

CURRENT AFFAIRS PROGRAM

PRE-CUM-MAINS 2024

SEP 2023 : BOOKLET-2

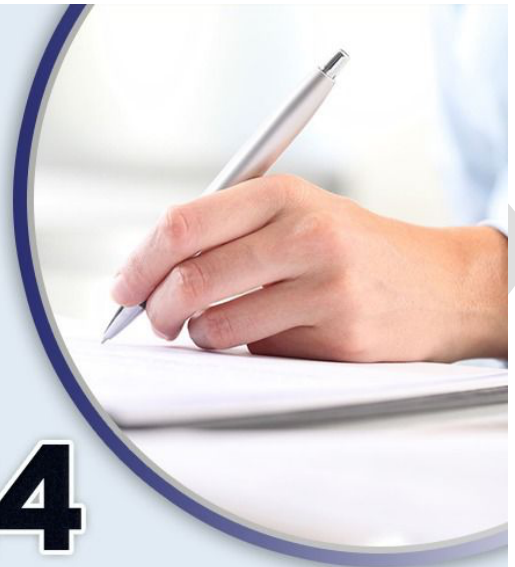
TABLE OF CONTENTS

1. General Studies-2	2
1) Polity: Elections – One Nation One Election	2
2) G20/G21	4
A) 2023 G20 Summit: India	5
B) India-MiddleEast-Europe Economic Corridor (IMEE EC)	7
C) Global Biofuel Alliance	8
2. General Studies-3	10
1) Economy: Indirect Tax: GST	10
A) 6 Year Analysis of GST and Key suggestions for improvement	11
B) GST on Gaming Sector	12
2) Increasing Direct Tax Base	13
3) Reduction of Corporate Income Tax and Its Implications	15
4) Forex Reserves	17
5) Exchange Rates and Its Implications	19
6) Environment: Air Pollution in India	21
A) Report: Air Quality Life Index Report, 2023 – by the University of Chicago	22
B) International Day of Clean Air for Blue Skies, 2023	22
3. Prelims Facts	24
1) Culture: Poila BAISAKH (Pohela Baisakh)	24
2) Culture: Language: KokBorok	24
3) Infrastructure: Nyoma Airfield	25
4) Infrastructure: Nechiphu Tunnel	25
5) Infrastructure: Sela Pass Tunnel	25
6) S&T: Shanti Swarup Bhatnagar Prize (SSB Prize)	26
7) S&T: Cyber Security: C-DOT	27

8)	S&T: Cyber Security: TRINETRA – Enterprise Security Operation Centre.....	27
9)	Defence: C-295 Transport Aircraft	28
10)	Defence: Varuna 2023	28



Optional DAMP 2024



DAILY ANSWER WRITING & MENTORSHIP PROGRAM



SOCIOLOGY

By Nishat Sir



HISTORY

By Nikhil Sir
& Vishal Sir



PHILOSOPHY

By Vishwajeet Sir
(EX - IAAS)



PSIR

By Chandan Sir



ANTHRO

By Karandeep Sir

Admissions
Open



8826486658
8826496658

**Office Complex 6, Third Floor Old
Rajinder Nagar, New Delhi-110060**

1) POLITY: ELECTIONS – ONE NATION ONE ELECTION

- **Why in news recently?**
 - The government has constituted an 8-member high-level committee headed by former President of India Ram Nath Kovind to explore the possibility of "one nation, one election" (Sep 2023)
- **Practice Questions:**
 - Discuss the key problems simultaneous elections to Lok Sabha and State Legislative assemblies are expected to solve. [10 marks, 150 words]
 - 'Simultaneous election to the Lok Sabha and the State Assemblies will limit the amount of time and money spent in electioneering but it will reduce the government's accountability to the people' Discuss [10 marks, 150 words] [CSM 2017]
- **What is Simultaneous Elections?**
 - Simultaneous Elections is defined as structuring the Indian election cycle in a manner that elections to Lok Sabha and State assemblies are synchronized together. In such scenario, a voter would normally cast his/her vote for electing members of Lok Sabha and State Assembly on a single day and at the same time.
- **History**
 - Though Vidhan Sabha and Lok Sabha elections started simultaneously in the fifties, in time they developed a natural rhythm of their own, responding to their specific contexts.
- **Why the demands for simultaneous elections?**
 1. **Reduce Policy Paralysis due to frequent elections.**
 - Currently, the Indian polity is in a **perennial election mode** where the country witnesses 4-5 assembly elections and a number of local body elections throughout the year.
 - Model code of conduct from the time of announcement of elections actually put a lot of limitations on new developmental projects and schemes by both center and states.
 - NITI Aayog has found that MCC is in force for an average of 4 months every year, thus limiting the work of development for 33% of the period in a year.
 - Ministers (being politicians) focus more on elections rather than on various ministries/departments.
 2. **Diversion of Human Resource** (like teachers and other government staff) for election purpose
 3. **Focus on long term goal/ politically difficult decisions**
 - Frequent elections forces government to focus on short term populist measures due to the electoral process.
 4. **Saving Expenses:** Simultaneous elections will save a lot of money - by ECI as well as by the Political Parties.
 5. **Easy for Election Commission**
 - Election commission will have to focus on election only once or twice in five years according to plan taken

6. **Limit the use of security forces for election work**
7. **Voter Participation may increase** as they have to come only once or twice to the booth.
8. **Other problems due to frequent elections**
 - Disrupts normal public life and impacts the functioning of essential services
 - Frequent elections **perpetuates casteism and communalism.**
 - For Chief Election Commissioner wrote that **elections are polarizing events** which have accentuated casteism, communalism, corruption and crony capitalism.

– **Commissions/Committees**

- Law Commission of India headed by Justice **B.P. Jeevan Reddy in its 170th report (1999) on Reform of Electoral laws recommended simultaneous elections to Lok Sabha and State legislative assemblies. It was **reiterated by draft recommendations of LCI in Aug 2018.**
 - It also provided a mechanism of preventing dissolution of assembly by replacing no confidence motion with a constructive no confidence through appropriate amendments.**
- The **Department related parliamentary Standing Committee on Personnel, Public Grievance, Law and Justice** in its 79th report (Dec 2015) and recommended holding simultaneous elections.
- NITI Aayog in a white paper released in 2017 also supported simultaneous elections.
- Now, on 1st Sep 2023, the central government has constituted a committee under the chairmanship of former President Ram Nath Kovind to examine the issue.

– **Some Criticisms and Impediments to simultaneous Elections**

1. **May undermine federal structure and democracy.**
 - Constitution recognizes existence on 28 states which have a constitutional status of their own in matters of elections and government formation. Any violation of this federal structure may be seen as the violation of the basic structure of the constitution.
 - **Keeping absolute power in check:** In our constitutional scheme, the federal structure is an important check upon the concentration of power (buttressed by the existence of the Rajya Sabha at the Central Level). This federal structure is sustained by a plurality of political outfits, at the State Level. But simultaneous elections may undermine this plurality, and risk concentration of power.
 - **Elections are about democratic representation everything else is secondary (including expenditure).**
2. **Simultaneous Elections may hamper public participation and debate:**
 - In the Indian Constitutional scheme, we don't have public participation in law making a guaranteed right. Elections are the only form of participation in public sphere. Relatively regular and frequent elections allow for more extended public participation and debate;
3. **Impractical:** Needs constitutional amendment; Preventing decoupling would be a challenge.
 - a. **Beginning the process would be challenging.**
 - Some state assemblies will have to be extended while some will have to be cut short - this would be unfair to sovereign democratic mandate given to states in the first place.
 - b. **How to stop decoupling cycle to start once again**
 - If Lok Sabha is dissolved before five years -> what happens to all assemblies

