National Air Sports Policy (NASP)

It aims **to make India one of the top air sports nations by 2030** by providing a safe, affordable, accessible, enjoyable and sustainable air sports ecosystem in India.

Its objectives include: **(a)** Promote an air sports culture in the country; **(b)** Adopt international best practices in air sports; **(c)** Develop India as a preferred global hub for air sports; **(d)** Develop effective governance structure; **(e)** Enhance participation of Indian sportspersons in global air sports events; **(f)** Promote design, development and manufacturing of air sports equipment in India.

The policy will cover activities like aerobatics, aeromodelling, amateur-built and experimental aircraft, ballooning, drones, etc.

Key features of the Policy

The policy proposes a **two-tier governance structure** for air sports in the country which will include an apex governing body called the **Air Sports Federation of India (ASFI)** and **associations for each air sport.**

ASFI will be an **autonomous body** under the Ministry of Civil Aviation.

It will represent India at the **Fédération Aéronaautique Internationale (FAI)** and at other events.

It will **provide governance** over various aspects of air sports like regulation, certification, competitions, awards and penalties.

FAI is headquartered in Lausanne, Switzerland and is the world governing body for air sports.

Associations for each air sport will handle day-to-day activities and lay down its safety standards for equipment, infrastructure, personnel and training, and specify the disciplinary actions to be taken in case of non-compliance.

Registration: All persons and entities providing air sports services will be required to register as members of the respective air sports associations. Key equipment used will also have to be registered.

Control Zones: The popular air sports attractions in the country such as Bir **Billing in Himachal Pradesh**, **Gangtok in Sikkim**, **Hadapsar in Maharashtra** and **Vagamon in Kerala** can be declared as a "control zone" for air sports in order to ensure the safety of other manned aircraft.

Schools and colleges will be encouraged to include air sports in their curriculum and their students will have the opportunity to participate in the FAI's international competitions.

#2 Decline in Immunization Coverage

News: Most immunisation programmes witnessed a decline in 2020. India was worst among South Asia and in some cases, one of the worst significant economies in the world. Data released by UNICEF shows that the immunisation programme in India suffered its worst hit in 2020, as coverage declined across all major vaccination programmes, including the Universal Immunisation Programme (UIP).

Findings of the UNICEF Data

Polio vaccination

The administration of the **third dose** of polio vaccine for children aged 12-23 months declined by **five percentage points** in 2020 compared to 2019; the worst drop since 1991. In terms of overall coverage, at 85%, India's polio vaccination levels went back to those witnessed in 2014.

DPT (Diphtheria, Pertussis and Tetanus)

In the case of DPT, the **first dose** for children aged 12-23 months **fell by seven percentage points**; the worst fall since 1991. The last time DPT shots had registered a decline (*of one percentage point*) was in 2006.

Tuberculosis (TB)

Administration of the tuberculosis (TB) vaccine was also **down seven percentage points** compared to last year. The last time the country witnessed a decline was in 2007.

Rotavirus and pneumococcal vaccine

Only these two vaccines witnessed an increase in coverage among children compared to last year. The rotavirus vaccine coverage for children aged 12-23 months **went up** from 53% to 82%, whereas the pneumococcal uptake **increased from** 15% to 21% between 2019 and 2020.

India's Performance Comparion

India's performance in some cases was one of the worst among the world's major economies. In terms of the drop in **TB vaccine**, among the major economies, **India was behind Mexico, Brazil and the UAE**. It also fared worse than all South Asia nations, with **even Pakistan and Afghanistan increasing coverage during the pandemic year**.

With respect to **hepatitis B**, **India was behind Brazil and Indonesia**.

In the **DPT vaccination**, only Pakistan and Nepal fared worse than India in the South Asian region.

Reasons behind the decline

One of the primary reasons for this seems to be **setbacks to rural health manpower and its impact on rural health programmes**, including the government's vaccination drives.

According to the National Health Mission, there has been a **drastic decline in the total number of health and nutrition days (HNDs)** held in thousands of villages in 2020 as compared to the previous year.

Also, there was a **fall in the number of ASHA** (*Accredited Social Health Activist*) **workers** recruited by the government in Indian villages. It is at these village health and nutrition days that ASHA workers compile a list of infants who require immunisation or have been left out.

Economy

#1 Green Energy Corridor

News: The Cabinet Committee on Economic Affairs has approved the scheme on Green Energy Corridor (GEC) Phase-II for Intra-State Transmission System (InSTS).

About the Green Energy Corridor Project for Intra-State Transmission System (InSTS)

The Green Energy Corridor(GEC) Project aims at s**ynchronizing electricity produced from renewable sources** such as solar and wind with conventional power stations in the grid.

The GEC-Intra State Transmission System(InSTS) project was sanctioned in 2015-16, for evacuation and integration of the renewable energy capacity through setting up of transmission lines and increasing transformation capacity of substations.

Parameter	Phase I	Phase II
States	8 Tamil Nadu, Rajasthan, Karnataka, Andhra Pradesh, Maharashtra, Gujarat, Himachal Pradesh, and Madhya Pradesh	7 Gujarat, Himachal Pradesh, Karnataka, Kerala, Rajasthan, Tamil Nadu and Uttar Pradesh
Network Length Target	9,700 circuit km of transmission lines and 22,600 MegaVolt-Amperes (MVA) transformation capacity	10,750 circuit km of transmission lines and 27,500 MegaVolt-Amperes (MVA) transformation capacity
Capacity	Grid Integration and Power Evacuation of 24 GW of Renewable Energy	Grid Integration and Power Evacuation of 20 GW of Renewable Energy
Completion	2022	2025-26
Funding	40% Government of India Grant, 20% state equity and a 40% loan from KfW Bank, Germany.	33% by the Government of India

Significance of the Green Energy Corridor

It will help to achieve the target of 450 GW installed renewable energy capacity by 2030.

It will also contribute to the long-term energy security of the country and promote ecologically sustainable growth by reducing carbon footprint.

The project will generate direct and indirect employment.

#2 Electronic Gold Receipts (EGRs) and Gold Exchange

News: Government of India has notified the **Securities and Exchange Board of India** (Vault Managers) Regulations, 2021 to create Electronic Gold Receipts (EGRs).

About the Electronic Gold Receipts (EGRs) and Gold Exchange

These are **electronic receipts issued on the basis of a deposit of underlying physical gold**. EGRs would pave the way for the operationalization of a gold exchange in India.

Gold Exchange would be a **national platform for buying and selling EGRs issued against physical gold**. Investors can trade in EGRs on stock exchanges and the proposed gold exchange.

The transaction in a gold exchange has been divided into three parts: **(1)** Conversion of physical gold into EGR; **(2)** Trading of EGR on a stock exchange; **(3)** Conversion of EGR into physical gold.

SEBI would regulate the entire ecosystem of the proposed gold exchange. It would be the sole regulator for the exchange, including for vaulting, assaying gold quality and fixing delivery standards.

Key features of the Gold Exchange

Stock exchanges can launch contracts of different denominations for trading and conversion of EGR into gold. SEBI has brought in fungibility and interoperability between vault managers for the ease of investors. Physical gold deposited at one location can be withdrawn from a different location of any vault manager.

Benefits of Gold Exchange

Gold exchange is expected to offer a lot of benefits such as **efficient and transparent price discovery, investment liquidity** and **assurance in the quality of gold**. It is also expected to create a **national pricing structure** for gold. It will also **promote compliance among market participants**.

#3 Proposed New Investment Category for Banks

News: The Reserve Bank of India has proposed a new investment category for banks: **Fair Value through Profit and Loss (FVTPL) Account**. This is a part of its initiatives to align lenders investment portfolio regulations with the global accounting standards.

Investment Portfolio of Banks

At present, the Investment Portfolios of Banks are classified under three categories:
Held to Maturity (HTM), **Held for Trading** (HFT) and **Available for Sale** (AFS).

RBI has proposed a new investment category for banks: Fair Value through Profit and Loss (FVTPL) Account. The existing held-for-trading (HFT) category will now come under the FVTPL category.

HFT category consists of debt securities purchased by banks with the **intent of selling them within a short period of time**.

FVTPL will be the **residual category where all investments that do not qualify for inclusion in HTM or AFS shall be categorized**. This category can have investments such as securitisation receipts (SRs), mutual funds, alternate investment funds, equity shares, derivatives (including those undertaken for hedging), among others.

