

DAILY CURRENT AFFAIRS (DCA)

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16TH INDIA-JAPAN ANNUAL SUMMIT

Context

- The Prime Minister of Japan paid an **Official Visit to India for the 16th India-Japan Annual Summit**.

Key outcomes of the summit:

- **Joint Declaration on Economic Security** to promote project-based collaboration in semiconductors, critical minerals, ICT including AI, clean energy and pharmaceuticals.
- **Joint Statement on Cooperation in Artificial Intelligence**, elevating bilateral ties to a **strategic AI research and development partnership** with a roadmap covering the entire AI technology stack and promoting safe, secure, trusted, inclusive and human-centric AI.
- **Joint Statement on Energy Resilience** to strengthen cooperation in strategic crude oil and petroleum reserves and promote joint investments in maritime energy transport.
- **Joint announcement to celebrate 2027 as the India-Japan Year of Shared Horizons**, commemorating the 75th anniversary of diplomatic relations.
- **MoU for the India-Japan Cooperative Biogas for Growth (CBG) Initiative** to support the establishment of **1,000 biogas and organic fertilizer plants** across India through dairy cooperatives.
- **MoU in geology and mineral exploration** to enhance collaboration in upstream critical mineral exploration through technical exchanges.
- **MoU on the Next Generation Mobility Partnership (NGMP)** to accelerate private sector-led cooperation in railways, automobiles, roads, aviation, shipbuilding, ports, logistics and urban development.
- **MoU between IIT Bombay, BharatGen Technology Foundation and Japan's National Institute of Informatics** to jointly develop large language models with a focus on scientific reasoning.

Brief on India-Japan Relations

- **Establishment of Relations:** After WWII, India opted for a separate Peace Treaty with Japan, signed in 1952, marking the start of formal diplomatic relations.
- **Growth in Bilateral Ties:** India-Japan bilateral relations were elevated to Global Partnership in

2000, Strategic and Global Partnership in 2006, and Special Strategic and Global Partnership in 2014.

- **Strategic Synergy:** India's Act East Policy and Indo-Pacific Oceans Initiative (IPOI) align closely with Japan's Free and Open Indo-Pacific (FOIP) policy.
- **Bilateral Trade:** Bilateral trade reached \$27.47 billion during FY 2025-26.
 - ♦ **Imports from Japan continue to outweigh exports.** India's main exports are chemicals, vehicles, aluminium, and seafood; imports include machinery, steel, copper, and reactors.
- **Collaboration on Global Initiatives:** Japan and India cooperate in initiatives like the International Solar Alliance (ISA), Coalition for Disaster Resilient Infrastructure (CDRI), and Leadership Group for Industry Transition (LeadIT).
 - ♦ Both countries work together in multilateral frameworks like the Japan-Australia-India-U.S. Quad and the India-Japan-Australia Supply Chain Resilience Initiative (SCRI).
- **Defence and Security:** Joint Declaration on Security Cooperation (2008), Defence Cooperation and Exchanges MoU (2014), Information Protection Agreement (2015), Reciprocal Provision of Supplies and Services Agreement (2020), and co-development of the UNICORN naval mast (2024).
 - ♦ **Exercises:** Malabar (with the US and Australia), Milan (multilateral naval), JIMEX (bilateral maritime), Dharma Guardian (Army), and Coast Guard cooperation are held regularly.
 - ♦ 2024-25 saw the participation of service chiefs in India and Japan, strengthening interoperability.
- **Development and Infrastructure Cooperation:** Japan has been India's largest ODA donor since **1958**, supporting critical infrastructure and human development projects.
 - ♦ ODA disbursement stood at about JPY 580 billion (\$4.5 billion) in 2023-24.
 - ♦ The **Mumbai-Ahmedabad High Speed Rail** is the flagship project symbolising advanced technology transfer and skill development.
- **Investment:** Japan is India's **fifth-largest source of FDI**, with \$43.2 billion cumulative investment up to 2024.

