

December - 08

## TNPSC BITS

- ❖ The Innovations for Defence Excellence (iDEX), the flagship initiative of the Department of Defence Production, has achieved a significant milestone by signing its 300th contract.
- ❖ Operation Nanhe Farishte is a Railway Protection Force (RPF) initiative to reconnect children who have been lost or separated from their families.
- ❖ Uber announced the launch of its global flagship electric vehicle service Uber Green in Bengaluru, Karnataka.
  - It marks our second stop in the country for Uber Green, with operations already running in Mumbai.
- ❖ Oxford University Press has unveiled "Rizz" as its Word of the Year, reflecting the linguistic choices of Generation Z.
  - The term is used to describe someone's ability to attract or seduce another person.
- ❖ Bharti Airtel becomes the 8th company to surpass Rs.6 lakh crore of market cap in India.
  - The others are Reliance Industries, TCS, HDFC Bank, ICICI Bank, HUL (Hindustan Unilever Limited), Infosys and ITC (India Tobacco Company).
- ❖ Bajaj Group has become the fifth business house to cross the Rs 10-lakh-crore mark in market cap.
  - Earlier, Tata Group, Mukesh Ambani Group (Reliance Industries), HDFC Bank and Adani Group have achieved this milestone.
- ❖ The 6th World Congress on Disaster Management was held Dehradun, Uttarakhand under the theme of 'STRENGTHENING CLIMATE ACTION & DISASTER RESILIENCE'.
  - It has emerged as the largest global conference on disaster management outside the United Nations system.
- ❖ Tata Motors has opened its fourth Registered Vehicle Scrapping Facility (RVSF) in Chandigarh.
  - Tata Motors already has three RVSFs in Jaipur, Bhubaneswar, and Surat.
- ❖ LIC (503\$ billion reserve) has become the fourth largest insurer in the world in 2022, ahead of US-based MetLife and Prudential Financial Inc.
  - Top three insurers are Allianz SE (Germany), China Life Insurance, and Nippon Life Insurance (Japan).

- ❖ Taylor Swift, an American woman singer-songwriter, has been named Time Magazine's Person of the Year for 2023.
- ❖ The football player Lionel Messi of Argentina has been named as Times magazine's Athlete of the Year for 2023.
  - It comes after Messi won the 2023 Ballon d'Or for a record-extending eighth time.

## TAMIL NADU

### **Impatiens karuppusamyi**



- ❖ The researchers of Botanical Survey of India (BSI) have discovered a new species of plant from Kalakad Mundanthurai Tiger Reserve, Tamil Nadu.
- ❖ The species is named after Dr. S Karuppusamy (Madhura College, Tamil Nadu) for his significant contributions to the taxonomy of south Indian angiosperms.
- ❖ Impatiens is a widespread genus with over 1,000 species worldwide, with more than 280 found in India.
- ❖ It is prevalent in tropical Africa, Madagascar, India, Sri Lanka, and China.
- ❖ The discovered species are differed from all known species of Impatiens.
- ❖ It shares similarities with Impatiens Bicornis but differs in terms of leaf size, flower count, scape length, and flower size.

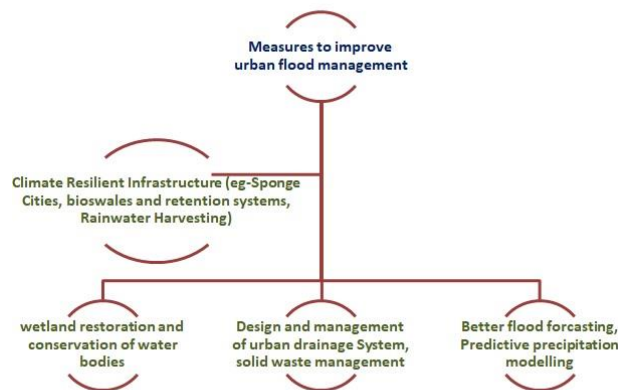
### **Memorial stone for Bipin Rawat**

- ❖ A memorial stone, Smritika, was installed at Nanjappa Chatram, Coonoor, Tamilnadu.

- ❖ It is the site of helicopter crash in which General Bipin Rawat, the then Chief of Defence Staff (CDS), died along with 13 others, in 2021.
- ❖ It was constructed by the Madras Regimental Centre, Wellington, Ooty.



## Integrated Urban Flood Management activities for Chennai Basin Project



- ❖ The Union Government has sanctioned an ambitious urban flood mitigation project for Chennai under the National Disaster Mitigation Fund (NDMF).
- ❖ It will be India's first project to tackle urban floods after Chennai deluge.

## Chennai rainfall in 2023

- ❖ In 2023, Chennai has received the highest amount of rainfall since the rain and subsequent floods in 2015.



