

FIVE RYDAY CURRENT AFFAIRS-October STATES

➤ Delhi Chief Minister Arvind Kejriwal – recently announced a 15-point Winter Action Plan to fight air pollution in the national capital

15 steps to cleaner city air
The Delhi government on Friday outlined its 15-point plan to tackle the annual winter pollution crisis in the city

- 1. Stubble burning**
Bio-decomposer spray on 5,000 acres land to curb stubble burning
- 2. Dust pollution**
Anti-dust campaign to begin on October 6; 233 anti-smog guns to be deployed
- 3. Vehicular emissions**
80 road sweeping machines, 380 teams to check pollution certificate, 521 water sprinkling machines
- 4. Garbage burning**
600 teams to be deployed to prevent burning of leaves, wood and roadside garbage
- 5. Industrial pollution**
33 teams to ensure industries use cleaner fuel (PNG)
- 6. Pollution hot spots**
Stricter supervision at areas such as Narela, Bawana, Mundka that are among 13 pollution hot spots
- 7. Firecrackers ban**
200 teams to enforce restriction on selling and burning crackers
- 8. Grap enforcement**
Steps under the anti-pollution plan to be strictly enforced
- 9. Pollution monitoring**
Real time data on share of each pollution source may be available from October 20
- 10. Paryavaran Mitras**
8,500 environment volunteers inducted so far to raise awareness on air pollution
- 11. E-waste**
Special park coming up at north-west Delhi's Holambi Kalan where e-waste will be scientifically processed
- 12. Afforestation**
3.3million saplings planted in the first phase of afforestation drive, 900,000 to be planted in second phase beginning October 15
- 13. 24x7 green war room**
A 9-member team to analyse pollution data and suggest corrective actions. The set up will go live from October 3
- 14. Green Delhi app**
53,000 complaints received in last two years, CM asks people to actively use the app to register complaints and report pollution rules violations
- 15. Working with neighbours**
Governments in neighbouring states to be urged to ban use of diesel generators and prevent polluting vehicles from entering Delhi

✓ The plan will serve as a blueprint for the Delhi government to fight pollution this winter season.

- ✓ During the announcement, Kejriwal also appealed to the neighbouring states to instruct industries to switch to PNG and provide 24x7 electricity in the National Capital Region.
 - ✓ The action plan proposed includes the installation of 233 anti-smog guns, deployment of at least 150 mobile anti-smog guns, the use of piped natural gas by all registered industrial units and the use of Pusa bio-decomposer to tackle the issue of stubble burning
 - ✓ The winter action plan will focus on stubble management, dust pollution, vehicular emission, open burning of garbage, industrial pollution, pollution hotspots, smog towers, public participation, firecrackers and joint action with neighbouring states among other aspects
 - ✓ Besides, the government is carrying out research in collaboration with IIT-Kanpur to know the amount of pollution and its source at any given point of time.
 - ✓ The Delhi government plans to run an anti-dust pollution campaign from October 6 to curb dust pollution in the national capital
 - ✓ The government has made it mandatory to install anti-smog guns at all construction and demolition sites larger than 5,000 square metres as against the present set up at sites larger than 20,000 square metres
 - ✓ To curb air pollution in the national capital, the Delhi government has imposed a complete ban on firecrackers till 1 January, 2023.
 - ✓ Further, the Delhi government will strictly inspect the pollution under control (PUC) certificates of diesel vehicles over 10-years-old and petrol vehicles over 15-years-old.
 - ✓ Apart from this, there will also be a ban on online sale or delivery of firecrackers in the national capital.
 - ✓ The green war room will monitor violations and redress complaints and grievances in keeping with the practice being followed for the last two years.
 - ✓ Over 3,500 volunteers have registered as 'Paryavaran Mitra', whose sole responsibility will be to raise awareness regarding environment protection
 - ✓ Other efforts taken by the government to control pollution includes an e-waste park spread over 20 acres in Holambi Kalan and the Green Delhi application launched two years ago to receive pollution-related complaints.
 - ✓ Further, a 'finer' Graded Response Action Plan -- a set of anti-air pollution measures followed in the national capital and its vicinity according to the severity of the situation -- will come into from October 1, 2022
 - ✓ On September 28, Punjab also launched an awareness campaign to persuade farmers to avoid stubble burning and adopt crop residue management.
- **The world's largest museum of Harappan culture - is coming up in Rakhigarhi in Haryana to showcase about 5,000-year-old Indus Valley artifacts**