- ♦ Japan has consistently ranked India as the most promising long-term investment destination.
- **Space Collaboration:** ISRO and JAXA collaborate in X-ray astronomy, satellite navigation, lunar exploration, and the Asia Pacific Regional Space Agency Forum (APRSF).
- ♦ In 2016, they signed a Memorandum of Cooperation (MoC) for peaceful space exploration and use.
- **Tourism:** 2023-24 was celebrated as the Year of Tourism Exchange, with the theme "Connecting Himalayas with Mount Fuji".
- **Emerging Focus Areas:** Digital cooperation (semiconductors, startups), clean energy, supply chain resilience, industrial competitiveness, and skill development.

Areas of Concern

- **Trade Imbalance:** There is a significant trade imbalance, with Japan exporting more to India than India exports to Japan, creating a need for better reciprocal trade.
- **Geopolitical Tensions:** Regional security issues, such as China's influence in the Indo-Pacific, pose challenges for India-Japan relations, requiring careful diplomatic balancing.
- **Cultural and Language Barriers:** Despite strong ties, differences in language, culture, and business practices pose challenges to deeper integration.
- **Limited People-to-People Exchanges:** The scale of people-to-people interactions is still limited, impacting deeper mutual understanding.
- **Infrastructure Constraints:** Despite improvements, some areas in India still lack the infrastructure necessary to support large-scale Japanese investments effectively.
- **Different Economic Priorities:** India's focus on rapid economic growth may sometimes contrast with Japan's emphasis on sustainable development and technology.

Way Ahead

- **Enhance Trade and Investment:** Focus on reducing the trade imbalance by increasing Indian exports to Japan and encouraging Japanese investment in India's manufacturing and technology sectors.
- **Boost People-to-People Connections:** Increase cultural exchanges, tourism, and educational collaborations to deepen mutual understanding.

- **Technology and Innovation Partnership:** Leverage Japan's expertise in technology and India's growing digital sector to collaborate in AI, robotics, renewable energy, and space exploration.
- **Address Environmental Concerns:** Increase cooperation on environmental sustainability, climate change, and disaster resilience to support both countries' green energy goals.

Source: **PIB**

INDIA-ISRAEL BILATERAL INVESTMENT AGREEMENT (BIA)

Context

- The Bilateral Investment Agreement (BIA) between India and Israel signed in September 2025, enters into force with effect from 4 July 2026.

About

- Israel has become the first **OECD (Organisation for Economic Co-operation and Development)** member state to sign an investment pact under India's new model treaty framework.
 - ♦ The BIA replaces the earlier investment treaty signed in **1996**, which was terminated in 2017 as part of India's policy overhaul on such agreements.
 - ♦ The Agreement will increase bilateral investments, which presently stands at a total of **USD 800 million**.

Key Provisions of the Agreement

- **Definition and Scope of Investment:** The agreement defines an investment as one that complies with the host country's laws and possesses characteristics such as commitment of capital, expectation of profit, and assumption of risk.
 - ♦ It limits treaty protection to investments made in accordance with domestic laws and excludes portfolio investments and speculative assets from the definition.
- **Right to Regulate:** The BIA reaffirms the sovereign right of both countries to regulate investments in pursuit of legitimate policy objectives, including public health, environmental protection, taxation and national security.
 - ♦ It also contains provisions preventing **treaty shopping** by denying treaty benefits to shell companies or investors that restructure solely to gain access to the agreement's dispute resolution mechanism.

- **Taxation Provisions:** The agreement contains a comprehensive **tax carve-out**, limiting the scope for investors to challenge tax measures through international arbitration. Except in cases involving allegations of expropriation, taxation measures are generally excluded from the treaty's dispute settlement mechanism.
 - ♦ The treaty also requires investors to comply with all applicable tax laws, regulations and administrative guidelines of the host country.
- **On dispute settlement**, investors must first seek to resolve disputes through consultations and are required to exhaust domestic legal remedies before initiating international arbitration.
 - ♦ International arbitration can be initiated only after the domestic proceedings have concluded or **after five years have elapsed**, whichever is earlier.
- **National Security Exception:** The treaty includes a strong essential security exception, under which either government may take measures it considers necessary to protect its national security interests.
 - ♦ Such decisions are expressly made non-justiciable, meaning arbitral tribunals cannot review a country's decision to invoke the security exception, even in compensation claims.
- ♦ **A US\$ 40 million** India-Israel Industrial R&D and **Technological Innovation Fund (I4F)** for joint projects was also set up.
- **Multilateral Cooperation:** Both are active members of the **I2U2 group** (India, Israel, USA, UAE), focusing on economic and space collaboration with projects like food parks and space-based environmental tools.