- ❖ Nungambakkam and Meenambakkam observatories recorded 53cm and 52cm of rain between December 2 and 4, 2023.
- ❖ Chennai recorded a total of 46cm of rain between December 3 and 5.
- ❖ On December 1 2015, the city was heavily flooded after receiving 494 mm of rainfall in a span of 24 hours.
- ❖ Chennai was declared a disaster zone on December 2, 2015.
- ❖ In November 2015, the city had received an overall rainfall of 1049.3 mm, making it the highest amount of rain received since 1918.

### Top 24hrs Rainfall in Chennai City (Nungambakkam)

S.N	Date	24 hrs Rainfall in mm
1	21 <sup>st</sup> October, 1846	550
2	24 <sup>th</sup> October 1857	460
3	25 <sup>th</sup> November 1976	452
4	14 <sup>th</sup> June 1996	347
5	13 <sup>th</sup> November 1985	329
6	2 <sup>nd</sup> December <b>2015</b>	294
7	17 <sup>th</sup> February 1984	294
8	22 <sup>nd</sup> October 1969	280
9	27 <sup>th</sup> October 2005	273
10	10 <sup>th</sup> December 1901	262
11	12 <sup>th</sup> November 1985	249
12	16 <sup>th</sup> November <b>2015</b>	247
13	13 <sup>th</sup> November 1984	246
14	22 <sup>nd</sup> May 1952	244
15	5 <sup>th</sup> December <b>2023</b>	238
16	16 <sup>th</sup> November 1922	236
17	3 <sup>rd</sup> December 2005	234
18	28 <sup>th</sup> October 1902	233
19	4 <sup>th</sup> December <b>2023</b>	230
20	7 <sup>th</sup> November <b>2021</b>	215
21	17 <sup>th</sup> May 1943	215
22	26 <sup>th</sup> December 1978	203
23	31 <sup>st</sup> December <b>2021</b>	201

## NATIONAL

### Garba Dance

- ❖ Recently, India's Garba dance was included in the Intangible Cultural Heritage list.
- ❖ It was done by the Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage of UNESCO.
- ❖ It is a ritualistic and devotional dance performed throughout the State of Gujarat.

- ❖ Garba of Gujarat is the 15th cultural item from India to make it to the UNESCO list.
- ❖ Kolkata's Durga Puja was the last one added two years ago.
- ❖ Intangible Cultural Heritage (ICH) includes oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts.



### **Advocates (Amendment) Bill, 2023**



- ❖ The Bill has now been passed by the Lok Sabha in December 2023.
- ❖ It amends the Advocates Act, 1961.



- ❖ The Bill repeals certain sections related to touts under the Legal Practitioners Act, 1879.
- ❖ The 1961 Act consolidates the law related to legal practitioners and constitutes Bar Councils and the All-India Bar.
- ❖ The new bill aims at regulating the legal profession by a single act and seeks to target touts.
- ❖ The Bill provides that every High Court, district judge, sessions judge, district magistrate, and revenue officer (not below the rank of a district collector) may frame and publish lists of touts.
- ❖ Tout refers to a person who
  - (i) either proposes to procure or procures the employment of a legal practitioner in a legal business in return of any payment,
  - or (ii) frequents places such as the precincts of civil or criminal courts, revenue-offices, or railway stations to procure such employment.

### **NTWB's Inaugural Meeting**



सत्यमेव जयते

**Department of Industrial Policy and Promotion**  
**Ministry of Commerce and Industry**  
**Government of India**

- ❖ The inaugural meeting of the National Traders' Welfare Board (NTWB) was convened at New Delhi by the Department for Promotion of Industry and Internal Trade (DPIIT).
- ❖ The Board and its members play a crucial role in addressing issues pertinent to traders.

### **5th edition of Global Ayurveda Festival**

- ❖ Vice President Jagdeep Dhankhar inaugurated the 5th edition of Global Ayurveda Festival in Thiruvananthapuram in Kerala.

- ❖ The theme for this year will be 'Emerging Challenges in Healthcare and a Resurgent Ayurveda'.
- ❖ It will also see India's first dedicated Business-to-Business (B2B) meet on Ayurveda medical tourism.



## Bills for Kashmir 2023

### BIGGER HOUSE

❖ Total seats in House up from 83 to 90 (seats in Jammu go up from 37 to 43; in Kashmir, from 46 to 47)

❖ Two members, including a woman, to be nominated for assembly from 'Kashmiri migrant' community (defined as persons who migrated from J&K after Nov. 1, 1989, and registered with the Relief Commissioner)

❖ One seat to be reserved for 'displaced people' from PoK

❖ This takes the total nominated seats in assembly after J&K Reorganisation Act, 2019, to five, including two seats already reserved in the Act for women

❖ The LG will make the nominations to the House. No provision for consultation with the elected government or the CM

❖ Nominations will take the seat count to 95 plus 24 seats reserved for PoK. The total seats in the assembly will be 119

- ❖ The Lok Sabha has passed two bills, the Jammu and Kashmir Reorganisation (Amendment) Bill, 2023, and the Jammu and Kashmir Reservation (Amendment) Bill, 2023.
- ❖ The Reorganisation bill seeks to reserve seats in the upcoming 114-seat Jammu and Kashmir Assembly for "Kashmiri migrants, people displaced from Pakistan-occupied Kashmir (PoK), and Scheduled Tribes."
- ❖ The legislative assembly in Jammu and Kashmir initially had 100 members, including 24 for Pakistan-occupied Kashmir (PoK).