- ✓ The Archaeological Survey of India is currently undertaking its excavation work at the protected site
 - ✓ The proposed museum will feature artefacts like sculptures, seals, pottery, and jewellery.
 - ✓ Rakhigarhi, a village in the Hisar district of Haryana, is said to be one of the five biggest townships of the Indus Valley Civilisation, including Harappa, Mohenjo Daro, and Ganweriwala.
 - ✓ The two villages, Rakhi Khas and Rakhi Shahpur have archaeological artefacts of evidence in this biggest Harappan site in Asia
 - ✓ In 1963, the Archaeological Survey of India (ASI) first started excavation in this site and in 1998, around 56 skeletons has been found in this region from which two women skeletons were about 7000 years old.
 - ✓ Shell bangles, a copper mirror and semi-precious stone beads have also been found in the hands of both the skeletons.
 - ✓ The civilization found in Rakhigarhi dates back to 5,000-5,500 BC, while the time of civilization found in Mohenjodaro is believed to be around 4,000 BC
 - ✓ The evidence found in Rakhigarhi indicates that this place was more prosperous than Harappa and Mohenjodaro in terms of trade exchange
 - ✓ It had trade links with Afghanistan, Baluchistan, Gujarat and Rajasthan, especially for making jewellery.
 - ✓ The Central government has allocated Rs 2,500 crore to develop five historical places in the country which includes Rakhigarhi (Haryana), Hastinapur (Uttar Pradesh), Shivasagar (Assam), Dholavira (Gujarat) and Adichanallur (Tamil Nadu).
- **The State festival of Telangana, Bathukamma - was celebrated from September 25 to October 3 this year.**
- ✓ Bathukamma is a floral cultural festival of Telangana and is celebrated by womenfolk with exotic flowers of the region, which includes several parts of Andhra Pradesh.

- ✓ Bathukamma, means 'Mother Goddess come Alive', is celebrated towards the end of monsoon, beginning on the day of Mahalaya Amavasya, before the onset of winter
- ✓ It is an annual celebration in Telangana that goes on for nine days and overlaps with the festival of Navratri and Dussehra



- ✓ This festival is to pray to the Goddess for the health and achievements of each family
- ✓ Women, during the festival, make small 'Bathukammas', and then later immerse them in water.
- ✓ The festival involves collection of flowers stacked one layer at a time and rising in a series of concentric circles like the temple gopuram.
- ✓ The Union Ministry of Culture has announced that this festival would be celebrated at the India Gate for the first time this year.
- ✓ The celebrations will be in line with the Hyderabad Liberation Day programmes that were organized earlier this month, when the national flag was hoisted in Hyderabad by Home Minister Amit Shah.

NATIONAL

- **On October 4, President Droupadi Murmu - launched 'herSTART' initiative, aimed at supporting women-led startups in Gujarat**

