



## CURRENT AFFAIRS

### 1. MASSIVE FLOODS IN DUBAI -

- Recently, one of the heaviest rainfall was recorded in the United Arab Emirates (UAE), after a severe thunderstorm hit the country. The storm had initially hit Oman before it landed in the UAE.
- On the other hand, Mumbai, lying on the other side of the Arabian Sea, has been undergoing a humid heatwave for the past few days, having a high relative humidity of 55%. UAE lies in the arid regions of the world, so such heavy rainfalls are unusual there.
- On average, Dubai experiences 94.7 mm of rain in a year. But this event was historic as it brought more than 142 mm of rainfall that had soaked Dubai over 24 hours.



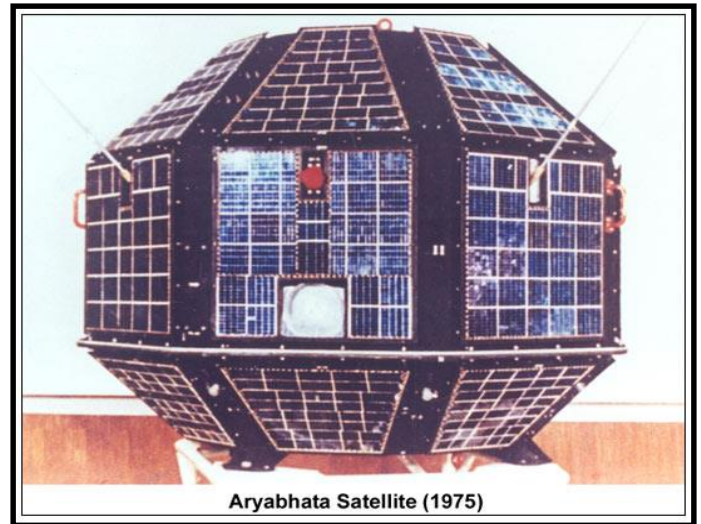
### Possible Causes of Extreme Rain:

- Climate Change- Climate Change along with multiple factors associated with it like patterns of natural climate variability, such as El Niño and La Niña, has contributed to the extreme rain.
- Global warming- It has led to higher temperatures causing evaporation of water not only from land but also oceans and other water bodies, causing a warmer atmosphere to hold more moisture. For every 1 degree Celsius rise in average temperature, the atmosphere can hold about 7% more moisture.
- Cloud Seeding- Cloud seeding is a process in which chemicals such as silver iodide crystals are implanted into clouds to increase rainfall in an environment where water scarcity is a concern. UAE, located in one of the hottest and driest regions on earth, has been leading the effort to seed clouds and increase precipitation.
- Thunderstorm- Thunderstorms are generated by atmospheric imbalance and turbulence caused by a combination of several conditions, including unstable, warm air rising rapidly into the atmosphere; sufficient moisture to form clouds and rain; and upward lift of air currents caused by colliding weather fronts (cold and warm), sea breezes, or mountains.

### 2. SATELLITE TECHNOLOGY DAY 2024 -



- U R Rao Satellite Centre (formerly known as ISRO Satellite Centre (ISAC)), Department of Space, in Bengaluru recently celebrated Satellite Technology Day (STD) 2024, marking the significant milestone of the 50th anniversary of India's first satellite launch, Aryabhata, on 19th April 1975.
- The event highlighted URSC's achievements along with recent missions like Chandrayaan-3, Aditya-L1, and X-ray Polarimeter Satellite which garnered national and international recognition.
- The Aryabhata spacecraft, named after the 5th Century CE mathematician and astronomer, was India's first satellite. It was completely designed and fabricated in India and launched from Kapustin Yar, Russia on 19th April 1975.
- On that day, India became only the world's 11th nation to send a satellite into orbit. Aryabhata was built by the Indian Space Research Organization (ISRO) to conduct experiments in X-ray astronomy, aeronomics, and solar physics..



Aryabhata Satellite (1975)

### 3. INDIA'S BIGGEST CLIMATE CLOCK -

- Recently, the Council of Scientific & Industrial Research (CSIR), installed and activated India's biggest Climate Clock at the CSIR Headquarters in New Delhi as a part of the Earth Day Celebrations.
- The event signifies CSIR's aim to spread awareness about climate change and to make people energy literate. It was launched in 2015 to provide a measuring stick against which viewers can track





climate change mitigation progress.