Significance for India

- **Defence & security:** Israel is a reliable partner for critical technologies for India and can be instrumental in India's Self Reliance and Make in India.
- **Agriculture & water:** Israel is known for its model of innovation, water conservation, and high-yield farming, India can adopt these technologies with collaboration.
- **Geopolitics:** It is an important strategic partner for India in West Asia that complements India's Act West policy.

Way Ahead

- The BIA is a landmark step towards strengthening bilateral economic relations and ensuring a secure and predictable investment climate.
- It is expected to contribute to increased cross-border investment activity and further deepen the economic partnership between India and Israel.

Source: PIB, IE, IEmb

India and Israel Bilateral Relations

- **Bilateral Relations:** India announced its recognition of Israel in 1950. Regular embassies opened in **1992** when full diplomatic relations were established between the two countries.
 - ♦ In 2022-23, the two countries jointly celebrated **30 years** of the elevation of bilateral ties to full diplomatic ties.
- **Defense & Security:** Israel has been a key supplier of advanced technology from AWACS (Airborne Warning and Control System) radars and drones to missile and surveillance systems making it one of India's largest defense suppliers.
- **Economic Relations:** In FY 2023-24 and **FY 2024-25** the bilateral trade (excluding defense) was US\$ 6.53 billion and **US\$3.75 billion** respectively.
 - ♦ In **2017**, both sides signed and exchanged seven MoUs on cooperation in the areas of **innovation, technology, water, agriculture, and space & science**.

11 YEAR OF DIGITAL INDIA PROGRAMME

Context

- The Digital India Programme completes 11 years as on 1 July 2026.

India's Digital Leadership

- Over the last decade, Digital India has become the foundation of **India's digital economy** and **Digital Public Infrastructure**.
 - ♦ It accelerated innovation, startup growth, and technology adoption across the various sectors.
- India now leads global real-time digital payments with UPI handling nearly **49%** of worldwide transaction volume.
- The digital economy contributes nearly **12–14% of India's GDP** and is expected to contribute around **one-fifth** over the next decade.

- India also launched **India Stack Global** and the **Global DPI Repository** during its G20 Presidency in 2023 which help in expanding global access to Indian digital solutions.
- As of February 2026, India has signed **MoUs with 24 countries** for cooperation on India Stack and DPI systems, covering digital identity, payments and service delivery.

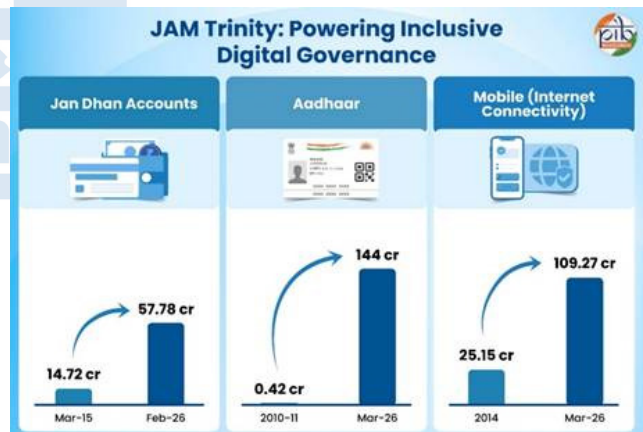
What are the Nine Pillars of Digital India?

- Broadband Access:** Reliable broadband is essential for digital governance and inclusive economic growth.
 - For example:** The broadband Internet subscriber base increased to **106.58 Cr.** at the end of March 2026.
- Universal Access to Mobile Connectivity:** As of Jan 2026, around 2.15 lakh Gram Panchayats i.e. nearly 97% have been connected with close to 7 lakh Km of optical fiber cable under the **BharatNet-1 and BharatNet-2**.
- Public Internet Access Programme:** Accessible digital centres help citizens access services near their homes. More than 6.5 lakh Common Service Centres and 1.6 lakh post offices now deliver digital services.
- e-Governance:** It promotes paperless, integrated, and public-centric administration.
 - Platforms such as **DigiLocker** and the **National Single Sign-On ecosystem** enable seamless access to certificates, applications, payments, and public services, reducing paperwork while improving ease of living.
- e-Kranti:** As the service delivery pillar of Digital India, e-Kranti has accelerated the shift from physical to digital governance.
 - Integrated platforms such as **e-Hospital, e-Sanjeevani, and e-Courts** have simplified access to certificates, healthcare and justice services.
- Information for All:** This pillar strengthens transparent and participatory governance by making government information easily accessible and encouraging citizen engagement through digital platforms.
 - Initiatives such as **MyGov** and **Open Government Data** enable citizens to access information.
- Electronics Manufacturing:** Electronics production has increased from 1.9 lakh crore in FY 2014-15 to about 12 lakh crore as of March 2026.