Held to maturity (HTM)

RBI said debt instruments with fixed or determinable payments and fixed maturity, with the intent of holding till maturity, shall now be classified as HTM. Corporate bonds have also been allowed to be held under HTM, which was not the case earlier.

Available for Sale (AFS)

Debt instruments held by a bank till maturity or sold before maturity would be eligible for AFS. Equity instruments will also be classified under AFS.

Indian Accounting Standards (Ind AS)

RBI had asked banks to adopt the Indian Accounting Standards (Ind AS) from 1 April 2018. But the RBI had deferred its implementation several times as the banks were not prepared to make the transition.

Ind AS is on a par with the **International Financial Reporting Standard (IFRS)** under which banks are required to undertake early recognition of provisions for loss on loans and off-balance sheet exposures based on an expected credit loss (ECL) model.

Currently, Indian banks follow the **Generally Accepted Accounting Principles (GAAP)**, which requires banks to recognize mark-to-market losses.

#4 Oxfam Report on Inequality: 'Inequality Kills'

News: Oxfam has released a report titled "Inequality Kills". The report has been released ahead of the World Economic Forum's Davos Agenda.

Key Findings of the Report: Global
The wealth of the 10 richest men has doubled, while the incomes of 99% of humanity are worse off, because of COVID-19. Inequality is contributing to the death of at least 21,000 people each day, or one person every four seconds. **The pandemic has set gender parity back from 99 years to 135 years**. **Women collectively lost Rs 59.11 lakh crore (USD 800 billion) in earnings in 2020**, with 1.3 crore fewer women in work now than in 2019.

Key Findings of the Report: India
Inequality worsened by the Covid pandemic: The income of 84% of households in the country declined in 2021. But at the same time, the number of Indian billionaires grew from 102 to 142. India has the 3rd highest number of billionaires in the world, just behind China and the United States. The **share of the bottom 50% of the population in national wealth was a mere 6%**. More than 4.6 crore Indians are estimated to have fallen into extreme poverty in 2020.

Decrease in Social Expenditure: The healthcare budget saw a 10% decline from RE (revised estimates) of 2020-21. There was a 6% cut in allocation for education. The budgetary allocation for social security schemes declined from 1.5% of the total Union budget to 0.6%.

Dependence on Indirect taxes: There was an **increase in indirect taxes as a share of the Union government revenue in the last four years**. On the other hand, the proportion of corporate tax in the same was declining. The additional tax imposed on fuel has risen 33% in the first six months of 2020-21 as compared to the last year and 79% more than pre-Covid levels. Lowering of corporate taxes from 30% to 22% to attract investment last year resulted in a loss of Rs 1.5 lakh crore, which contributed to the increase in India's fiscal deficit.

Out of Pocket Expenditure (OOPE): The data from the National Sample Survey (NSS) (2017-18) shows that Out-of-Pocket Expenditure (OOPE) in private hospitals is almost six times of that in public hospitals for inpatient care and two or three times higher for outpatient care. The **average OOPE in India is at 62.67%, while the global average is at 18.12%**.

#5 Google Probe by Competition Commission of India (CCI)

News: CCI has launched a probe against Google after complaints by the country's digital news publishers.

What is the case? A complaint has been made by **India's Digital News Publishers Association** against Google. **(1)** It has been alleged that **Google abuses its dominant position** by **not providing a fair share of the advertising revenue** and by not providing adequate information. **(2)** The association has complained that Google does **not pay for the news snippets** that appear in search. **(3)** Also, the **terms of engagement** are "unilaterally and arbitrarily", which are dictated by Google without any consultation.

What are the implications associated with this issue? The implications of the issue are **(1)** Lately, the **news media industry** in India is **struggling** to survive. Whereas big tech platforms are becoming more and more powerful. **(2)** The sustainability of journalism in the digital era is very important, especially in a democracy.

When journalistic efforts do not get a fair value, they end up **sacrificing quality to gain more users** and in a quest for more emotional engagement. **(3)** In recent years, many **countries like Australia and France have tried to correct the balance** between the big tech companies and the traditional journalism industry and now India seems to be following those precedents.

International Relations

#1 China constructing Bridge over Pangong-Tso Lake

News: China is building a bridge across the Pangong Tso Lake.

Construction of the Bridge

China is constructing a bridge in Eastern Ladakh connecting the **North and South Banks of Pangong Tso**. The bridge is located in Chinese territory but the bridge would significantly bring down the time for People's Liberation Army (PLA) to move troops and equipment between the two sectors.

The bridge is located **around 25 kms ahead of the Line of Actual Control (LAC)** and is just east of Khurnak Fort in Rutog county (*Historically a part of India, Khurnak Fort has been under Chinese control since 1958*).

Troops from the North Bank will no longer need to drive nearly 200 kilometres around the Pangong Lake to reach their base at Rutog. That journey will be **cut by approximately 150 km** and the duration will be reduced from **12 hours earlier to 3-4 hours**.

India-China Dispute on Pangong Tso Lake

Pangong Tso is an **endorheic lake**. India holds 1/3rd of the lake.

The lake has mountain spurs of the **Chang Chenmo range** jetting down referred to as fingers which are divided 8 parts.

The Chinese say that the Line of Actual Control (LAC) is at finger 4. But India's perceived LAC is at finger 8. This leads to frequent disputes in the area.

The North bank of the lake has much

higher differences in perception of LAC than the South bank (*South Bank of Pangong leads to Kailash range and to the Chushul sector*).

In 2020, as part of the first phase of disengagement, India and China had agreed for complete disengagement on the North and South Banks of Pangong Lake. Currently, the Indian Army has a permanent position near Finger 3, the Dhan Singh Thapa post, while the PLA has a base East of Finger 8.

#2 Widening of Road to Lipulekh

News: India has proposed to widen the road that leads up to the Lipulekh area in Uttarakhand. Although there have been no official statements from Nepal, but the issue has caused a lot of resentment in the Nepal politics. Various parties have spoken against India's project publicly.

About the Issue

Nepal has been recently laying its claim on Lipulekh, Limpiyadhura and Kalapani area.

However these areas have been under India's administrative control.

Nepal had issued revised Maps in 2020 which showed the disputed areas as part of Nepal.

About India's Stand

Indian Government has maintained that the **road only follows the pre-existing route** used by the pilgrims of the Kailash Mansarovar yatra. And the same road has been made better for the ease of travellers.

These areas have been **under India's administrative control** since a long time.

Kalapani Dispute

Kalapani is located at an altitude of 3600m on the Kailash Mansarovar route. It borders Uttarakhand in India and Sudurpaschim Pradesh in Nepal. Since the Indo-China war of 1962, Kalapani has been controlled by India's Indo-Tibetan Border Police.

The 1816 **Treaty of Sagauli** signed between British India and Nepal defined river Mahakali as the western border of Nepal. However, discrepancy in locating the source of the Mahakali river led to boundary disputes between India and Nepal with each country producing maps supporting their own claims.

India claims that the river begins in Kalapani as this is where all its tributaries merge.

On the other hand, Nepal claims not only the Kalapani region but also Limpiyadhura and Lipulekh as parts of its territory. All three areas are to the east of the river Kali.

#3 China approaches the UN under the Outer Space Treaty

News: China's astronauts aboard the Tiangong Space Station had to take evasive measures to avoid a potential collision with two of SpaceX's Starlink satellites. China has complained to the United Nations detailing the alleged space incidents.

China's approach the UN

Both the U.S and China are parties to the Outer Space Treaty. The treaty provides the basic framework for international space law. China has referred to articles V, VI and VII of the treaty in the complaint filed with the UN.

Article V: It requires parties to immediately inform other parties or the UN Secretary-General of any phenomenon they discover in outer space which could constitute a danger to the life or health of astronauts.

Article VI: Nations will be responsible for national space activities, whether carried out by governmental or non-governmental entities.

Article VII: It states that nations will be liable for damage caused by their space objects, such as satellites.

UN's intervention in Space Issues

The **United Nations Office for Outer Space Affairs** was created in 1958 to service the ad hoc **Committee on the Peaceful Uses of Outer Space (COPUS)**. It has been serving as a focal point for international cooperation in the peaceful exploration and use of outer space. Several multilateral treaties have been adopted by the United Nations General Assembly to enable the orderly conduct of activities in outer space. The cornerstone of these is the **Outer Space Treaty of 1967.**

Associated Agreements and Treaties

Four other treaties were also adopted to reinforce the framework set by the Outer Space Treaty. These treaties are:

The **Rescue Agreement of 1968** requires States to assist an astronaut in case of accident, distress, emergency or unintended landing.

