

### NATIONAL ESSENTIAL DIAGNOSTICS LIST

The Indian Council of Medical Research (ICMR) has begun the process of revising the current National Essential Diagnostics List (NEDL) and invited relevant stakeholders to offer suggestions on adding or deleting diagnostic tests to the current list by the end of February.



#### About the National Essential Diagnostics List:

- The NEDL lists the **essential and most basic tests** that should be available at various levels of healthcare facilities in the country, including at the **village level, in sub-health centres, health and wellness centres**, and primary health centres.
- The ICMR had released the **first NEDL in 2019** to make the availability of diagnostics an essential component of the healthcare system.
- The list includes general laboratory tests for a broad range of common conditions for the diagnosis of communicable and non-communicable diseases, disease-specific tests for HIV, hepatitis, tuberculosis, dengue, malaria, and area-endemic diseases.
- India is the first country to release the NEDL.
- Since 2018, the **World Health Organisation (WHO) recommends** the development and implementation of a **National Essential Diagnostics List (NEDL)** to facilitate the availability of In-Vitro Diagnostics (IVDs) across the various tiers of the healthcare pyramid, facilities with or without a laboratory onsite.

#### What are Essential diagnostic tests?

- These are defined as those "that satisfy the **priority healthcare needs of the population** and are selected with due regard to disease prevalence and public health relevance, evidence of efficacy and accuracy, and comparative cost-effectiveness".
- The test should focus on conditions with a high disease burden or having significant public health relevance, where the introduction of a diagnostic test will have a clear impact on disease diagnosis and management.

## QANAT SYSTEM

Some of Africa's dry areas face serious water shortages due to minimal rainfall. An ancient system of drawing water from aquifers, the "qanat system", could help.



- It is an ancient **type of water-supply system**, developed and still used in arid regions of the world.
- It taps underground mountain water sources trapped in and beneath the upper reaches of alluvial fans and channels the water downhill through a series of gently sloping tunnels.
- The qanats have been used for centuries in arid and **semi-arid parts of north Africa**, the Middle East and Asia, where water supplies are limited.
- It's known by a variety of names, "**foggara**" in north Africa, "**falaj**" in Oman and "**qarez**" in parts of Asia.
- Many old qanāts are still used in Iran and Afghanistan, chiefly for irrigation.
- It's a system that's managed by everyone and its benefits are shared.
- Some of the region's qanat systems, like those in Iran, are protected under **heritage status**.

### Significance of the system

- The **qanat is sustainable** as it works with gravity and no electricity is needed. It can even be used to create clean energy.
- Water lost to **evaporation is minimal** in comparison to surface water supplies.
- It can have a wide scale impact. Qanats are multiple kilometres long and once this water hits a floodplain, it can irrigate multiple hectares of land.
- It **fosters social cohesion**. Many people, with different skills, are involved in maintaining the system.
- The **lifespan** of the system extends **beyond that of a deep water well**, which is only about 20 years. Tunnels do not clog as easily as wells.
- The **quality of water** coming from the mountains is much better than water on the plains. It'll have lower salinity and be better for crops and people.

## SCHEME FOR RESIDENTIAL EDUCATION FOR STUDENTS IN HIGH SCHOOLS IN TARGETED AREAS (SHRESHTA)

The Central Board of Secondary Education (CBSE) recently issued instructions for Residential Private Schools interested in joining SHRESHTA Scheme.



- The scheme aims to **provide access to the best private residential schools for meritorious students from Scheduled Caste (SC) communities.**
- It will **provide scholarships** to meritorious students from SC communities **to study in private and NGO-run residential schools for Classes 9-12.**
- The core objectives of the scheme are to enhance the reach of the development initiatives of the government and fill in the gap in service-deprived SC dominant areas in the education sector.
- The scheme will **collaborate with voluntary organisations** to provide an environment that can help create conditions for socio-economic upliftment and the overall development of the SC communities.
- **Implementation agency:** The **Department of Social Justice and Empowerment, Ministry of Social Justice & Empowerment.**

### **Eligibility:**

- Students whose **annual parental income is less than Rs 2,50,000** and who belong to SC communities are eligible to participate in this scheme.
- Only those candidates **who have passed or are appearing in Class VIII/X** in the given academic session can apply for admission to Class IX/XI.
- The **scheme will cover the tuition fee, the hostel fee, and the mess fees** for qualifying students.
- **Students will also be allowed to choose from a range of schools based on their merit.**

## WHO ARE SHANKARACHARYAS?

- Shankaracharya, literally ‘teacher of the way of Shankara’, is a **religious title used by the heads of the four Hindu maths** (monasteries) that were **established by the eighth-century Hindu saint Adi Shankara**.



- Adi Shankara established these maths to **impart knowledge**.

These maths consist of religious shrines, temples, libraries, and residences.