- ❖ In 1988, the seats were increased to 111.
- ❖ The 24 PoK seats were not considered in quorum calculation.
- ❖ It makes the total contestable seats 87, including four for Ladakh.
- ❖ After delimitation in 2020, the total seats rose to 114, including those for PoK.
- ❖ The state governor has the power to nominate 5 members to assembly.
- ❖ Out of these, two will be women, one a Kashmiri migrant and one from PoK.
- ❖ The J&K Reorganisation Act, 2019 provides for the reorganization of the state of Jammu and Kashmir into the union territories of Jammu and Kashmir (with legislature) and Ladakh (without legislature).
- ❖ It seeks to provide reservation of 9 seats for Scheduled Tribes for the first time.
- ❖ The Reservation bill replaces the term “weak and underprivileged classes” in the J&K Reservation Act, 2004, with “other backward classes.”

## INTERNATIONAL

### AIGIF



- ❖ The 4th edition of the annual ASEAN India Grassroots Innovation Forum (AIGIF) for 2023 took place in Langkawi, Malaysia recently.
- ❖ AIGIF is an annual program that focuses on strengthening the relationship between India and ASEAN Member States (AMS) in the fields of Science, Technology, and Innovation.

### Article 99 of the UN Charter

- ❖ Recently, UN Secretary-General Guterres addressed the UN Security Council, highlighting the severe risk of a collapse of the humanitarian system in Gaza.



- ❖ He urged the Council to help avert a humanitarian catastrophe and appealed for a humanitarian ceasefire.
- ❖ UN Secretary-General Antonio Guterres said he was invoking Article 99 for the first time in his career.
- ❖ Article 99 of the UN Charter grants the Secretary-General the discretionary power to bring to the attention of the Security Council any matter that may threaten the maintenance of international peace and security.

#### ISRAEL- GAZA WAR

## What is Article 99 of the UN Charter about?

UN Secretary-General Antonio Guterres made a rare move on Wednesday, invoking Article 99 to formally warn the Security Council of the global threat from Israel's war on Gaza.

#### ARTICLE 99

“ The secretary-general may bring to the attention of the UNSC any matter which, in his opinion, may threaten the maintenance of international peace and security.

#### If in agreement

The UNSC will have additional powers to ensure that the ceasefire resolution is implemented, including

- the power to impose sanctions, and
- deployment of an international force.

#### WHEN WAS IT LAST INVOKED?



1960 - CONGO

**Secretary-General Dag Hammarskjöld**

The Congolese government requested the UNSC to provide UN military assistance to protect against Belgian forces.



1979 - IRAN

**Secretary-General Kurt Waldheim**

The UNSC called for the release of 52 Americans held hostage by Iranian militia at the US embassy in Tehran and restoring diplomatic immunity.



1989 - LEBANON

**Secretary-General Javier Perez de Cuellar**

It was used to call for a ceasefire in Lebanon's escalating civil war.



### WRC 23 – Dubai, UAE

- ❖ United Arab Emirates' Mohammed Al Ramsi has been appointed Chairman of World Radiocommunication Conference 2023 (WRC 23).



- ❖ WRC is organised by International Telecommunication Union (ITU) every four years to revise the global use of radio-frequency spectrum, geostationary-satellite and non-geostationary-satellite orbits.



### **World's 100 Most Powerful Women of 2023**



- ❖ Union Finance Minister Nirmala Sitharaman, HCL Corporation Chairperson Roshni Nadar Malhotra, Steel Authority of India Chairperson Soma Mondal and Biocon Executive Chairperson Kiran Mazumdar-Shaw are the four Indians among the 100 named in Forbes' annual list of 'The World's Most Powerful Women'.
- ❖ Nirmala Sitharaman, serving as India's first full-time female finance minister, has made it to the list for the fifth year in a row.
- ❖ The top position on the list is Ursula von der Leyen, President of the European Commission.

- ❖ Following her are European Central Bank President Christine Lagarde, US Vice President Kamala Harris, and Italian Prime Minister Giorgia Meloni.

