

November - 02

TNPSC BITS

- ❖ 25T Bollard Pull (BP) Tug, 'Mahabali' was launched by Indian navy.
 - This will provide assistance to Naval ships and submarines during berthing and un-berthing, turning and manoeuvring in confined waters.
- ❖ The US-India Strategic Partnership Forum (USISPF) felicitated Nita Ambani with the 2023 Global Leadership Award for Philanthropy and Corporate Social Responsibility.
- ❖ Bangladesh builds a memorial to honour the Indian soldiers who sacrificed their lives in the Liberation War of Bangladesh in 1971 at Ashuganj.
 - This will be the first memorial in Bangladesh to exclusively honour Indian soldiers from the 1971 war.
- ❖ Heman Bekele, a 14-year-old from Virginia, USA has been crowned "America's Top Young Scientist" after inventing a groundbreaking soap designed to treat skin cancer.
- ❖ The Financial Action Task Force (FATF) has removed offshore tax haven Cayman Islands from its 'grey list'.
 - Besides Cayman, Panama, Jordan, and Albania have been removed from the list.

TAMIL NADU

Breeding nests of crab-plovers



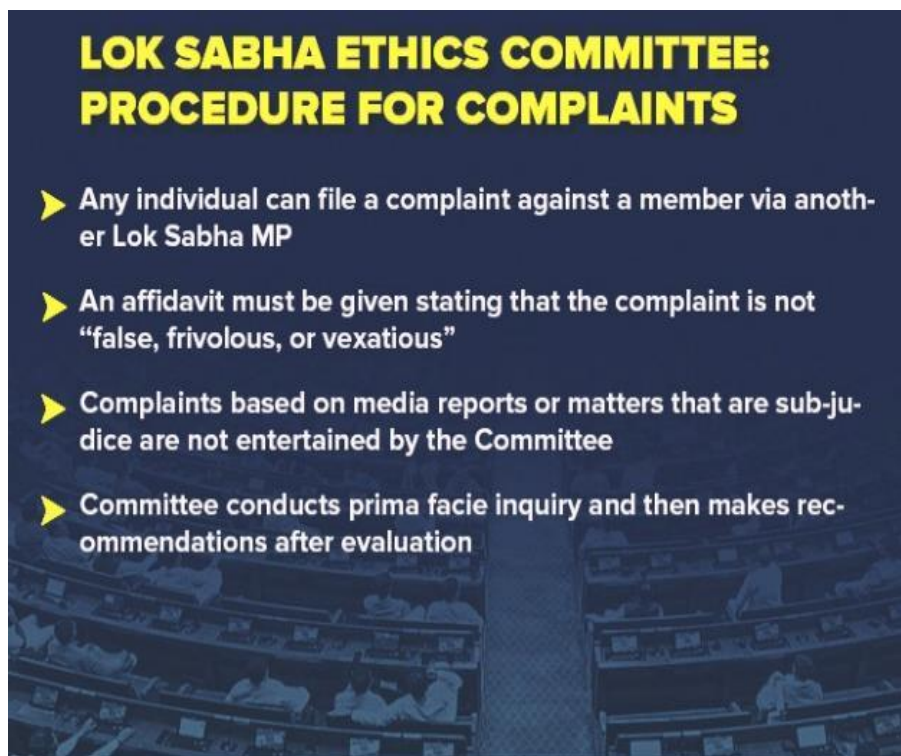
- ❖ For the first time, breeding nests of crab-plovers spotted at Great Vedaranyam Swamp near Point Calimere.



- ❖ Crab-plover (*Dromas ardeola*) is considered a winter visitor to Pakistan, peninsular India, the Andaman and Nicobar Islands, Lakshadweep, northern Sri Lanka, and the Maldives, and a vagrant to Bangladesh.
- ❖ The chicks are semi-nidifugous, unlike chicks of other shorebirds that leave the nests shortly after hatching.
- ❖ Parents take care of the young ones for five to six months.