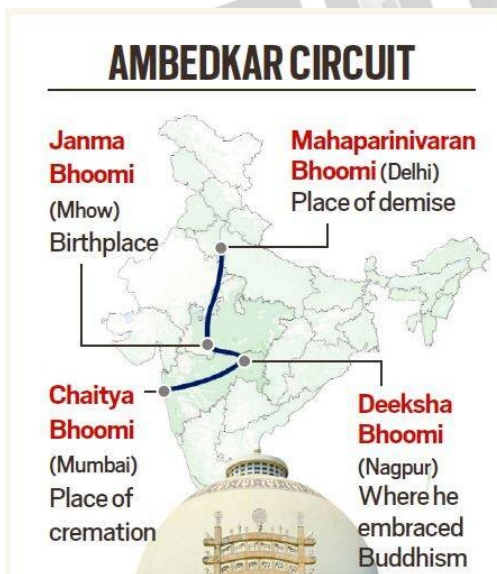


- ✓ The 'herSTART' platform will boost innovation and start-up efforts of women entrepreneurs and also help them connect with various government and private enterprises,
 - ✓ The initiative will include a digital platform to provide resources and training modules free of cost to aspiring women entrepreneurs, a digital community for them, and a digital publication to spread their success stories.
 - ✓ The platform includes herSTART Incubator focusing specifically on women entrepreneurs and innovators and herSTART Accelerator, a round-the-year accelerator programme for high-impact women-led startups
 - ✓ The initiative is implemented by the Gujarat University Startup and Entrepreneurship Council
 - ✓ It is supported by the state government of Gujarat, the Central Government and the United Nations International Children's Emergency Fund (UNICEF).
 - ✓ The Department for Promotion of Industry and Internal Trade (DPIIT) recognized this initiative of the Gujarat Startup Ecosystem in the States Startup Rankings Framework Report of 2022.
 - ✓ During her address, the President noted that there are more than 450 start-ups working in the campus of Gujarat University, with more than 125 women-led start-ups having around 15,000 women entrepreneurs, who are associated online or offline with this initiative.
 - ✓ Prime Minister Narendra Modi, father of India's space program Dr. Vikram Sarabhai, former chairman of ISRO, Dr K. Kasturirangan and Union Home Minister Amit Shah are alumni of this university.
 - ✓ The President further noted that India's first education quality and monitoring cell, 'Garima Cell' has been established in Gujarat for evaluation of higher education
 - ✓ During the launch event, President Murmu felicitated 10 women-led startups and entrepreneurs supported by the Gujarat University and herSTART.
 - ✓ The president was on a two-day visit to Gujarat, her first after becoming the President, on October 3 and 4.
- **The higher education regulator, University Grants Commission (UGC) - has issued new guidelines for appointment of a new teaching position called Professor of Practice in higher education institutes**
- ✓ Under the new guidelines, industry experts and professionals from various sectors will now be allowed in higher education institutions even without a formal academic qualification such as a PhD
 - ✓ The concept is similar to the provisions that already exist in the Indian Institutes of Technology (IITs) in Delhi, Madras and Guwahati.
 - ✓ To be eligible for appointment, an individual will have to be a "distinguished expert" who has "made remarkable contributions in their professions", and has at least 15 years of service or experience.

- ✓ A professor of practice can be anyone with a background in a diverse range of areas from technology, science, social sciences, media, literature, armed forces, law, fine arts, etc.
 - ✓ However, the position is not open for those in the teaching profession — either serving or retired
 - ✓ Currently, under the UGC’s minimum qualifications for appointment of teachers and other academic staff, an individual needs a PhD to be recruited as a professor or associate professor, and also needs to have cleared the National Eligibility Test (NET).
 - ✓ Additionally, up to 10% of sanctioned posts can be Professors of Practice in higher education institutes
 - ✓ As per the rules, the position can be either a full-time or a part-time engagement for a maximum of four years.
 - ✓ The new position has created three categories - Professor of Practice funded by industries, Professor of Practice funded by higher education institutions from their own resources, and Professor of Practice on honorary basis.
 - ✓ According to the guidelines, the Professors of Practice will also be involved in developing and designing the curriculum, while also delivering lectures “as per institutional policies”
 - ✓ Further, they will also be expected to focus on an enhanced industry-academia collaborations.
 - ✓ They can also carry out joint research projects or consultancy services in collaboration with the regular faculty members.
- **For the first time, all the 23 Indian Institutes of Technology in the country - will come together for a mega Research and Development fair called “InvenTiv”**
- ✓ The two-day fair will be held during October 14-15, 2022 at the Indian Institute of Technology, Delhi premises.
 - ✓ It is being organized in commemoration of the 75th year of India’s Independence in line with the Azadi ka Amrit Mahotsav initiative.



