

**DAILY  
CURRENT  
AFFAIRS  
ANALYSIS**

 LAKSHYA ACADEMY®

**07 SEPTEMBER 2023**

## 1 – About Pirola:

### GS II

#### Health related issues

- **Context:**

- Multiple nations have reported an increase in Covid-19 infections, which is being caused by the novel Coronavirus strain BA.2.86.

- **Key information:**

- 'Pirola' is the colloquial name for it.
- This situation raises questions about the high frequency of mutations.
- This was comparable to how many mutations there were between the Delta variants.

- **Why do viruses change?**

- All viruses naturally alter over time; these modifications are especially prevalent in viruses that use RNA as their genetic material, such as coronaviruses and influenza viruses.
- When a virus enters the body of a living thing, its genetic material—DNA, RNA, or both—enters the cells and begins to make copies of itself, which can then infect other cells.
- Every time a mistake is made during this copying, a mutation results.
- On occasion, a mutation appears when the genetic errors brought about by copying turn out to be advantageous for the virus.
- These make it easier for the virus to replicate itself or infiltrate human cells.
- The more a virus spreads and replicates in a population, the greater the likelihood that it may mutate.

- **Source** → *The Hindu*

## **2 – Details of the Autonomous District Council:**

### **GS II**

#### **Constitution related issues**

- **Context:**
- The state has suggested to the Centre that the current autonomous hill councils be granted more authority in order to end the ongoing violence in Manipur and appease Kukis.
- **About ADC:**
- **Pre-Independence:**
- Tribal communities living in the hills, who had their own customary rules, fiercely resisted the British when they assumed control of what was then Assam and imposed formal laws on the area.
- Through the Government of India Act, 1935, the British separated the Assamese hill regions into "excluded" and "partially excluded" areas in order to prevent conflict.
- Federal or provincial laws would not be enforced in certain areas unless the governor deemed them necessary for stability and progress.
- The provision's stated goal was to give tribal populations autonomy over their own affairs.
- **Following independence:**
- When India gained its independence, this clause was included to the Constitution's Sixth Schedule along with several changes.
- It was founded on suggestions provided by a committee headed by the former premier of Assam, Gopinath Bordoloi.
- In order for the indigenous people to safeguard their identity and resources, it has advised the establishment of autonomous district councils (ADCs) in the six Assamese hill districts:
- District of the United Khasi-Jaintia Hills,
- District of Garo Hills,
- District of Lushai Hills,
- District of Naga Hills,
- District of North Cachar Hills, and
- District of Mikir Hills.

- **Later on, some of these hill districts were transformed into states:**

- Districts of Khasi-Garo people became Meghalaya.
- District of Naga Hills became Nagaland,
- Mizoram arose from the Lushai Hills.
- The current ADCs were either replaced, given new names, or subsumed.
- In 1986, Tripura was added to the list.

- **There are now 10 ADCs in the North East listed on the Sixth Schedule:**

- Tripura has one, three each in Assam, Meghalaya, and Mizoram.
- Six ADCs exist in Manipur, however they were only established in 1971 by a parliamentary act.

- **The actions of ADCs:**

- The ADCs and Regional Councils are given the power to make laws, to receive financing from the Consolidated Fund of India, and to develop the region in the areas of health, education, roads, and regulations under the Sixth Schedule.
- Autonomous districts and regions are not subject to all parliamentary laws or just to varied degrees.
- ADCs have a term of five years and up to 30 members.
- With more than 40 members, the Bodoland Territorial Council in Assam is an exception to this rule.
- Each autonomous district and regional council has a maximum of 30 members, of which four are elected and the remaining members are chosen by the governor.
- The members are still in charge after five years have passed.

- **Strengths of ADCs:**

- **Judicial authority:**

- The ADCs can establish village courts within their jurisdiction to hear trials of cases involving the tribes because they are endowed with civil and judicial authority.
- The high courts' jurisdiction over each of these instances is specified by the governors of the states covered by the sixth schedule.
- In cases when both parties are Scheduled Tribe members and the maximum sentence is less than five years in prison, ADCs also have the authority to establish courts.

- **Legislative authority:**

- With the proper approval from the governor, the councils are also permitted to pass legislation pertaining to things like land, forests, fisheries, social security, entertainment, public health, etc.

- **State legislatures' and the parliament's limited roles:**

- The territorial jurisdiction of these autonomous zones limits the functions of the federal and state administrations.
- Unless the President and the governor give their assent, with or without changes to the legislation for the autonomous regions, laws established by the Parliament and state legislatures may or may not be implemented in these territories.