- It is a graphic to demonstrate how quickly the planet is approaching 1.5°C of global warming, given current emissions trends. It also shows the amount of CO2 already emitted, and the global warming to date.
- The date shown when humanity reaches 1.5°C will move closer as emissions rise, and further away as emissions decrease. As of 4th April 2024, the current climate temperature is 1.295°C.

#### 4. JIO SURPASSES CHINA MOBILE TO LEAD GLOBAL TELCO INDUSTRY IN DATA TRAFFIC -

- Reliance Jio, the telecom leader in India, has outpaced China Mobile to become the world's largest mobile operator by data traffic consumption. With a subscriber base of 481.8 million, including 108 million on its True5G Standalone network, Jio's dominance underscores its position in the global telecom market.
- In its quarterly results announced on Monday, Jio revealed remarkable achievements, including reaching a total data traffic of 40.9 Exabytes in the January-March quarter, representing a 35.2% year-on-year increase. A significant portion of this traffic, 28%, originates from its 5G subscribers, indicating a swift adoption of next-generation connectivity.
- Jio's subscriber base stands at 481.8 million, a figure that reinforces its stronghold in the Indian telecom landscape. Notably, the company boasts the world's second-largest 5G subscriber base, with 108 million users on its network. This substantial 5G penetration underscores Jio's preparedness for the future of telecommunications.



#### 5. ISRAEL USES GPS SPOOFING TO COUNTER IRANIAN MISSILE THREATS -

- Recent reports indicate that Israel has employed Global Positioning System (GPS) spoofing techniques to defend against Iranian missile





attacks, a strategy reminiscent of past instances such as the United States' actions during the Kargil war in India.

- GPS spoofing is a method used to alter GPS signals to mislead receivers, causing them to believe they are in a different location than they actually are.
- This technique can broadcast false GPS signals or modify authentic ones, leading to inaccurate information about positioning.

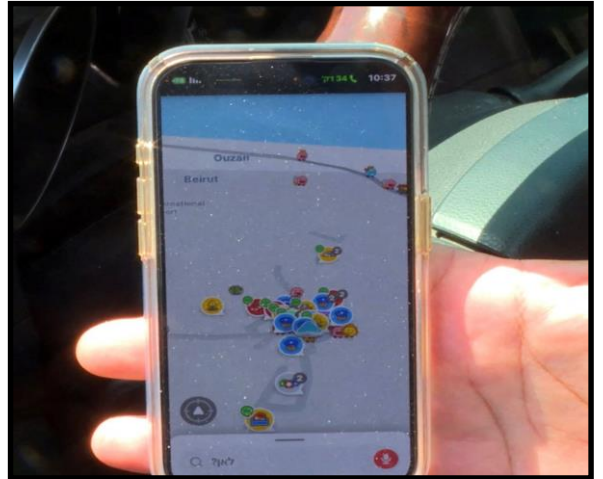
**Spoofing can serve various objectives, such as:**

A. Tricking enemy navigation systems

B. Guarding against unauthorized tracking

C. Generating false location data for malicious purposes

- Around 25 years ago, Pakistani soldiers infiltrated India and occupied positions in Kargil in 1999. Despite the Indian military's request for GPS data for the area, the US declined to provide it.
- The US initially used a technology known as "selective availability" to deliberately introduce inaccuracies into civilian GPS receivers, preserving the highest accuracy for military purposes.
- This method was employed to "degrade" GPS accuracy for the Indian military during the Kargil conflict, impeding their operations.
- India launched NavIC (Navigation with Indian Constellation), formerly named the Indian Regional Navigation Satellite System (IRNSS), developed by the Indian Space Research Organisation (ISRO).
- NavIC offers precise and secure positioning, navigation, and timing services within India and up to 1500 kilometers beyond its territorial boundary.



## **6. RECENTLY, TWO DIFFERENT INCIDENTS OF NAXALITES ATTACK WERE REPORTED FROM CHHATTISGARH AND ASSAM -**

- 29 Naxalites were killed in the Kanker area of Chattisgarh in one of the largest operations by security forces in Chhattisgarh.
- In another incident, three vehicles of the paramilitary Assam Rifles were ambushed in eastern Assam's Tinsukia district.