## WHO Global Clinical Trials Forum



- ❖ It is the first ever forum by WHO.
- ❖ It aims to discuss and develop a global vision for sustainable clinical research infrastructure.
- ❖ In India, the Central Drug Standard Control Organisation (CDSCO) regulates clinical trials under Drugs and Cosmetics Act, 1940.
- ❖ The Clinical Trials Registry – India (CTRI), a free online public record system, was established in 2007.
- ❖ It is maintained by ICMR under the Ministry of Health and Family Welfare.
- ❖ It is a national clinical trial registry in India.
- ❖ It is mandatory to register for every clinical trial at CTRI before commencing as per the Drugs Controller General (India) (DCGI).

## SCIENCE AND TECHNOLOGY

### Nuclear Gravity Bombs

- ❖ The United States' plans to build new nuclear gravity bomb will be designated as B61-13.
- ❖ These bombs do not consist of a guidance system and, hence, follow a ballistic trajectory.

- ❖ The new bomb is estimated to be 360 kilotons, which is roughly 24 times powerful than the blast that destroyed Hiroshima.
- ❖ Gravity bombs work is being pulled to the ground by the force of gravity instead of flying to the target on a powered missile.
- ❖ In this case, a bomber or an aircraft fly over the target and drops the bomb.



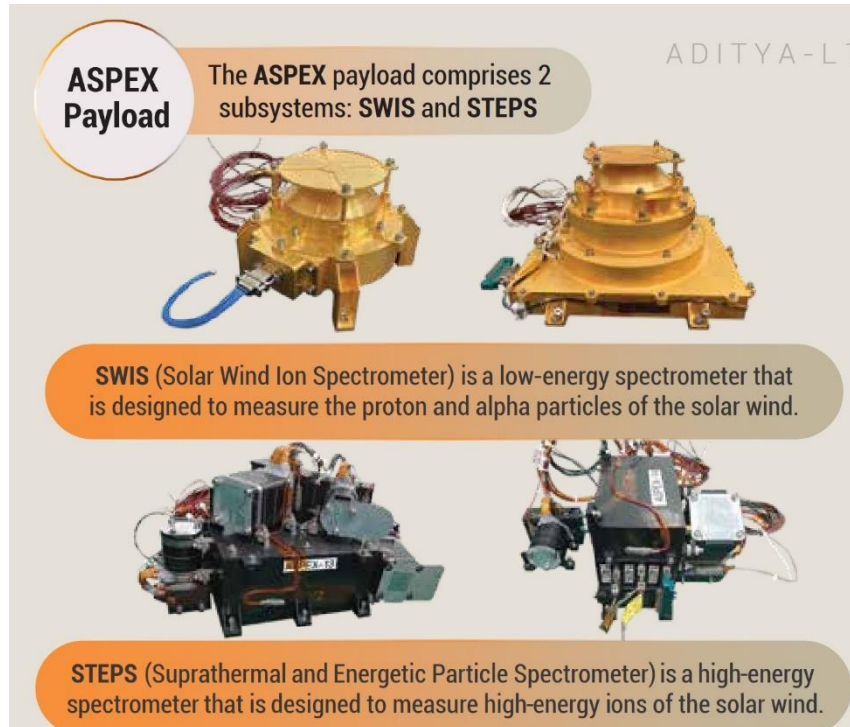
## AI Model Gemini



- ❖ Google has officially launched its latest AI system, named Gemini.
- ❖ Gemini AI introduces three distinct modes: Ultra, Pro, and Nano.
- ❖ It's now integrated into Bard, the AI chatbot, and available on Pixel phones as well.

- ❖ Google aims to compete OpenAI's ChatGPT.