- Today, **India is the world's second-largest mobile phone manufacturer**, reflecting its growing role in global electronics value chains.
- IT for Jobs:** The IT and ITes industry is estimated to have generated USD 283 billion in revenue in FY25, according to NASSCOM.
- India's 2,100+ Global Capability Centres (GCCs) employ around **26 lakh** professionals across engineering, analytics, cyber security, and AI-driven roles.
- Early Harvest Programmes:** Quick-impact initiatives such as biometric attendance, secure government email, public Wi-Fi hotspots, eBooks, SMS-based weather alerts, and digital communication platforms demonstrated the immediate benefits of technology-led governance.

Flagship Initiatives That Powered an Inclusive Decade

- JAM Trinity:** The Foundation of Digital India has revolutionised financial inclusion and welfare delivery in India. It brought millions into the formal banking system and enabled seamless access to government services.



- DigiLocker:** DigiLocker is replacing physical documents with a secure digital wallet, and transforming document storage and verification across India.
 - As of March 2026, the platform has registered over **70.69 crore** users and issued more than **850+ Cr documents**.
- Unified Payments Interface (UPI):** Completing ten years in **2026**, UPI is transforming digital payments through instant and secure transactions for citizens and businesses.
 - UPI's global footprint now extends to **nine countries**, with **Cambodia** becoming the latest to adopt it.

- **Digital Platforms Powering Public Health:**
 - ♦ **The Online Registration System (ORS)** enables patients to book appointments digitally while reducing queues and paperwork. The cloud-based eHospital platform is digitising hospital operations, while eBloodBank is improving blood availability and management across healthcare institutions.
 - ♦ **eSanjeevani:** The telemedicine platform is connecting patients with doctors remotely, especially in rural and underserved regions.
 - ♦ **Tele MANAS** provides free tele-counselling and mental health support nationwide.
- **Empowering Commerce Through Technology:**
 - ♦ **Government e-Marketplace (GeM)** has transformed public procurement by making it transparent, efficient and paperless.
 - ♦ **Open Network for Digital Commerce (ONDC)** is creating an open and interoperable digital commerce ecosystem that connects buyers and sellers across platforms.
- **AgriStack: Empowering Farmers Through Technology**
 - ♦ Developed under the Digital Agriculture Mission, AgriStack is a farmer-centric DPI powering services such as **e-NAM for online agricultural trading** and **Kisan e-Mitra**, an AI-powered chatbot providing instant farming information and government scheme support.
- **Digital Platforms Driving Educational Access:**
 - ♦ **DIKSHA (Digital Infrastructure for Knowledge Sharing)** is transforming school education through curriculum-linked digital learning resources and teacher training.
 - ♦ **SWAYAM (Study Webs of Active Learning for Young Aspiring Minds)** and **SWAYAM Prabha** are expanding access to quality education beyond classrooms.
- **Powering India's Digital Workforce:**
 - ♦ **PMGDISHA** bridged the rural digital divide by training citizens in smartphone usage, internet access, digital payments and online services.
 - ♦ **FutureSkills Prime** is preparing learners for emerging technologies such as AI, cloud computing, cybersecurity and data analytics.
 - ♦ **Skill India Digital Hub (SIDH)** is a unified platform for skilling, certification and employment services.

- ♦ **IndiaAI Mission** is strengthening AI education, infrastructure and responsible AI adoption.

Way Ahead

- **Strengthen digital infrastructure:** Complete universal broadband connectivity, particularly in remote and Left Wing Extremism (LWE)-affected areas.
- **Bridge the digital divide:** Enhance digital literacy programmes to ensure that rural populations, women, senior citizens, and other vulnerable groups are not excluded from the digital economy.
- **Boost manufacturing ecosystem:** Strengthen domestic value addition through the **Semiconductor Mission**, encourage research and development, and integrate India more deeply into global technology supply chains.