NATIONAL

Ethics committee of Lok Sabha



- ❖ The Lok Sabha Ethics Committee will take up Nishikant Dubey’s complaint against Mahua Moitra, last met on July 27, 2021.
- ❖ The members of the Ethics Committee are appointed by the Speaker for a period of one year.
- ❖ A Presiding Officers’ Conference held in Delhi in 1996 first mooted the idea of ethics panels for the two Houses.
- ❖ Then Vice President (and Rajya Sabha Chairman) K R Narayanan constituted the Ethics Committee of the Upper House on March 4, 1997.
- ❖ The late Speaker, G M C Balayogi, constituted an ad hoc Ethics Committee of Lok Sabha in 2000.

- ❖ It became a permanent part of the House only in 2015.
- ❖ The work of the Ethics Committee and the Privileges Committee often overlap.

Vision India@2047

Growth path
What does the future hold? Scenario building for macroeconomic indicators

Indicator	Units	2030	2040	2047
GDP at current prices	₹ trillion	609.04	1,759.79	3,604.94
Per capita GDP at current prices	₹	4,02,008	10,93,037	21,84,812
Exports	\$ trillion	1.58	4.56	8.67
Imports	\$ trillion	1.88	5.92	12.12
Investment	₹ trillion	195.5	591.1	1,273.40
Savings	₹ trillion	207.8	649.4	1,339.70

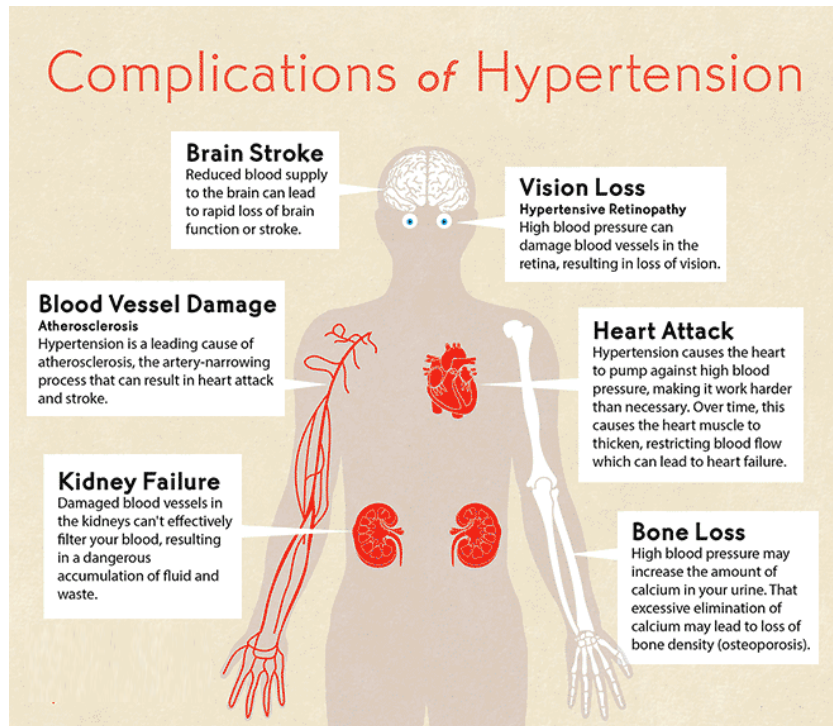
Source: NITI Aayog

- ❖ Niti Aayog's is finalising the draft Vision 2047.
- ❖ It projects India to be \$30 trillion economy and will lay out a roadmap to help India escape the middle-income trap.
- ❖ India becomes a developed nation by 2047.
- ❖ The plan targets a per-capita income ranging from \$18,000 to \$20,000.
- ❖ This ambitious goal aims to position India as one of the world's leading economies.

