

DAILY PT POINTERS

12th June, 2024



The Hindu-Polity and Governance(GSII)-Page 1

Uniform Civil Code is part of government's agenda, says Union Law Minister Meghwal

The Hindu Bureau
NEW DELHI

Union Law Minister Arjun Ram Meghwal on Tuesday said the implementation of the Uniform Civil Code (UCC) was part of the Narendra Modi government's agenda.

Assuming charge at the Law Ministry, which he held in the earlier government as well, Mr. Meghwal rejected the allegation that there was conflict between the executive and the judiciary, and expressed hope that a solution would be found on the issue of the Memorandum of Procedure (MoP).

The MoP refers to the procedure on the appointment, elevation and transf-



Arjun Ram Meghwal.

er of High Court and Supreme Court judges, which is yet to be finalised because of differences between the executive and the judiciary.

"I believe that we will certainly find a solution to it," Mr. Meghwal told presspersons after taking charge of the Ministry of Law and

Justice.

Responding to a question on the implementation of the UCC, he said that it was part of the government's agenda.

On the issue of "One Nation, One Election", Mr. Meghwal said the committee under former President Ram Nath Kovind had submitted its report, and the Law Commission was also working on the subject.

Mr. Meghwal also signed the national litigation policy document soon after taking charge. The policy document, part of the 100-day agenda of the new Narendra Modi government, will be placed before the Union Cabinet for approval in the coming days.

The Law Minister said a

key priority of his Ministry would be faster justice in matters pending in the Supreme Court, High Courts, lower courts, tribunals, and consumer courts.

The national litigation policy has been drafted and redrafted over several years by successive governments, and aims to lay down principles for responsible litigation. A national litigation policy has been a part of the BJP's manifesto since 2014.

"There is a factor of ease of living in all the stakeholders related to litigation... All stakeholders, including litigants, advocates and others are part of it... the Ministry has finalised the policy document," Mr. Meghwal said.

- The Uniform Civil Code aims to establish a uniform legal framework for all citizens, regardless of their religion. Article 44 in the DPSP, found in Part IV of the Constitution, states that "the State shall endeavour to secure for the citizens a uniform civil code throughout the territory of India".
- The Supreme Court in various judgments has called for the implementation of the UCC. In its Mohd. Ahmed Khan vs Shah Bano Begum judgment of 1985, where a divorced Muslim woman demanded maintenance from her former husband, the SC while deciding whether to give prevalence to the CrPc or the Muslim personal law, called for the implementation of the UCC.
- In 2018, the Law Commission submitted a 185-page consultation paper on the reform of family law at the Modi government's request. The Law Commission stated that UCC "is neither necessary nor desirable at this stage", the report recommended that discriminatory practices, prejudices, and stereotypes within a particular religion and its personal laws should be studied and amended.

The Hindu-Science &Tech (GSIII)Page 8

IISc develops method to remove heavy metal contaminants from groundwater

The Hindu Bureau
BENGALURU

Indian Institute of Science (IISc) researchers have developed a novel remediation process for removing heavy metal contaminants such as arsenic from groundwater.

According to IISc, the three-step method, which is patent-pending, also ensures that the removed heavy metals are disposed of in an environment-friendly and sustainable manner, instead of sending untreated heavy metal-rich sludge to landfills from where they can potentially re-enter groundwater.

“In every technology that exists, you can take



Polluting groundwater: Heavy metal contaminants can significantly affect human and animal health. FILE PHOTO

out arsenic and provide clean water. However, after you remove the arsenic, you must do something about it so that it doesn't re-enter the environment, and that aspect is not given due consideration in the existing methods. Our pro-

cess was designed to solve this problem,” said Yagnaseni Roy, assistant professor at the Centre for Sustainable Technologies, whose lab has developed the method.

IISc said that according to reports, 113 districts in 21

States in India have arsenic levels above 0.01 mg per litre while 223 districts in 23 States have fluoride levels above 1.5 mg per litre, which are beyond the permissible limits set by the Bureau of Indian Standards (BIS) and the World Health Organisation.

These contaminants can significantly affect human and animal health, necessitating their efficient removal and safe disposal.

The researchers have been working with the IN-REM Foundation and Earthwatch, both NGOs, to deploy and test these systems in rural areas such as Bhagalpur in Bihar and Chickballapur in Karnataka.

