

October - 09

TNPSC BITS

- ❖ The Healthway Cycling Track, India's first solar cycling track, was inaugurated in Hyderabad.
- ❖ The Central Reserve Police Force (CRPF) kick-started an all-female bikers' expedition rally named 'Yashasvini' from Srinagar to Gujarat.

TAMIL NADU

Realization of Cauvery water in 2023

- ❖ After a gap of 11 years, Tamil Nadu's realisation of Cauvery water during this year's southwest monsoon did not exceed the 50 tmc ft [thousand million cubic feet] mark.
- ❖ This is the fifth time in almost 50 years that the season's realisation has not crossed 50 tmc ft.
- ❖ This year's realisation was 45.16 tmc ft, was lower than that of 2016-17.
- ❖ Seven years ago, the State received about 53 tmc ft.
- ❖ During the water year June 2012 – May 2013, the first four months witnessed the State getting about 40.15 tmc ft.

Water year	Quantum realised (tmc ft)
1987-88	24.823
2003-04	30.632
2012-12	40.149
2023-24	45.1623
2002-03	46.665

Tamil Nadu energy plan 2023

- ❖ Tamil Nadu planned to add wind energy capacity of 5,000 MW this year.
- ❖ At present, the installed wind energy capacity in the State is 10,225 MW.

- ❖ Of the 5,000 MW capacity planned, 4,400 MW would be provided by new players and 600 MW by the existing players.
- ❖ In Tamil Nadu, almost 65% of wind energy is used for captive consumption or sold to third party industrial or commercial customers.
- ❖ Tangedco procures only 35%.



NATIONAL

MP Disqualification from Lok Sabha



- ❖ The Nationalist Congress Party (NCP) Lakshadweep MP Mohammed Faizal was disqualified from the Lok Sabha.

- ❖ He was convicted him and three others on charges of attempting to murder case and sentenced all the three to rigorous imprisonment for 10 years.
- ❖ Now, the Kerala high court rejected his plea to suspend his conviction in an attempt to murder case.
- ❖ Under Section 8(3) of the Representation of Peoples Act 1951, a sitting legislator who is convicted for an offence and sentenced to a punishment of two or more years stands disqualified from the date of conviction.
- ❖ Also, for a further period of six years ban unless they can get the order of conviction suspended.

ENVIRONMENT

The State of the World's Amphibians, 2023



- ❖ The world's amphibians are in grave danger, with 41% of species threatened with extinction.
- ❖ This is compared to 26.5% of mammals, 21.4% of reptiles and 12.9% of birds.
- ❖ It is an increase from the 39% reported in the last assessment conducted in 2004.
- ❖ Amphibians, including frogs, salamanders, newts, and others, are considered the most threatened animals globally.
- ❖ This is due to their unique biology and permeable skin, making them highly sensitive to environmental changes.
- ❖ The assessment evaluated the extinction risk of more than 8,000 amphibian species from all over the world.
- ❖ It is including 2,286 species evaluated for the first time.

- ❖ The data has revealed that two out of every five amphibians are threatened with extinction.
- ❖ Between 2004 and 2022, a few critical threats have pushed more than 300 amphibians closer to extinction.
- ❖ Climate change was the primary threat for 39% of these species.
- ❖ Three out of every five salamander species are threatened with extinction primarily as the result of habitat destruction.
- ❖ North America is home to the most biodiverse community of salamanders in the world.
- ❖ Four amphibian species were documented as having gone extinct since 2004.
- ❖ Twenty-seven additional critically endangered species are now considered possibly extinct.
- ❖ It is bringing the total to more than 160 critically endangered amphibians that are considered possibly extinct.
- ❖ The assessment also found that 120 species improved their Red List status since 1980.

PERSONALITIES, AWARDS, AND EVENTS

Nobel Prize in Physics 2023



- ❖ The 2023 Nobel Prize in Physics has been awarded to Pierre Agostini, Ferenc Krausz, and Anne L'Huillier.
- ❖ This was awarded for experimental methods that generate attosecond pulses of light for the study of electro dynamics in matter.
- ❖ Their research has given humanity new tools for exploring the world of electrons inside atoms and molecules.

- ❖ They have demonstrated a way to create extremely short pulses of light that can be used to measure the rapid processes in which electrons move or change energy.
- ❖ Their experiments granted the Laureates to observe extremely brief events that transpire in a few tenths of attoseconds—a quintillionth (10^{-18}) of a second.
- ❖ An attosecond is so short that there are as many in one second as there have been seconds since the birth of the universe.
- ❖ These brief pulses of light can be used to provide images of what occurs inside atoms and molecules.