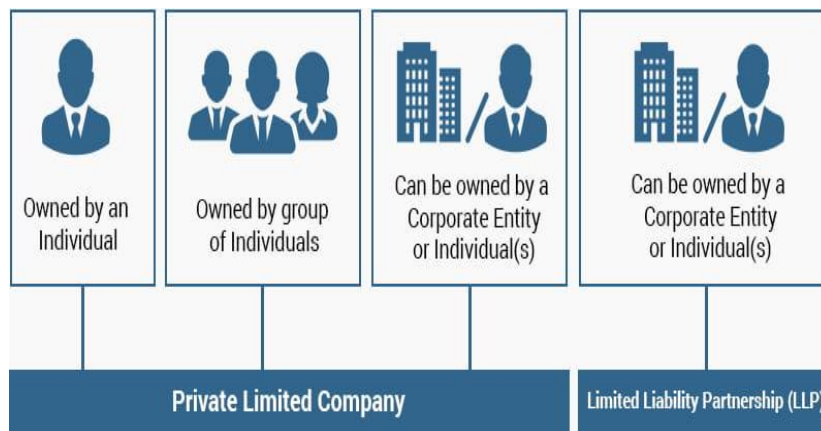
Disparities in Hypertension Care

- ❖ According to a recent WHO report, 188.3 million people in India suffer from hypertension but only 37% get diagnosed.
- ❖ 30% of the people start treatment, and only 15% manage to keep their blood pressure under control.
- ❖ It is estimated that at least 4.6 million deaths in India can be prevented by 2040 if half of those with the condition manage to keep their blood pressure under control.

- ❖ There were substantial variations across districts in blood pressure diagnosis (range: 6.3%-77.5%), treatment (range: 8.7%-97.1%) and control (range: 2.7%-76.6%).



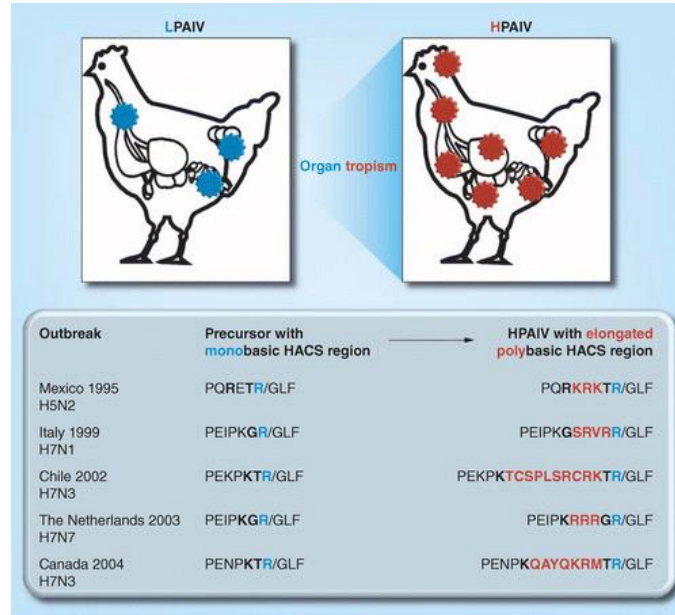
Limited Liability Partnerships



- ❖ The government has made the disclosure rules tougher for limited liability partnerships (LLPs).
- ❖ It will now be required to maintain a register of partners with details of their beneficial interests and both tangible and intangible contributions.
- ❖ The Ministry of Corporate Affairs notified the Limited Liability Partnership (Third Amendment) Rules, 2023.

- ❖ Even upcoming LLPs have to maintain such a register, at their registered offices, within 30 days of incorporation.

India's bird flu self-declaration



- ❖ The World Organisation for Animal Health (WOAH) has approved the country's self-declaration of freedom from Highly Pathogenic Avian Influenza (HPAI).
- ❖ HPAI commonly known as bird flu.
- ❖ This includes only specific poultry compartments (approved farms) in Maharashtra, Tamil Nadu, Uttar Pradesh, and Chhattisgarh.
- ❖ India submitted a self-declaration of freedom from (HPAI) in 26 poultry compartments in four states to the (WOAH).
- ❖ India is currently the third-largest producer of eggs (130 billion) and the fifth-largest producer of poultry meat (4.5 million tonnes) in the world.
- ❖ During the 2022-23 fiscal year, India exported poultry and poultry products to 64 countries, generating revenue of 134 million USD.
- ❖ Bird flu was first detected in India in Maharashtra in February 2006.

INTERNATIONAL

Turkish Republic's 100th Anniversary

- ❖ This year 29th October marks 100th anniversary of the Turkish Republic.



- ❖ Turkey has a secular government and was founded as a secular republic by Mustafa Kemal Atatürk in 1923.
- ❖ This modern government replaced the Ottoman Empire.