Source: PIB

DELHI DRAWS UP 7-YEAR AIR POLLUTION MITIGATION PLAN

Context

- The Delhi government has drawn up a **seven-year air pollution mitigation plan with an estimated outlay of Rs 8,300 crore.**

About

- **Aim:** To strengthen air quality management in the Capital and reduce emissions from major pollution sources such as **vehicles, road dust, construction and demolition waste.**
- Titled '**Swachh Hawa, Swasth Delhi**', the project is proposed to be implemented between **September this year and August 2033 with support from the World Bank.**
 - ♦ **The World Bank** will provide **65% financial assistance**, while the remaining 35% will be borne by the Delhi government.
- **Key Sectors:** Transport, road dust, construction and demolition (C&D) waste, solid waste management, industry, green spaces, and water pollution.

Key Interventions:

- **Strengthening Air Quality Management:**
 - ♦ Establish a dedicated Project Management Unit (PMU) to ensure mission-mode implementation;
 - ♦ Developing advanced air quality monitoring, data analytics, and Integrated Command

and Control Centre (ICCC)-based monitoring systems;

- ♦ Strengthening inter-departmental coordination and collaboration with Indo-Gangetic Plain (IGP) states for airshed-based pollution management.
- **Reducing Emissions from Major Pollution Sources:**
 - ♦ Promote cleaner transportation by accelerating the phase-out of polluting vehicles, expanding electric vehicle (EV) adoption, improving public transport integration, and establishing advanced Pollution Under Control (PUC) systems.
 - ♦ Implement dust control measures through road redevelopment, end-to-end paving, mechanised cleaning, and innovative dust suppression technologies.
 - ♦ Strengthen construction and demolition (C&D) waste management and promote the use of Recycled Aggregate Manufacturing Systems (RAMS).
- **Significance:** The project is expected to improve air quality, reduce emissions from transport, industry, waste, and dust sources.
 - ♦ It will strengthen governance and monitoring systems.
 - ♦ It will enhance green cover, mobilise private investment, create employment opportunities, and adopt international best practices in air quality management.

Air Pollution in India (World Air Quality Report 2025)

- India was ranked **sixth amongst the world's most polluted countries**, with a national average PM_{2.5} concentration of 48.9 g/m.
- ♦ That is nearly **ten times the WHO's safe limit of 5 g/m**.
- All of the world's top 25 most polluted cities were either in **Pakistan, India, or in China**.
- **Loni in Ghaziabad** was the world's most polluted city in 2025, recording an annual average PM_{2.5} of 112.5 g/m. Following right behind was Byrnihat in Meghalaya, ranking third globally, while **Delhi came in fourth**.

Government Initiatives to Curb Air Pollution in India

- **National Clean Air Programme (NCAP):** Launched in 2019, NCAP is a comprehensive initiative with the goal of reducing air pollution in identified cities and regions across India.

- ♦ The program focuses on improving air quality monitoring, implementing stricter emission standards, and promoting public awareness.
- **Bharat Stage VI (BS-VI) Emission Standards:** The government implemented BS-VI emission standards for vehicles nationwide in 2020.
 - ♦ These standards aim to reduce vehicular emissions by mandating the use of cleaner fuel and more advanced emission control technologies.
- **Pradhan Mantri Ujjwala Yojana (PMUY):** The PMUY scheme aims to provide clean cooking fuel to households by promoting the use of liquefied petroleum gas (LPG) as an alternative to traditional biomass-based cooking methods.
- **FAME (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles) Scheme:** The FAME scheme promotes the adoption of electric and hybrid vehicles to reduce air pollution caused by vehicular emissions.
 - ♦ Incentives are provided to both manufacturers and consumers to encourage the use of electric vehicles.
- **Green Initiatives for Sustainable Habitat (GRIHA):** GRIHA is an initiative to promote sustainable and environmentally friendly practices in the construction and operation of buildings.
 - ♦ It encourages the use of energy-efficient technologies and materials to reduce pollution.
- **Waste Management Programs:** Proper waste management is crucial to prevent the burning of waste, which contributes to air pollution.
 - ♦ Various waste management initiatives, including the Swachh Bharat Abhiyan, aim to address solid waste issues and promote cleaner disposal methods.
- **Commission for Air Quality Management:** The Commission has been set up for Air Quality Management in the National Capital Region and Adjoining Areas for better coordination, research, identification, and resolution of problems surrounding the air quality index.
- **Afforestation Programs:** Initiatives like the Green India Mission aim to increase tree cover, which can help absorb pollutants and improve air quality.

