



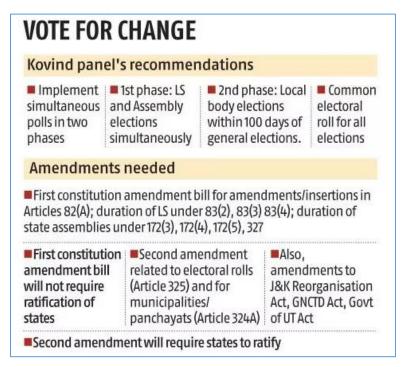
October - 04

## TNPSC BITS

- Lay's is named Official Sponsor of FIFA World Cup 26™ & FIFA Women's World Cup 2027.
- ❖ India's first Oxygen Bird Park near Nagpur (Maharashtra) is spread across 8 hectares housing over 8,000 diverse plant species.
- ❖ Former Defence Minister Shigeru Ishida became the 102<sup>nd</sup> Prime Minister of Japan.
- ❖ The seventh edition of the Global Aerospace Summit, a premier forum for the world's aerospace supply chain, was held in Abu Dhabi, UAE.

## **NATIONAL**

## Constitution amendment bills for ONOE



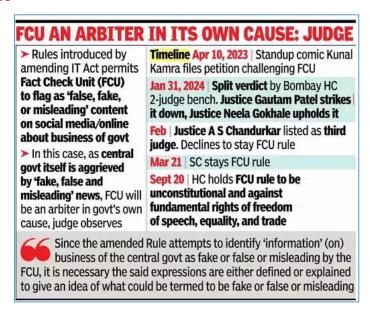
- ❖ The government is likely to bring three bills, including two to amend the Constitution, to put in place its plan to hold simultaneous elections.
- ❖ The proposed Bill would seek to amend Article 82A by adding sub-clause (1) relating to the 'appointed date'.
- ❖ It will also seek to insert sub-clause (2) to Article 82A relating to the end of terms of the Lok Sabha and state assemblies together.





- ❖ The Bill also proposes to amend Article 83(2) and insert new sub-clauses (3) and (4) relating to the duration and dissolution of the Lok Sabha.
- ❖ It also has provisions related to the dissolution of the legislative assemblies and amending Article 327 to insert the term 'simultaneous elections'.
- ❖ The second Bill will create provisions to hold simultaneous elections to municipalities and panchayats, along with elections to Lok Sabha and state legislative assemblies by inserting a new Article 324A.
- ❖ This Bill is required ratification by at least 50% of the states.
- ❖ The third Bill will be an ordinary one to amend provisions in three laws dealing with Union Territories with legislative assemblies Puducherry, Delhi and Jammu and Kashmir.
- ❖ It aims to align the terms of these Houses with other legislative assemblies and the Lok Sabha as proposed in the first Constitutional Amendment Bill.
- ❖ The statutes it proposes to amend are the Government of National Capital Territory of Delhi Act-1991, the Government of Union Territories Act-1963 and the Jammu and Kashmir Reorganisation Act-2019.
- ❖ To pass the Constitutional Amendment Bills, a special majority of not less than two-thirds of the House will be required.
- ❖ So, the government needs the support of 362 members, but it has only 292 members in the House.

#### **Fact Check Unit**



❖ The Bombay High Court has formally struck down the amended Information Technology Rules, 2023.





- ❖ This amendment allowed the Centre to set up a fact check unit (FCU) to identify fake, false and misleading information about the government and its establishments on social media.
- ❖ As per the court, these Amendment Rules, 2023, violated "Article 14 (right to equality), 19 (freedom of speech and expression) and 19(1)(g) (freedom and right to profession) of the Constitution".

## SBI ERD report 2024

Age-wise Distribution				
	1991	2001	2011	2024 P
Population by broad age- group (in crore)				
18 years and above	44.7	56.5	76.3	99.0
0-14	31.2	36.4	37.4	34.0
15-59	46.5	58.6	73.5	91.0
60+	6.1	7.9	10.2	15.0
Share (in %)				
0-14	37.2	35.3	30.9	24.3
15-59	55.4	56.9	60.7	65.0
60+	7.3	7.7	8.4	10.7
Median age (years)	24.3	28.2	24.9	29.0
Source: SBI Research, Census reports, NHP				

- SBI's economic research department (ERD) released a new report, "Precursor to Census 2024: The Fine Prints of a Rapidly Changing Nation."
- ❖ The average annual exponential growth of India is expected to decline from 2.20 per cent in 1971 to 1 per cent in 2024.
- ❖ The national population will be in the range of 138-142 crore in 2024.
- ❖ The median age of India is expected to increase from 24 years in 2021 to 28-29 years in 2023/24.
- ❖ The working age population (15-59) is likely to increase to 65.2 per cent in the 2031 census.
- ❖ The elderly population will cross 15 crores (Female: 7.7 crore; Male: 7.3 crore), with a growth of 4.6 crore during 2011-2024.
- ❖ Southern States, chiefly Tamil Nadu, Andhra Pradesh, and Telangana, in incremental population growth is set to decline (vis-à-vis 2011).
- ❖ Northern States, led by UP and Bihar (with a 33 per cent share in incremental growth), will drive the growth.
- ❖ The northern and eastern regions together are expected to have a 52 per cent share of the entire population (51 per cent in 2011).





