

### WHAT IS LOKPAL?

Former Supreme Court judge Justice Ajay Manikrao Khanwilkar was recently appointed as the chairperson of Lokpal.



Lokpal is a statutory body established under the Lokpal and Lokayuktas Act 2013.

- **Mandate:** To inquire into allegations of corruption against certain public functionaries and for related matters.
- **Organisational Structure:**
  - The Lokpal will consist of a **chairperson** and a **maximum of eight members**.
  - The **Chairperson** should be either the **former Chief Justice of India**, or a **former Judge of the Supreme Court**, or an **eminent person** who fulfils the eligibility criteria as specified.
  - **Out of the maximum eight members, half will be judicial members**. The judicial member of the Lokpal should be **either a former Judge of the Supreme Court or a former Chief Justice of a High Court**.
  - A **minimum of fifty per cent** of the Members will be from **SC / ST / OBC / Minorities and women**.

### **How are members appointed?**

- The Chairperson and the Members are **appointed by the President** of India on the **recommendation** of a **selection committee** composed of the **Prime Minister** as the Chairperson, the **Speaker of Lok Sabha**, the **Leader of Opposition in Lok Sabha**, the **Chief Justice of India** or a **Judge** nominated by him/her, and **one eminent jurist**.
- They **hold office for a term of five years** from the date on which they enter upon the office **or until they attain the age of 70 years**, whichever is earlier.

- The salary, allowances, and other conditions of services of the Chairperson are the same as that of the Chief Justice of India.
- The salary, allowances, and other conditions of services of the members are the same as that of a Judge of the Supreme Court.
- **Jurisdiction:**
  - It has jurisdiction to inquire into allegations of corruption against anyone who is or has been Prime Minister, a Minister in the Union government, or a Member of Parliament, as well as officials of the Union Government under Groups A, B, C, and D.
- **Exceptions for Prime Minister:**
  - Lokpal cannot inquire into allegations against the PM relating to international relations, external and internal security, public order, atomic energy, and space.
  - Also, complaints against the PM are not to be probed unless the full Lokpal bench considers the initiation of the inquiry and at least 2/3rds of the members approve it.
- **Powers of Lokpal:**
  - It has powers to superintendence over and to give direction to the CBI.
  - If it has referred a case to the CBI, the investigating officer in such a case cannot be transferred without the approval of Lokpal.
  - Powers to authorize CBI for search and seizure operations connected to such cases.
  - The Inquiry Wing of the Lokpal has been vested with the powers of a civil court.
  - Lokpal has the power to give directions to prevent the destruction of records during the preliminary inquiry.
- In terms of Section 48 of the said Act, the Lokpal is required to present annually to the President a report on the work done by it, which is caused to be laid in both the Houses of Parliament.

## WHAT IS GENERAL DIARY (GD)?

The Supreme Court recently held that the information disclosing the commission of the cognizable offence needs to be recorded as a First Information Report ("FIR") in the form of a book and not in the General Diary maintained by the Police under the Police Act, 1861.



- **General Diary**, also called **Station Diary** or **Daily Diary** in some States, is **maintained under** the provisions of **Section 44 of the Police Act, 1861**, in the States to which it applies, **or under the respective provisions of the Police Act(s) applicable to a State or under the Police Manual of a State**, as the case may be.
- Section 44 of the Police Act, 1861 states that it shall be the duty of every officer in charge of a police station to keep a general diary in such form as shall, from time to time, be prescribed by the State Government and to record therein all complaints and charges preferred, the names of all persons arrested, the names of the complainants, the offences charged against them, the weapons or property that shall have been taken from their possession or otherwise, and the names of the witnesses who shall have been examined.
- It is a record of all important transactions/events taking place in a police station, including the departure and arrival of police staff, the handing over or taking over of charges, the arrest of a person, details of law-and-order duties, visit of senior officers, etc.
- Additionally, the GD summarizes each First Information Report (FIR) registered at the police station, as FIR registration is a significant event there.

