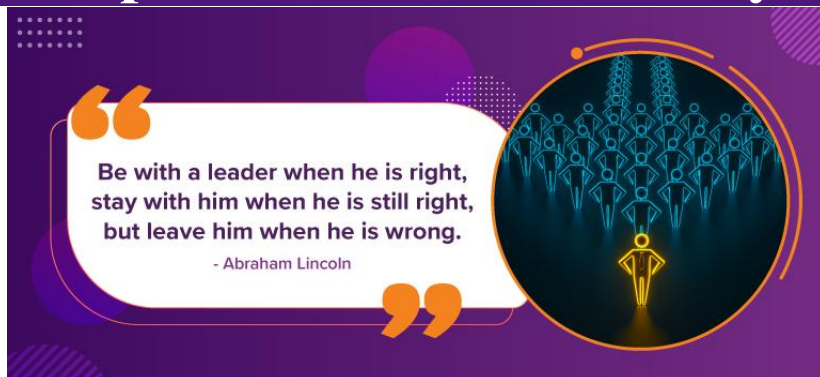


# 03 Apr 2023: UPSC Exam Comprehensive News Analysis



<b>TABLE OF CONTENTS</b>
<b>A. GS 1 Related</b>
<b>B. GS 2 Related</b>
<b>C. GS 3 Related</b> <b><i>ECONOMY</i></b> <b>1. The Bharat 6G vision document</b>
<b>D. GS 4 Related</b>
<b>E. Editorials</b> <b><i>INTERNATIONAL RELATIONS</i></b> <b>1. No 'sayonara' for Japan in Indo-Pacific geopolitics</b>
<b>F. Prelims Facts</b> <b>1. ISRO's Reusable Launch Vehicle</b> <b>2. In a first, Eravikulam National Park gets a fernarium</b>
<b>G. Tidbits</b> <b>1. Foreign Trade Policy brings 'strategic and economic interests' into trade transit ties</b> <b>2. Govt. to expand definition of 'political risk' under export guarantee scheme</b> <b>3. Over ₹6,800 crore spent in 5 years on cleaning Yamuna</b>
<b>H. UPSC Prelims Practice Questions</b>
<b>I. UPSC Mains Practice Questions</b>

## A. GS 1 Related

*Nothing here for today!!!*

## B. GS 2 Related

*Nothing here for today!!!*

## C. GS 3 Related

**Category: SCIENCE AND TECHNOLOGY**

### 1. The Bharat 6G vision document

*Syllabus: Indigenization of technology*

*Mains: Bharat 6G Vision Statement and the significance of faster adoption of 6G technologies.*

#### Context

The Prime Minister of India unveiled the Bharat 6G Vision Document in March 2023.