SCIENCE AND TECHNOLOGY

CAIPEEX phase-4

- ❖ The experiment — Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX phase-4) — was a scientific investigation conducted in Solapur city.
- ❖ The primary objective was to investigate the efficacy of hygroscopic seeding in deep convective clouds and to develop a cloud seeding protocol.
- ❖ The study found that cloud seeding is an effective strategy for enhancing rainfall in a region under suitable conditions.
- ❖ The seeded clouds produced more rainfall than the unseeded clouds.
- ❖ It can help produce 18% more rainfall and partially address water requirements.
- ❖ Calcium chloride flare was used for seeding the clouds.

- ❖ The approximate cost of producing water through cloud seeding was 18 paise per litre.

Cloud seeding works if done correctly

Cloud seeding experiments were carried out in Solapur city, which gets less rainfall, from June to September in 2018 and 2019

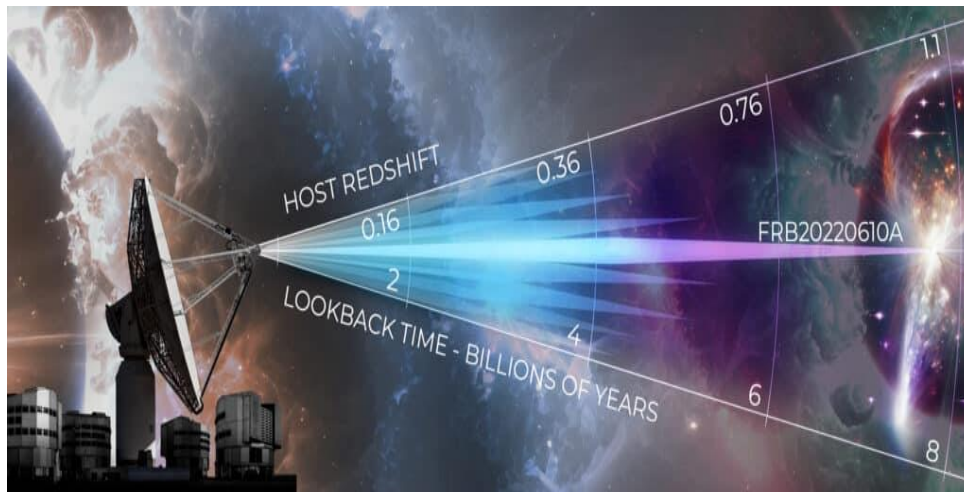
- There was 18% increase in rainfall over a 100 sq.km area in Solapur city due to cloud seeding
- Approximate cost of producing water through cloud seeding was 18 paise per litre. The cost can drop by over 50% if indigenous seeding aircraft are used
- 20-25% of cumulus clouds produce rainfall if cloud seeding is done correctly
- Cloud seeding alone cannot mitigate droughts but can help produce additional rainfall that can partially address water requirements

Not all:
As microphysics of clouds vary widely, not all clouds produce rainfall through cloud seeding

- Calcium chloride flare was used for seeding the clouds. The seeding was done at the base of the warm convective clouds and at a time when the clouds were growing
- The study was carried out for two years to understand the microphysics and characteristics of convective clouds that can be targeted to enhance rainfall
- The work provides elaborate protocols and technical guidance to plan and conduct cloud seeding in India



FRB 20220610A



- ❖ Astronomers have detected a mysterious blast of radio waves that have taken 8 billion years to reach Earth.
- ❖ The fast radio burst is one of the most distant and energetic ever observed.
- ❖ The burst, named FRB 20220610A, lasted less than a millisecond.
- ❖ But in that fraction of a moment, it released the equivalent of our sun's energetic emissions over the course of 30 years.

- ❖ Fast radio bursts, or FRBs, are intense, millisecond-long bursts of radio waves with unknown origins.
- ❖ The first FRB was discovered in 2007.

MISCELLANEOUS

QR codes on Food Products



- ❖ The Food Safety and Standards Authority of India (FSSAI) has recommended the inclusion of a QR (quick response) code on food products for accessibility by visually impaired individuals.
- ❖ These new QR codes should encompass comprehensive details about the product, including, ingredients, nutritional information, allergens, manufacturing date, best before/expiry/use by date, allergen warning, and contact information for customer enquiries.
- ❖ A QR code is a type of two-dimensional matrix barcode, invented in 1994, by the Japanese company Denso Wave for labelling automobile parts.
- ❖ The U.S., India, France and the U.K. are among the top users of QR code, according to reports.