The **Liability Convention of 1972** establishes the standards of liability for damage caused by space objects.

The **Registration Convention of 1975** requires States to register all objects launched into outer space with the United Nations.

The **Moon Agreement of 1979** elaborates on the provisions of the Outer Space Treaty as they apply to the Moon and other celestial bodies.

#4 Sale of BrahMos Missile to Philippines

News: India has recently closed a deal worth more than INR 2,000 crore for export of Brahmos missile to the Philippines.

About the BrahMos Missile

BrahMos Missile (PJ-10) have been developed through a joint collaboration between India and Russia.

It is a medium range ramjet supersonic cruise missile. The Missile is capable of being **launched from land, sea, sub-sea and air** against the **surface and sea-based targets**. It is one of the fastest supersonic cruise missiles in the world with **maximum speed of Mach 4** (i.e., 4 times the speed of sound in air).

The range of the missile was originally capped at 290 km as per obligations of the Missile Technology Control Regime (MTCR).

Following India's entry into the MTCR club in 2016, the range has been extended to 450 km and to 600 km.

Significance of the Deal

The deal is strategically significant in the **backdrop of China's expansionism** and strong arm tactics with its neighbours in the **South China Sea**.

India has **supported the freedom of navigation and overflight for all in the South China Sea** in accordance with UNCLOS. The deal will give further impetus to **India's Act east policy**.

Over the years India has been trying to **strengthen its ties with ASEAN countries** through combat exercises, exchanges, training and now weapon supplies.

It will help India in becoming a **major exporter of arms** from being one of the world's top arms importer as other countries like UAE, Saudi Arabia and South Africa have also shown interest in acquiring Brahmos.

#5 Indian Deployment to the UN Peacekeeping Forces

News: The Indian Infantry group with around 570 soldiers will be deployed under the **UN Interim Security Force for Abyei (UNISFA)** in the **Abyei region in Africa**, which is between Sudan and Southern Sudan and is claimed by both.

UN Peacekeeping Forces

UN Peacekeeping Forces were created in 1945. They are often referred to as **Blue Berets** or **Blue Helmets** because of their light blue berets or helmets.

Their purpose is to provide security, political, and peacebuilding support to countries under conflicts. The forces help countries make the difficult, early transition from conflict to peace.

They are guided by three basic principles: **(a)** Consent of the parties; **(b)** Impartiality; **(c)** Non-use of force except in self-defense and defense of the mandate.

Every peacekeeping mission is authorized by the UN Security Council.

Member states contribute their manpower for Peacekeeping forces on a voluntary basis. The US has never contributed ground troops but contributes >25% of the UN's Peacekeeping budget.

India's Contributions to UN Peacekeeping

At present the **Indian Army is the world's third-largest troop contributor to peacekeeping operations**, after Bangladesh and Nepal. Till now, the Indian Army has contributed over **2.58 lakh troops in 51 of the 71 UN missions** since the first one for Korea in 1953-54, with 159 Indian soldiers have also laid down their lives in the operations.

Moreover, the decision to send another infantry battalion comes amidst India's ongoing two-year tenure as a non-permanent member of the **UN Security Council**. This is the **eighth time India has become a non-permanent member** of the UNSC.

Significance of the Deployment

UN deployments will earn goodwill for India, especially in places like mineral-rich Africa where the new "great game" is now being played with China making major strategic inroads into the continent.

It provides new exposure and experience to the Indian soldiers.

UN assignments also give Indian battalions a much-needed break from being deployed along the "active" borders with Pakistan and China, as well as counter-insurgency operations in J&K and northeast.

Indian soldiers also get good allowances from the UN over and above their salaries.

Environment

#1 Impact of Bioenergy Crops

News: According to a study, **converting annual crops to perennial bioenergy crops** can induce a **cooling effect** on the areas where they are cultivated. The study was undertaken to look at the biophysical climate effects of bioenergy crops to fully assess their role in climate mitigation.

About Bioenergy Crops

Bioenergy is the energy derived from recently living material such as wood, crops, or animal waste.

Bioenergy crops are defined as any plant material used to produce bioenergy. These crops have the capacity to produce large volumes of biomass, high energy potential and can be grown in marginal soils.

Some examples of bioenergy crops: Eucalyptus, poplar, willow, miscanthus and switchgrass.

Findings of the study

Currently, cultivation area under bioenergy crops occupies 3.8% ± 0.5% of the global total land area. These crops exert **strong regional biophysical effects**, leading to a global net change in air temperature of −0.08 °C ~ +0.05 °C.

Researchers have found that the **global air temperature decreases** by 0.03~0.08 °C with strong regional contrasts and inter-annual variability after 50 years of large-scale bioenergy crop cultivation.

Moreover, researchers also demonstrated the **importance of the bioenergy crop type choice. For example**, cultivating eucalypt shows generally cooling effects that are more robust than if switchgrass is used as the main bioenergy crop, implying that eucalypt is superior to switchgrass in cooling the lands biophysically.

Further, the magnitude of changes in the biophysical effects also depends on the **total Bioenergy crop area** under cultivation.

#2 Indian climate getting warmer: IMD Report

News: **India Meteorological Department (IMD)** has released its report on India's climate.

Key Findings of the Report

(1) 2021 has been the fifth-warmest year since 1901, and the **decade 2012-2021, was the warmest on record**; (2) **11 of the 15 warmest years** on record were **between 2007 and 2021**; **(3)** India's **averaged annual mean temperature** from 1901-2021 showed an increasing trend, particularly in the case of maximum temperature; (3) In 2021, the **annual mean land surface air temperature** was 0.44 degrees Celsius above the long period average (LPA). LPA IS based on temperatures between 1981 and 2010.

Effects of rising average temperature

It has a **cascading effect on extreme weather events**, crop patterns, and urban disaster management.

Heavy rainfall and flood-related incidents: It claimed over 750 lives with 215 in Maharashtra, 143 in Uttarakhand, 55 in Himachal Pradesh, 53 in Kerala and 46 in Andhra Pradesh.
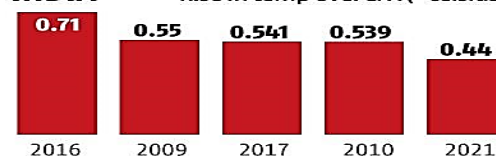
Weather events: In 2021, extreme weather events such as heavy rainfall, floods, landslides, lightning, etc have been experienced in many parts of the country and 1750 lives were lost due to it. Among the casualties, Maharashtra topped the list with 340 deaths.

In 2020, around 1565 lives were lost due to extreme weather events, while the number was around 1560 in 2019.

Thunderstorms and lightning: It caused more than 780 deaths. Also, events like snowfall, cold waves, dust storms, etc have affected different parts of the country, leading to loss of life and livestock, injuries, and damage to crops and property.
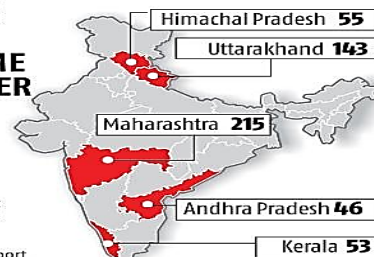
WARMEST YEARS ON RECORD IN INDIA Rise in temp over LPA (° Celsius)

2016	2009	2017	2010	2021
0.71	0.55	0.541	0.539	0.44

DEATHS DUE TO EXTREME WEATHER IN 2021
No. of deaths

Himachal Pradesh **55**
Uttarakhand **143**
Maharashtra **215**
Andhra Pradesh **46**
Kerala **53**

Note: LPA: Long period average
Source: India Meteorological Department report

#3 Volcanic Eruption in Tonga and Impact on

News: A massive underwater volcanic eruption occurred in Tonga in the Southern Pacific Ocean. This has raised questions whether this volcanic eruption could cool the climate.

Impact of volcanic eruptions on the climate

Volcanic Eruptions release several types of gases, steam and ash into the stratosphere.

One of the released gases is **sulphur dioxide (SO_2)** which has a global cooling effect. This is because SO_2 from volcanic eruptions **turns into sulphuric acid**, **which condenses rapidly in the stratosphere** to form fine **sulphate aerosols**.

The aerosols **increase the reflection of radiation** from the sun back into space, making it harder for the sun's energy to reach the Earth's surface, which cools the climate.