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The Hindu :_GS 3-Science and Tech –Page 20

New portable atomic clock offers very accurate timekeeping at sea

Researchers have built a portable optical atomic clock that can be used on board ships. While it lacks some accuracy for size and robustness, it is still more accurate than other used time-keeping systems. As with all other researchers, it is the most performant optical clock at sea.



Atomic clocks are the backbone of the Global Positioning System (GPS), the network of satellites above the earth that we use every day to navigate cities, respond to emergencies, and organise military operations, among other things. They are being used in the most accurate time-keeping systems, but they still need to be improved. Scientists are now pushing the boundaries with a new technology called optical atomic clocks.

But the being used on board ships is a challenge. Both these clocks are also bulky, power hungry, fragile, and expensive. As a result, their installation and operation can often be limited to high research facilities.

A study recently published in the journal *Nature* introduced a new portable optical atomic clock that can be used on board ships. While these clocks lack some accuracy for size and robustness, they were still more accurate than other used time-keeping systems.

According to the researchers, this is the most performant optical clock used at sea and represents a significant advance in optical atomic clocks.

The working of an atomic clock
Atomic clocks work by keeping the energy levels of an atom constant. The most common example is the cesium-133 atomic clock, which is used to define the second. The frequency of the radiation emitted by a cesium-133 atom is used to define the second. The accuracy of the cesium-133 atomic clock is so high that it is used to define the second.

As the cesium-133 atom is found naturally, which is why it is used as a standard in atomic clocks.

Atomic clocks exploit a fundamental property of all atoms: their ability to jump between different energy levels. These jumps are like the steps of a ladder. Atoms absorb energy, like electromagnetic radiation, to jump to a higher energy level. The frequency of the radiation emitted by the atom is related to the energy difference between the two levels.

For example, when light is incident on a cesium-133 atom, its electrons absorb the energy and jump to a higher energy level. The frequency of the radiation emitted by the atom is related to the energy difference between the two levels.

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The accuracy of atomic clocks comes from a feedback mechanism that detects any drift in the frequency of the radiation emitted by the atom.

Building a portable clock
The construction of a portable optical atomic clock is a challenge. The clock must be small, power efficient, and robust. The researchers used a microchip-based optical atomic clock that can be used on board ships.

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- Researchers have build a portable optical atomic clock that can be used onboard ships.
- Atomic clocks are the backbone of the Global Positioning System (GPS), the network of satellites above the earth that we use every day to navigate cities, respond to emergencies, and organise military operations, among other things.
- Atomic clocks work by keeping time using atoms. One popular design uses atoms of an isotope of caesium, Cs-133. The International Committee for Weights and Measures first used it in 1967 to define the duration of one second. India also uses a Cs-133 atomic clock to define the second for timekeeping within its borders.
- Cs-133 is a highly stable atom and is found naturally, which is why it is so commonly used in atomic clocks.
- Atomic clocks exploit a fundamental property of all atoms: their ability to jump between different energy levels. Energy levels are like the steps of a ladder. An atom climbs up the ladder by absorbing energy, like electromagnetic radiation

HEADLINES OF THE DAY

The Hindu : _GS 3-Science and Tech –Page 20



The United Nations has said 2025 will be designated the 'International Year of Quantum Science and Technology'. In a statement, the body said the initiative will be "year-long", "worldwide", and that it will "be observed through activities at all levels aimed at increasing public awareness of the importance of quantum science and applications."

HEADLINES OF THE DAY

Indian Express- GS 3/Environment (Page 8)

MP completes preparations for second cheetah home – Gandhi Sagar Sanctuary

EXPRESS NEWS SERVICE
BHOPAL, JUNE 11

THE MADHYA Pradesh government has completed preparations for its ambitious cheetah reintroduction project at Gandhi Sagar Wildlife Sanctuary, which is slated to be the second home for cheetahs in India after Kuno National Park, an official said on Tuesday.

Teams from Kenya and South Africa had earlier visited Gandhi Sagar to assess the conditions, the official said.

He also said that Madhya Pradesh Chief Minister Mohan Yadav chaired a meeting of the wildlife board in which it was informed that preparations have been completed. Prey animals have been relocated from Kanha, Satpura and Sanjay tiger reserves, the official said.