### **Aditya Solar wind Particle Experiment (ASPEX)**

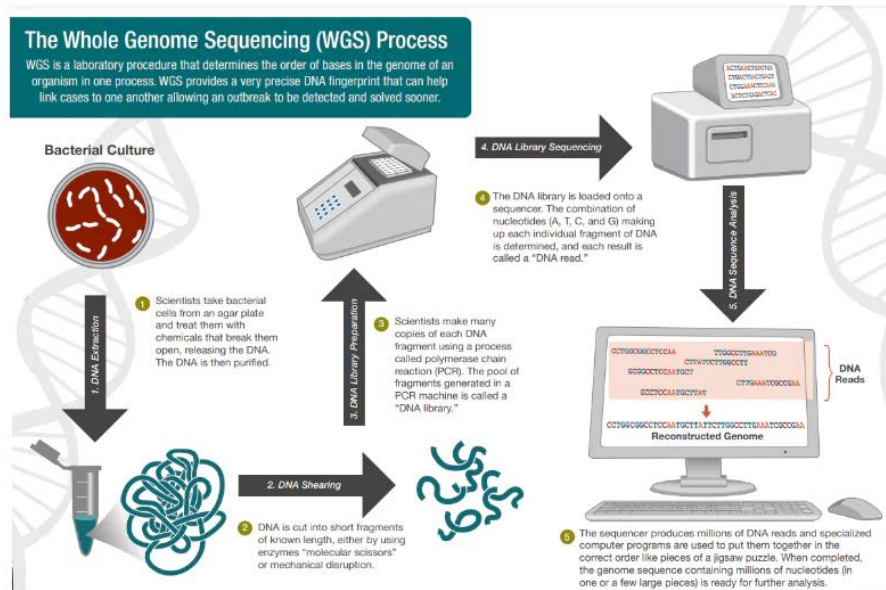


- ❖ It is the payload onboard India's Aditya-L1 satellite, launched to explore the sun.
- ❖ It has commenced its operations.
- ❖ It is designed to study solar wind particles.
- ❖ It comprises tools such as the 'Solar Wind Ion Spectrometer' (SWIS) and the 'Suprathermal and Energetic Particle Spectrometer' (STEPS).
- ❖ SWIS measures charged particles (ions) from the Sun, offering a broad view, while STEPS focuses on studying high-energy particles emitted by the Sun.
- ❖ ASPEX plays a crucial role in understanding space weather and its potential impact on communication systems and power grids on Earth.

### **Genome sequencing of jamun**

- ❖ Researchers at the Indian Institute of Science Education and Research (IISER) Bhopal have conducted the first-ever genome sequencing of the jamun tree.
- ❖ The research team used Oxford Nanopore and 10x Genomics sequencing technologies to sequence the *S. cumini* genome.

- ❖ The analysis revealed a higher number of coding genes in the jamun genome, suggesting a neopolyploidy event.
- ❖ A neopolyploidy event refers to the occurrence of polyploidy.
- ❖ It is a condition in which an organism has multiple sets of chromosomes, leading to an increase in the number of chromosomes in its cells.
- ❖ Polyploidy can arise through different mechanisms, including errors during cell division or hybridization between different species.

