



DATE: 3 MARCH 2026

## 1 Durand Line (Source: *The Hindu*)

The recent attack on Afghanistan from across the Pakistan border has again brought to light the historic conflict-torn Durand Line.

### Facts to Know About Border

- It was originally created in 1893, to separate then British-controlled India from Afghanistan.
- Now serves as the border between Pakistan and Afghanistan.
- It was named after Sir Mortimer Durand, a secretary of the British Indian government.
- It has been in conflict from early times due to dividing the Pashtun community residing in Afghanistan from that in present day Pakistan.



### Similar borderlines that need to be known

- **LAC (Line of Actual Control)**: It is a disputed border between India and China. The disputed area is located in Ladakh, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh.
- **LOC (Line of Control)**: It is a disputed area separating India and Pakistan. It is located in Jammu and Kashmir.
- **McMahon Line**: Boundary between India and China. It was originally negotiated between British India and Tibet.
- **Radcliffe Line**: It is the boundary between India and Pakistan/Bangladesh.

DATE: 3 MARCH 2026

## 2 Malaria (Source: **Down To Earth**)

*Malaria is a mosquito borne disease. It is one of the most challenging diseases of the tropical areas.*

### What you need to know?

- It is caused by *Plasmodium parasites*, transmitted through bites of female *Anopheles mosquitoes*.
- It does not spread from person to person.
- Blood transfusion and contaminated needles may also transmit malaria.
- Globally in 2024, there were an estimated 282 million malaria cases and 610,000 malaria deaths in 80 countries.
- Artemisinin and Chloroquine are used to treat Malaria.
- The WHO [Global technical strategy for malaria 2016–2030](#) provides a technical framework for all malaria-endemic countries.
- Malaria infected people have high fever and shaking chills.



## 3 Nucleic Acid Test (Source: *The Hindu*)

It is a diagnostic technique used to identify the presence of virus or bacteria. It uses the presence of genetic material to identify the pathogen.

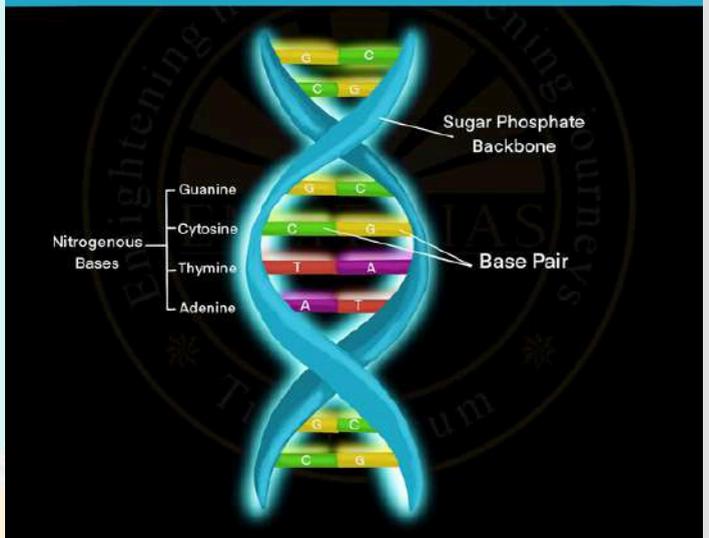
### Fact To Know

- It is used to identify infectious diseases like COVID-19, HIV, and hepatitis.
- It tries to identify the variation in the sequence /structure of DNA or RNA.
- It uses amplification methods like PCR(Polymerase Chain Reaction) to create sufficient quantity of sample.
- High specificity and sensitivity associated with the test allows for early detection of pathogens unlike other tests.

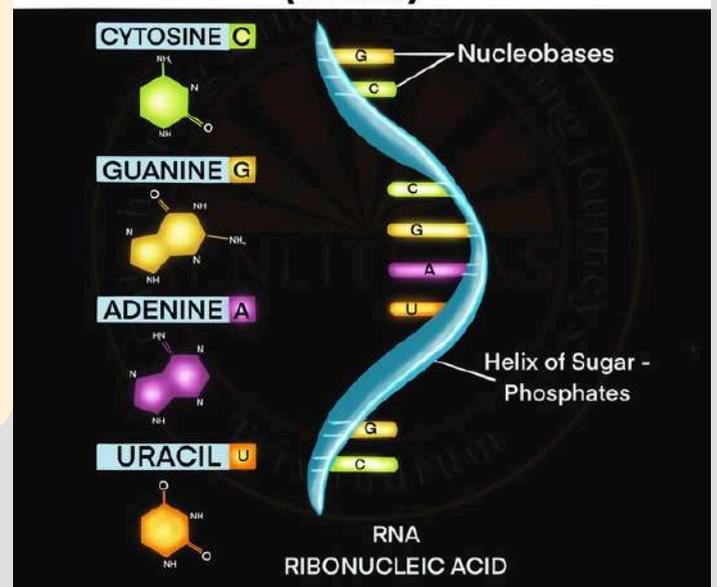
### What is nucleic acid?

- They are molecules representing the genetic information. They are found in different cells as well as virus.
- They can be DNA or RNA.
- Nucleic acid are composed of nucleotides . The nucleotides are composed of Sugar, Phosphate and a nitrogenous base.
- They are essential for life, heredity, and the growth and regulation of all organisms.

## DNA STRUCTURE



## RIBONUCLEIC ACID ( RNA )



## 4 Chenab River (Source: *The Indian Express*)

One among the key tributaries of Indus, Chenab originates in Himachal Pradesh from Chandra and Bhaga.

### What you need to know?

- The river initially forms by the confluence of Chandra and Bhaga in the Lahaul district of Himachal Pradesh.
- The Bhaga River originates from Surya taal lake in Himachal Pradesh.
- The Chandra River originates from Chandra Taal in Himachal Pradesh.
- River Indus has five major tributaries - Jhelum, Chenab, Ravi, Beas, and Sutlej.
- The world's highest rail arch bridge is built across river Chenab.
- Under Indus water treaty it was allocated to Pakistan. India is permitted to use the water under 'run of river' projects.
- Salal, Baglihar, and Rattle are major Hydroelectric power plants over Chenab.