- If any other state government falls -> what happens to this state
- **Options: Constructive No Confidence Motion**
 - Instead of dissolving invite opposition to form government for rest of the period.
- c. **Not possible in existing constitutional framework: Constitutional Amendment** would be required to initiate the simultaneous election process in articles such as **Article 83** (fixed tenure for LS i.e. five years), Article 85, **Article 172** (Fixed tenure for legislative assembly i.e. 5 years), Article 174 and 356 of the constitution.
- 4. **Local issues may be put to backburners**
- 5. **Benefit national parties at the cost of regional players**
- 6. **Frequent elections keep governments on alert**
- 7. **If Model Code of Conduct is an issue - amend and modify it**
- **Conclusion1** (if you are not supporting simultaneous elections)
 - Constitutional experts like Gautam Bhatia say that administrative benefits from simultaneous elections are overstated at best, and non-existent at worst. But, the damage to federalism and democracy may be big. Therefore, the idea of simultaneous elections is a bad one, and ought not to be acted upon.
- **Conclusion2:** (If you are supporting simultaneous elections)

2) G20/G21

- **Introduction**
 - The Group of Twenty (also known as G-20 or G20) is an international forum for the governments, finance ministers and the central bank governors from 20 major economies.
 - It was **founded in 1999** as an informal forum of Finance Ministers and Central Bank Governors of its members to meet annually, with the aim of studying, reviewing, and promoting high level discussion of policy issue pertaining to the promotion of international financial stability.
 - Its agenda was **expanded in 2008** with the **inclusion of the head of government in the meet.** After this first summit it replaced the G8 as the main economic council of the wealthy nations.
 - G-20 in the current form is the child of 2008 global financial crisis.
 - Please note that G20 is an informal grouping and thus it doesn't have permanent secretariat/staff. **Rather, G20 presidency rotates annually** among members and is responsible for bringing together the G20 agenda, organizing its workings and hosting summits.
- **Members**
 - **19 countries and EU**
 - Canada, US, Mexico, Brazil, Argentina, UK, France, Germany, Italy, Turkey, South Africa, Saudi Arabia, Russia, China, India, Japan, South Korea, Indonesia and Australia.
 - EU is represented by European Commission and European Central Bank.
 - **Note:** In the 2023 summit in Delhi, **inclusion of African Union** has been agreed upon.
 - **The UN, IMF and WB** also attend G20 meet.

- Spain is a permanent guest invitee at the summit.
- **Objectives:**
 - Policy Coordination between its member countries in order to achieve global economic stability, sustainable growth.
 - To Promote Financial Regulations that reduce risks and prevent future financial crisis.
 - To Create a new international financial architecture.
- **Significance of G20**
 - G20 has emerged as the premier forum of international economic cooperation, a sort of mini-UN, towards building an open world economy. G20 got its reputation because of its ability to restore stability in the global financial system after the 2008-09 crisis.
 - Discussions and agreements at G20 help in reshaping the governance of global finance. It has enabled work towards reform of IMF, WB and United Nations as all the major world economies are represented here.
 - The member countries (before addition of AU) represent 90% of the Gross World Product, 80% of the trade, 2/3rd of the World Population and approximately half of the world land area.
 - When global governance in general is continuing to reflect the power equations at the end of World War - II, the G20 is a recognition of the changed realities and has given a place at the international high table to emerging powers.

A) 2023 G20 SUMMIT: INDIA

- India's Presidency Theme was "Vasudhaiva Kutumbakam" which means "the world is one family".
- **Key Outcomes:**
 - **New Delhi Declaration:** The G20 has adopted a consensus declaration with following highlights:
 - **On Ukraine War:**
 - All states must act in a manner consistent with purposes and principles of UN charter in its entirety.
 - They must refrain from threat or use of force to seek territorial acquisition against territorial integrity and sovereignty or political independence of any state. States must also refrain from use of or threat of use of nuclear weapons.
 - Peaceful resolution of conflicts and efforts to address crisis as well as diplomacy and dialogue are critical.
 - "Today's ERA must not be of war"
 - **On Grain/Food/Energy Security:**
 - The declaration calls on Russia and Ukraine to ensure unimpeded delivery of food and fertilizer inputs from Russia and Ukraine.
 - **On Economies and Financial Market:**
 - It endorses financial board's high level recommendations for regulation, supervision and oversight of Crypto-assets, activities. Finance Ministers and central bank governors will discuss taking forward the cryptocurrency roadmap at their meeting in October.

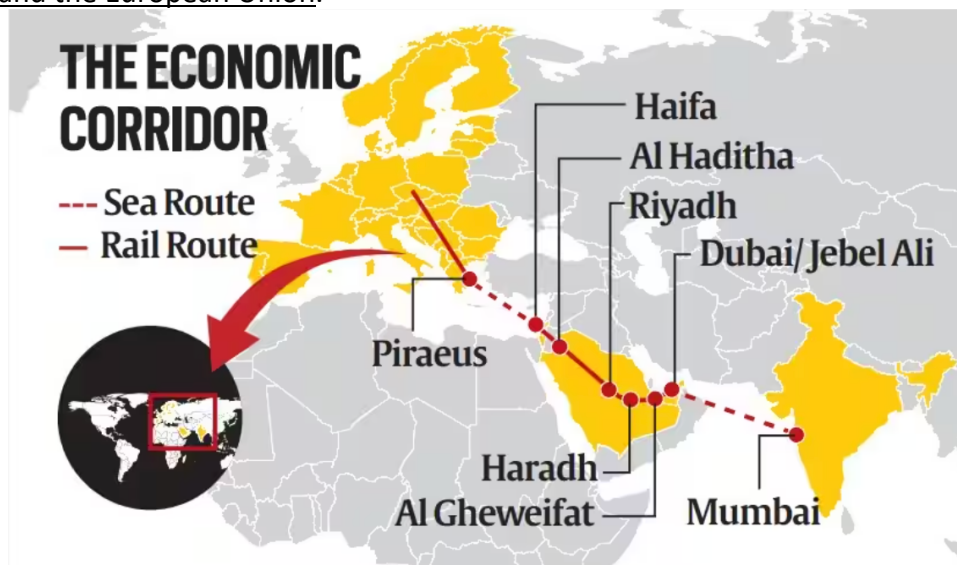
- **Renew our commitment** to ensure a level-playing field and fair competition by discouraging protectionism, market distorting practices.
 - **On Climate Change:**
 - Notes that there is a need to accelerate efforts to phase down unabated coal power, in line with national circumstances.
 - The declaration noted that \$5.8-5.9 trillion in pre-2030 period is required by developing countries, in particular for their needs to implement their emission targets.
 - **On Global Debt Vulnerability:**
 - It committed to promoting resilient growth by urgently and effectively addressing debt vulnerabilities in developing countries.
 - **Health:** It remains committed to strengthening global health architecture.
 - **Terrorism:** It condemns terrorism in all its forms and manifestations, including those on the basis of xenophobia, racism, and other forms of intolerance, or in the name of religion or belief, recognizing the commitment of all religions to peace.
- **Announcement of G-20 decision to include the 55-nation African Union,** the second regional bloc to join the G-20 after the EU.
- With this, the future summits in Brazil and South Africa is expected to **take India's Global South Initiative forward.**
 - The move help tilt the balance within G-20 away from Power-11 of the geopolitical powers, the G7, Australia, the EU and the Russia and China combined to the **Developing 10** (Argentina, Brazil, Mexico, African Union, South Africa, Turkey, Saudi Arabia, India, South Korea and Indonesia) who make up rest of the member.
- **Finance Track of India's G20 Presidency** also **paved the way for coordinated global approach to regulating cryptocurrencies, strengthening multilateral development banks'** lending capacity and replicating the use of digital public infrastructure like the India Stack to expand financial inclusion around the world.
- Discussion on the regulation roadmap for cryptocurrencies and strengthening of developmental banks will continue in Morocco in Oct when the G-20 ministers will meet in Marrakech for the IMF and World bank autumn meeting.
- **Announcement of India-Middle East - Europe Economic Corridor (IMEE EC)** to strengthen economic connectivity between India-West Asia and Europe.
- **Launch of Global Biofuel Alliance** on the sidelines of G20 summit.
- **Analysis:**
- **Positives:**
 - **India's G20 presidency was both a challenge and opportunity for India to showcase its leadership in global affairs:**
 - There were several challenges - the international order is in a flux, geopolitical contestation has sharpened, weaknesses of existing multilateral institutions and the global economy is facing strong headwinds.