Impact of Tonga Volcanic Eruption

In 1991, **Mount Pinatubo** volcanic explosion occurred in the **Philippines**. Pinatubo released about 15 million tonnes of sulphur dioxide into the stratosphere. The total mass of SO_2 in the volcanic cloud was 20 Tera-gram. Due to this explosion, researchers recorded a **0.5°C drop in the average global temperature o**ver large parts of the earth between 1992 and 1993.

On the other hand, the Tonga volcanic cloud contains roughly 0.4 Tera-gram (Tg) of SO_2. This means that the Tonga event **appears unlikely to have a significant cooling effect on temperatures globally**. However, experts said it was still too early to draw conclusions as new data would emerge. More eruptions are also possible which might increase the amount of SO_2 gas in the atmosphere..

#4 Sixth Mass Extinction

News: According to a study, the Sixth Mass Extinction is underway. And this time, it is entirely caused by human activities.

Mass Extinction

A mass extinction event is when species vanish much faster than they are replaced. This is usually defined as about **75% of the world's species being lost in a 'short' amount of geological time,** less than 2.8 million years. Earth has so far undergone **five mass extinctions caused by natural phenomena**, either due to natural climate shifts or asteroid impacts. After each of these extinctions, it took millions of years to regain species comparable to those that existed before the event.

Now the **sixth mass extinction** is underway which is **entirely caused by human activities**.

Researchers have described it as the "most serious environmental problem" since the loss of species will be permanent.

Findings of the Study

The study has said that the **sixth mass extinction has been going on since at least the 16th century**.
Earth was once home to two million known species. But since 1500 CE, as many as 7.5%-13% of them may have been lost, meaning from 150,000 to 260,000 different species.
The study also said that some people deny this sixth mass extinction. But this denial was due to a biased view that focuses only on mammals and birds, ignoring the **die-off rate of invertebrates**.

An **Invertebrate** is any animal that **lacks a vertebral column, or backbone**. More than 90% of all living animal species are invertebrates. They include animals as diverse as sea stars, sea urchins, earthworms, sponges, jellyfish, lobsters, crabs, insects, spiders, snails, clams, and squid.

Science and Technology

#1 Scientists achieve Quantum Entanglement using Tardigrades

News: Scientists have claimed that **Frozen tardigrade** became the first 'quantum entangled' animal in history.

About Tardigrades

They are near-microscopic multicellular organisms and are also called water bears or moss piglets. They were discovered in 1773 by the German zoologist Johann August Ephraim Goeze who dubbed them "little water bear. Tardigrades are found everywhere in terrestrial, marine, and freshwater environments from the Arctic to the Antarctic, including great depths and altitudes.

They are known to survive extreme conditions such as exposure to extreme temperatures, pressures (both high and low), air deprivation through a latent state of life known as **cryptobiosis**. Tardigrades have also survived exposure to outer space.

Cryptobiosis or anabiosis is a metabolic state of life entered by an organism in response to **adverse environmental conditions** such as

desiccation, freezing, and oxygen deficiency. In this state, all measurable metabolic processes stop, preventing reproduction, development, and repair. When environmental conditions return to being hospitable, the organism will return to its metabolic state of life as it was prior to the cryptobiosis.
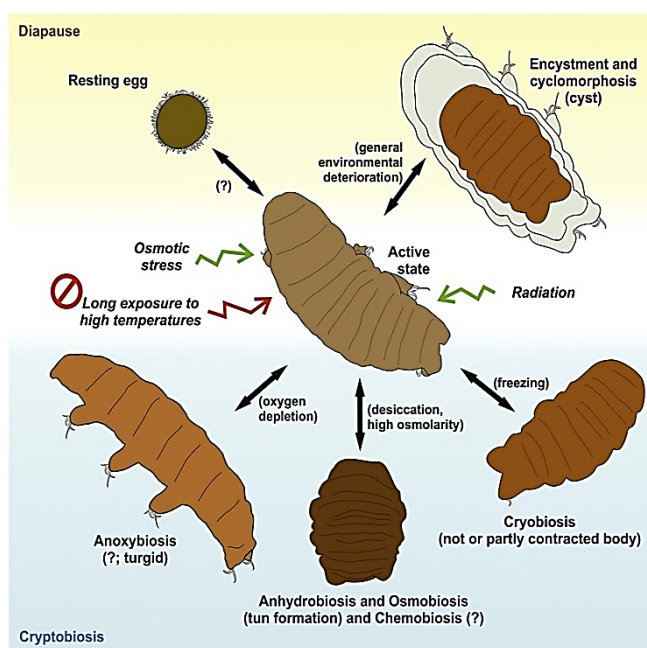
About Quantum Entanglement

Quantum entanglement is a physical phenomenon that occurs when a group of particles are generated and they interact or share spatial proximity in a way such that the **quantum state of each particle of the group cannot be described independently of the state of the others**, even when the particles are separated by a large distance.

About the experiment

Scientists have placed a tardigrade in a state of quantum entanglement. In other words: the researchers managed to put a tardigrade in a state where it was **directly connected to a pair superconducting qubits** in such a way that anything that happens to the water bear or the qubits would simultaneously affect all three.

Significance

This study is perhaps the closest realization **combining biological matter and quantum matter available with present-day technology**. Moreover, this work is a new record for the conditions that a complex form of life can survive.

#2 Study on formation of Synapses

News: Researchers at the National Centre of Biological Sciences, Bengaluru, have studied Zebrafish to understand how Synapses are formed.

About Synapses

Neurons, or nerve cells in the brain, **connect by means of junctions known as synapses** through which they **also transmit signals**. They are of two types:

Chemical Synapses: There is a space of about 20 nanometres between two neurons. For communication one neuron **converts the electrical signal into chemical signals** and this chemical is released into the synaptic space and the **receiving neuron converts the chemical signal back into an electrical signal**.

Electrical Synapse: The two neurons have a physical connection and the conversion of electrical to chemical need not occur, and they communicate directly. Electrical synapses are like a physical wire, communication is faster, but they are also fewer in number.

About the Study

It is known that **electrical synapses are formed before chemical synapses**. Electrical synapses are like a blueprint in which neurons make a handshake. This results in the making of chemical synapses.

Research on organisms such as leeches showed that if electrical synapses are removed, the chemical synapses do not form. However, the mechanism of how it happens in higher organisms such as vertebrates was not known.

Researchers had chosen Zebrafish as a model organism to study this process. Zebrafish are transparent and neuron development in larval zebrafish can be observed by injecting a dye or by engineering the fish to express fluorescent proteins.

The researchers found that **knocking out a particular protein** known as the **gap junction delta 2b** (gjd2b) in the cerebellum of zebrafish **affected levels of the enzyme CaMKII**. Levels of CaMKII were seen to increase in the Purkinje neurons in the cerebellum. *Purkinje neurons and the cerebellum control the coordination of movements in the organism.*

While zebrafish have about 300-400 Purkinje neurons, humans have thousands of these. In humans, for example, **excess abuse of alcohol leads to damage of Purkinje neurons**, which results in a lack of coordination in movement.

Moreover, the researchers found that in the absence of gap junction protein, CaMKII levels prematurely increase. Due to this, **chemical synapses do not form**.

#3 Inclusion of MM Wave band in 5G

News: Satcom Industry Association-India (SIA) has urged TRAI to limit the inclusion of MM Wave spectrum in the 5G auction

About MM Waves

Millimeter wave (MM wave), also known as *millimeter band*, is the band of spectrum with wavelengths between 10 millimeters (30 GHz) and 1 millimeter (300 GHz). It is also known as the **Extremely High Frequency** (EHF) band by the International Telecommunication Union (ITU). It lies between the microwave and infrared waves. This **spectrum can be used for high-speed wireless communications**. It is being considered by standards organization, the Federal Communications Commission and researchers as the way to bring "5G" in the future. This band is **apt to deliver greater speeds and lower latencies**. This in turn makes data transfer efficient and seamless.

SIA Suggestions

The SIA has **urged TRAI to limit the inclusion of mm Wave spectrum in the 5G auction** as the 17.7-21.2 GHz and 27.5-31 GHz bands have been preserved **for satellite-based broadband services as per the decision taken by the ITU**.

5G services can be deployed using lower frequency bands. The lower frequency bands can cover greater distances and are proven to work efficiently even in urban environments, which are prone to interference. But the lower frequency bands can deliver data only at lower speed. Hence for achieving higher data speed, higher frequency bands are required. So MM wave band is required to roll out 5G Services with high speed.