## What is a First Information Report (FIR)?

- It is a written document prepared by a Police officer based on information given by an aggrieved person or any other person, either in writing or made orally, about the commission of a Cognizable Offence.
- The investigation is started only after the filing of the FIR.

## General Diary (GD) vs. First Information Report (FIR):

- A copy of each FIR is sent to the superior officers and to the concerned Judicial Magistrate.
  - A copy of GD is not sent to the Judicial Magistrate, though its copy is sent to a superior police officer.
    - The Magistrate of the district shall be at liberty to call for any inspection of such GD.
  - The signature of the complainant is obtained in the FIR Book as and when the complaint is given to the police station. On the other hand, there is no such requirement to obtain the signature of the complainant in the general diary.
  - The general diary is an internal police record, while in the case of F.I.R., a copy of these will be provided to the complainant.
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## WHAT IS INTERNATIONAL ASTRONOMICAL UNION (IAU)?

The International Astronomical Union recently confirmed the existence of three currently unnamed moons — one around Uranus and two orbiting Neptune.



### About the International Astronomical Union (IAU):

- The IAU is a senior body governing international professional astronomical activities worldwide.
- It was established in 1919 as the first of a series of international unions for the advancement of specific branches of science.
- Its mission is to promote and safeguard the science of astronomy in all its aspects, including research, communication, education, and development, through international cooperation.
- The IAU is made up of various divisions, commissions, and working groups representing the various areas of astronomical research, teaching, and other endeavours.

- **Membership:**
  - Its **individual members** are **professional astronomers** from all over the world, **at the Ph.D. level** and beyond, who are active in professional research, education, and outreach in astronomy.
  - The IAU **also has junior members**.
  - IAU **membership spans 92 countries**. Out of those countries, **85 are National Members**.
- IAU **activities range from the definition of fundamental astronomical and dynamical constants and unambiguous astronomical nomenclature**, rapid dissemination of new discoveries, organization of **international observing campaigns**, and promotion of **educational activities** in astronomy to **early informal discussions** of possible future international large-scale facilities.
- It is the **only organization recognized professionally for the naming of astronomical bodies**, which it does solely on the basis of merit, history, or discoverer's privilege.
- The IAU **holds a general assembly every three years** in varying parts of the world at which professional astronomers meet to discuss research, new cooperative ventures, and similar matters of professional interest.
- The IAU also works to **promote research, education, and public outreach activities** in astronomy for the public.
- **Headquarters: Paris, France.**

## GENERAL AGREEMENT ON TRADE IN SERVICES (GATS)

Around 72 nations have agreed to take on additional obligations in services under the-



**General Agreement on Trade in Services (GATS) to ease non-goods trade among themselves and extend the similar concessions to all other members of the World Trade Organisation (WTO).**

GATS is a treaty of the World Trade Organization (WTO).

- It was created to extend the multilateral **trading system to the service sector**, in the same way, the General Agreement on Tariffs and Trade (GATT) provides such a system for merchandise trade.
- It was **signed at the Uruguay Round** of Multilateral Trade Negotiations' conclusion and entered into force on January 1, 1995.
- **Members:** All WTO members are at the same time members of the GATS including India.
- Basic obligations under the GATS may be categorized into **two broad groups:**
  - **General obligations** that apply to all members and services sector.
  - **Specific commitments:** These are obligations that apply only to the sectors **inscribed in a member's schedule of commitments**. Such commitments are laid down in individual schedules whose scope may vary widely between members.
- The GATS applies in principle to all service sectors, with two exceptions.
  - **Services supplied in the exercise of governmental authority:** These are services that are **supplied neither on a commercial basis** nor in competition with other suppliers.
  - These include **social security schemes** and any other public service, such as health or education that is provided at non-market conditions.
- **The Annex on Air Transport Services** exempts from coverage measures affecting air traffic rights and services directly related to the exercise of such rights.