#### Bharat 6G Vision Statement

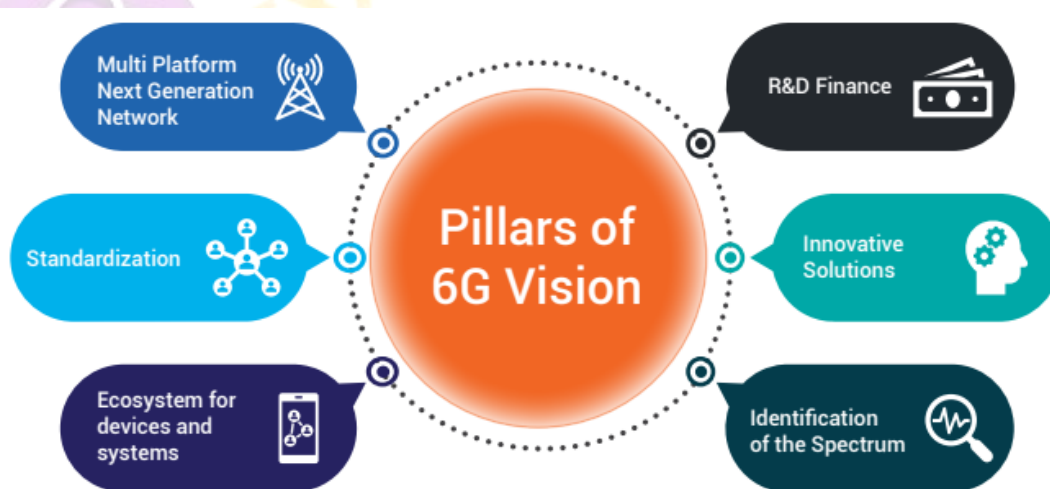


Image Source: Bharat 6G Vision Statement

- Through a 6G vision document, the government has made it clear that it wants to improve India's wireless data consumption and become a global leader in terms of setting up the standards for 6G.

- The key goals of the government are:
  - Guarantee every citizen a minimum bandwidth of 100Mbps
  - Ensure that every gram panchayat has half a terabit per second of connectivity
  - To blanket the country with 50 million internet hotspots, with thirteen per square kilometre.
- In order to achieve the intended goals, the government is looking to promote local manufacturing of telecom gear, support domestic companies and involve engineers in international discussions around standardisation.
- In the vision document, the government has also acknowledged the delays in the adoption of previous generations of telecommunication technologies in India and the government does not want to repeat the same.
  - For example, 5G was adopted in India, years after countries such as South Korea and the U.S. had adopted it in their major urban centres.
- The government in the vision document has said that the spectrum has been congested currently, especially in the low and mid-bands. Such frequencies in 4G networks may not be able to keep up with the demand for traffic.
  - More data can be transferred in higher frequencies.
- Apart from promoting greater participation in standardisation discussions, the government through the vision document also looks to extend financial support to research and development in order to advance connectivity goals, leveraging talent in academia and companies.
- As per the government, an apex body would be established to take Bharat 6G Vision forward for its implementation.

### Difference between 6G and 5G

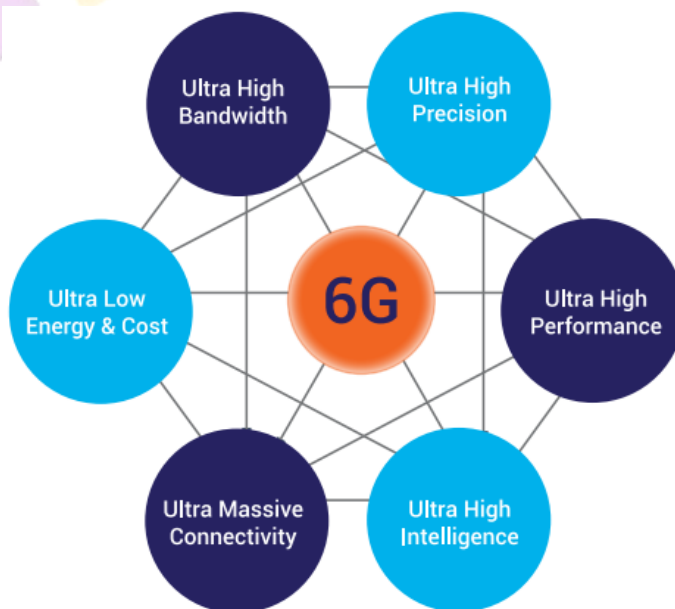


Image Source: Bharat 6G Vision Statement

- The 6G technology ensures that the websites would load faster, videos look better, and files download faster.
- The 6G technology offers **much lower latency**, which is the time taken for a data packet to move from one place to another.
- 6G is anticipated to provide higher speeds as compared to 5G.
- Higher speeds and lower latency associated with the 6G networks will help deliver new-age innovations such as holographic communication, improved artificial intelligence, and expanded reality (XR).