The SIA also noted that offering excessive spectrum resources in the upcoming 5G auction will result in Indian citizens being denied the benefits of high-demand, advanced satellite broadband services. In addition to this, it will result in a massive loss to the Indian economy of up to $184.6 billion by 2030, along with the loss of foreign direct investment (FDI) and employment generation benefits.

History, Art and Culture

#1 *Nai Talim* of Mahatma Gandhi

News: The Vice President of India recently said that the New Education Policy follows the '*Nai Talim*' of Mahatma Gandhi **by giving importance to the mother tongue as the medium of instruction** at school level.

About *Nai Talim* of Mahatma Gandhi

The phrase *Nai Talim* is a combination of two words: *Nai* Means 'New' and *Talim* – a Urdu word-means 'Education'. Mahatma Gandhi introduced the concept of *Nai Talim* in 1937.

The concept laid emphasis on **making mother tongue as the medium of instruction** in addition to **free compulsory education** and **skill training** to the students.

The concept was based on four basic principles: **(1)** Education or learning in mother tongue along with handicraft work; **(2)** Work should be linked with most useful vocational needs of the locality; **(3)** Learning should be linked with vocational work; **(4)** Work should be socially useful and productive.

About Mahatma Gandhi International Hindi University

It was established to fulfil a dream of Mahatma Gandhi. He was of the firm opinion that Hindi should not only be the national language of the country, but it should also gain the status of a world language

The dream of Gandhi was reflected in the resolutions passed by the **First World Hindi Conference organized** in Nagpur in 1975.

The first resolution demanded **Hindi to be made one of the official languages of the UN** and the second resolved to **establish an International Hindi University at Wardha**. Subsequently, the University was established by a bill passed by the Parliament in 1997

#2 10ᵗʰ Century Idol of Goat-headed Yogini

News: The Union Minister of Culture has announced that the stone idol of Goat Head Yogini that had been illegally removed from a temple in Lokhari, Banda, Uttar Pradesh is being returned to India.

Goat-headed Yogini

Goat-headed Yogini is a 10th Century Stone Idol. It originally belonged to a group of stone deities in sandstone and was installed in **Lokhari temple**. The idol had been illegally removed from a temple in Lokhari,

Banda, Uttar Pradesh in the 1980s. In October 2021, the idol was discovered in London. And now it is being returned to the **Archaeological Survey of India**, New Delhi.

Yoginis

Yoginis are a group of powerful female divinities associated with the **Tantrik mode of worship**. They are worshipped as a group, often 64 and are believed to possess infinite powers.

#3 Tableaux at the Republic Day Parade

News: Some States had criticized the Union Government that the tableau from their States were not allowed in the Republic Day Parade

About the Tableaux at the Parade

Tableaux refer to a group of models or motionless figures representing a scene from a story or from history. On Republic Day, **States and different departments and Ministries showcase their achievements** in form of cutting-edge technology or **their history and culture** in their respective tableaux.

Themes for the Tableaux

The participants have to showcase elements relevant to their State/Department, within the overarching theme. The theme given to participants in 2022 is 75 years of India's Independence. The theme, the government told willing participants, is **India@75**: **Freedom struggle, Ideas @75, Achievements @75, Actions @75 and Resolve @75**. Moreover, the tableaux of two different States/UTs cannot be too similar as the tableaux should showcase the diversity of the country.

The tableaux cannot have any writing or use of logos, except for the name of the State/UT/Department which should be written in Hindi on the front, English on the back and a regional language on the sides.

Selection Process

The selection process is elaborate. The **Defence Ministry constitutes an expert committee** of distinguished persons from fields like art, culture, painting, sculpture, music, architecture and choreography. The Committee examines the proposals on the basis of theme, concept, design and visual impact before making its recommendations.

#4 Kohima War Cemetery

News: Kohima War Cemetery in Nagaland has figured in the Commonwealth War Graves Commission (CWGC) five sites with unusual features. These sites are associated with World War I and World War II.

About the Kohima War Cemetery

Kohima War Cemetery is a memorial dedicated to the soldiers of the British Division of the Allied Forces who died in **World War II** at Kohima in April 1944. It has been identified as the **only cemetery on the Earth which incorporates a tennis court**. It is also one of World War graves across the continents maintained by the CWGC.

Formation of Kohima War Cemetery

The Japanese forces had attached Kohima in 1944. The British Indian and the Japanese forces fought fiercely leading to the British Indian Forces' retreat to the former house of the British Deputy Commissioner. This house had a tennis court. After a hard battle, the Japanese forces withdrew in May 1944. Those who had fallen in the defence of Kohima were buried in the area around the residence.

Present Day Kohima (Nagaland) and adjoining Imphal (Manipur) comprised the **only theatre of World War II** in the Indian subcontinent.

Commonwealth War Graves Commission (CWGC)

It is an **intergovernmental organisation** of six member-states (**Australia, Canada, India, New Zealand, South Africa, the United Kingdom**) whose principal function is to mark, record and maintain the graves and places of commemoration of **Commonwealth of Nations military service members** who died in the two World Wars.

It was **formed in 1917** as the **Imperial War Graves Commission**. However the present name was given in 1960. It is h**eadquartered in** Maidenhead, UK.

Miscellaneous

#1 Global Risks Report by the World Economic Forum

News: The Global Risks Report 2022 has been released.

About the Global Risks Report
Global Risks Report is **an annual report released by the World Economic Forum**.
The report was based on a survey that tracks global risk perceptions among risk experts and world leaders in business, government and civil society.
It examines risks across five categories: **Economic, Environmental, Geopolitical, Societal, Technological**.

Key Findings of the Report
Biggest Threats: Climate action failure, extreme weather events and biodiversity loss were perceived as the biggest threats for the global population over the next decade.
Impact of COVID-19: It has **compounded** the threats of erosion of social cohesion, livelihood crises and climate action failure the most. Apart from this, mental health deterioration, debt crises, cybersecurity failures, digital inequality and backlash against science were also exacerbated by the pandemic.
**Economic Stagnation:** The most serious challenge persisting from the pandemic is economic stagnation. The macroeconomic outlook remains weak, with the global economy expected to be 2.3% smaller by 2024 than it would have been without the pandemic.
Global Economic Gap: The global economic gap will widen by 2024 when the developing countries will have fallen 5.5% below their pre-pandemic expected GDP growth and advanced economies would have surpassed the same by almost 0.9%.

Growing dependency on digital systems: The response to COVID-19 has fundamentally altered societies. At the same time, cybersecurity threats are growing and outpacing societies' ability to effectively prevent or respond to them.

"Identify the most severe risks on a global scale over the next 10 years"

Economic | Environmental | Geopolitical | Societal | Technological

1st	Climate action failure	6th	Infectious diseases
2nd	Extreme weather	7th	Human environmental damage
3rd	Biodiversity loss	8th	Natural resource crises
4th	Social cohesion erosion	9th	Debt crises
5th	Livelihood crises	10th	Geoeconomic confrontation

Source: World Economic Forum Global Risks Perception Survey 2021-2022

Migration: Growing insecurity in the forms of economic hardship, worsening impacts of climate change and political persecution will force millions to leave their homes in search of a better future.
Space Risk: Humans have been exploring outer space for decades, recent years have witnessed an increase in private and public activity, both creating new opportunities and also signalling that outer space is an emerging realm of risk. The most immediate consequence of increased space activity is a higher risk of **collision between near-Earth infrastructure and space objects**.
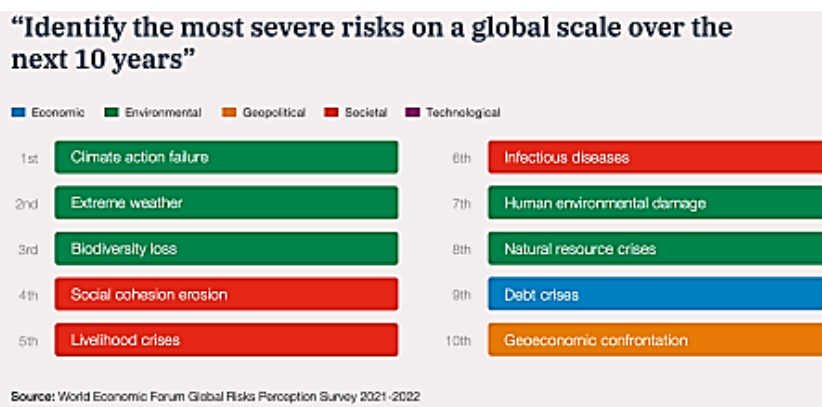
Pointly

1. **Egypt joins New Development Bank (NDB)**
   Egypt is the latest nation to join the NDB. Bangladesh, UAE and Uruguay had joined in September 2021. NDB is a **multilateral development bank** jointly founded by the BRICS countries at the 6th BRICS Summit in Fortaleza, Brazil in 2014. It aims to **mobilise resources for infrastructure and sustainable development projects in emerging economies** in areas such as transport, water and sanitation, clean energy, digital infrastructure, social infrastructure and urban development. The Bank got observer status in the UN General Assembly (UNGA) in 2018. The present members include Brazil, Russia, India, China, South Africa, Bangladesh, United Arab Emirates (UAE) Uruguay and Egypt.