- ❖ Apart from the Union Territories, Goa and Kerala are highly urbanised.
- ❖ Among the major states, Tamil Nadu continues to be the most urbanised State, with 54 per cent of the population living in urban areas, followed by Maharashtra (48.8 per cent).
- ❖ Himachal Pradesh (10.3 per cent), followed by Bihar (12.4 per cent), Assam (15.7 per cent), and Orissa (19.0%) form the bottom end of the spectrum.

## INTERNATIONAL

#### DF-41 missile

- ❖ China successfully test-fired an intercontinental ballistic missile- D-41, into the Pacific Ocean.
- ❖ It has an operational range of up to 12,000–15,000km, capable of reaching the US mainland.
- ❖ An ICBM typically has a range greater than 5,500km and is designed to carry nuclear warheads.
- ❖ In May 1980, a DF-5 -China's first ICBM flew more than 9,000 kilometres.



## SCIENCE AND TECHNOLOGY

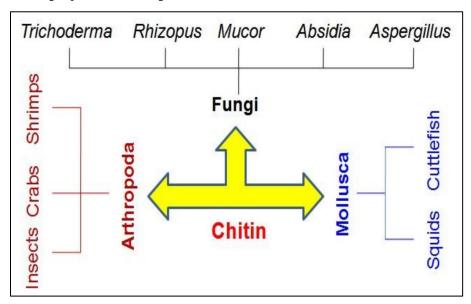
# New Drug delivery method

- ❖ The Scientists have used a chitin synthesis fungicide, Nikkomycin, produced by the bacterial Streptomyces spp. to develop Nikkomycin loaded polymeric nanoparticles.
- ❖ Chitin is the chief component of fungal cell walls and is absent in the human body.





- ❖ The drug loaded nanoparticles were found to disrupt the growth of Aspergillus spp and found effective against fungal infection known as Aspergillosis.
- ❖ The nano formulation developed was found to be free of cytotoxic and hemolytic effects.
- ❖ The use of polymeric nanoparticles is the most advanced method of drug delivery.



# Spiral galaxy - Caldwell 45



❖ NASA's Hubble Space Telescope has shared a video of a Spiral galaxy known as Caldwell 45, or NGC 5248.

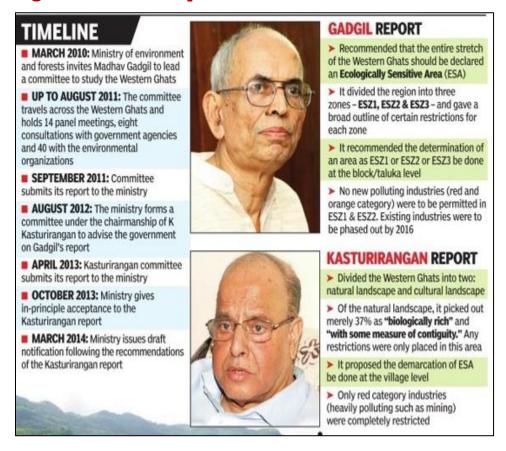




- The spiral galaxy is located 59 million light-years away from Earth.
- ❖ It is home to starburst regions places where stars form at a much higher rate than usual.

#### **STATES**

# Kasturirangan Committee Report - Karnataka



- ❖ The Karnataka government has rejected the Kasturirangan committee report -2014.
- ❖ It gave recommendation for the protection of the fragile Western Ghats region from environmental degradation.
- ❖ It proposes that 37 per cent of the total area of Western Ghats, which is roughly 60,000 square kilometres, to be declared as eco-sensitive area.
- ❖ Out of this, 20,668 sq. km of the area falls in Karnataka covering more than 1,500 villages.
- ❖ A state-level expert committee conducted meetings in the Western Ghats districts and prepared a report in 2015.



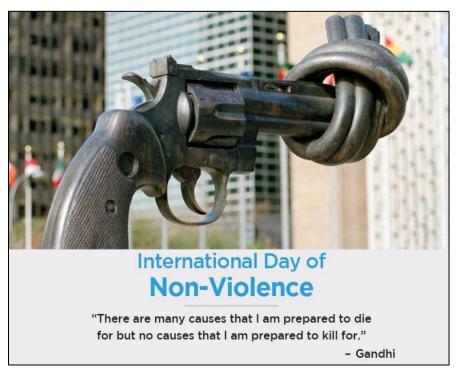


❖ It has recemented only 153 (as opposed to 1,553 villages) in Karnataka should be declared ecologically sensitive areas.

## **IMPORTANT DAYS**

# International Day of Non-violence 2024 - October 02

- ❖ The day is observed on the birth anniversary of MK Gandhi and reflects upon his philosophy and commitment to non-violence as a means of social and political change.
- ❖ His struggles guided by non-violence and peaceful resistance.
- ❖ The principle of non-violence/non-violent resistance rejects the use of physical violence in order to achieve social or political change.
- ❖ In June 2007, the United Nations General Assembly unanimously declared this day.



### **MISCELLANEOUS**

### Shankh Air

❖ Shankh Aviation Private Limited, has received a no objection certificate (NOC) from the Union Civil Aviation Ministry, allowing it to begin operations.





- The NOC is valid for three years.
- ❖ It will be the first scheduled airline to launch from Uttar Pradesh, with hubs in Lucknow and Noida.



### Nazca Lines - Peru

- ❖ Archaeologists assisted by artificial intelligence, have discovered 303 previously unknown giant symbols carved in the Nazca Desert.
- The carvings include birds, plants, spiders, humanlike figures with headdresses, decapitated heads and an orca wielding a knife.
- ❖ These mysterious artworks formed in the ground by moving stones or gravel that date back some 2,000 years.