- ✓ The inaugural session will be graced by Union Minister for Education and Skill Development and Entrepreneurship Dharmendra Pradhan
 - ✓ The fair will showcase projects on diverse areas covering climate change, defence and aerospace, environment and sustainability, smart city architecture, rural agriculture, affordable healthcare, drone technology, semiconductors, robotics, communication technologies, blockchain technology, clean energy and renewable etc.
 - ✓ A total of 75 projects brought out by 23 IITs are selected for the event, along with 6 showcase projects
 - ✓ The audience shall also include administrators and students from universities and colleges from small towns, global IIT alumni, faculties of various CFTIs, scientists from DRDO, ISRO, CSIR and ICAR, and so on.
 - ✓ Representatives from Confederation of Indian Industry (CII), Federation of Indian Chambers of Commerce and Industry (FICCI) and National Association of Software and Service Companies (NASSCOM), will be present at the event.
 - ✓ The 2-day event will hold interactive as well as one-to-one sessions among the academia and industry representatives
- **The government – to introduce a special train for the proposed Ambedkar Circuit that covers various places associated with B.R. Ambedkar**



- ✓ The Tourism Ministry has drawn up an action plan for various circuits under its Swadesh Darshan scheme.
- ✓ In June, a special train was run on the Ramayana Circuit, which covered prominent places associated with the life of Lord Ram, including Ayodhya and Janakpur in Nepal.
- ✓ Currently, special trains are available for the Ramayana, Buddhist, and North East Circuits.
- ✓ The concept of Ambedkar Circuit was first proposed in 2016

- ✓ It covers Madhya Pradesh's Mhow, Ambedkar's birthplace; Nagpur, where he converted to Buddhism; the residence in Delhi where he lived during his last years; and Dadar in Maharashtra, where his body was cremated.
 - ✓ The Swadesh Darshan scheme was launched by the Tourism Ministry in 2014-2015 to achieve the integrated development of theme-based tourist circuits
 - ✓ Under this central sector scheme, the government identified 15 tourist circuits, which included Ramayana Circuit, Buddhist Circuit, Coastal Circuit, Desert Circuit, Eco Circuit, Heritage, North East, Himalayan, Sufi, Krishna, Rural, Tribal, and Tirthankar Circuits
- **To mark UN 'International Day of Older Persons', HelpAge India - launched 'Saarthak', a community-based initiative for the mental wellbeing of elderly**



- ✓ The initiative has been launched in collaboration with the National Institute of Mental Health and Neuro Sciences (NIMHANS) and the National Programme for Health Care of Elderly, which will provide technical support
- ✓ The aim of this initiative is to provide psychiatric support to senior citizens suffering from depression and dementia across the country
- ✓ Through 'Saarthak', training will be imparted to around 10,000 nurses, healthcare workers and volunteers on geriatric mental health over a period of one year
- ✓ Under the initiative, 'online' training will be given to various categories of non-specialised health workers and community care givers through customised modules for each specified category, such as the Non-Specialist health work force, Informal Caregivers and Institutional Caregivers.
- ✓ According to the Longitudinal Ageing Study of India (LASI) report, by 2050, 14 million senior citizens in India would be impacted by mental health issues, from five million now

INDIA AND OTHER COUNTRIES

- **India - has recently signed Rs 2,000 crore defence deal to export anti-tank rockets and other ammunition to Armenia through a government-to-government route**