- But, by forging the consensus between the G-20 nations on New Delhi Declaration, India has shown its diplomatic ability, growing clout and cordial relations on both sides of the divide.
- **India has made G-20- more inclusive:** What was once a summit merely for technocrats and policy wonks has become a people's festival.
 - It was a tremendous organizational effort, with over 200 meetings in 60 cities, and association of sections of society, economy and the academic community.
- **Interest of Global South** has been given much higher profile in this summit.
 - India organized a Voice of Global South Summit with participation from 125 countries.
 - The inclusion of African Union was a powerful symbol of importance attached to the Global South
- **IMEE EC** which was unveiled during the summit has the potential to be an effective counter, though comparatively limited in scope, to the ambitious BRI.
- **The GBA** was an important step towards more research and delivery of alternative energy sources for a world still dependent on fossil fuel.
- The summit also focused on Technological Transformation and Digital Public Infrastructure (DPI), thus providing India an opportunity to showcase its considerable accomplishments in these areas.
- **Conclusion 1:**
 - "With its deft leadership, New Delhi has managed to put its own distinct imprimatur on the G-20, making it a much more dynamic platform and in the process, India has managed to elevate its own credibility in the global order" - Harsh V Pant.
- **Conclusion 2:**
 - "As the G20 President, we had pledged to make the global table larger, ensuring every voice is heard, and every country contributes. I am positive that we have matched our pledge with actions and outcomes" - PM Narendra Modi.

B) INDIA-MIDDLEEAST-EUROPE ECONOMIC CORRIDOR (IMEE EC)

- It was announced by PM Modi during the G20 Summit in India in 2023
 - India, USA, UAE, Saudi Arabia, France, Germany, Italy and the European Union Commission have signed MoU to establish IMEE EC.
- It entails an ambitious project that could leverage railway tracks and shipping corridors to help physically link up a vast stretch of the Eurasian subcontinent and in the process improve digital connectivity and catalyze trade among countries including energy products including Green Hydrogen.
- It will consist of **two separate corridors**:
 - **East Corridor** connecting India to West Asia/ Middle East
 - **Northern Corridor** connecting West Asia/Middle East to Europe

- i. It involves laying of a railway link through the Arabian Peninsula that could then link up with shipping passages to India and Europe on both ends.
- The initiative is jointly spearheaded by the US and India, and spans India, UAE, Saudi Arabia, Jordan, Israel, and the European Union.



- **Significance:**
 - **Impetus to Economic Development:** It is being positioned as a modern-day spice route which can lead to enhanced connectivity and economic integration.
 - **Strategic Significance:** it will act as weighty ideological alternative to China's BRI.
 - **Reduce dependency on Suez Canal:** The use of land route in the Arabian Peninsula could mean bypassing the congested Suez Canal that cargo ships currently take. Eventually it will create a seamless corridor running all the way from Southeast Asia to Europe.
- **Official timelines and Funds** details is yet to be announced.

C) GLOBAL BIOFUEL ALLIANCE

- Launched during the sidelines of G-20 Summit in Delhi in 2023 by PM Modi and a host of global leaders including US President Joe Biden, Brazilian President Lula da Silva, Bangladesh PM Sheikh Hasina and Italian Prime Minister Giorgia Melon.
- **Initiating members** include USA, Brazil, Argentina, Italy, South Africa, Mauritius, UAE, India and Bangladesh.
 - **Observer Countries:** Singapore and Canada.
- Other G-20 countries have been urged to join the initiative.
- **The alliance is aimed** at facilitating global cooperation in increasing the sustainable production and use of biofuels across the sector.
 - Its focus is on strengthening market, facilitating global biofuel trade, developing concrete policy lesson-sharing and providing technical support for national biofuel program worldwide.
 - **Target:** Take ethanol blending with petrol globally to 20%.

- The Alliance mirrors International Solar Alliance (ISA) which aims to bring clean and affordable solar energy within the reach of all.

LevelUp IAS

1) ECONOMY: INDIRECT TAX: GST

- **Why in news?**
 - Total GST collection for **FY23** stood at **18.10 lakh crores**, 22% higher than the previous year.
- **Example Questions:**
 - "The last six years of the GST journey have been like the "samudra Manthan" that began with unwanted element of transition, but slowly yielded the nectar of higher revenues" Elaborate [10 marks, 150 words]
- **Introduction**
 - The GST is the most important indirect tax reform in recent years and it carried VAT to its logical conclusion. It was passed by Parliament in Aug 2016 through the 101st Constitutional Amendment Act and was rolled out from 1st July 2017.
- **Key Features:**
 - It has subsumed several indirect taxes at central and state level and acts as one indirect tax for the whole nation on the supply of goods and services.
 - **Avoids Cascading** of taxes through input tax credit (ITC) mechanism.
 - It is applicable on supply of goods and services instead of earlier concept of tax on the manufacture or sale of goods or on provision of services. It is a destination-based tax. Earlier indirect taxes were origin based.
 - GST is a **dual tax** and centre, and states are simultaneously levying it on a common base.
 - An **integrated GST (IGST)** is levied on inter-state supply of goods and services.
 - **Imports of goods or services** are deemed as supply of goods or services or both, in the course of inter-state trade or commerce and thus attract IGST.
 - **Note:** Basic custom duties which were levied on import of goods, continue to be levied in addition to IGST on imported goods.
 - **Exports** are zero-listed.
 - **GST Council** is a federal Constitutional authority created to give recommendations on the rates of taxes on different goods and services. It is chaired by Union Finance Minister.
- **Advantages of GST**
 - i. **For Business and Industry-> Easy compliance** (online filing, single tax, less chance of harassment); **Uniform tax rate** (common national market, easy expansion); **Removal of cascading** (reduction of total tax payment); Increase competitiveness; **gain for manufacturers and exporters**.
 - ii. **Advantages of Government (Center and State) -> Easy administration** (Single Tax, end to end IT system); **Better control over leakage** (robust IT infra, simple tax structure -> easy compliance); **Improved tax base**; A more transparent basis for apply WTO's National Treatment Principle; **Higher revenue efficiency** (less cost of administration); **Spur economic growth**; **Reduced**

corruption; Promote cooperative federalism (In GST system center and states work together for the nation's benefit).

iii. **For Consumers/citizens -> Cheaper goods and services;** Higher revenue efficiency-More money with government -> More social initiatives; **increased resource for resource consuming states** (as this is a destination-based tax).