Conclusion

- The **'Swachh Hawa, Swasth Delhi'** initiative marks a **comprehensive and long-term strategy**

to tackle Delhi's persistent air pollution through integrated governance, cleaner technologies, and scientific monitoring.

- If implemented effectively it can significantly advance the objectives of the National Clean Air Programme (NCAP) and serve as a model for airshed-based urban air quality management in India.

Source: TH

NEWS IN SHORT

LOKOS

Context

- Self-Help Entrepreneur-Livelihoods and Enterprise Application for Prosperity and Sustainability (SHE-LEAPS) was recently launched and is implemented **under the LokOS platform**.

About

- It is a digital platform for **empowering women associated with Self-Help Groups (SHGs)** across rural India, it is developed by the **Digital India Corporation**.
- It provides a **unified platform** for enterprise creation, performance tracking, and business management.
- It supports farm and non-farm enterprises, strengthening a sustainable and resilient rural economy.

About LokOS Platform

- LokOS (**Lok = People, OS = Operating System**) is a **web and mobile platform** under the **Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM)**.



- It was developed by the **Digital India Corporation (DIC)** under the aegis of the **Ministry of Rural Development (MoRD)** and was **launched in 2022**.
- It helps in managing **Self-Help Groups (SHGs) and Community-Based Organizations (CBOs)** by digitizing member records, profiles, savings, lending, repayments, financial transactions, livelihoods, and convergence initiatives.

Source: PIB

ASSAM SELLS INDIA'S FIRST COMMERCIALY PRODUCED MATCHA TEA

Context

- **Assam** has become the **first state in India to commercially produce Matcha tea**, with production commencing at the **Chota Tingrai Tea Estate** in eastern Assam's Tinsukia district.

Matcha

- **Matcha** is made after shading **Camellia sinensis** tea leaves for three to four weeks before harvest.
- **Blocking 90% of sunlight** from the leaves boosts their **chlorophyll and amino acid levels**, and gives its characteristic **bright green colour and rich umami flavour**.
- Matcha originated through **cultural exchanges between China and Japan** during the premodern period.
 - It developed from earlier powdered tea practices in China that were later introduced to Japan by **Zen Buddhist monks**.
- **China is the largest producer of matcha tea**.
- The USA, Canada, UK, Germany, France, Australia, Singapore, South Korea and Middle Eastern countries are some of the main markets for match tea exports.

Source: TH

MUMBAI-AHMEDABAD HIGH SPEED RAIL (MAHSR)

Context

- India is nearing completion of its **first bullet train corridor – the Mumbai-Ahmedabad High Speed Rail (MAHSR)**.

About

- The corridor will connect **Mumbai and Ahmedabad in about 1 hour 58 minutes**. It covers a total length of approximately **508 kilometres**.
 - 12 stations** have been planned along the route.
- It is expected to commence in **August 2027**. The first section to open will be from **Surat to Vapi**.
- The corridor has a design speed of **350 kmph** and an operational speed of **320 kmph**.
- The MAHSR Project is being developed using **Japanese Shinkansen technology and operational practices**.

- Track System:** J-Slab ballastless track technology is being introduced in India for the first time.
- Track Construction Bases:** Dedicated Track Construction Bases are being developed. These are for the storage and handling of rails, track slabs, machinery, and other equipment.

Seven High-Speed Rail Corridors

- Seven high-speed rail corridors, covering nearly **4,000 kilometres**, have been identified for future development.

Routes	Travel Time
Delhi–Varanasi	3 hours 50 minutes
Varanasi–Patna–Siliguri	2 hours 55 minutes
Chennai–Bengaluru	1 hour 13 minutes
Bengaluru–Hyderabad	2 hours
Chennai–Hyderabad	2 hours 55 minutes
Mumbai–Pune	48 minutes
Pune–Hyderabad	1 hour 55 minutes

Source: **PIB****POLYGRAPH TEST****Context**

- Pune Police's request to conduct a polygraph test on high profile murder has revived the debate over the use of lie detector tests in criminal investigations.