- ✓ The purchase made by Armenia is due to the recent clashes of its troops with the troops of its neighbouring country Azerbaijan, inspite of a ceasefire signed between them
 - ✓ In a first, India will also export indigenous Pinaka multi-barrel rocket launchers to Armenia
 - ✓ Pinaka has been developed by the Defence Research and Development Organisation (DRDO) and manufactured by indigenous private sector firms
 - ✓ However, this is not the first time India has exported weapons to Armenia.
 - ✓ The central government earlier supplied four Swathi radars to the former Soviet republic in 2020 for an estimated Rs 350 crore
 - ✓ In 2021-2022 fiscal, India's defence exports were around Rs 13,000 crore, which was 8 times more than what it was around five years ago.
 - ✓ The Centre has set a target to sell weapon systems worth Rs 35,000 crore to foreign countries by 2025.
 - ✓ Towards achieving this target, India and the Philippines agreed on a \$375 million sale of BrahMos missiles in January
 - ✓ BrahMos missile was made jointly by India's DRDO and Russia's NPO Mashinostroyeniya.
- **The Indo-Bangladesh friendship pipeline carrying High Speed Diesel from Numaligarh refinery in India to Bangladesh - is expected to be completed by the end of this year.**
- ✓ The project aims to connect Siliguri in West Bengal with Parbatipur in Bangladesh's Dinajpur district.
 - ✓ The total outlay of this 1 million metric per annum capacity project involving the construction of 130 km pipeline is Rs.346 crore.
 - ✓ The pipeline's construction was inaugurated in March 2020.
 - ✓ The project is jointly implemented by the Numaligarh Refinery Limited of India and Meghna Petroleum Limited of Bangladesh.
 - ✓ Under the contract, Bangladesh will import diesel for 15 years from the day when supply commences to provide a stable supply of diesel in all 16 northern districts under Rangpur and Rajshahi in Bangladesh

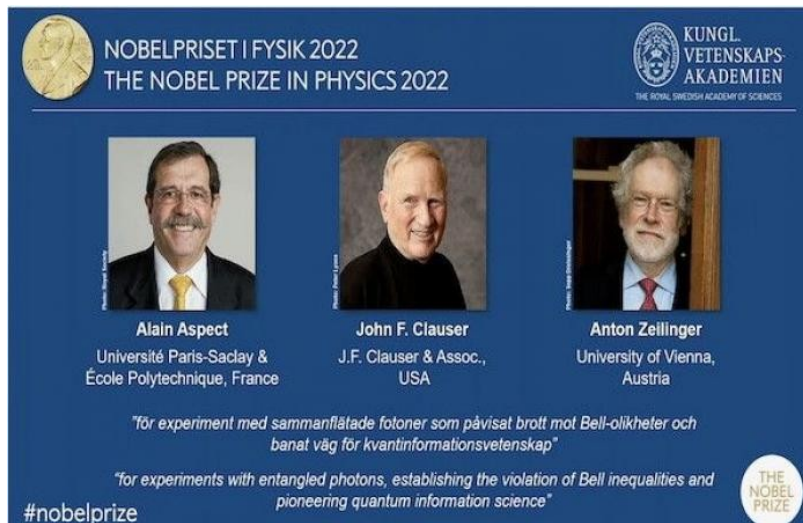
- ✓ Currently, imported diesels are supplied to these regions via wagons and trawlers from the Chattogram and Mongla ports.

SCIENCE, TECHNOLOGY & ENVIRONMENT

- **The United Arab Emirates (UAE) - is planning to launch its maiden moon mission 'Rashid' in November this year.**
- ✓ The Rashid rover, named after Dubai's ruling family, will be launched between November 9 and 15 from the Cape Canaveral spaceport in Florida.
- ✓ The probe will be launched onboard a SpaceX Falcon 9 rocket and will be put into lunar orbit by a Japanese ispace lander in March
- ✓ The Rashid rover is expected to study the lunar surface, mobility on the moon's surface, and how different surfaces interact with lunar particles.
- ✓ The 10-kilogram (22-pound) rover will carry two high-resolution cameras, a microscopic camera, a thermal imagery camera, a probe, and other devices.
- ✓ The lunar mission is part of the UAE's broader strategy to become a major player in the field of space exploration.
- ✓ If the moon mission succeeds, the UAE and Japan would join the ranks of only the US, Russia, and China as nations that have put a spacecraft on the lunar surface.
- ✓ This will be the second big mission for the Emirates space agency after the success of its Hope probe in the maiden mission
- ✓ The UAE partnered with Japan's Mitsubishi Heavy Industries to launch the Hope probe, which was placed in Mars' orbit in February 2021.
- ✓ It has also set the ambitious goal of building a human colony on Mars by 2117.