A) 6 YEAR ANALYSIS OF GST AND KEY SUGGESTIONS FOR IMPROVEMENT

– Positives:

- **Tax base has increased** (Update)
 - **Average monthly GST collections** has increased to **1.55 lakh crore** in 2022-23.
 - **Number of GST taxpayers** have increased from 70 lakh in FY18 to **1.4 crore** in FY23.
 - **Small businesses and informal sectors** initially faced some issues, but many of them jumped to the tax net to take advantage of ITC.
 - **GSTN**, as a common technology platform has simplified tax compliance. It provides a one stop solution where key business process registration, payment of duties and filing of returns are done online in a transparent manner.
 - **Action taken against tax evaders, including steps being taken by tax authorities**, has resulted in better compliance and helped push the growth in GST collection.
- **Facilitated free movement of goods and services and Increased efficiency of logistic supply chain:**
- **Reduced Tax Burden:** Overall tax on many essential use items have come down. Further, with input tax credit the cascading has been reduced.
- **Push for Cooperative federalism:** GST Council has played a crucial role in forging a national consensus on key issues related to tax regime - rates, exemptions, business, processes, and movement of ITC.
- **System has evolved to simplify tax compliance for MSME sector:** Recently, threshold exemption limit was increased from 20 lakh to 40 lakh for goods and Quarterly Returns and Monthly Payments (QRMP) system was introduced.
- **Tax Evasion has reduced:**
 - E-Invoicing has become an integral part of doing business in India.
 - The GST number that can track every supply chain transaction has helped to address fraudulent claim.
 - **Coordination between CBIC and CBDT** has increased to ensure easy compliance.

– Negatives/Limitations

- **Federal Issues:**
 - **Fiscal Autonomy reduces for states and ULBs** - states now have limited scope to raise their own revenue. **ULBs** are also much weaker and more dependent on state grants.
 - It **harms the producer state and reward the consumer state** in terms of revenues.
 - States like TN which have invested heavily in their manufacturing ecosystem are not facing revenue challenges. GST compensation period has also ended. **After the end of GST compensation**, fiscal strain is expected in state budget as the median growth rate of subsumed tax in many states are much lower than 14%.
- **GST Council decides the increase or decrease of tax rates.** Earlier, these powers were only with Parliament/state legislatures.

- **Criticism of keeping some items out of GST Net.**
 - This goes against the principle of 'One nation one tax'. It also allows continuance of cascading.
 - Further, sectors like airline industry is not able to get credit for taxes paid of jet fuel.
 - Major black money generating sector such as real estate are out of the GST regime
 - **Multiple Rates and Cess -> not a simple tax**
 - **Advanced Economies like USA have also not moved onto GST path yet:** It is mostly due to their federal structure and federal autonomy.
 - **Large businesses/units are reluctant to purchase from MSME sector** as they don't get ITC.
 - **Delay in establishment of Appellate tribunal** related to GST is increasing the burden on Judiciary. Trapped GST refunds and numerous court cases are alarming.
- **Way Forward:**
 - **GST structure needs to be further simplified and rationalized:** This was recommended both by 15th Finance Commission and the Revenue Neutral Rate Report.
 - New structure should have lesser number of rates (preferably 2, but at max 3).
 - National Institute of Public Finance and Policy has also recommended a three-rate framework of 8%, 15% and 30%.
 - **Petroleum products** should be brought under GST regime. This should be followed by inclusion of real estate and electricity sector.
 - **To increase the attractiveness of MSME sector** by large enterprises, amend the law to provide that all units buying from unregistered GST suppliers would have to pay duty on a reverse charge basis.
 - **Set up GST Appellate Tribunal** as soon as possible as dispute resolution remains a pain point.
 - Finally, **GST Council's working needs tweaking**.
 - During Vajpayee regime, Yashwant Sinha established a culture of consensual decision making on indirect taxes. He did this by requiring the Empowered Committee of State Finance Ministers to be headed by a finance minister from an opposition-run-state government, such as Asim Das Gupta from WB and Sushil Modi from Bihar. **This spirit can be translated in GST Council's functioning as well**.

B) GST ON GAMING SECTOR

- **Why in news?**
 - GST Council, in its 50th meeting in July 2023 decided to **levy a uniform 28% tax on full face value for online gaming, casinos, and horse-racing**. (July 2023)
- **About Online Gaming Market:**
 - The revenue of the Indian Mobile Gaming industry is expected to exceed \$1.5 billion in 2022 and is estimated to reach \$5 billion in 2025.
 - It grew at a rate of **38% CAGR** between 2017-20.
- **Details of GST Council's decision:**

- The GST council has recommended a uniform levy of 28% tax on the face value of chips purchased in the case of casinos, on the full value of bet placed with bookmaker/totalizer in the case of horse racing, and on the full value of the bets placed in case of online gaming.
 - Government has now expected to bring amendment to the GST-related laws to include online gaming and horse racing in Schedule III as taxable actionable claims.
- **Significance:**
- Increase in tax base.
 - The taxation aligns with the regulation of the MeitY.
 - **Moral suasion** to stay away from betting and online gaming addiction.
 - **Simplification and transparency** in the gaming sector.
- **Criticism:**
- Online gaming companies have said that this will be catastrophic for online gaming industry which have to compete with several international players.
 - They also complaint that it will benefit illegal gaming platforms.
 - **Nowhere in the world** is tax levied on the entire money that is pooled in online game. The levy of tax is always on the amount charged for the provisions of service and this can only be on the platform fee or service charge levied by any gaming company.
 - **Negative impact on employment** in a sector which already employs more than 100,000 employees.

2) INCREASING DIRECT TAX BASE

- **Why in news?**
- Less than 6% of the population has filed ITR in FY23 (July 2023)
 - Only 7.4 crore people out of 140 crore population have filed ITR in 2022-23.
- **Example Questions**
- Though the direct tax collection has increased in recent years, there is still a huge scope for improvement. Suggest measures to increase direct tax base in India. [10 marks, 150 words]
- **What is Direct Tax?**
- Direct taxes are those taxes where impact and incidence lie on the same point (i.e. the burden for the tax falls on the entity that is being taxed). These taxes are generally progressive in nature and are highly elastic.
 - Because the direct taxes are **progressive**, they bring equity in society (which doesn't happen with indirect taxes). Therefore, the direct taxes need to be monitored carefully.
- **Direct Tax in FY23:**
- India's net direct tax collection has **risen by 17.63%** in 2022-23 to touch **Rs 16.61 lakh crores**, as per the data released by Finance Ministry in April 2023.
 - It was 14.09 lakh crore in FY22 and 9.41 lakh crores in FY21.
 - **Corporate Tax - Rs 10.04 lakh crores** (51.1% of direct tax) and **Personal Income Tax** and **Securities Transaction Tax** accounted for **Rs 9.61 lakh crores** (48.9% of direct tax)

- **Current Tax Base:**
 - Less than 6% of the population has filed ITR in FY23. Only 7.4 crore / 140 crore population have filed ITR in FY23.

- **Why is it important to increase the Direct Tax Base?**
 - **Boost Economic Growth:** More Resources with government will let better implementation of various infrastructure and social projects.
 - **Fights Inequality:** Indirect tax are regressive, but direct taxes are progressive and thus promote equality. Direction taxes also avoid severe distortionary trend of indirect taxes.
 - **Educative Value:** Direct tax creates a civic sense among taxpayers. Because money is directly paid by citizens, they become more vigilant of where and how government is spending their money.
 - **Anti-Inflationary:** Direct Tax can be considered a good instrument of anti-inflationary fiscal policy.
 - Reduce pressure on honest taxpayers.