What is a polygraph test?

- A **polygraph test** also called **lie detector test** operates on the presumption that **specific physiological responses are triggered when a person is lying**.
- The test is administered by attaching instruments like **cardio-cuffs or sensitive electrodes** to the

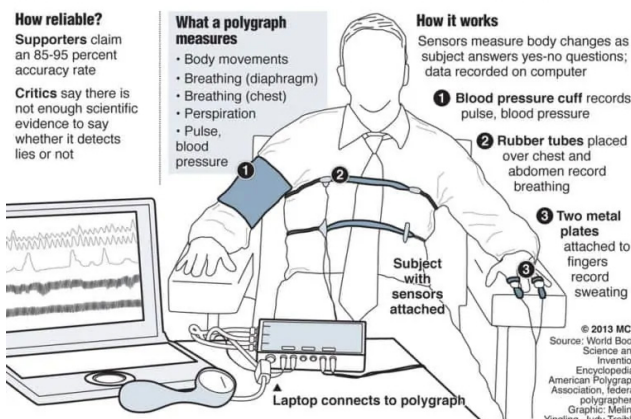
suspect to measure variables such as blood pressure, galvanic skin response (a proxy for sweat), breathing and pulse rate.

- As questions are posed, each physiological response is assigned a numerical value to determine whether the individual is telling the truth or being deceptive.
- In India, a polygraph test is used **only as an investigative tool and cannot by itself be treated as evidence** in a court of law. But if the test results lead police investigators to obtain new evidence, that evidence may be admissible in court under **Section 27 of the Indian Evidence Act**.

- A polygraph test can be conducted **only with the voluntary consent** of the person concerned.
- In **Selvi v. State of Karnataka (2010)**, the Supreme Court held that the involuntary administration of polygraph, narco-analysis, and brain-mapping tests violates **Article 20(3)**, which protects against self-incrimination, and **Article 21**, which guarantees the right to life and personal liberty.

Do polygraphs detect lies?

Polygraph or "lie detector" exams continue to be used by law enforcement and government agencies for various screenings even though most criminal courts ban polygraph evidence.



Narco-Analysis

- It involves the injection of a drug called **sodium pentothal** into the accused, inducing a hypnotic or sedated state.
- The assumption is that a subject in such a state is less inhibited and is more likely to divulge information.
 - ♦ Because the drug is thought to weaken the subject's resolve to lie, it is often referred to as a "**truth serum.**"

Source: **IE**

RADIO TELEMETRY

Context

- Recently the death of a radio-tagged white-rumped vulture has highlighted the importance of radio telemetry in monitoring wildlife and identifying conservation threats.

What is Radio Telemetry?

- It is a **technique to locate animals and track their movements**. It uses radio signals to determine location.

- A radio telemetry system is made up of **three parts**: a radio transmitter, a radio antenna and a radio receiver.

Working:

- ♦ The radio transmitter is **worn by the animal** and is the part that **transmits, or sends, the radio signal**.
- ♦ The antenna is used to pick up the radio signals, which are then transformed into a beeping sound by the receiver.
- ♦ As the receiver gets closer to the transmitter, the beeps get louder, meaning the animal wearing the transmitter is close by.
- ♦ The researcher uses this sound to locate and follow the animal wearing the transmitter.

Source: **TH**

7TH NATIONAL WATER AWARDS

Context

- Ministry of Jal Shakti has launched the 7th National Water Awards on the Rashtriya Puraskar portal of Ministry of Home Affairs.

About

- The Awards were introduced in **2018** by the **Ministry of Jal Shakti**, and first were given in **2019**.
- **Eligibility for the awards:** Any State, District, Urban Local Body, Dam Own Agencies, & Industry who have done good work in the field of water conservation and management is eligible.
- The awards were introduced to recognize and encourage exemplary work and efforts made by States, Districts, individuals and organizations across the country in accomplishing the government's vision of **Jal Samridh Bharat**.
- It aims to **sensitize the public about the importance of water** and motivate them to adopt the best water usage practices.

Source: **AIR, PIB**

