

April -12

TNPSC BITS

- ❖ Hong Kong's equity market has overtaken Japan to be the world's third largest in value, behind only the U.S. and mainland China.
- ❖ National Mission for Clean Ganga (NMCG) or Namami Gange has received the distinction of "Public Water Agency of the Year" by Global Water Intelligence at the Global Water Summit in London.
- ❖ The Central government has transferred administrative control and matters concerning cow shelters, prevention of cruelty to animals and its governing law from Environment ministry to Agriculture ministry.

TAMIL NADU

Mercury Levels

- ❖ Institute for Ocean Management (IOM), Anna University has found that gaseous mercury levels in Chennai ranges between 3.5 nano gram/m³ to 8.5 nano gram/m³.
- ❖ Global average of gaseous mercury in atmosphere is 1.5 nano gram/m³.
- ❖ Apart from industrial pollution, proximity to the sea, which is a huge natural reserve of mercury, is suspected to be reason for high concentration of gaseous mercury in the city's air.
- ❖ Pollution levels are high between 3 AM and 8 AM and high in summer season than winter.

Health effects caused by short-term exposure to high levels of mercury vapors

- Cough, sore throat
- Shortness of breath
- Chest pain
- Nausea, vomiting, diarrhea
- Increase in blood pressure or heart rate
- A metallic taste in the mouth
- Eye irritation
- Headache
- Vision problems



Health effects caused by long-term exposure to mercury vapors

- Anxiety
- Excessive shyness
- Anorexia
- Sleeping problems
- Loss of appetite
- Irritability
- Fatigue
- Forgetfulness
- Tremors
- Changes in vision
- Changes in hearing



NATIONAL

Indian Cities and Air Pollution

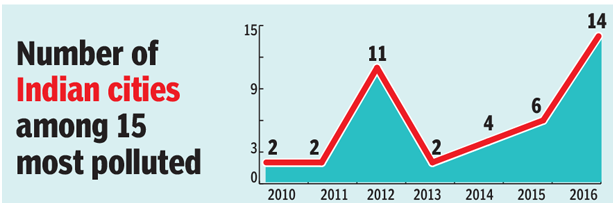
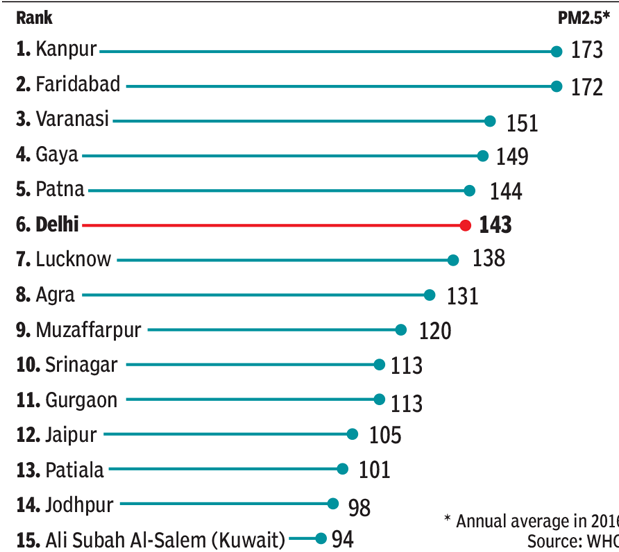
- ❖ The Environment group Climate Trends has released a report titled ‘Political Leaders Position and Action on Air Quality in India 2014-2019’ to highlight the dangerous Air Pollution levels at the Indian cities.
- ❖ It states that the Varanasi, Prime Minister Narendra Modi’s Lok Sabha constituency, is ranked third on the WHO’s list of 15 most polluted cities.
- ❖ It reports that the situation in Varanasi is “deteriorating” as the Government has focused only on its beautification and infrastructure.
- ❖ Varanasi is witnessing a rise in the number of people suffering from allergies and respiratory problems due to a “lot” of uncontrolled construction in the city.
- ❖ The Air Quality Index (AQI) in Varanasi reached an alarming 490 in 2017 and 384 — very poor category — in December 2018.

| Air Quality Index | Status |
|-------------------|--------------|
| 0 – 50 | Good |
| 51 – 100 | Satisfactory |
| 101 – 200 | Moderate |
| 201 – 300 | Poor |
| 301 – 400 | Very Poor |
| 401 – 500 | Severe |

- ❖ The report claimed MPs of Lucknow and Kanpur have mostly been silent on the issue of air pollution in their respective constituencies.
- ❖ Home Minister Rajnath Singh and senior BJP leader Murli Manohar Joshi are MPs of the two constituencies respectively.

WORLD'S MOST POLLUTED CITIES ARE IN INDIA

TOI



Veer Parivar App

- ❖ On the occasion of the 54th Valour Day of the Central Reserve Police Force (April 9) President Ram Nath Kovind launched 'Veer Parivar App.
- ❖ It is a mobile application for families of CRPF personnel killed in the line of duty.
- ❖ The Veer Parivar App will be installed securely on the phones of the slain personnel families and will not be available in the app stores.
- ❖ The app will provide real-time assistance to the families of the martyred CRPF personnel with regard to issuance of ex gratia, pension benefits etc.