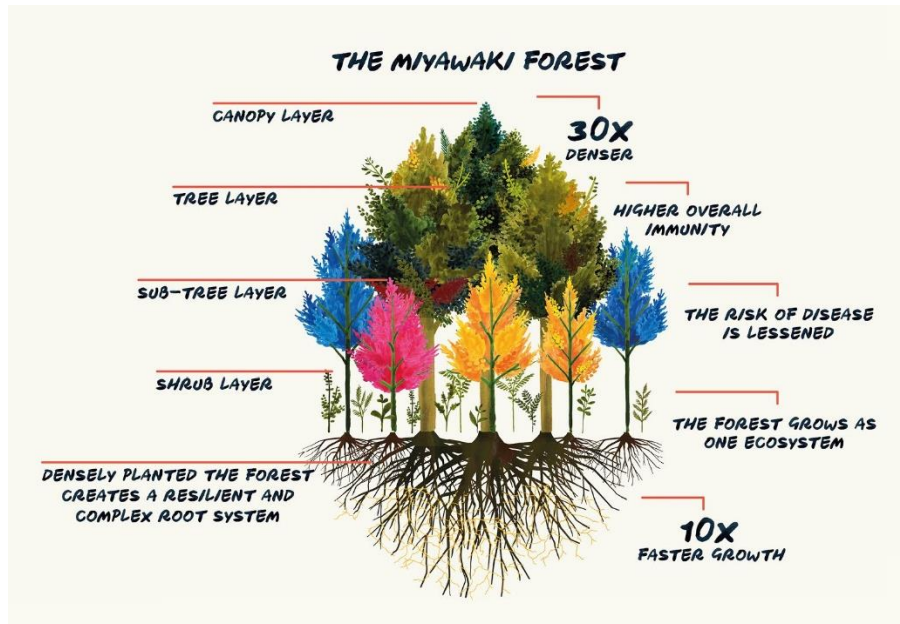


## ENVIRONMENT

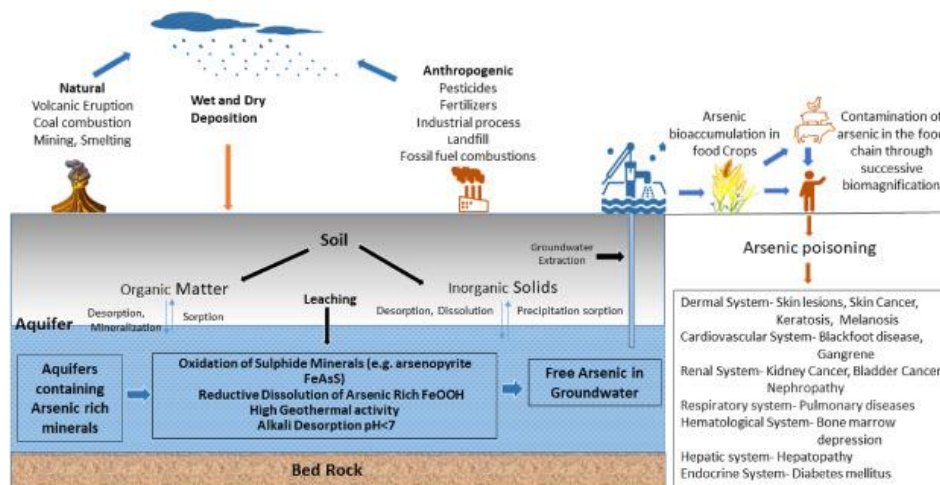
### “Miyawaki” Plantation Method

- ❖ South Eastern Coalfields Ltd (SECL), a subsidiary of Coal India Ltd, is set to implement the Miyawaki method for the first time in its operational areas.
- ❖ The initiative is expected to increase green cover around the Gevra mine of chhattisgarh, the largest coal mine in India.
- ❖ Gevra mega project recently became the first mine in the country to achieve 50 million tonnes of coal production
- ❖ Miyawaki is an initiative of creating mini forests in urban areas for the afforestation programme.
- ❖ It was named after Japanese botanist Akira Miyawaki.
- ❖ This method involves planting 2 to 4 different types of indigenous trees within every square metre.

- ❖ In this method, the trees become self-sustaining and don't require regular manuring and watering.
- ❖ They grow to their full length within 3 years.



## Arsenic and Fluoride in India



- ❖ Arsenic has been detected in groundwater in parts of 230 districts in 25 states and fluoride in 469 districts in 27 states.
- ❖ The groundwater contamination reported by the Central Ground Water Board (CGWB) is mostly geogenic in nature and does not show significant change over the years.

- ❖ The contamination is primarily geogenic, indicating that constituents are naturally present in the rock or soil matrix and enter groundwater through various chemical processes.
- ❖ The CGWB under the Ministry of Jal Shakti conducts regular monitoring and assessment of groundwater quality including groundwater contamination of Arsenic and Fluoride.
- ❖ A recent MoU between the CGWB and Geological Survey of India targets groundwater contamination studies.
- ❖ It is including arsenic and fluoride, in eight states: Punjab, Haryana, Andhra Pradesh, Uttar Pradesh, Chhattisgarh, Jharkhand, Bihar, and Assam.

### **India 2023: An assessment of extreme weather events**



- ❖ It was a report by Down To Earth (DTE) magazine and the Centre for Science and Environment.



- ❖ Extreme weather events occurred on 85 out of 92 days, spreading across 33 states and UTs, with Maharashtra and Rajasthan being the worst-hit.
- ❖ Madhya Pradesh experienced the highest frequency of extreme weather events, occurring almost every second day.
- ❖ Bihar recorded the highest number of human deaths at 642, followed by Himachal Pradesh (365 deaths) and Uttar Pradesh (341 deaths).
- ❖ Himachal Pradesh also reported the highest number of damaged houses (15,407).
- ❖ Punjab saw the most significant loss of animal life, with 63,649 livestock deaths.