### Path ahead

- According to the vision document, satellite constellations will connect telecom towers and base stations, integrating networks and extending them to rural areas.
- Further, countries such as South Korea, Japan and Germany are working in mission mode to adopt 6G technology by encouraging the development of key original technologies and domestic production of core equipment.
  - India must look to collaborate with such countries to fasten the adoption of 6G technologies in India.
- The Bharat 6G Vision statement also cites Europe's equivalent of the document which says that "the key vision is to ensure leadership in strategic areas and establish secure and trusted access to key technologies making Europe a sovereign, independent, and reliable source for 6G public and private network solutions and services."

***Nut graf:** The formulation of a Bharat 6G Vision Document is regarded as a landmark step as the policymakers and the industry gear up for the adoption of the next generation of telecommunication. However, India should first focus on improving telecommunication connectivity as more than 45,000 villages of the country still lack even 4G connectivity.*

## D. GS 4 Related

*Nothing here for today!!!*

## E. Editorials

### Category: INTERNATIONAL RELATIONS

#### 1. No 'sayonara' for Japan in Indo-Pacific geopolitics

*Syllabus: Effect of policies and politics of developed countries on India's interest.*

*Mains: Japan's role in Indo-Pacific geopolitics.*

***Prelims: India-Japan relations.***

**Context:** Japanese Prime Minister, Fumio Kishida visited India in March 2023.

**Details:**

- Japanese Prime Minister, Fumio Kishida engaged with Indian Prime Minister, Narendra Modi on bilateral and global issues during his two-day visit to India in March 2023.
- He focused on cooperation between [G-7](#) and G-20, as Japan and India are holding their presidencies respectively.
- Mr. Fumio Kishida also announced, “Japan’s New Plan for a Free and Open Indo-Pacific” (FOIP). He also talked about strengthening the “Japan-India Special Strategic and Global Partnership”.
- It was highlighted that in the backdrop of the Russia-Ukraine conflict, and China’s increasing assertiveness in the [South China Sea](#), East China Sea, Taiwan Strait, and India’s LAC (Line of Actual Control), the concept of FOIP needs further momentum.
- The New Plan for the FOIP emphasizes rule-based order and mutual respect for each other's territories.

**Associated Concerns and Way Ahead:**

- The new policy of Japan focuses on the plethora of issues in the Indo-Pacific like food security, cyberspace, freedom of seas, connectivity, etc.
- There is a lack of united stand on the understanding of “what the international order should be”.
  - However, it is suggested that FOIP will embrace diverse voices and create an atmosphere of cooperation and collaboration.
- Japan can address these concerns through:
  - Japan needs to collaborate with other like-minded countries like India under FOIP.
  - Rule-making through dialogue should be encouraged.

**Japan’s course of Action:**

- Japan has outlined four pillars of cooperation under FOIP:
  - ***Principles for peace and rules for prosperity***
    - It is pointed out that vulnerable countries are impacted the most by the erosion of the rule of law.

- Thus, Japan is willing to engage in economic development programmes like the implementation of the [G-20](#) Principles for “Quality Infrastructure Investment”.
- ***Addressing challenges in an Indo-Pacific way***
  - Mr. Kishida talked about incorporating realistic and practical projects in the fields of climate change, health, food security, etc.
  - In this direction, Japan is focusing on connectivity projects bilaterally with many countries in the Indo-Pacific region.
- ***Multi-layered connectivity***
  - The three areas identified under this pillar are Southeast Asia, South Asia, and the South Pacific/Pacific Island countries.
  - Japan has taken several steps in this regard. For instance,
    - The commitment of \$100 million towards the Japan-[ASEAN](#) Integration Fund.
    - Japan is promoting the Bay of Bengal-Northeast India industrial value chain concept in cooperation with India and Bangladesh.
    - It is also supporting the development of the new Palau International Airport Terminal project.
- ***Extending efforts for security and safe use of the “sea” to the “air”***
  - Under this, it will strengthen the capabilities of maritime law enforcement agencies in other countries.
  - It will implement the “strategic use of Official Development Assistance (ODAs)” and will put forth the guidelines for ODA for the next 10 years.
  - Furthermore, it will introduce a new framework for “private capital mobilization-type” grant aid and revise the Development Cooperation Charter.