- These maths are **located in Dwarka (Gujarat), Joshimath (Uttarakhand), Puri (Odisha), and Sringeri (Karnataka)**.
- The **Shankaracharyas also oversee the Dashanami Sampradaya**, an order of **renunciates**.

## Who was Adi Shankaracharya?

- Adi Shankaracharya, or Shankara, as he was known, was an **ancient Indian philosopher** and theologian who **lived in the early 8th century CE**.
- **Birth:** He was born in Kalady, a village in **present-day Kerala**.
- Revered as an avatar of Lord Shiva, it is believed that he **mastered the Vedas when he was just 16**.

## Philosophical Contributions:

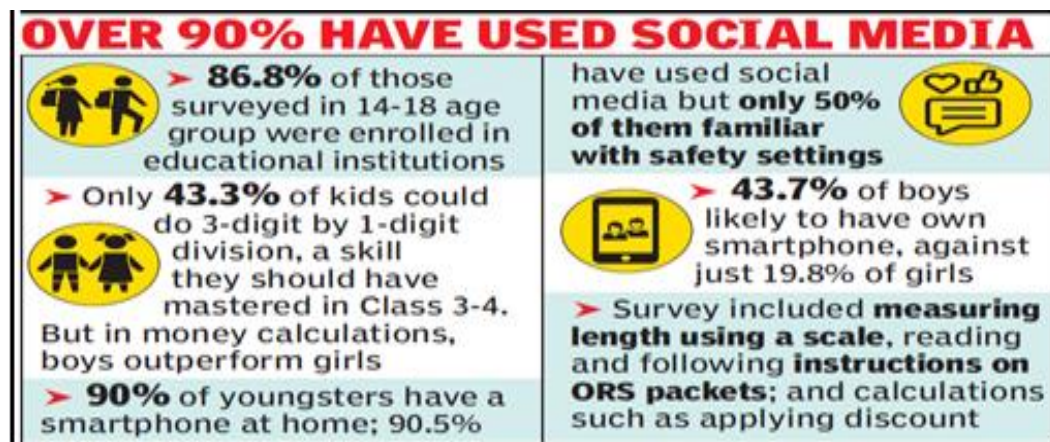
- At a very young age, Shankara started criss-crossing the length and breadth of India to **spread his commentaries on the Brahma Sutras, Upanishads, and the Bhagavad Gita** amid a rise in Jainism and Buddhism.
- He is best known for his role in the development and **propagation of Advaita Vedanta**, a **non-dualistic school of Hindu philosophy**.
  - The fundamental philosophy of Advaita Vedanta lies in the **unity of atma (soul), or individual consciousness, and brahma** or the ultimate reality.
  - According to this philosophy of non-duality, **God and humans are not two** and the **material world is an "illusion"**.

## THE ANNUAL STATUS OF EDUCATION REPORT (ASER) 2023

### About the Annual Status of Education Report (ASER) 2023:

- ASERs (by NGO Pratham) have been surveying children aged 6 to 14 since 2005 to track trends in school enrollment, attendance and reading and arithmetic abilities.
  - ASER reports are **usually referred to by the government** while formulating policies.
- The ASER 2023 is based on a survey conducted in 28 districts across 26 states, reaching out to 34,745 youths in the **14-18 age group**.
  - One rural district was surveyed in each major state with the exception of Uttar Pradesh and Madhya Pradesh, where two such districts were surveyed.
- The youths were surveyed on 4 points –
  - Basic reading, math and English abilities;
  - Application of basic skills to everyday calculations;
  - Reading and understanding written instructions; and
  - Financial calculations that need to be done in real life.

### Findings of the ASER 2023:



- Trends on basic learning:
  - Overall (of those aged 14-18), a quarter (26.5%) could not read a Class 2-level textbook in their regional language, and a little less than half (42.7%) could not read sentences in English.

- Of those who can read these sentences, over a quarter (26.5%) did not understand the meaning of what they were reading.
- **Basic mathematics remains the big challenge.** More than half of the surveyed students (56.7%) could not solve a simple 3-digit by 1-digit division problem.
- The ability to do division is seen as a proxy for the ability to do basic arithmetic operations.
- **Arithmetic proficiency:**
  - 45% of youths in the surveyed group have basic arithmetic proficiency.
  - The rest need to ‘catch up’ as **low levels of foundational numeracy affect the ability of youth in tackling everyday calculations** (say, for financial computations).

### Significance of the ASER 2023:

- For nearly two decades, ASER reports have consistently pointed to **deficiencies among children in elementary school** with regard to foundational skills like reading and basic arithmetic.
- But this year’s focus on an older age group also points to a **similar gap in learning outcomes at higher levels.**
  - The report reveals that children continue to struggle with basic reading and arithmetic skills well into their teenage years, even after reaching Class 10 and higher secondary levels of education (Classes 11 and 12).
  - The findings point to a **huge skill deficit among adolescents**, many of them only a few years away from entering the job market.