- **Sixth Schedule:**

- The Sixth Schedule was adopted in 1949 to protect indigenous people by creating autonomous administrative divisions known as Autonomous District Councils (ADCs), in accordance with Article 244 of the Constitution.
- The Northeastern states of Assam, Meghalaya, Mizoram (each with three Councils), and Tripura (with one Council) are currently subject to the provisions of the Sixth Schedule, which provide for extensive autonomy for indigenous tribes.
- The Karbi Anglong Autonomous Council, the Dima Hasao Autonomous District Council, and the Bodoland Territorial Council are located in Assam;
- The autonomous district councils for the Garo Hills, Jaintia Hills, and Khasi Hills are located in Meghalaya;
- The Tripura Tribal Areas Autonomous District Council exists in Tripura.
- Chakma Autonomous District Council, Lai Autonomous District Council, and Mara Autonomous District Council are all present in Mizoram.
- The Ladakh Autonomous Hill Development Council (LAHDC) is now in place in Ladakh.
- As stated in the LAHDC Act of 1997, the LAHDC is solely given executive authority to serve as an administrator to supervise development.
- Although the LAHDC has jurisdiction over land, it is not allowed to pass laws that limit how any land may be used or transferred.
- It can only designate and specify how public land shall be used.

- **What distinguishes Manipur ADCs from those on the Sixth Schedule?**

- **Statutory status:**

- The Constitution is the source of authority for other ADCs.
- The Act's provisions make the Manipur ADCs reliant on the state Assembly.

- **Legislative authority:**

- The Sixth Schedule gives ADCs far broader legislative authority over a number of governance-related issues.
- Manipur's are restricted to domestic issues including marriage, divorce, and social conventions.
- The Governor's approval is all that is required for sixth schedule ADC measures to become laws.
- Manipur ADCs must present them to the state Assembly after passing them through Hill Area Committees, which are made up of MLAs from the hills.
- Manipur ADCs are subordinate to the Deputy Commissioner, who is chosen by the state government, unlike Sixth Schedule ADCs.
- Unless the Governor decides differently, the DC's decision is binding in almost all situations.
- With the Governor's approval, the DC may even disband the ADCs.

- **Monetary powers:**

- The state provides central grants to ADCs on the sixth schedule.
- The state government is the sole source of cash devolution for Manipur ADCs.

- *Source → The Hindu*

### **3 – About the Kumkis:**

## **GS III**

### **Environmental Conservation**

- **Context:**

- Chittoor's kumkis are highlighted by Tamil Nadu's Operation Gaja.

- **About:**

- Kumkis are trained elephants that hunt and domesticate wild elephants.
- Wild elephants are abducted, tamed, and trained to become Kumki elephants after being removed from the herd in the forest.
- Three years are spent in training.
- Once trained, the elephants enter the "Kumki service" and work for the government until they are 60 years old.

- At age 60, elephants can retire and unwind in any sanctuary for elephants.
- Usually, kumki elephants are used to drive wild elephants that wander into human settlements back into the forest.
- The assistance of Kumki elephants is also used to assist wild elephants who have trouble standing and to rescue injured elephants.
- Additionally, the Kumki elephants show up to rescue tuskers that become stranded in a ditch or a swamp.
- The tranquillized wild elephants are also cared for by the Kumki elephants.
- *Source → The Hindu*

## 4 – Details of Preeclampsia:

### GS III

#### Biotechnology related issues

- **Context:**
- According to a study, a liquid biopsy method that gauges DNA methylation levels in the blood may enhance the early identification of foetuses at risk for preeclampsia.
- **Regarding preeclampsia:**
- Preeclampsia is a pregnancy problem.
- Preeclampsia, also known as postpartum preeclampsia, is a dangerous illness that can develop after the 20th week of pregnancy.
- **It may lead to:**
- elevated blood pressure
- proteinuria, a condition in which there is a high quantity of protein in the urine, or
- various indications of organ harm.
- Preeclampsia and its related consequences, such as eclampsia, account for 10 to 15 percent of maternal deaths globally.

- **Treatments:**
- **Taking aspirin:**
  - Early in the illness (before to 16 weeks of gestation), low-dose aspirin therapy can lower the risk of preeclampsia.
  - To start this intervention, the disease must be detected early.
- **Biological Liquid Treatment:**
  - Liquid biopsy is a promising new non-invasive diagnostic method that is being used more frequently to identify disease, track its course, and assess how well treatments are working.
  - A promising method for determining presymptomatic PE risk is cell-free DNA methylation profiling, which has the potential to enhance care and follow-up in obstetric clinics.
- *Source → The Hindu*

## 5 – About the Cartesian coordinates:

### GS III

### Science and Technology

- **Context:**
  - A coordinate system is a collection of integers that makes it possible to pinpoint a point's location in a given area of space.
- **About:**
  - One such system is the Cartesian coordinates, which uses a series of three numbers to represent the separation between a point and three perpendicular planes.
  - If there are N perpendicular planes, including in higher dimensions, this system often employs N numbers.
  - Cartesian coordinates on a plane employ a pair of numbers, one on the x-axis and one on the y-axis, to identify a particular point on the plane.
  - By entering one more number, such as the level of the building you are on, the location of the point in three dimensions can be determined.



- **Founder:**

- This approach was developed in the 17th century by the French mathematician and philosopher René Descartes.
- His discovery developed analytic geometry by bridging the gap between algebra and geometry.

- **Application:**

- astronomy,
- engineering,
- various fields of study that use geometry,
- using computer visuals and computer-aided geometric design to express spatial data.

- *Source → The Hindu*



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