2. **Trincomalee Oil Tank Farm**
   Sri Lanka has announced to sign an agreement with the Indian Oil Company (IOC) Ltd. for setting up an oil tank farm in Trincomalee in Sri Lanka. The tank farm will be jointly **owned and operated by Ceylon Petroleum Corporation (51%) and IOCL (49%)**. The agreement will be for 50 years. Trincomalee has a pre-WWII oil storage facility and is the nearest port to Chennai. The proposal of joint development of the tank farm was envisaged 35 years ago, in the **Indo-Lanka Accord 1987**. **Trincomalee is a major port city in Eastern Sri Lanka** and the capital city of Eastern Province.

3. **Mahakali Treaty**
   It is an agreement between the Governments of India and Nepal regarding the **integrated development of the Mahakali River**. The treaty **was signed in 1996**. The treaty recognizes the Mahakali River as a boundary river between the two countries. The Mahakali River, also called *Sharda* and *Kali* River originates at *Kalapani* in the Himalayas in the *Pithoragarh* district in Uttarakhand. The river flows along Nepal's western border with India. It joins *Ghaghara (Karnali/Manchu)* River, a tributary of the Ganga.

4. **Bridge between India and Nepal over River *Mahakali***
   A new bridge will be constructed over river *Mahakali* in the Indo-Nepal Border stretch in Dharchula in Uttarakhand. This will be the second motor bridge on the India-Nepal border in Uttarakhand. The other one is the *Banbasa bridge* in the Champawat district, Uttarakhand.

5. **Collective Security Treaty Organization (CSTO)**
   It is an **intergovernmental military alliance in Eurasia** that consists of select post-Soviet Union States. It originated from the conclusion of the **Collective Security Treaty**, which was signed in Tashkent (Uzbekistan) **on May 15, 1992** by the heads of Armenia, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan. The treaty entered into force on April 20, 1994. As of today it has 6 member States: **Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan**.
   The organisation is based on the **principle of collective security** or the idea of '**one for all and all for one**'; aggression against any one state in the organisation is considered to be an aggression against all other states. This is also the principle on which NATO, the UN and earlier the League of Nations were founded.

6. **Henley Passport Index 2022**
   It ranks passports of countries according to the **number of destinations their holders can access without a prior visa**. It has been released by Henley and Partners, a London-based global citizenship and residence advisory firm since 2005. The index is based on exclusive data provided by the International Air Transport Association (IATA). I**ndia's rank has improved to 83 from 90 in 2021**. India now **has visa-free access to 60 destinations worldwide**, up from 25 in 2006. Japan and Singapore have topped the index, with visa-free access to 192 destinations.

7. **Africa50**

   Africa50 is an **infrastructure investment platform** that contributes to Africa's economic growth by developing and investing in infrastructure projects and mobilizing public and private sector capital. Currently, **Africa50 has 31 shareholders** comprising 28 African countries, the African Development Bank, the Central Bank of West African States (BCEAO), and Bank Al-Maghrib. **Power Grid Corporation of India** Limited (POWERGRID) has signed a Joint Development Agreement with Africa50 to develop the **Kenya Transmission Project**. The Project aims to **develop power transmission lines** in Kenya under a PPP framework.

8. **Asian Clearing Union (ACU)**

   Asian Clearing Union (ACU) was established in 1974 at the initiative of the United Nations Economic and Social Commission for Asia and Pacific (ESCAP). Its objective is to facilitate payments among member countries that helps in economizing on the use of foreign exchange reserves, reducing transfer costs and promoting trade among the participating countries. Its members include the Central Banks and the Monetary Authorities of **Bangladesh, Bhutan, India, Iran, Maldives, Myanmar, Nepal, Pakistan and Sri Lanka**. ACU is headquartered in *Tehran, Iran.*

   India has recently confirmed a $400 million currency swap with Sri Lanka while deferring another $500 million due for settlement to the Asian Clearing Union (ACU).

9. **International Cooperative Alliance (ICA)**

   International Cooperative Alliance (ICA) was founded in 1895. It is an **independent, non-governmental association** that unites, represents and serves the co-operatives worldwide.

   ICA is not a United Nations Organization. However, the ICA enjoys General Consultative Status with the United Nations Economic and Social Council (UN-ECOSOC). ICA has 4 regional offices managing the regions: Africa, Americas, Asia-Pacific and Europe. It is headquartered in *Brussels, Belgium.*

   International Co-Operative Alliance Asia And Pacific (ICAAP) and National Cooperative Development Corporation (NCDC) have released a policy recommendation handbook on **SAHAKAR PRAGYA Good Practices for Cooperatives**. The Handbook is a compendium of guidelines, resources, methodologies, key learning, case studies of the best performing cooperatives in India and abroad and the outcome and impact.

10. **World Employment and Social Outlook**

    World Employment and Social Outlook is released by the **International Labour Organization (ILO)**. The report examines the **impacts of the COVID-19** crisis on global and regional trends in employment, unemployment, labour force participation, job quality, informal employment and working poverty. **Global unemployment is projected to stand at 207 million in 2022**. An additional 30 million adults fell into extreme poverty (living on less than $1.90 per day in purchasing power parity) while being out of paid work.

11. **INS Vikrant**

    INS Vikrant is India's **first indigenously built aircraft carrier** (IAC-1). The aircraft carrier has been built by the **Cochin Shipyard Limited** (CSL) for the Indian Navy. It is named 'Vikrant' as a tribute to India's first aircraft carrier, *Vikrant* (R11). It is STOBAR (short take-off but arrested landing) type of aircraft. At present, the Indian Navy operates a single aircraft carrier, **INS Vikramaditya**, which was bought from Russia. **INS Vikrant is scheduled to be commissioned into service by August 2022**. After this, the Indian Navy is planning a second indigenous aircraft carrier (IAC-2), to follow INS Vikrant. It is believed that the IAC-2 will be named **INS Vishal**.

12. **Man-Portable Anti-Tank Guided Missile (MPATGM)**

    MPATGM is an **indigenously developed** low weight **Anti-Tank guided fire & forget missile**. An anti-tank missile is a missile that is created to destroy vehicles that are heavily armoured. MPATGM has ability to strike targets at maximum **range of 4,000 metres**.

The missile can be launched from a **man portable launcher**. It is also integrated with a **thermal sight** that allows it to be used in low-visibility conditions, even in **complete darkness.** The missile has a miniaturized **infrared imaging seeker** and advanced avionics for on-board control and guidance.

13. **Intermediate Jet Trainer**

    Intermediate Jet Trainer is an aircraft designed and developed by Hindustan Aeronautics Limited (HAL) in Bengaluru. The aircraft is being brought as a **replacement to the ageing Kirans of the Indian Air Force (IAF) fleet**. The primary role of the aircraft includes **pilot training**; general flying; navigation formation flying; instrument and cloud flying; basic air to ground and air-to-air weapon aiming; tactical flying and night flying.

14. **Exercise Sea Dragon**: It is an annual US-led, multinational exercise with a **focus on Anti-submarine warfare tactics.** It involves participation from navies of 6 countries United States, India, Australia, Canada, Japan and South Korea.

15. **CEMP Stars**

    Carbon enhanced metal poor stars are a class of **chemically peculiar star**. CEMP stars have higher carbon compared to Sun (> 10 times that of Sun) while iron is less than one-tenth of that in the Sun. **Chemically Peculiar stars** (**CP stars**) are stars with distinctly unusual metal abundances, at least in their surface layers.

    A team of Indian scientists has achieved significant advancement in revealing the mystery behind chemical peculiarity of the stars. The team analyzed the stars using the **Himalayan Chandra Telescope** (HCT) at Indian Astronomical Observatory, Hanle (Ladakh) and **SUBARU Telescope** at the summit of Mauna Kea, Hawaii operated by the National Astronomical Observatory of Japan.