Development assistance

- ❖ India has built a 25-bed maternity hospital, known as Chandra Narayan Yadav Memorial Maternity Hospital, in Nepal.

- ❖ The hospital has been built under the Government of India's Small Development Projects (SDP) scheme.
- ❖ SDPs constitute an active pillar of India's development assistance to neighbouring countries such as Afghanistan, Nepal, Bhutan, Bangladesh, Myanmar.
- ❖ Development assistance is a key instrument in India's foreign policy.

RailWire Wi-Fi

- ❖ The Santacruz railway station in Mumbai became the 1600th station to become a RailWire Wi-Fi zone.
- ❖ RailWire is a retail Broadband initiative of the RailTel.
- ❖ RailTel has already provided high-speed Wi-Fi at 985 stations.
- ❖ RailTel Corporation of India Ltd is a Miniratna public sector enterprise of Government of India.
- ❖ It is one of the largest neutral telecom infrastructure providers in the country.

Article 324

- ❖ The Election Commission of India, by invoking powers under Article 324, has stalled the release of three political biopics until the completion of the Lok Sabha election process.

| Movie | Personality |
|-------------------------|--------------------|
| Udyama Simham | K Chandrasekar Rao |
| Lakshmi's NTR | NT Rama Rao |
| PM Narendra Modi | Narendra Modi |

- ❖ Under Article 324 of the Constitution, superintendence and control of elections are bestowed upon the Commission and it is its duty to take necessary measures to create a level playing field for all candidates.
- ❖ In People's Union for Civil Liberties vs Union of India and others 2013 case, Supreme Court has held that Free and fair elections is a part of the "basic structure" of the Indian Constitution.

INTERNATIONAL

Sri Lanka – New Railway Line

- ❖ Sri Lanka has opened a new railway line, built with China's assistance, connecting its coastal city of Matara and Beliatta in Hambantota province.
- ❖ The 26.75-km long Matara-Beliatta railway extension is the first to be constructed in Sri Lanka since 1948.

SCIENCE AND TECHNOLOGY

Gene Editing

- ❖ Researchers from the University of Georgia (UGA) were able to target the pigmentation genes of *Anolis sagrei* lizards to create four albino offsprings.
- ❖ The team microinjected CRISPR proteins into multiple immature eggs in the lizard's ovaries that targeted the tyrosinase gene.
- ❖ Tyrosinase gene is responsible for pigmentation.
- ❖ They created albino lizard offsprings from normal lizards.
- ❖ CRISPR-Cas9 technology was used by the scientists for this research.



CRISPR

- ❖ CRISPR stands for clustered, regularly interspaced, short palindromic repeats or CRISPR-associated protein 9 (Cas9) (CRISPR-Cas9) system.
- ❖ CRISPR technology is basically a gene-editing technology that can be used for the purpose of altering genetic expression or changing the genome of an organism.
- ❖ Its many potential applications include correcting genetic defects, treating and preventing the spread of diseases and improving crops.
- ❖ CRISPR raised ethical concerns when manipulating human embryos.

New State of Matter

- ❖ Scientists from the University of Edinburgh, Scotland using powerful computer simulations have discovered the existence of the new state of matter known as the chain-melted state.



- ❖ At the chain-melted state, atoms are both solid and liquid at the same time.
- ❖ Over half a dozen elements including sodium and bismuth are thought to be capable of existing in the newly discovered state.

PERSONALITIES, AWARDS AND EVENTS

Jamia Millia University

- ❖ Professor Najma Akhtar was appointed as the Vice-Chancellor (VC) of Jamia Millia Islamia University.
- ❖ She is the first woman to be appointed as VC of this University.
- ❖ Jamia Millia Islamia University was established at Aligarh in United Provinces, India during British rule in 1920.
- ❖ It became a Central University by an Act of the Indian Parliament in 1988.
- ❖ In Urdu language, Jamia means University, and Millia means National.
- ❖ Abul Kalam Azad, the nationalist leader of the Indian National Congress, was one of its main initial patrons.

SPORTS

Hockey Coach

- ❖ Australia's Graham Reid has been appointed as the new coach of the India men's hockey team.
- ❖ He was a part of the silver medal winning team at the 1992 Barcelona Olympics as well as the Australian squad that won back-to-back Champions Trophy titles in 1984, 1985, 1989 and 1990

MISCELLANEOUS

Tobacco Abuse

- ❖ According to World Health Organisation (WHO), Global cigarette sales in 2017 stood at \$700 billion, which was 250 times more than what the WHO needed to protect human health.
 - ❖ Tobacco is the only legal drug that kills many of its users.
 - ❖ According to Tobacco Institute of India, India accounts for 84% of the world's consumption of smokeless tobacco.
-