### **UNFCCC COP 28 Summit**

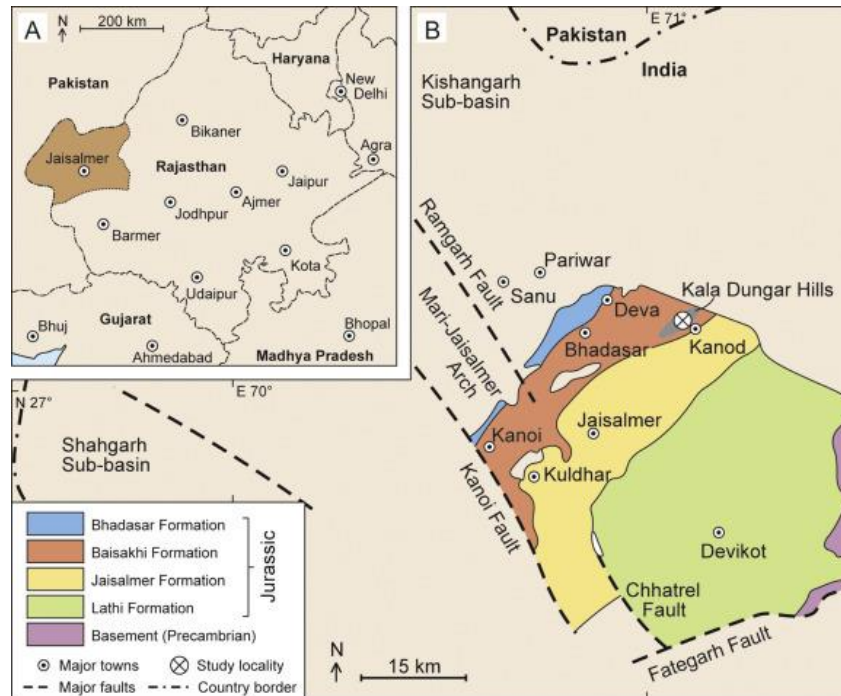


- ❖ It was hosted at Dubai by the UAE.
- ❖ It is the 2023 United Nations Climate Change Conference or Conference of the Parties of the UNFCCC.
- ❖ Sultan Al Jaber was named President-Designate of COP28 UAE
- ❖ It has been held annually since the first UN climate agreement in 1992.
- ❖ The "parties" are the countries that signed up to the original UN climate agreement in 1992.
- ❖ The Paris agreement 2015 Keep global average temperature rise below 2°C, with efforts to limit it to 1.5°C above pre-industrial levels.
- ❖ India offers to host the 33rd edition of COP in India in 2028.
- ❖ It also advocated "Green Credit initiative," a non-commercial effort to create a carbon sink.
- ❖ COP28 is the first COP to discuss the impact of climate change on public health.

### **Early Cretaceous (aptian) shark fossils from India**

- ❖ India's first Early Cretaceous shark fossils were discovered in the Habur Formation of the Jaisalmer Basin, Rajasthan.

- ❖ These are dating back approximately 115 million years.
- ❖ It was a transformative era for sharks, witnessing the emergence of new species and the disappearance of older ones.
- ❖ The present study introduces new dimensions, unveiling the first Early Cretaceous lamniform sharks in India.



## REPORTS AND INDICES

### 1st Aspirational Delta Ranking of ABP

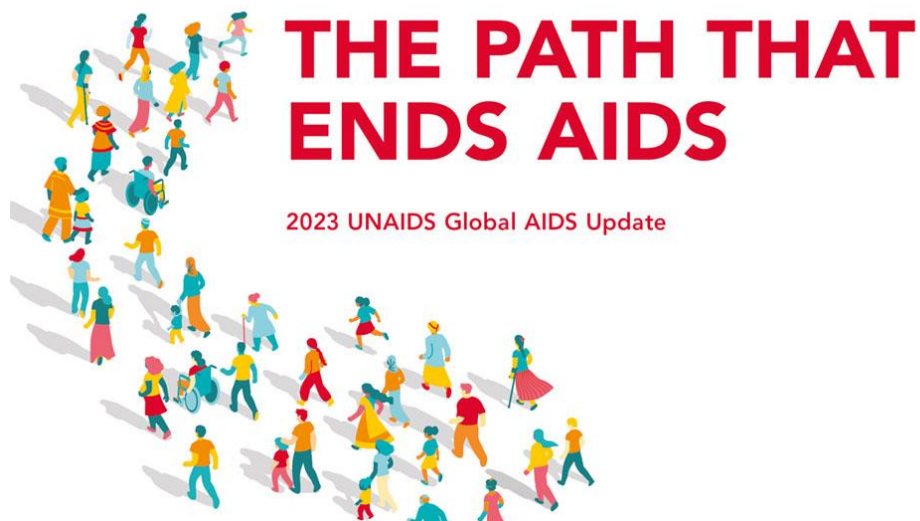
- ❖ NITI Aayog released the inaugural delta rankings of the Aspirational Blocks Programme (ABP).
- ❖ The rankings were determined based on the performance and progress of the blocks in achieving 40 key performance indicators (KPIs) grouped into 5 themes.
- ❖ Approximately 500 blocks from 329 districts across 27 states and 4 Union Territories are part of this programme.
- ❖ Tiriyani Block in Kumuram Bheem Asifabad district, Telangana, clinched the top spot.
- ❖ The second position was secured by Kaushambi block in Kaushambi District, Uttar Pradesh.
- ❖ In addition to ABP, the ADP rankings for October 2023 were also announced.



- ❖ Rayagada (Odisha) and Jamui (Bihar) claimed the first and second positions, respectively.



### **UNAIDS World Aids Day report 2023**



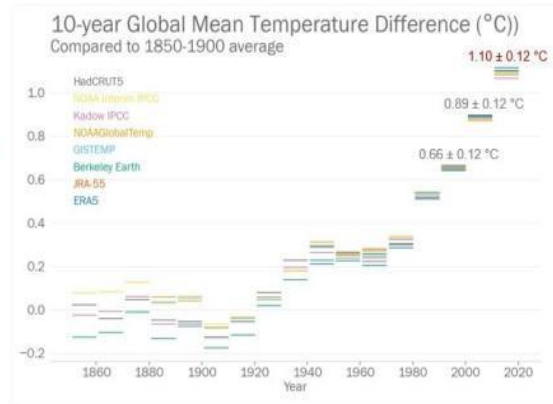
- ❖ The report by UNAIDS was titled 'The Path that Ends AIDS'.
- ❖ It emphasizes the political and financial choices involved in ending AIDS.
- ❖ The report notes a fourfold increase in people on antiretroviral treatment worldwide, from 7.7 million in 2010 to 29.8 million in 2022.