- **Key Reasons for recent increase in tax base**
 - i. Cross Seeding of PAN with Bank Accounts and Linking PAN with Aadhar.
 - ii. Introduction of new data sources in the Statement of Financial Transaction (SFT), such as dividend, interest, details of shares etc has led to jump in reported information, with additional information of about 3 crore persons.
 - iii. Expansion of the scope of TDS/TCS: Several new transactions were brought under the ambit of TDS and TCS.
 - iv. **Simplified process** through technology:
 - **Faceless assessment Scheme** is one of the biggest direct tax reforms in India based on key principle of Efficiency, Transparency and Accountability.
 - Simplified ITR filing process through a 1-page SAHAJ return process for individual income tax.
 - **Ease of getting refund**, majorly by small and medium taxpayers have also encouragement more filing of ITRs.
 - v. Steps towards formalization of economy
 - vi. Steps to expand digital payment system
 - vii. Streamlining of GST system

- **The above growth is still not good enough** and the tax base is very low (only 7.4 crore people filing FIR)

- **Key factors for low tax base**
 - i. **Complex Law**
 - **Income Tax Act 1961** isn't suitable for current scenarios. It has become very complex and has thus reduced compliance.
 - This **complicated structure** is difficult to understand for individuals/corporate sector. Plethora of exemptions and deductions, adding to litigation on these, needs to be removed.
 - **High compliance cost**

- ii. **High Rates** are recipe for low tax compliance.
 - Personal income tax rates are very high leading to high rates of evasion.
 - iii. **Poor Tax Administration**
 - A lot of tax evaders go scot-free.
 - Income Tax department doesn't have resources to deal with small tax evaders
 - Corruption is rampant in income tax department.
 - Complaints of harassment by tax officials.
 - iv. **Large Informal Sector**
 - v. **Agriculture-out of tax net** (sometimes non-agri income is also presented as agri-income)
- **Way Forward**
- **Simplified Direct Tax Law** - A Direct Tax Code (DTC) has been envisaged for long.
 - **A direct tax council** on lines of GST Council
 - To periodically update the tax rates and other provisions
 - **Increasing Compliance**
 - Reducing tax rates for personal income tax as well
 - Simplifying tax filing (for e.g. recent proposal by CBDT to merge 6 ITR methods into 1 is a step in right direction)
 - Increased resources with income tax department to even prevent evasion from among small players.
 - **Focusing on Behavioural Change**
 - **Employ social norms** in encouraging the individuals to pay taxes. Countries like UK, Norway, Guatemala to name a few have successfully used the social pressure to increase the tax compliance.
 - CBDT campaigns can focus on salience of taxes in providing public goods.
 - **Incentivize honest taxpayers** - For e.g., by determining the amount of pension on the basis of individual's tax contribution.
 - **Enhance use of new technologies like AI and ML to identify tax evaders.**
 - **Bring Agriculture Income** under Tax regime.
- **Conclusion**
- Higher direct tax collection could lower the tax burden on the poor by creating fiscal space for reduction in GST rates.
 - Therefore, it is important that government keeps working towards increasing the share of direct taxes in overall tax collection and increasing the tax base.

3) REDUCTION OF CORPORATE INCOME TAX AND ITS IMPLICATIONS

- **Why in news?**
 - Government lost Rs 1 lakh crore revenue in FY21 after corporation tax rate cut (Aug 2023: Source - IE)
- **Example Questions**
 - Discuss the key changes in the Corporate Income Tax brought by the Taxation Law (amendment) Act, 2019. How far will it be effective in reviving economic growth in India. [15 marks, 250 words]

- Corporate tax rates which used to be more than 50% in early 1990s was brought down to 30% by 2004-05 as per the recommendations of Shome Committee (2001) and Kelkar Committee (2002).
- But, even at the basic rate of 30% the effective corporate tax paid by Indian companies was around 35% which was on the higher side compared to its peers.



- **This high tax rate** led to low investments which reduced economic growth potential.
- **So**, through Taxation Laws (Amendment) Ordinance following changes were made in Sep 2019.
 - **Income Tax rate of 22% (Effective 25% with surcharge and cess)** for all domestic companies (provided they don't claim deductions under the Income Tax Act)
 - Domestic manufacturing companies set up on or after Oct 1, 2019, to pay tax at a **lower 15% rate** (effective 17%) if they forego other incentives.
 - Note: These companies must start manufacturing before April 1, 2023.
 - If a company applies for new rates than the same will be applicable in subsequent years.
 - Provisions related to Minimum Alternate Tax (MAT) will not be applicable for companies choosing new tax rates.
 - **Minimum Alternate Tax (MAT)** has been reduced from 18.5% to 15% for companies not choosing the new tax rates.
- **Positive Implications**
 - India's tax rates have become **on par with competing Asian peers**.
 - This will **increase the profitability** of the corporate players and thus will contribute to making India an **attractive destination for investment**.
 - It may also **increase the export competitiveness** of Indian companies as now they will be able to price their products at lower price for same profitability.
 - **Sectors like telecom sector**, which are facing high debt burden, can use the extra money to pay off the debt and thus will contribute to **better functioning** of India's banking system.
 - **Contribute to easy credit availability.**
 - In long run, the **enhanced economic activities will increase the tax base** and thus may also **boost tax collection**.
- **Concerns**
 - **Revenue loss** and thus **increased fiscal deficit** in short run.
 - For e.g., recently, finance ministry announced that the government faced a revenue loss of more than 1 lakh crores in FY21.
 - **Hasn't kickstarted investment**: RBI has recently noted that the new tax regime didn't kickstart the intended Investment Cycle.
 - In an annual report for 2019-20, the RBI said that tax rate cut may have been used for debt servicing, building up cash, and other current assets.

- **Way Forward**
 - Reduced tax rates alone can't deal with the key challenges faced by Indian economy. It is a bold move but is only one of the supply side reforms. Other steps required are:
 - **Land and Labor Reforms** -> to further simplify the ease of doing business in the country.
 - **Banking reforms** -> to ensure easy credit for consumption and investment.
 - Further, the supply side reforms should be **complemented with demand side reforms**. Without increase demand, increasing supply will be of no use.
 - Here, there should be focus on **increasing income** of working and middle class. Here **reforming agricultural sector** would be crucial as it provides income and employment to more than 50% of the India's population.
 - Continuation of the reform process also calls for **Rationalizing Personal Income Tax Rates** in alignment with the new CIT rates.
 - Further, since there is going to be a **large slippage in fiscal deficit**, the central government would do well to **enhance the efforts to garner additional non-tax revenue as well as disinvestment proceeds** over and above the budget estimates.
- **Conclusion:** In long run, the corporate tax cut, can indeed boost economic activities. It's important that to fully utilize the potential of this cut other complementary steps such as reform in labor laws, strengthening of the banking sector also takes place.

4) FOREX RESERVES

- **Example Question:**
 - Why is forex reserve crucial for any economy? Discuss the key factors behind decreasing forex reserve in India over the last few months [15 marks, 250 words]
- **Basics: Composition of India's foreign Exchange Reserves and who manages these reserves?**
 - India's foreign exchange reserves comprise.
 - **Foreign currency assets (US\$, Euro, Pound, and Yen)**: It is expressed in US Dollar or Indian rupee terms.
 - **Gold reserves of RBI**: The RBI has gold stocks as a backup to issue currency and to meet unexpected balance of payment problems.
 - **Reserve Tranche**:
 - It consist of **India's quota** (member subscription fee) to IMF and lending to the General Resource of IMF.
 - **Note:** The General Resource Account is the pool of member countries' quota payment.
 - **Special Drawing Rights (SDR)** holdings of the government
- **Managed by RBI.**
 - **RBI Act and Foreign Exchange Management Act, 1999** set up the legal provisions for governing the foreign exchange reserves.