### **Analysis of Japan's stand:**

- Japan is trying to reinforce its centrality in the emerging geopolitics of the Indo-Pacific.
- It is concerned about the growing Chinese belligerence in the region.
- The new FOIP aims to stabilize the regional order, uphold peace and accommodate differing voices of countries.
- Japan is preparing for any unforeseen challenges both for itself and the Indo-Pacific region as a whole.

**Nut Graf:** *Japanese Prime Minister unveiled a new plan for a Free and Open Indo-Pacific. This highlights that Japan is focusing on the Indo-Pacific region and is deeply investing in stability and prosperity.*

## F. Prelims Facts

### 1. ISRO's Reusable Launch Vehicle

*Syllabus: GS 3; Science and Technology; Awareness in the fields of Space*

*Prelims: About Reusable Launch Vehicle*

#### Context

The Indian Space Research Organisation (ISRO) carried out the landing experiment of the Reusable Launch Vehicle-Technology Demonstration (RLV-TD) programme successfully in Chitradurga, Karnataka.

#### ISRO's Reusable Launch Vehicle



Image Source: The Hindu

- According to ISRO, the Reusable Launch Vehicle-Technology Demonstration (RLV-TD) programme is part of a series of experiments to develop essential technologies for a fully reusable launch vehicle to enable low-cost access to space.
- The RLV-TD experiments are used to develop technologies such as hypersonic flight (HEX), autonomous landing (LEX), return flight experiment (REX), powered cruise flight, and Scramjet Propulsion Experiment (SPEX).
- ISRO aims to develop this vehicle to become India's reusable two-stage orbital (TSTO) launch vehicle.
- ISRO's RLV-TD looks similar to an aircraft with a fuselage, a nose cap, double delta wings, and twin vertical tails.
- In 2016, an experiment was conducted that involved sending a winged spacecraft on a rocket powered by a conventional solid booster (HS9) engine used by ISRO into space.
  - The spacecraft had traveled at a speed of Mach 5 when re-entering the earth's orbit.
- **Advantages of Reusable Launch Vehicle:** a reusable launch vehicle is a low-cost, reliable, and on-demand mode of accessing space.

### About Chinook Helicopters



- A Chinook Helicopter of the Indian Air Force (IAF) was used to lift the Reusable Launch Vehicle Autonomous Landing Mission (RLV LEX) to a height of 4.5 km and release the RLV.
- Chinook is an advanced multi-mission helicopter of the IAF.
- Chinook Helicopters are developed by the US-based Boeing company.
  - In 2020, Boeing completed the delivery of 15 Chinook Helicopters to the IAF.
- Chinook Helicopters are being used for various strategic, combat and humanitarian missions.

## 2. In a first, Eravikulam National Park gets a fernarium

*Syllabus: GS 3; Environment; Conservation*

*Prelims: About Eravikulam National Park*

### Context

The Eravikulam National Park will have a fernarium set up inside the park.

### Details

- The Eravikulam National Park is located along the Western Ghats in the Idukki and Ernakulam districts of Kerala.
- The Eravikulam National Park is known as the natural habitat of the Nilgiri tahr in Munnar.
- The national park will now have a fernarium set up inside the park.
  - As per the reports, this is the first time a fern collection is being set up in the hill station.
- Close to 52 varieties of ferns have already been planted in the new fernarium.
- Ferns are a part of the Epiphytic family.
  - i.e. Ferns grow naturally in soilless conditions and such plants get water and other nutrients through leaching from trees.
  - A large number of ferns are found on the trees inside the national park
- The Eravikulam National Park is said to be one of the rich biodiversity areas in the country, and the new initiative aims to provide visitors with awareness of the park's biodiversity.