AWARDS

- **On October 4, the Royal Swedish Academy of Sciences - awarded the 2022 Nobel Prize in Physics to three scientists - Alain Aspect, John F. Clauser and Anton Zeilinger – for their work on quantum mechanics**



- ✓ They have won the award "for experiments with entangled photons, establishing the violation of Bell inequalities and pioneering quantum information science".
- ✓ The three laureates conducted groundbreaking experiments using entangled quantum states, where two particles behave like a single unit even when they are separated.
- ✓ This phenomenon known as 'quantum entanglement' can be used for specialised computing and to encrypt information.
- ✓ It will have implications in the fields of quantum computers, quantum networks and secure quantum encrypted communication.
- ✓ Quantum computers use quantum mechanics to solve problems too complex for regular computers.
- ✓ Alain Aspect, 75, is a Professor at Université Paris-Saclay and École Polytechnique, Palaiseau, France.
- ✓ John F Clauser, 79, is a Research Physicist at JF Clauser & Assoc., USA, while Anton Zeilinger, 75, is a Professor at the University of Vienna, Austria
- ✓ In 2021, the prize was awarded to three scientists - Syukuro Manabe, Klaus Hasselmann and Giorgio Parisi - for their work in explaining and predicting complex forces of nature which aided understanding of climate change
- ✓ So far, 115 Nobel Prizes in Physics have been awarded between 1901 and 2021, of which only four are women, which includes Marie Curie in 1903, Maria Goeppert-Mayer in 1963, Donna Strickland in 2018, and Andrea Ghez in 2020.
- ✓ The youngest person to win the Physics award has been Lawrence Bragg, who was just 25 when he was given the 1915 Physics Nobel.
- ✓ The Nobel Prize is awarded under the will and testament of Alfred Nobel
- ✓ Alfred Nobel designated The Royal Swedish Academy of Sciences for the Nobel Prize in Physics and Chemistry, Karolinska Institute for the Nobel Prize in Physiology or Medicine, the Swedish Academy for the Nobel Prize in Literature, and a Committee of five persons to be elected by the Norwegian Parliament (Storting) for the Nobel Peace Prize.

- **Former German chancellor Angela Merkel – has been named as the winner of prestigious UNHCR Nansen Award**



- ✓ The Geneva-based UN refugee agency has chosen Merkel for its highest award to acknowledge her efforts in offering asylum to over 1.2 million refugees, mostly from Syria into Germany, despite criticism both at home and abroad.
- ✓ Under the then-Federal Chancellor Merkel's leadership, Germany welcomed more than 1.2 million refugees and asylum-seekers in 2015 and 2016 at the height of the conflict in Syria
- ✓ Merkel is expected to travel to Geneva on October 10 to receive the award, which includes a \$150,000 prize
- ✓ The UNHCR Nansen Refugee Award honours individuals, groups or organisations that go above and beyond the call of duty to protect refugees, other displaced and stateless people
- ✓ More than 60 laureates have received the award since it was first awarded to Eleanor Roosevelt in 1954
- ✓ The award celebrates Fridtjof Nansen, a Norwegian scientist, explorer and diplomat who was the first commissioner for refugees in the League of Nations, which is the predecessor of the United Nations
- ✓ The recipient of the award in 2021 was the Jeel Albena Association for Humanitarian Development in Yemen, for its support for displaced Yemenis.