- **The RBI** functions as the custodian and manager of forex reserves and operates within the overall policy framework agreed upon with the Centre. It allocates the dollars for specific purposes.
 - For e.g., under the Liberalized Remittances Scheme, individuals are allowed to remit up to \$2,50,000 every year.
 - The Central bank uses its forex kitty for orderly movement of the rupee. It sells the dollar when the rupee weakens and buys dollar when the rupee strengthens.
- **Why Foreign Exchange Reserves are important?**
 - It acts a cushion against domestic currency volatility once the global exchange rate start rising.
 - It increases the confidence in the monetary and exchange rate policies of the government.
 - During balance of Payment crisis foreign exchange reserve come to the rescue of any country so as to absorb the distress related to such crisis.
 - Strong forex reserves also helps a country to adopt more aggressive countercyclical measures and emerge from a short-lived recession.
 - It also adds to the comfort of market participants that domestic currency is backed by external assets and hence it also helps the equity markets of the country, because due to strong reserves many people from foreign countries are willing to invest in the country.
- **However, holding too much foreign exchange reserves is also not advisable -> (Opportunity Cost)**
- **How much Foreign Reserve do we have?**
 - India's forex reserve at \$602 billion as of Aug 2023: RBI
 - **Foreign Currency Assets (FCAs):** \$534.40 billion
 - **Gold Reserves:** \$44.34 billion
 - **SDR:** \$18.32 billion
 - **Note:** India's foreign reserve had peaked in Sep 2021 at \$642.45 billion.
- **How did India's foreign exchange reserves increase till Sep 2021?** (Not by exports; but by import of capital)
- **Why the recent drop in the reserves?**
 - Largely due to steps taken by the Reserve Bank of India to support the rupee.
 - Increasing trade deficits (and Current Account Deficits)
 - Capital outflow (FIIs have pulled out) [given the rising global interest rates and bond yields on the back of monetary policy tightening by the US Fed and other major central banks.
- **Some Recent Steps by RBI:**
 - In July 2022, RBI has announced a series of measures including relaxation in:
 - i. **Foreign investment in debt:**
 - FPIs in government securities and corporate debt made till 31st Oct 2022, will be exempted from this short-term limit. These will not be reckoned for the short-term limit of one year till maturity or sale of such investments.
 - ii. **External Commercial Borrowings**
 - Increase the limit under automatic route for ECBs from \$750 million or its equivalent per financial year to \$1.5 billion.

iii. NRI Deposits:

- RBI has allowed banks temporarily to raise Fresh Foreign Currency Non-Resident Bank i.e., (FCNR (B)) and Non-Resident External (NRE) deposits without reference to the current regulations on interest rates. This relaxation is available till 31st Oct 2022.
- From July 30, 2022, incremental FCNR(B) and NRE deposits with reference base date of 1st July 2022, will be exempt from the maintenance of CRR and SLR.

– **Conclusion:**

- With reserve bank of India showing willingness to use reserves to defend the rupee - ensuring "orderly evolution" of the exchange rate with "zero tolerance for volatile and bumpy movements" - a further drawdown of foreign exchange reserve is possible. The forex reserve was, after all, accumulated as a buffer against currency volatility, external shocks and sudden stop in capital flows. As RBI Governor Shaktinath Das has recently put it, "***You buy an umbrella to use it when it rains***".

5) EXCHANGE RATES AND ITS IMPLICATIONS

– **Why does depreciation take place?**

- **Core Reason - Demand supply gap of foreign currency (US\$)**
 - **Increasing Current Account Deficit** (More imports, less exports).
 - **Monetary and Interest rate hikes by the US Fed**
 - This makes US treasury investment more attractive and leads to **FII's moving funds from emerging economies back to US.**
- **Other traditional factors affecting India's exchange rates**
 - Mounting External Debt
 - Tightening global liquidity
- Further, since India is an emerging market, **inflation rate** here would be higher when compared to developed countries and there will be a long term depreciation.

– **Why the recent depreciation in rupee?**

- Since March 2022, the US Federal Reserve has been raising its benchmark interest rate causing investors seeking higher returns to pull capital away from emerging markets such as India and back into the USA. This puts pressure on emerging market economies.
- India's Current Account Deficit is expected to hit a 10-year high of 3.3% of GDP in the current financial year.
- Consistently high domestic inflation

– **Negative Impacts**

1. **Decline in forex reserves**
2. **Negatively impacts Current Account Deficit -> Vicious Cycle**
3. **Pulling out of Foreign Portfolio Investments**
4. **Inflation: Increased prices of imported products**
 - Further, increases the cost of crude oil import.
5. **Negatively impacts business' taking loans from abroad**

- With banks already not willing to lend because of increasing NPAs depreciating rupee makes it difficult for business' to borrow from abroad.
- 6. **Difficulty in financing external debt**
- 7. **Increase in RBI's monetary policy rates**
 - Thus impacting economic growth negatively
- 8. **Challenges for students studying or wanting to study abroad**
- **Positives of declining rupee**
 - Depreciation helps in increasing exports as exports become cheaper for importing foreign country.
 - Therefore, some sectors like IT, Pharma, hospitality can actually benefit from depreciating rupee.
 - This may help in chipping away of trade deficit imbalance.
 - **Tourism and hospitality** sector may get a boost
 - **Remittances tend to increase** during the depreciating phase
- **Sectoral Impact**
 1. **Export based industry would benefit.**
 - Depreciation acts as booster for IT and Pharma sector which are export based. Further hospitality sectors such as tourism, hotel etc can benefit as foreign tourists would now find it cheaper to visit India.
 2. **Problems for Oil Marketing Companies**
 - Rise in crude oil prices and depreciation of rupee is a double jeopardy for oil marketing companies. The lack of pricing power during major elections further exacerbate the problems for OMCs.
 3. **Auto sector**
 - Companies having high export shares will benefit from this depreciation.
 - On the other hand, operating procedure margins of vehicle manufacturers such as Maruti Suzuki which import most of their components and focus on domestic market are going to face problems.
 4. **Aviation sector will be hit**
 - Increasing cost of Crude oil (thus Aviation Turbine Fuel)
 - The big capacity additions on the anvil will also face problems.
- **Steps taken by Government.**
 - Steps to fight trade deficit [see Trade Deficit Topics]
 - Steps to attract investments [See currency depreciation topic]
- **Conclusion**
 - Most of the reasons for depreciation in rupee are not due to development internal to India and thus the problem is not India specific.
 - Further, though a depreciating rupee may be beneficial for a few sectors, but it doesn't bode well for the country's macro-economic stability, unless export growth increases.
 - In long run, India should focus on decreasing its energy dependency, expanding its manufacturing sector to reduce current account deficit, and to make India less vulnerable to these external factors.

- We will need to remove policy barriers that are impeding the growth of export oriented sectors.

And finally, there is a need of reform in the monetary policy framework of RBI to reduce the continuous inflationary pressure on rupee.

6) ENVIRONMENT: AIR POLLUTION IN INDIA

- **Introduction: Current Pollution situation in India:**
 - As per WHO India has the 37 out of world's 50 most polluted cities. Similarly, as per the Air Quality Life Index Report 2023, India has 50 of the world's most polluted cities.
- **Major sources** of air pollution in India include Transportation, biomass burning for cooking, Electricity generation, industry, construction, waste burning, and episodic agricultural burning.
- **Impacts**
 - Health** - As per the Air Quality Life Index Report 2023, in North India, PM2.5 shortens lives by eight years
 - Air pollution can cause mental health, Alzheimer's and loss of vision.
 - It can also increase vulnerability to diseases such as COVID-19.
 - Women who are chronically exposed to particulate air pollution are more likely to have underweight babies and preterm birth.
 - Economy**
 - Lost output due to premature deaths and morbidity from air pollution amount to around 1.4% of GDP (i.e. around 2,60,000 crores). **The overall economic cost of air pollution is estimated at around 7% of GDP (or 14 lakh crores).**
 - **Agricultural losses:** Other than impacting farm labour productivity, air pollution (PM, Ozone etc.) can lead to reduction in wheat and rice production by around 25%.
 - Air pollution impacts various dimensions of economy from labor productivity to crop yield.
 - Environmental Impact**
 - **Reduction in yields of Solar Power Plants** - due to rising dust and particulate matter (PM)
- **Key challenges in fighting Air Pollution:**
 - **India's Economic growth is built on fossil fuels:**
 - Coal, Oil, and Natural Gas account for roughly 75% of our power generation and 97% of road transport. But they contribute to the pollution of CO, SO2, NO2, Ozone, PM etc.
 - **Stubble Burning** -> Farmers yet to get credible alternative
 - **Solid Fuel dependency for cooking in rural areas** -> firewood or dung cake -> Drudgery; Health Impact;
 - **Capital and Human Resource** for dealing with air pollution is lacking
 - This leads to poor monitoring and poor compliance of air pollution norms
- **Way Forward**