- ❖ The 2022 HIV Estimates for India indicate approximately 2.47 million people living with HIV, with a decline of over 42% in new infections since 2010.
- ❖ The key priority for India is reaching individuals aware of their status but not on treatment.

## The Global Climate 2011-2020: A Decade of Acceleration

**2011-2020 warmest decade on record for both the land and ocean by a clear margin.**



- ❖ The World Meteorological Organisation (WMO) has published this report.
- ❖ The decade 2011-2020 emerged as the warmest on record for both land and ocean.
- ❖ Global mean temperature soared to  $1.10 \pm 0.12$  °C above the 1850-1900 average.
- ❖ 2016 (due to an El Niño event) and 2020 are standing out as the warmest years.
- ❖ CO<sub>2</sub> was reaching 413.2 ppm in 2020.
- ❖ Greenland and Antarctic ice sheets lost 38% more ice compared to 2001-2010.
- ❖ The Antarctic ozone hole diminished in the 2011-2020 period, credited to successful international action under the Montreal Protocol.

## STATES

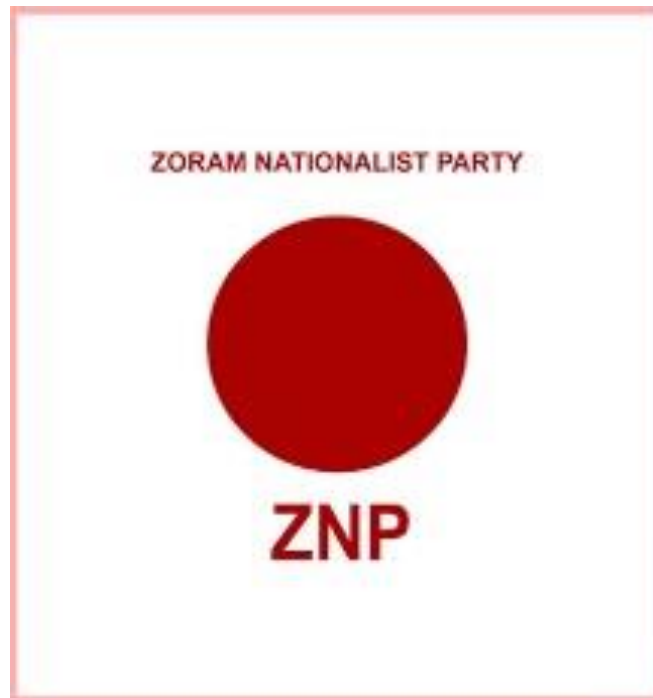
### GI tags in Uttarakhand

- ❖ For the first time, 18 products of Uttarakhand have got GI tag together in a single day.
- ❖ This is the first state in India in this kind.
- ❖ GI tag is provided to local products by the GI Registry Wing of the Department for Promotion of Industry and Internal Trade (DPIIT).

- ❖ These products got GI tag: Berinag Tea, Manduwa, Jhangora, Gahat Dal, Red Rice, Black Bhatt, Malta, Amaranth (Ramdana), Lakhauri Chilli of Almora, Toor Dal, Buransh Juice, Nettle (Kandali) Nettle Fiber, Nainital Candle, Rangwali Pichhoda, Litchi of Ramnagar, Peach of Nainital, Chamoli mask, Uttarakhand wood art.
- ❖ These products have already got GI tag: Tejpatta, Basmati Rice, Bhotiya Dan, Aipan Kala, Chiura Oil, Munsiyari White Rajma, Ringal Craft, Tamra and Thulma.



### **New Mizoram CM**



- ❖ Lalduhoma takes oath as new chief minister of Mizoram.



- ❖ The Zoram Nationalist Party emerged victorious in the 2023 Mizoram assembly elections (40 seats).
- ❖ It was registered as a political party only in 2019 with the symbol of Sun without Rays.

## **PERSONALITIES, AWARDS, AND EVENTS**

### **Safeena Husain**



- ❖ She is the founder of 'Educate Girls', a NGO.
- ❖ She has been awarded the prestigious WISE Prize for Education.
- ❖ The prize was awarded by the NGO "Qatar Foundation" at the 11th Edition of the World Innovation Summit for Education (WISE) Summit in Doha, Qatar.
- ❖ It is one of the most prestigious awards in the field of education.
- ❖ She is the second Indian to receive this award.
- ❖ 'Pratham' co-founder Madhav Chavan was the first recipient of this award in 2012.

## **SPORTS**

### **FIFA U-17 World Cup 2023**

- ❖ Germany won this cup for the first time.
- ❖ It beat France in the final held at Indonesia.

- ❖ This was the first time that Indonesia hosted a FIFA tournament and the first time that the FIFA U-17 World Cup was held in Southeast Asia.