- The term Naxalism derives its name from the village Naxalbari of West Bengal. It originated as rebellion against local landlords who bashed a peasant over a land dispute.
- The movement soon spread across Eastern India in less developed areas of states such as Chhattisgarh, Odisha and Andhra Pradesh.
- Left-wing extremists (LWE) are popularly known as Maoists worldwide and as Naxalites in India.
- They advocate for the overthrow of the Indian government through armed revolution and the establishment of a communist state based on Maoist principles.
- The year 2022 witnessed the lowest number of incidents of violence and deaths in Naxal-hit areas in the last four decades.
- Violent incidents in Naxalism-affected States have come down by 77% in 2022 compared to the high of 2010.
- The number of districts affected dropped from 90 to 45.
- The number of deaths of security forces and civilians in LWE violence has also reduced by 90% in 2022 compared to the high of 2010 (98 in 2022 from 1005 in 2010).
- The States of Chhattisgarh, Jharkhand, Odisha, Bihar, West Bengal, Andhra Pradesh, Telangana, Maharashtra, Madhya Pradesh and Kerala are considered LWE affected.
- The Red Corridor is the region in the central, eastern and southern parts of India that experience severe Naxalism–Maoist insurgency.



## 7. YUVRAJ SINGH NAMED ICC MEN'S T20 WORLD CUP 2024 AMBASSADOR -

- The International Cricket Council (ICC) has announced the appointment of Indian cricket legend Yuvraj Singh as an ambassador for the upcoming ICC Men's T20 World Cup 2024. The announcement comes with just 36 days remaining until the highly anticipated global event for T20 cricket commences.



- Yuvraj Singh's selection as an ambassador holds special significance, as it commemorates his iconic feat of hitting six sixes in an over during India's triumphant campaign at the inaugural T20 World Cup in 2007.



- As an ambassador, Yuvraj Singh will participate in a range of exciting World Cup promotional events in the United States, leading up to and during the T20 showpiece. One of the highlights will be his presence at the highly anticipated India versus Pakistan fixture in New York on June 9.

## 8. INDIA'S PHARMACEUTICAL EXPORTS SURGE TO \$28 BILLION IN FY24 -

- India's pharmaceutical exports witnessed robust growth in the fiscal year 2023-24, reaching \$28 billion, marking a 10% increase compared to the previous fiscal year. Despite a 3% dip in total exports, the pharmaceutical sector demonstrated resilience and significant expansion.



- Pharmaceutical exports in March soared by 12.73% to USD 2.8 billion, indicating a strong upward trajectory in the sector's performance.
- Year-on-year, India's drugs and pharmaceuticals exports escalated by 9.67%, totaling USD 27.9 billion in 2023-24, showcasing steady progress.
- The United States, the United Kingdom, the Netherlands, South Africa, and Brazil emerged as the top five export destinations. Notably, the US accounted for over 31% of India's total pharmaceutical exports.





## 9. INDIA'S FIRST MULTI-PURPOSE GREEN HYDROGEN PILOT PROJECT INAUGURATED IN HIMACHAL PRADESH -

- India takes a significant step in renewable energy with the inauguration of its first multi-purpose green hydrogen pilot project at the 1,500 MW Nathpa Jhakri Hydro Power Station (NJHPS) in Himachal Pradesh's Jhakri. Spearheaded by Satluj Jal Vidyut Nigam (SJVN), the project aims



- to produce green hydrogen through renewable energy sources.
- The project features a 20Nm<sup>3</sup>/hr electrolyzer and 25kW fuel cell capacity-based green hydrogen pilot system. It is the nation's first multi-purpose green hydrogen generation plant, serving both electricity generation and the high-velocity oxygen fuel (HVOF) coating facility of NJHPS.
- Utilizing renewable energy from SJVN's 1.31 MW solar power plant located in Wadhal, Himachal Pradesh, the project employs an alkaline electrolyzer to split water into hydrogen and oxygen. This integration allows for sustainable hydrogen production.
- During eight hours of operation, the pilot project is set to produce 14 kg of green hydrogen daily, stored in six storage tanks. This green hydrogen will serve dual purposes: facilitating HVOF coating of turbine underwater parts and generating electricity through its 25 kW fuel cell.



## Quiz

**Q1. Consider the following States :**

1. Andhra Pradesh
2. Bihar
3. Karnataka
4. Rajasthan
5. Telangana
6. Uttar Pradesh

How many of the above states have a bicameral legislature ?

- a) Only three
- b) Only four
- c) Only five
- d) All of the above

**Q2. With reference to the National Human Rights Commission (NHRC), which of the following statements is/are correct ?**

1. NHRC is empowered to provide monetary compensation to a victim.
2. The recommendations of NHRC are not binding in nature on the government.
3. NHRC cannot take Suo moto cognizance of human rights issues.