## 1. Foreign Trade Policy brings 'strategic and economic interests' into trade transit ties

- In line with India's strategic and economic interests, the new Foreign Trade Policy (FTP) has introduced additional provisions to allow trade transit for adjacent countries.
  - This marks a significant shift in the country's stance on allowing the transit of goods in and out of neighbouring countries.
- The Union Commerce and Industry Minister released the new policy which indicates the changed language in provisions pertaining to transit facilities and a subtle shift in the stance on trade with neighbouring countries
  - These new provisions in the new policy could potentially unnerve some land-locked countries such as Nepal and Bhutan neighbouring India that depend on goods transit through India.
- According to the Foreign Trade Policy 2015-20, which was applicable till recently, the transit of goods through India from/or to countries adjacent to India would be regulated in accordance with bilateral treaties between India and those countries and will be subject to such restrictions as may be specified by Directorate General of Foreign Trade (DGFT) in accordance with international conventions.
  - However, according to the new policy document, such transit of goods will now be enabled and regulated in accordance with strategic and economic interests of India along with the bilateral treaties between India and those countries.
- Trade experts believe that the implications of using such provisions must be weighed in light of India's commitments at the [World Trade Organisation \(WTO\)](#).
  - Freedom of transit to landlocked countries is guaranteed under Article V of the [General Agreement on Tariffs and Trade \(GATT\)](#).
  - Further, the WTO Agreement on Trade Facilitation of which India is a party also states that "regulations in connection with traffic in transit imposed by Member shall not be applied in a manner that would constitute a disguised restriction' on traffic in transit".

## 2. Govt. to expand definition of 'political risk' under export guarantee scheme

- As per the new Foreign Trade Policy (FTP), exporters would be able to get insurance cover for losses suffered on account of countries' sudden imposition of barriers to trade.
  - Further, the new FTP also envisages the formation of a "whole of government" ministerial panel to address the grievances of small exporters.
- The government will expand the definition of "political risk" under the export guarantee scheme to cover any fresh imposition of non-tariff barriers by importing nations after a shipment has left Indian shores.

- The [Export Credit Guarantee Corporation \(ECGC\)](#) compensates the exporters for losses when buyers turn insolvent or default on payments, political risks such as war and sudden import restrictions or promulgations of laws or decrees, but does not cover anti-dumping steps or non-tariff barriers.
- However, a few anti-dumping measures or non-tariff barriers introduced after a shipment has been made, will now come under the purview of “political risk”.
- The new FTP also talks about establishing an inter-ministerial committee to look into micro, small and medium enterprises’ (MSME) trade-related grievances.

### 3. Over ₹6,800 crore spent in 5 years on cleaning Yamuna

- According to the Environment Department, Delhi, about ₹6,856.91 crores was spent between 2017 to 2021, to clean the Delhi stretch of river Yamuna.
- Despite the efforts, the Delhi Pollution Control Committee (DPCC) reports note that most of this stretch remains polluted for nearly the entire year and is not even fit for bathing.
  - According to DPCC’s February report, the faecal coliform (microbes from human and animal excreta) found in the river was beyond the “desirable level” at all points except for Palla, where the river enters Delhi.
  - Further, the faecal coliform level was seen to be as high as 500 times the desirable level at the point where the river exits the city.
- Although only about 2% of the 1,400-km-long Yamuna flows between Wazirabad and Okhla in Delhi, it accounts for over 76% of the pollution load of the river.
- In 2020, in the run up to the Assembly election, the Chief Minister of Delhi had announced a 10-point guarantee card and said that the Yamuna river will be cleaned and made pollution-free.
- According to the convener of the Yamuna Jiye Abhiyaan, a civil society initiative for the river’s rejuvenation, the rejuvenation of the Yamuna depends on three things namely:
  - A single agency must be responsible for the rejuvenation to ensure accountability.
  - Prioritising efforts to increase the natural flow of the river.
  - Protecting and cleaning the floodplains of the river and not allowing any developmental work.

**Q1. Which of the following statements is/are correct with respect to Adeno-associated virus 2 (AAV2)? (Level – Difficult)**

1. It is a group of viruses called Dependoparvovirus which infects both humans and some primates.
2. AAV2 in order to infect the host, requires another virus to also be infecting the host at the same time.