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## 10,000 HUMAN GENOMES SEQUENCED IN INDIA

### What is genome sequencing?

- **Human genome**
  - The human genome is the entire set of deoxyribonucleic acid (DNA) residing in the nucleus of every cell of each human body.

- It carries the complete genetic information responsible for the development and functioning of the organism.

## Genome sequencing

- Genome sequencing is the process of determining the complete DNA sequence of an organism's genome.
- There are several methods of genome sequencing, but the most common is called next-generation sequencing (NGS).
- NGS allows for rapid, accurate, and cost-effective sequencing of large amounts of DNA.

## What are the applications of genome sequencing?

- **To evaluate rare disorder**
  - Genome sequencing has been used to evaluate rare disorders, preconditions for disorders, even cancer from the viewpoint of genetics, rather than as diseases of certain organs.
  - Nearly 10,000 diseases — including cystic fibrosis and thalassemia — are known to be the result of a single gene malfunctioning.
- **Tool for prenatal screening**
  - It has also been used as a tool for prenatal screening, to investigate whether the foetus has genetic disorders or anomalies.
  - **Technology Crispr**, which relies on sequencing, may potentially allow scientists to repair disease-causing mutations in human genomes.
- **Uses at the population level**
  - Advanced analytics and AI could be applied to essential datasets created by collecting genomic profiles across the population.
  - This would allow to develop greater understanding of causative factors and potential treatments of diseases.

## What is Genome India project?

- The Genome India Project is a gene mapping project sanctioned by the Department of Biotechnology.
- It was launched with the goal of creating a comprehensive database of genetic variations among the Indian population.
- The project aims to sequence the genomes of over 10,000 Indians from different regions of the country and establish a reference genome for the Indian population.

## What is the significance of the Genome India project?

- **To learn about genetic variants unique to the Indian population**
    - This project allows researchers to learn about genetic variants unique to India's population groups and use that to customise drugs and therapies.
  - **Database for 1.3 billion population**
    - India's 1.3 billion-strong population consists of over 4,600 population groups, many of which are endogamous.
    - Thus, the Indian population harbours distinct variations, with disease-causing mutations often amplified within some of these groups.
    - Findings from population-based or disease-based human genetics research from other populations of the world cannot be extrapolated to Indians.
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## PM MODI ANNOUNCES 4 ASTRONAUTS FOR GAGANYAAN

- PM Modi announced the names of the four astronauts, who would fly to low-Earth orbit as part of the ISRO's Gaganyaan — the first crewed Indian space mission.
- The selected astronauts are:
  - Prashanth Balakrishnan Nair, Angad Prathap, Ajit Krishnan, and Shubanshu Shukla.
  - They are all either wing commanders or group captains with the Indian Air Force (IAF) and have extensive experience working as test pilots.



## Gaganyaan

- Gaganyaan project envisages **demonstration of human spaceflight capability** by launching a **crew of 3 members to an orbit of 400 km** for a 3 days mission and bring them back safely to earth.
  - It is part of the **Indian Human Spaceflight Programme (IHSP)**, which was initiated (2007) by the ISRO to develop the technology needed to launch crewed orbital spacecraft into low earth orbit (LEO).

## Current status of Gaganyaan missions

- The Gaganyaan missions include both manned and unmanned missions.
- The first unmanned Gaganyaan-1 mission, a test flight to check the technology readiness for the final mission, is scheduled to take off by the end of 2024.
- The manned mission, which will fly a three-membered crew into a low earth orbit at an altitude of 400 km for a period of three days, is scheduled later.

## Training of astronauts

- The four selected astronauts have completed their generic training at Russia's Yuri Gagarin Cosmonaut Training Centre.
  - Their training took place after ISRO-Glavkosmos (a subsidiary of Russian space agency Roscosmos) signed an MOU in June 2019.
- The astronauts are currently undergoing training at ISRO's astronaut training facility in Bengaluru.
- One of the four astronauts is also expected to be trained by the American space agency NASA.