Select the correct answer using the code given below :

- a) Only one
- b) Only two
- c) All three
- d) None

**Q3. Consider the following statements regarding Star Campaigners :**

1. A recognised National party can nominate a maximum of 20 star campaigners

2. Expenditure incurred on electioneering by the star campaigner is added to a candidate's poll expenditure.

3. When a prime minister or a former prime minister is a star campaigner, the expenditure incurred on security including bullet-proof vehicles will be borne by the government.

How many of the above statements are correct ?

- a) Only one
- b) Only two
- c) All three
- d) None

**Q4. When is National Panchayati Raj Day observed ?**

- a) April 24
- b) April 25
- c) May 1
- d) April 15

**Q5. Where was India's largest Climate Clock unveiled for the Earth Day celebration ?**

- a) Mumbai
- b) New Delhi
- c) Bangalore
- d) Kolkata

**Q6. Where is the Satpura National Park located ?**

- a) Jharkhand
- b) Madhya Pradesh
- c) Gujarat
- d) Rajasthan





**Q7. Which of the following statements regarding Ethylene Oxide is/are incorrect :**

1. Ethylene oxide is a non-flammable substance which is used as a chemical in a range of industrial processes.
2. Ethylene Oxide is used to control insects in some stored agricultural products.
3. Ethylene oxide is also used in antifreeze and polyester production.

Select the correct option using the code given below :

- a) 1 only
- b) 1 and 3 only
- c) 1, 2 and 3
- d) 2 and 3 only

**Q8. Exercise DUSTLIK is a joint military exercise between India and which of the following ?**

- a) Kazakhstan
- b) Singapore
- c) Uzbekistan
- d) Iran

**Q9. Consider the following statements regarding Communication Satellites:**

1. Satellite communication is a type of wireless communication that employs artificial satellites to communicate.
2. Communication satellites are similar to space mirrors that bounce communications such as internet data, television, etc.
3. The coverage area of satellites is narrower than the conventional terrestrial Communication systems.

How many of the given statements are incorrect ?

- a) Only one
- b) Only two
- c) All three
- d) None

**Q10. Recently, which country passed the Safety of Rwanda (Asylum and Immigration) Bill ?**

- a) United Kingdom
- b) Canada
- c) France
- d) Russia

**Q11. Which of the following statements best defines the Ecosystem ?**

- a) A system that studies the volume, intensity and velocity of sound.
- b) A system that governs the radiation of energy from the sun.
- c) A system that classifies organisms.
- d) A system that comprises the physical environment and the organisms that live there in

**Q12. The Dutch established their first factory in India at**

- a) Chinsura
- b) Masulipatam
- c) Surat
- d) Cochin

**Q13. India's services exports jumped how much per cent to USD 345 billion in 2023 despite global economic uncertainties, according to the UNCTAD report?**



- a) 10.4%
- b) 11.4%
- c) 12.4%
- d) 13.4%

**Q14. International Chernobyl Disaster Remembrance Day is observed every year on which day ?**

- a) 25 April
- b) 26 April
- c) 27 April
- d) 28 April

**Q15. In which year was DRDO established ?**

- a) 1957
- b) 1958
- c) 1956
- d) 1955

**Q16. In 2023, India ranked fourth globally in terms of military spending, having spent a total of \_\_\_ billion dollars updating a variety of weaponry and combat systems.**

- a) \$82.3billion
- b) \$83.6billion

- c) \$84.7billion
- d) \$85.4billion

**Q17. Recently, who was elected as the Chairman of the Athletes Commission of the Wrestling Federation of India (WFI) ?**

- a) Deepak Punia
- b) KD Jadhav
- c) Narsingh Yadav
- d) Yogeshwar Dutt

**Q18. Which country recently passed Foreign Aid Bill to provide military aid to Ukraine ?**

- a) India
- b) Iran
- c) UK
- d) USA

**Q19. Recently, which organization has been conferred the Outstanding Public Sector Undertaking (PSU) of the Year award ?**

- a) BHEL
- b) ONGC
- c) HAL
- d) IOCL

### Answer Key

1	2	3	4	5	6	7	8	9	10	11	12
c	a	a	a	b	b	a	c	a	a	d	b
13	14	15	16	17	18	19					
b	b	b	b	c	d	c					