16. **Heartbeat Stars**: Heartbeat Star refers to **special type of binary stars**. Each star travels in a **highly elliptical orbit** around a common centre of mass. The distance between the two stars varies drastically as they orbit each other. When the stars are at their closest, there is **a sudden increase in the brightness**, with amplitude going up significantly. As they move apart, the **light variation falls** and becomes almost flat. This results in **alternating peaks and troughs in their light curves**. This pattern resembles the appearance of heat beat on an electrocardiogram of the human heart. Scientists have recently discovered a binary star named HD73619 in the Cancer constellation,

17. **Doppler Radar**

    Doppler weather radar is an instrument that sends **pulses of electromagnetic energy** into the atmosphere to **find precipitation, determine its motion and intensity, and identify the precipitation type** such as rain, snow or hail. When the electromagnetic pulse strikes an object such as a raindrop or a snowflake, the wave reflects back to the radar with data that can be analysed by meteorologists. Meteorologists can use this information to determine specific areas where dangerous weather conditions exist. Four Doppler Weather Radars were launched recently at **Leh, Mumbai, Delhi and Chennai**.

18. **Digital Embossing Technology**

    Visually challenged students from all over the country will have access soon to **Braille Maps** designed and developed using Digital Embossing Technology.

    Digital embossing technology (DET) is a **digital printing technology** that eliminates the need for printing plates, moulds, chemicals, and solvents besides releasing no pollutants or waste and reducing overall energy usage.

    DET technology has been introduced, designed and implemented for the first time in India by **National Atlas & Thematic Mapping Organisation (NATMO)**.

19. **National Atlas & Thematic Mapping Organisation (NATMO)**

    NATMO was established in 1997. It is a subordinate department under the **Department of Science & Technology**, Ministry of Science & Technology. It primary function is **compilation of the National Atlas of India** in Hindi, English and other regional languages. It is **headquartered in Kolkata**.

20. **Piezoelectrical Effect**

    Piezoelectric Effect is the **ability of certain materials to generate an electric charge in response to applied mechanical stress**. The piezoelectric effect is very useful in many applications that involve the production and detection of sound, generation of high voltages, electronic frequency generation and ultra-fine focusing of optical assemblies. The effect is also used in igniting mechanism for cigarette lighters.

    Indian scientists have recently proposed an efficient way to induce piezoelectric delta phase in polymer nanoparticles.

21. **UV-C Disinfection Technology**

    Ultraviolet-C or UV-C Disinfection Technology has been developed by the **Council of Scientific & Industrial Research** (CSIR). The technology is meant for the mitigation of airborne transmission of COVID-19. UV-C deactivates viruses, bacteria, fungus and other bioaerosols etc. with appropriate dosages **using 254 nm (nanometre) UV light**. The disinfection system can be used in auditoriums, large conference rooms, classrooms, malls etc. which provides a relatively safer environment for indoor activities in the current pandemic. It can also be used in buildings, transport vehicles, etc.

22. **Automatic Generation Control (AGC)**

    AGC has been launched by the **Union Ministry of Power and New and Renewable energy** . Its aim is to ensure **power balancing in real-time** to keep supply and demand in sync for **power generated through renewable energy**. It is being operated by **Power System Operation Corporation** (POSOCO) through the **National Load Despatch Centre** (NLDC). Through AGC, **NLDC can send signals to more than 50 power plants in the country every 4 seconds to maintain the frequency and reliability of the Indian Power System**. This will ensure more efficient and automatic frequency control for handling variable and intermittent renewable generation.

23. **Baricitinib and Sotrovimab**

    The **WHO** has recommended two drugs, **Baricitinib and Sotrovimab**, for **treatment of COVID-19**. Baricitinib is part of a class of drugs called **Janus Kinase (JAK) inhibitors** that **suppress the overstimulation of the immune system**. It has been strongly recommended for **patients with severe or critical COVID-19**.

    Sotrovimab has been developed by GlaxoSmithKline with US partner Vir Biotechnology Inc. It is a **monoclonal antibody drug** that binds to the SARS-CoV-2 spike protein, thereby preventing the virus from attaching to and entering human cells. It has been recommended for **treating mild or moderate COVID-19** in patients who are at high risk of hospitalisation.

24. **India's first Cryptocurrency Exchange: IC15**

    CryptoWire has launched India's first cryptocurrency index, IC15. It will measure the performance of the **15 most widely traded cryptocurrencies** listed on leading crypto exchanges by market capitalization.

25. **Technical Textiles**

    Technical textiles are textiles materials and products manufactured **primarily for technical performance and functional properties** rather than aesthetic characteristics. Technical textiles include textiles for automotive applications, **medical textiles** (e.g., implants), **geotextiles** (reinforcement of embankments), **agro-textiles** (textiles for crop protection), and **protective clothing** (e.g., heat and radiation protection for fire fighter clothing, molten metal protection for welders, bulletproof vests, and spacesuits).

26. **National Technical Textiles Mission**

The Mission aims to **position India as a global leader in Technical Textiles** and improve the penetration level of technical textiles in the country. Its implementation period is from FY20-21 to FY23-24. India shares nearly 6% of the world market size of USD 250 billion. The penetration level of technical textiles is low in India at 5-10%, against 30-70% in advanced countries.

Under the project, the Ministry of Textiles has cleared 20 strategic research projects in the areas of Specialty fibres and Geotextiles.

27. **Chips to Start-up Programme (C2S)**

The Programme aims to **train 85,000 qualified engineers in the area of Very-large-scale Integration (VLSI) and Embedded System Design**. It is being driven by the Ministry of Electronics and Information (MeitY)

28. **Open Network for Digital Commerce (ONDC)**

ONDC is a Unified Payments Interface (UPI) equivalent for the e-commerce space. It aims to **promote open networks for all aspects of the exchange of goods and services over digital or electronic networks**. Through ONDC consumers can potentially discover any seller, product or service by using any ONDC compatible application or platform, thus increasing **freedom of choice for consumers**.

The platform will also help in **reducing the cost of doing business, benefit small, traditional retailers while curbing digital monopolies**. It is an initiative of the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry.

29. **Cavallo Effect**

In Economics, the **inflation-producing effect of high interest rates is called the 'Cavallo Effect'.** This idea suggests that inflation is associated with cost-push factors, such as high interest rates, which boost the cost of working capital and thus make the production cost higher.

30. **AT1 Bonds**

AT1 Bonds stand for additional tier-1 bonds. These are **unsecured bonds that have perpetual tenure** i.e., the bonds have **no maturity date**. These bonds are typically used by banks to **bolster their core or tier-1 capital**. These bonds were introduced by the **Basel accord after the global financial crisis**. These bonds offer higher returns to investors but compared with other debt products, these instruments carry a higher risk as well. **AT1 bonds are subordinate to all other debt** and **only senior to common equity**.

31. **Asian Waterbird Census**

Asian Waterbird Census (AWC) was started in 1987. It is an **annual exercise to count the waterbirds** and monitor the wetlands for **conservation of migratory birds** and their habitats along the **Central Asian Flyway**.

The census is conducted by **Wetlands International** and forms part of a global waterbird monitoring programme called the **International Waterbird Census** (IWC). In India, AWC is coordinated by the **Wetlands International South Asia and the Bombay Natural History Society**. The 2022 census showed fall in the species density in **Okhla Bird Sanctuary** (from 73 in 2021 to 47 in 2022) and **Sanjay Lake** while it increased in **Hastinapur Wildlife Sanctuary** (from 38 to 45).

32. **Red Sanders**

Red Sanders (*Pterocarpus santalinus*) is a tree species found in thorny scrub, dry deciduous forests. It is **endemic to a distinct tract of forests in Andhra Pradesh**. Some contiguous patches in Tamil Nadu and Karnataka also see some wild growth.

Red Sanders is known for its **therapeutic properties**. It is also used to make furniture, woodcraft and musical instruments. A tonne of Red Sanders costs between Rs 50 lakh to Rs 1 crore in the international market.

It has **again been listed in the 'endangered' category** in the **IUCN Red List.** It faces threats due to illegal smuggling, over harvesting, and due to invasive species.

33. Black Eagle

Black eagle is a **hunter** bird (not a scavenger bird) found in the hills of Eastern and Western Ghats and the Himalayan foothills. The species is almost entirely black that can grow up to 81 cm. It has a grey-yellow beak with a black tip and yellow feet.

Black eagle has been spotted in Delhi after three years. Experts have called this a rare phenomenon in the Aravallis. The spotting of Black Eagle in Delhi is a **good sign for the ecology** and a matter of research to conserve the Aravallis.