- **Legal and Policy Initiatives:**
 - **Effective implementation of National Clean Air Program:**
 - **Phase out of existing coal, oil and gas infrastructure**
 - **Closure of old coal-fired power plants** can yield health benefits that exceed the value of electricity generated.
 - **Phase out dates for diesel, petrol and gas cars -> Promote electric vehicles**
 - **Transition to affordable and carbon neutral transport -> Strengthening of public transport, good walking and cycling infrastructure.**
 - **Transition to renewable energy.**
 - Share of renewable energy in India has risen dramatically to around 100 GW in Aug 2021, but there is still a long way to go.
 - **Deal with issue of stubble burning**
 - PUSA decomposer (use of biotechnology); Awareness; Higher subsidy for machinery etc.
 - **Healthy Way to Cook:** Critically analyze the shortcomings of PM Ujjwala Yojna and bring changes to ensure 100% coverage and utilization.
 - **Revise Ambient Air Quality Standards** to bring them to **WHO levels** and **implement them** without exceptions.
 - **Expand country's Air Quality Monitoring Network** - A number of new, low cost monitors have entered service, that capture readings for not only PM2.5 and 10 but also other gases like NO2, SO2, methane, VoCs etc.
 - **Strengthen CPCB and other SPCBs** to effectively implement the air pollution norms.
- **Conclusion**
- China was once amongst the most polluted countries in the world. But consistent efforts in the field of prioritizing zero-emissions transport, staggered use of Internal Combustion engines, promotion of Electric vehicles etc. while continuing to grow economically, shows that air pollution can be clamped down without impeding economic growth.

A) REPORT: AIR QUALITY LIFE INDEX REPORT, 2023 – BY THE UNIVERSITY OF CHICAGO

- The world's fifty most polluted regions belong to northern plains of India. Seven states - Punjab, Chandigarh, Haryana, NCT, Uttar Pradesh, Bihar, and West Bengal comprise a majority of this region.
- In North India, PM2.5 shortens lives by eight years.
- **NCT of Delhi** is the most polluted city in the world.

B) INTERNATIONAL DAY OF CLEAN AIR FOR BLUE SKIES, 2023

- **About International Day of Clean Air for Blue Skies:**
 - The International Day of Clean Air for Blue Skies is commemorated annually on 7th September. It recognizes that clean air is important for the health and day-to-day lives of people, while air pollution is the single greatest environmental risk to human health and one of the main avoidable causes of death and disease globally.

- **UNGA** by a resolution 74/212 of 22nd Jan 2020, designated the Day to emphasize the need to make further efforts to improve air quality, including reducing air pollution, to protect human health.
- **On 7th Sep 2023**, the 4th International Day of Clean Air for blue skies focused on the theme, '**Together for Clean Air**'. The theme aims to highlight the urgent need for stronger partnerships, increased investment, and shared responsibility of overcoming pollution.

Levelup IAS

3. PRELIMS FACTS

1) CULTURE: POILA BAISAKH (POHELA BAISAKH)

- It is the first day of the Bengali Calendar which is also the inspiration for official calendar of BD. It is celebrated on 15th April in India in the states of WB, Tripura, Jharkhand, and Assam (Barak Valley) by Bengalis regardless of religious faith.
- It is celebrated with processions, fairs and family times.
 - In **2016**, the UNESCO declared this festivity organized by the Faculty of Fine Arts, University of Dhaka as a cultural heritage of humanity.
- **West Bengal Assembly** has passed a resolution on 'Poila Baisakh' as State Foundation Day (or Bangla Divas) (Sep 2023)
 - **Background Controversy:** A controversy had emerged when Raj Bhavan had observed June 20, as the Foundation Day.
 - **Chief Minister Mamta Banerjee** has criticized this in the assembly saying that there was no particular day which was observed as the State Foundation Day and June 20 which brings back the memories of partition has nothing to do with Foundation of the state.
- **Resolution on making Tagore's 'Banglar Mati Banglar Jol'** (Bengal's soil and Bengal's water) as the official song of West Bengal was also passed by the assembly.

2) CULTURE: LANGUAGE: KOKBOROK

- **Why in news?**
 - Protests and strikes in Tripura by Twipra Students' Federation (TSF) to press for the **introduction of Roman script for Kokborok**, state's indigenous lingua franca, and other demands (Sep 2023)
- **About Kokborok language:**
 - Kokborok (or Tripuri) is a Tibeto Burman language of the Indian State of Tripura and neighbouring areas of Bangladesh. Its name comes from Kok meaning "verbal" and borok meaning people of "human". The language was formerly called Tripuri & Tipra Kok, with its name being changed in the 20th century. It has been attested since at least 1st century CE, when the historical record of Tripuri kings began to be written.
 - It was originally written using Koloma script.
 - **Official Language:** It is an official language of the state since 1979. Consequently, the language has been taught in schools of Tripura from the primary level to the higher secondary stage since 1980s. Now it also has BA and MA courses.
 - **Demand for inclusion in 8th Schedule** of the Constitution of India is also going on.
- **Script and Associated issues:**
 - The language had a script called Koloma script that was developed in 1st century CE and used by the Royal family of Tripura. But the script fell out of use in the 14th century, and is widely considered to have been lost.
 - **From the 19th century**, Bengali script is being used to write the Kokborok. But since the independence, several NGOs have been promoting Roman Script.
 - **The script issue has become highly politicized presently.**

- The Left front government advocate usage of the Asian Bengali script and all the regional indigenous parties and student organization and ethnic nationalist organizations advocate for Roman Script.

– **Why the protests recently?**

- In 2022, the Opposition TIPRA Motha party flagged media reports where candidates were claimed to have been compelled by exam invigilators to write answers of the Kokborok paper in Bengali script. The demand for introducing Roman script has intensified since then.

3) INFRASTRUCTURE: NYOMA AIRFIELD

Defence Minister Rajnath Singh laid down foundation stone for Nyoma airfield in **Eastern Ladakh very close to LAC** in Sep 2023

It will be developed at a cost of Rs 200 crore and will boost air infrastructure in Ladakh and augment the IAF's capability along the northern border. It will be one of the world's highest airfield and prove game changer for the armed forces.

It will be completed in about two years and will be able to accommodate all fighter jets in the IAF's inventory.



4) INFRASTRUCTURE: NECHIPHU TUNNEL

In Sep 2023, Defence Minister Rajnath Singh inaugurated the crucial Nechiphu tunnel on the axis to Tawang in Arunachal Pradesh.

It is a 500-meter tunnel on Balipara-Charduar-Tawang Road. The work for this started in 2020.

This tunnel, along with Sela tunnel, which is under construction, will provide all weather connectivity to the strategic Tawang Region.

Strategic Significance: Defence experts say that it will play an important role in neutralizing any threat from China.