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

**Answer: C**

Explanation:

- **Statement 1 is correct**, Adeno-associated viruses 2 (AAV2) belong to the family Parvoviridae, genus Dependovirus which infects both humans and some primates.
- **Statement 2 is correct**, AAV2 belongs to the parvovirus family and is dependent on co-infection with other viruses, mainly adenoviruses, in order to replicate.

**Q2. Which of the following are the Quantitative tools used by Reserve Bank of India (RBI) to control the money supply? (Level – Easy)**

1. Margin requirements
2. Rationing of credit
3. Open Market Operations
4. Cash Reserve Ratio

Options:

- A. 1 and 3 only
- B. 3 and 4 only
- C. 1, 2 and 4 only
- D. 1, 2 and 3 only

**Answer: B**

Explanation:

- The RBI controls the money supply in the economy through quantitative and qualitative tools.

- Under Quantitative measures money supply is controlled through tools like **Cash Reserve Ratio (CRR)**, or bank rate or **open market operations**.
- Qualitative or selective methods of credit control include regulation of margin requirement, credit rationing, regulation of consumer credit, direct action, etc.

**Q3. Consider the following Pairs: (Level – Difficult)**

National Park/Wildlife Sanctuary	State/UT
1. Asola Bhatti Wildlife Sanctuary	Delhi
2. Chinnar Wildlife Sanctuary	Tamil Nadu
3. Kolleru Wildlife Sanctuary	Telangana
4. Melghat Wildlife Sanctuary	Madhya Pradesh

How many pairs given above are correctly matched?

- A. Only one pair
- B. Only two pairs
- C. Only three pairs
- D. All four pairs

**Answer: A**

Explanation:

- **Pair 1 is correct**, Asola-Bhati Wildlife Sanctuary is located on the Southern Delhi Ridge of Aravalli hill range on Delhi-Haryana border lies in Southern Delhi and northern parts of Faridabad and Gurugram districts of Haryana state.
- **Pair 2 is not correct**, Chinnar Wildlife Sanctuary is located in the Devikulam taluk in the Idukki district of **Kerala**.
- **Pair 3 is not correct**, Kolleru Wildlife Sanctuary is located in **Andhra Pradesh**
- **Pair 4 is not correct**, Melghat Wildlife Sanctuary is located in the northern part of Amravati District of **Maharashtra**.

**Q4. What of the following differences between El Nino and La Nina is/are correct? (Level – Easy)**

1. El Niño events are associated with a warming of the central and eastern tropical Pacific, while La Niña events are the reverse, with a sustained cooling of these same areas.
2. El Niño means lesser than average rains for India, but La Niña has no effect on monsoon climate.

Options:

- A. 1 only

- B. 2 only
- C. Both
- D. None

**Answer: A**

Explanation:

- **Statement 1 is correct**, El Niño events are associated with a warming of the central and eastern tropical Pacific, while La Niña events are the reverse, with a sustained cooling of these same areas.
- **Statement 2 is not correct**, Indian context, El Niño means lesser than average rains for India and **La Niña is associated with good rainfall during the monsoon season.**

**Q5. Who among the following wrote the poem, Subh-e Azadi ?(Level–Difficult)[PYQ-2008]**

- A. Sahir Ludhiyani
- B. Faiz Ahmed Faiz
- C. Muhammad Iqbal
- D. Maulana Abul Kalam Azad

**Answer: B**

Explanation:

- Subh-e Azadi is an Urdu language poem written by Faiz Ahmed Faiz in 1947.
- Faiz Ahmed Faiz in his poem Subh-e Azadi expressed anguish and displeasure about the “Partition of India”.

## I. UPSC Mains Practice Questions

1. [Discuss the challenges and opportunities that 6G technology holds for India.](#) (10 marks, 150 words) [GS-3; Science and Technology]
2. [“India’s New Foreign Trade Policy is more pragmatic than idealistic”. Comment.](#) (10 marks, 150 words) [GS-2; International Relations]