Nobel prize in chemistry 2023









- ❖ The 2023 Nobel Prize in chemistry was awarded to Mounqi G. Bawendi, Louis E. Brus and Alexei I. Ekimov.
- ❖ They were awarded for the discovery and synthesis of quantum dots.
- ❖ In the early 1980s, Dr. Ekimov succeeded in creating size-dependent quantum effects in coloured glass.
- ❖ In 1983, Dr. Brus and his colleagues went a step ahead and prepared similar crystals in a liquid solution, rather than in a glass.
- ❖ Finally, in 1993, Dr. Bawendi and his coworkers developed a technique to make these peculiar crystals— i.e., the quantum dots—of well-defined sizes and with high optical quality.

- ❖ These nanoparticles have wide-ranging applications across fields like electronics, advanced surgery, and quantum computing.
- ❖ Quantum dots are particles that are a few nanometres wide.
- ❖ They exhibit unique optical properties due to their small physical size.
- ❖ Their structure and atomic composition are the same as bulk materials, but the properties of the latter don't depend on their size.
- ❖ Quantum dots are also used in photovoltaic cells to improve the absorption and efficiency in converting solar light into electricity.

SPORTS

Asian Games 2023



Rank	Team/NOC	Gold	Silver	Bronze	Total	Rank by Total
1	 People's Republic of China	187	104	63	354	1
2	 Japan	47	57	65	169	3
3	 Republic of Korea	36	50	85	171	2
4	 India	25	35	40	100	4
5	 Uzbekistan	20	18	26	64	6
6	 Chinese Taipei	17	17	25	59	7
7	 Democratic People's Republic of Korea	11	18	10	39	11

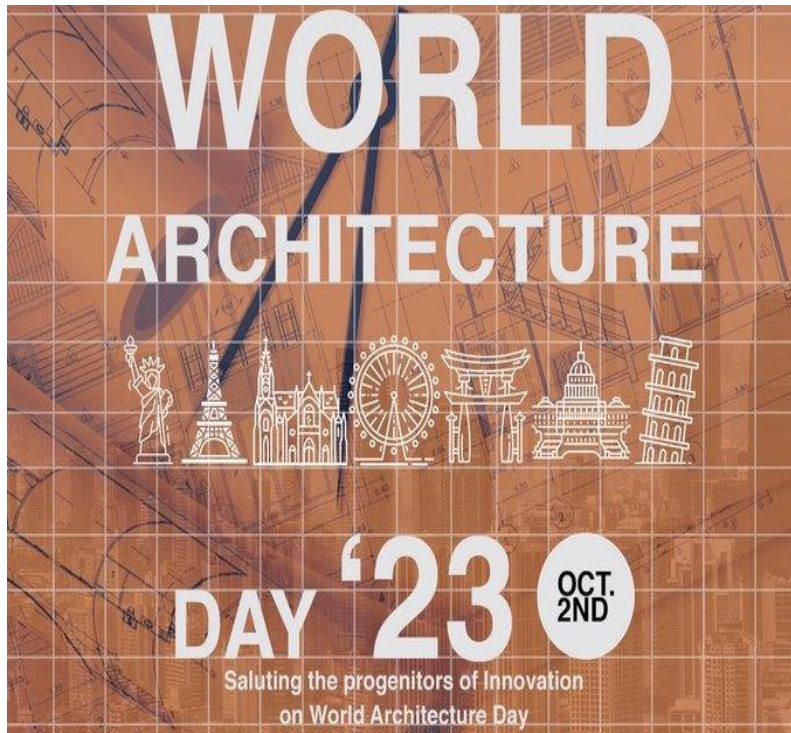
- ❖ India has reached the unprecedented milestone of 100 medals at the ongoing 19th Asian Games is a momentous achievement.
- ❖ India have so far won 25 gold medals, 35 silver medals and 40 bronze medals.
- ❖ The 100th mark was reached after the women's kabaddi team beat Chinese Taipei in a nail-biting final in the last time to clinch gold.



- ❖ Athletics (best-ever haul of 29 medals) and shooting (22) have been the biggest contributors to India's sweetest century.
- ❖ This is also only the second time India have won more than 100 medals in any of the three major Games - The Olympics, Commonwealth Games and Asian Games.
- ❖ They had won 101 medals in the 2010 Commonwealth Games in New Delhi.

IMPORTANT DAYS

World Architecture Day 2023 - October 02



- ❖ This annual event was hosted by the International Union of Architects (IUA).
- ❖ World Architecture Day has taken place on the first Monday of October since 1985.
- ❖ It happens in parallel with the United Nations' (UN) World Habitat Day.
- ❖ The theme for 2023 is "Safe Spaces for All: Accessible Design Leads the Way."

World Smile Day 2023 - October 06

- ❖ Harvey Ball, a commercial artist from Worcester, Massachusetts created the smiley face in 1963.



- ❖ The image went on to become the most recognizable symbol of good will and good cheer on the planet.
- ❖ The first World Smile Day celebration was held in Worcester, MA in 1999.