### INDIAN VULTURE



First in many years, a vulture was spotted in the skyline of Thane which has not been spotted over two decades in the city.

About Indian vulture:

- The Indian vulture (*Gyps indicus*) is an Old-World vulture **native to Asia**.
- They are also known as Indian long-billed vultures due to their comparatively longer beak.
- It is a medium-sized and bulky scavenger feeding mostly on the carcasses of dead animals.
- Females of this species are smaller than males.
- **Distribution:** These are native to India, Pakistan, and Nepal.
- **Habitat:** They are usually found in savannas and other open habitats around villages, cities, and near cultivated areas.
- **Threats:** The Indian vulture has suffered a 97-99% population decrease due to poisoning caused by the veterinary drug This drug is toxic for vultures; it was given to working animals as it reduced joint pain and so kept them working for longer.
- **Conservation status**
  - **IUCN Red List: Critically Endangered**

## KEY FACTS ABOUT VADNAGAR

The remains of a 2,800-year-old human settlement have been recently discovered in Gujarat's Vadnagar.



### About Vadnagar:

- Vadnagar is a town and municipality in the Mehsana district of North Gujarat.
- As a historical city, it was known by various names, such as Vridhanagar, Anandapur, Anartapur, and Nagar.
- The town represents a continuously evolving historic urban landscape/area that played a major role in the hinterland trade network of Western India.
- It is mentioned often in the Puranas and even in the travelogue of the great Chinese traveller, Hieu-en-Tsang (7th century), as a rich and flourishing town.

## Features:

- The **ancient town** of Vadnagar is an **L-shaped town** with **Sharmishtha Lake** located on its **northeastern edge**.
- The whole ancient town of Vadnagar is **built over an ancient mound**. The topography of the **mound is gently rising**, with its **highest point in** the middle of the settlement, also called **Darbar Ghat**.
- Vadnagar town is **divided into several blocks**, also called **Mohallas or Madhs**. These mohallas are **named after a temple, a community, or an occupation**.
- The town's **fortifications, arched gateways (toranas), temples, wells, residential structures (kothis), and excavated sites like Buddhist monasteries** and dedicated **stupas** showcase the architectural influence of various cultural periods.
- The **current residential layer** of the town is from the **late Gaekwad period** (late 18<sup>th</sup> Century CE).

## WHAT IS THE CHANG'E 6 MISSION?



The China National Space Administration (CNSA) recently announced that the Chang'e 6 sample return mission is on track to land on the surface of the Moon in the first half of 2024.

The Chang'e 6 mission is a **planned lander** designed to **return samples from the lunar south pole**.

- The mission **aims to land on the Moon, collect samples** from the lunar surface, and **return them to Earth**. This process will contribute crucial data to unravel the Moon's geological mysteries.
- Representing the **first attempt to retrieve samples from the far side of the Moon**, Chang'e 6 is set to **bring back up to two kilograms of lunar samples**, adopting a configuration similar to the successful Chang'e 5 mission.
- The mission **involves international collaboration**, with payloads from the **European Space Agency (ESA) and the French space agency CNES**.



- **ESA contributes a lunar surface ion tester**, while **CNES provides equipment for measuring radon gas** and its decay products.
  - Additionally, an **Italian laser corner reflector** for radar instrument calibration and **Pakistan's ICUBE-Q CubeSat** will be **part of the mission**.
  - **Chang'e 6 will consist of both a lander and a rover.**
    - The lander will touch down on the lunar surface, while the rover will explore specific regions, conduct experiments, and aid in the sample collection process.
  - The returned samples will be made available to the global scientific community for study.
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## ASIAN BUDDHIST CONFERENCE FOR PEACE (ABCP)



**The Indian Vice President recently inaugurated the 12th General Assembly of the Asian Buddhist Conference for Peace in New Delhi.**

**About Asian Buddhist Conference for Peace (ABCP):**

- It was **founded in 1970 in Ulaanbaatar, Mongolia**, as a **voluntary movement of followers of Buddhism** with both monastic (monks) and lay members.
- Its aim is to bring together the efforts of Buddhists in support of **consolidating universal peace, harmony, and cooperation** among people in Asia.
- It is currently **headquartered at the Ganden Tegchenling Monastery in Ulaanbaatar, Mongolia**, and the **Supreme Head of Mongolian Buddhists** is the **ABCP President**.

### **History:**

- The **roots of founding of ABCP lay in the Cold War politics** of peace movements, and consolidation of allies, and building popular outreach among the masses through various organisations.
  - It drew **active participation from Mongolia, Japan, India, Laos, Vietnam, Cambodia, Bhutan, Russian Far East, Sri Lanka, Thailand, and other regional countries.**
  - ABCP was registered as an **observer to the UN's Economic and Social Council** in 1988 in recognition of its contribution to the well-being of humanity.
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