Economic Significance: More tourism



5) INFRASTRUCTURE: SELA PASS TUNNEL

About Sela Pass

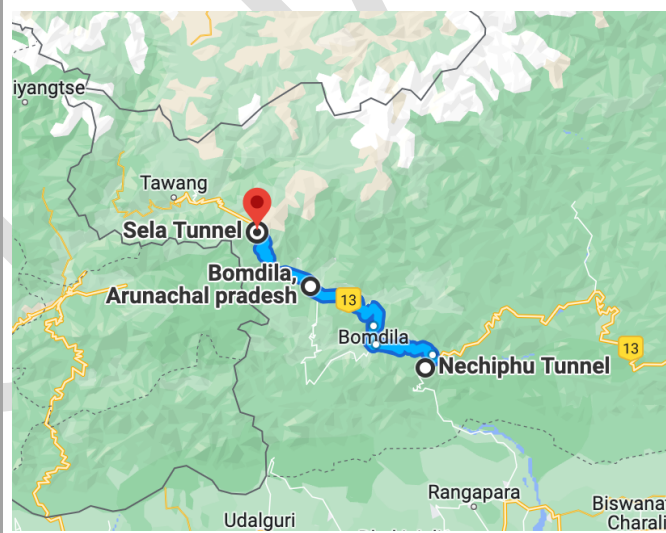
- It is high altitude mountain pass located on the border **between the Twang and West Kameng Districts** of Arunachal Pradesh.
- It has an elevation of 4170 m (around 13,000 feet), and connects Tibetan Buddhist town of Tawang to Dirang (West Kameng District) and Guwhati i.e. the pass carries the main road connecting Tawang with the rest of India.
- Sela Lake** is one of the approximate 101 lakes in the area that are sacred in Tibetan Buddhism.

About the Tunnel

- It is being constructed by BRO at a cost of Rs 687 crores. It is being constructed using the latest **New Australian Tunneling Method (NATM)** and is much below the snowline allowing all weather travel challenges without the challenge of snow clearance.
- At this height, it will be the world's longest bi-lane road tunnel. It would provide all weather connectivity to Tawang.

Significance

- Strategic:** the tunnel will reduce the travel time between the Indian Army's 4 Corps headquarters at Tezpur in Assam and Tawang.
- Economic:** it will also boost the tourism industry in the region.



6) S&T: SHANTI SWARUP BHATNAGAR PRIZE (SSB PRIZE)

- Why in news?**
 - After Year's delay, CSIR's Bhatnagar award for 2022 announced (Sep 2023)
- About Shanti Swarup Bhatnagar Prize**
 - Shanti Swarup Bhatnagar Prize for Science and Technology is a prestigious honour and an annual award in science and technology in India.
 - It is awarded by **CSIR** and its named after its **founder director** Dr. Shanti Swarup Bhatnagar.
 - The award recognizes outstanding contributions in the field of **biological sciences, Physical Sciences, Mathematical Sciences, Chemical Sciences, Engineering Sciences, Medical Sciences and Earth, Atmosphere, Ocean and Planetary Sciences.**
 - It is announced each year on **26th Sep** to mark the CSIR foundation day.
 - It contains a citation, a plaque, a cash award of Rs 5 Lakh and an endowment of Rs 15,000 per month up to the age of 65 years.

- **About Shanti Swarup Bhatnagar**
 - Shanti Swarup Bhatnagar (1894 - 1955) was an Indian scientist, academic and scientific administrator. He was the first Director General of CSIR and the first chairperson of UGC.
 - The Shanti Swarup Bhatnagar Price was initiated by CSIR in 1958 in his honour.
- **About 2022 Award** (Announced in Sep 2023)
 - The 2022 Bhatnagar prize honours 12 scientists across seven scientific discipline.
 - While the award is usually announced on Sep 26 - CSIR's Foundation day - the prizes weren't announced last year, without any official reason being ascribed.
 - **Last year**, the Ministry of Home Affairs constituted a committee to review all the national awards administered by various science and medical ministries and whittled down some of them. The **SSB** award however was retained.

7) S&T: CYBER SECURITY: C-DOT

- **Why in news?**
 - C-DOT celebrates its 40th Foundation Day (25th Aug 2023)
- Centre for Development of Telematics (C-DOT) was established in 1984 as an autonomous Telecom R&D centre of DoT, Gol. It is a registered society under the Societies Registration Act, 1860.
- It is chaired by Ministry of Communication and Information Technology.
- It is a registered public funded research institute with the Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology.
- **Key contribution:**
 - In its initial years, it triggered the telecom boom in the rural India that was responsible for all around socio-economic development.
 - As part of its development process, it also **spawned a wide base of equipment manufacturers and component vendors for the industry**.
- Over the years it has **evolved into full-fledged telecom R&D institution**, that complies with level-5 maturity on CMMI Model and has capabilities to undertake large-scale state of art telecom technologies development programs.
- C-DOT as a torch bearer of indigenous telecom R&D continues to develop latest technology products in areas like Optical, Switching, Wireless, Security and Network Management while also working on futuristic technologies like M2M/IOT, 5G, AI etc.
- It also works towards realizing the objectives of various flagship programs of the Government of India that include Digital India, Make In India, Skill India, Startup India, and Smart Cities.

8) S&T: CYBER SECURITY: TRINETRA – ENTERPRISE SECURITY OPERATION CENTRE

- Ministry of communication and information technology has launched TRINETRA on 25th August 2023.
- It is aimed at providing end-to-end security solution to the organizations for detection, analysis and mitigation of cyber security threats.
- It is a combination of multiple security systems like Security Information and Event Management (SIEM), Security Orchestration and Automated Response (SOAR), Data Loss prevention etc.
- It provides 24X7 near real-time actionable cyber security status and detection and resolution of cyber threats (Virus, Malware, Ransomware, Spyware etc.)

- It also performs security evaluation of organization's IT assets by protecting endpoints including PC, Laptop, Servers and VMs by detection, analyses, and mitigation of vulnerabilities and giving AI enabled automated responses to the cyber threats ensuring protection of sensitive data.

9) DEFENCE: C-295 TRANSPORT AIRCRAFT

- **Why in news?**
 - IAF chief takes delivery of the first C-295 transport aircraft in Spain (Sep 2023)
- **About the Aircraft:**
 - Note: India has ordered 56 C-295Ws for the Indian Air Force, with a plan to order an additional 6 aircrafts for the Indian Coast Guard and 9 aircraft for the Indian Navy.
- **Details**
 - The aircraft comes in transport configuration, equipped with an Indian Electronic Warfare Suite.
 - In Sep 2021, the Defence Ministry signed a Rs 22,000 crore deal with Airbus and Space S.A., Spain for procurement of 56 C-295s.
 - **Total 56 Aircrafts are to be procured by Indian Airforce:**
 - **16 aircraft** will come in a fly-away condition from Seville, while **40 will be manufactured** by Airbus jointly with **Tata Advanced System Limited (TASL)**.
 - Work is underway to set up the Final Assembly Line (FAL) at Vadodra in Gujarat and the first aircraft manufactured in India would be delivered in Sep 2026.
 - **Need:** Replacing **56 Avro Transport Aircraft**: IAF has 56 Avro Transport aircraft procured in the 1960s and they are in urgent need of the replacement.

10) DEFENCE: VARUNA 2023

Exercise Varuna	India France	Navy Phase-II of the <u>21st edition of Varuna (Varuna-23)</u> , between Indian and French Navy was conducted in Arabian Sea in Sep 2023. The exercise was conducted over three days and witnessed joint operations, underway replenishment and various tactical maneuvers.	Indian & French Navy bilateral exercise was initiated in <u>1993</u> . The exercise was <u>later christened as 'Varuna'</u> in <u>2001</u> and has since become a hallmark of robust India-France Strategic bilateral relationship. It is aimed at <u>enhancing cooperation and interoperability</u> of two navies.
------------------------	-----------------	---	--