34. Introduction of Cheetah in India

The Cheetah became extinct in independent India in 1952. The Ministry of Environment, Forest and Climate Change is planning to **translocate around 8-12 cheetahs from South Africa, Namibia and Botswana** to **Kuno Palpur National Park** in Madhya Pradesh. This could be the world's first intercontinental cheetah translocation project.

35. Environmental DNA (e-DNA)

Environmental DNA or eDNA is DNA that is **collected from a variety of environmental samples** such as soil, seawater, snow or air rather than directly sampled from an individual organism. Some sources of eDNA include faeces, mucus, gametes, shed skin, carcasses and hair. Airborne e-DNA could help understand the composition of animal communities and **detect the spread of non-native species**. It can also aid in **tracking long-distance migratory birds** and other birds' flying patterns. It can help boost biodiversity conservation efforts across the world.

36. Rani Velu Nachiyar

Rani Velu Nachiyar is the 18th century queen (born 1730) from Sivagangai district in Tamil Nadu, who fought against British rule to recapture her kingdom. She is known as the **first queen to fight against the colonial power** during that time. She is also called **Veeramangai (brave woman).**

The British and the Nawab of Arcot had attacked Sivagangai in 1772 and her husband died in the battle. She escaped and later on recaptured Sivagangai in alliance with other local kingdoms. She ruled Sivagangai for more than 10 years. During her reign, she also created a **women's only army** called **Udaiyaal.**

37. Maharaja Bir Bikram

Maharaja Bir Bikram Kishore Manikya Debbarman (1908-1947) was the king of Tripura State till 1947. He played an important role in the development of Tripura and is known as **Father of modern architecture in Tripura**. During his rule, the entire planning of present-day Tripura was initiated. He was also a **pioneer in land reforms**.

Agartala Airport has been named after the King. The Airport was originally built by the US Air Force during the Second World War in collaboration with King.

38. Veer Baal Diwas

The Prime Minister has announced that **26th December** shall be observed as 'Veer Baal Diwas' to **mark the martyrdom of Sahibzada Zorawar Singh and Sahibzada Fateh Singh**.

Sahibzada Zorawar Singh and Sahibzada Fateh Singh were the sons of **Guru Gobind Singh**. They are remembered as among the most respected martyrs in Sikhism. They were martyred because of their refusal to convert to Islam and were bricked alive.

39. Special Protection Group (SPG)

The Special Protection Group is responsible for the **safety and security of the Prime Minister of India**. The SPG protects the PM at all times both in India and abroad, as well as his **immediate family members**

residing with them at their official residence. The **agency was formed in 1988 by an Act of the Parliament of India**. SPG's **Blue Book lays down the SOPs** and guidelines for the protection of the PM. The instructions in the 'Blue Book' are **issued by the Ministry of Home Affairs**.

40. **Multi-Agency Centre (MAC)**

MAC is a common counter-terrorism grid under the **Intelligence Bureau**. It was made **operational in 2001** following the *Kargil war*. It is the nodal agency for the exchange of **intelligence collected by various agencies and police forces across the country**. The national-level MAC is located in Delhi, while State Capitals have subsidiary MACs (SMACs) where daily meetings are held to analyse inputs received in the previous 24 hours.

41. **Crime Multi-Agency Centre (Cri-MAC)**

Cri-MAC was launched by the Ministry of Home Affairs in 2020 to share information between **various police forces** on heinous crimes and other issues related to interstate coordination.

42. **District Good Governance Index**

Jammu & Kashmir will become the first UT in the country to have a District Good Governance Index (DGGI). The index will be carried out by the **Department of Administrative Reforms and Public Grievances (DARPG)** in collaboration with the **Jammu & Kashmir Administration**. **Centre for Good Governance (CGG) Hyderabad** has provided **technical support** in creating the index. **The index is modelled on the** Good Governance Index 2021. The Index has 58 indicators across **10 sectors** which include Agriculture Commerce & Industry, Human Resource Development, Public Health, Public Infrastructure & Utilities, Economic Governance, Welfare & Development, Public Safety & Judiciary, Environment and Citizen-Centric Governance. The index will also offer an indicator-wise performance of the Districts.

43. *Padhe Bharat* **Campaign**

Padhe Bharat is a **100-day reading campaign** starting from January 1, 2022 to April 10, 2022. Its aims is to improve the learning levels of students as it develops creativity, critical thinking, vocabulary and the ability to express both verbally and in writing. It also helps children to relate to their surroundings and real-life situations. The campaign will focus on **children studying in *Balvatika* to Grade 8.** The campaign will also **focus on Indian languages, including mother tongue/**local/regional languages.

February 21 which is celebrated as **International Mother Tongue Day has also been integrated with this campaign.** It is being undertaken by **Ministry of Education.**

44. **Health Index Report**

The NITI Aayog has released the **4th Health Index Report** for the year 2019-20. It has prepared with the help of the Ministry of Health and Family Welfare (MoHFW). The reports ranks states on a weighted composite score based on 24 indicators. The objective of the Index is to track progress on health outcomes and health systems performance, develop healthy competition and encourage cross-learning among states and UTs. The index is based on three broad domains: **Health Outcomes, Governance and Information, Key Inputs/Processes**.

Kerala, Tamil Nadu and Telangana emerged as the best performers overall while UP emerged at the top in terms of overall performance. UP ranked at the bottom in Overall Performance. **Mizoram emerged as the best performer** in Overall Performance as well as Incremental Performance for **smaller states**.

45. **Kalpana Chawla Centre for Research in Space Science and Technology**

The Centre has been inaugurated by the Defence Minister at the **Chandigarh University, in Mohali, Punjab**. The Centre has been named after India-born astronaut Kalpana Chawla, who lost her life in the 2003 Columbia shuttle disaster. The objective of the Centre is to **train students in space science, satellite development and meeting future challenges in space research**. The centre will also be the ground

control station for Chandigarh University's Student Satellite (CUSat) along with a Geo-Spatial Centre for research.

46. **Global Women's Health Tech Awards**

The Award was launched in August, 2021 by the **World Bank and the Consumer Technology Association** (CTA). Its aim is to **recognize innovative start-ups** that leverage technology to improve women's health and safety in **emerging markets**. The awards are given under three categories: **Reproductive Health and Pregnancy, Adolescent Health, and Women Safety and Security**. The two start-ups namely **NIRAMAI Health Analytics** and **InnAccel Technologies** have received the award this year. These two start-ups have received support from the Department of Biotechnology (DBT) and BIRAC.

47. **India's First Open Rock Museum**

India's First Open Rock Museum has been inaugurated in the campus of the CSIR-National Geophysical Research Institute (NGRI) in Hyderabad. The Museum has been set up with an aim to educate and enlighten the masses about several lesser-known facts about rocks. The museum displays around 35 different types of rocks from different parts of India with ages ranging from 3.3 Billion years to around 55 Million years of the Earth's history.

48. **Central Institute of Classical Tamil and *Kural Peedam* Award**

It is an autonomous Institute of higher research in Chennai functioning under the Ministry of Education, Government of India. Its aim is to carry out higher research on Classical Tamil at international levels not to be found elsewhere globally. The institute is engaged in the task of **developing Tamil** through various programmes of its own.

The institute is also responsible for the *Kural Peedam* **Award.** It is a lifetime achievement presidential award given to eminent scholars of classical Tamil. The award was instituted in 2005

49. **BRO Projects**

BRO undertakes several projects for construction and maintenance of road infrastructure in extremely difficult terrain:

Project Beacon: It was launched in the 1960's. This is the oldest project of the BRO. The project currently looks after **road infrastructure development and maintenance in the important areas of Kashmir**.

Project *Vijayak*: It was launched by BRO in 2010. Project *Vijayak* along with **Project *Himank*** are responsible for the **construction and maintenance of critical road infrastructure in Ladakh**.

Project DANTAK: It was established in 1961 with the objective of developing roads, telecommunication networks and other such landmark **infrastructure-related projects in Bhutan**.

Project *Sampark*: It was raised by BRO in 1975. It looks after the construction, improvement and maintenance of strategic roads in the border district of Jammu, Kathua, Doda, Udhampur, Rajouri, Reasi and Poonch.

NOTE : *With effect from 1st February, the monthly ForumIAS Epic Magazine, for the month will provide wholistic coverage for the said month upto 20th of the month. This ensures that issues / stories that occur after 21st of the month are allowed to fully develop and are covered wholistically in the next month.*