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On September 17, 2022, eight Namibian cheetahs – five females and three males – were released into enclosures at Kuno National Park

About:The cheetah (*Acinonyx jubatus*) is a large cat **native to Africa and central Iran.**

It is the fastest land animal, estimated to be capable of running at 80 to 128 km/h.

African Cheetah	Asiatic Cheetah
IUCN status: They are vulnerable under the IUCN Red List.	IUCN status: The Asiatic cheetah is classified as a “critically endangered” species by the IUCN Red List.

Indian Express –IR(GSII)-Page 12

12 % hike in Schengen visa fee comes into effect

DIVYAA
NEW DELHI, JUNE 11

FROM TUESDAY onwards, the cost of a short-stay Schengen visa has increased by 12 per cent. While the Schengen visa fee for adults has increased to 90 euros from 80 euros, children between the age of 6 and 12 will now pay 45 euros instead of 40 euros. It is still free for those under six years of age.

The EU attributes the increase to both inflation and growing civil worker wages.

Schengen visa allows the holder to travel freely in the Schengen Area comprising 29 European countries, for short stays of a maximum of 90 days in any 180-day period. The visas are not purpose-bound, but they do not grant the right to work.

Schengen countries are among the most popular destinations for Indian travellers with a high preference for destinations

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- Schengen countries are among the most popular destinations for Indian travellers with a high preference for destinations like France, Spain, Germany, Italy and Switzerland, among others. S

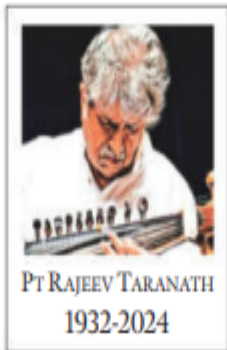
Indian Express:GS 1-Art and Culture (GSI)

Sarod maestro Pt Rajeev Taranath dies at 92

SUANSHU KHURANA
NEW DELHI, JUNE 11

IN THE early 1950s, Pandit Rajeev Taranath was a Bengaluru-based English literature student who had grown up with an affection for classical music, literature, progressive values and a dislike for the sound of sarod.

To him, the sarod music he heard through the gramophone records of his parents — the illustrious scholar Pandit Taranath and his English professor and author wife Sumathi Bai — was too staccato. It was ironic then, that Rajeev Taranath, who admired the sitar and Pandit Ravi Shankar's playing style and discipline, found himself inseparably connected to the sarod. "I hadn't heard my guru (Ustad Ali Akbar Khan) till then," he said in direc-



PT RAJEEV TARANATH
1932-2024

tor Amshan Kumar's short documentary on him.

Taranath, the seniormost disciple of Ustad Ali Akbar Khan and a scholar of English literature (he was referenced in the famous Arden edition of Shakespeare) passed away in Mysuru on Tuesday. He was 92.

It was a concert by Shankar and Khan in Bengaluru (then

Bangalore) that took Taranath to the inward space he didn't think existed. He had only learned vocal music and tabla from his father till then, but decided to leave everything and learn sarod. A college topper, he kept listening to music while pursuing his career as a lecturer (he held a PhD in literature), until Shankar told him to seriously learn sarod. So in 1955, he quit academics for a while to learn music.

In a conversation with The Indian Express, Taranath's guru bhai and sarod player Tejendra Narayan Majumdar said, "He had the closest touch of my Baba Ali Akbar Khan Saab, his tone, the intellectual density in the raga presentation of the Maihar baaj (playing style). I should say he was the best exponent of Ali Akbar Khan's baaj of our times."

But the move to Calcutta,

without a job, was hard. He lived on one meal a day and slept at bus stations until he met a famous jeweller who decided to support Taranath for the next six years, allowing him to learn from Khan. Taranath performed extensively and spoke about music and literature all around the world.

Besides Khan, Taranath was also mentored by Shankar Annapurna Devi and Nikhil Banerjee. He performed regularly and taught throughout his life. Besides being the Head of English literature at the National Institute of Technology, Tiruchirapalli, Taranath also taught English in the 80s at Aden University, Florida, and was the Head of Indian Music Programme at California Institute of Arts from 1995-2005.

He was awarded the Sangeet Natak Akademi Award in 2000 and the Padma Shri in 2019.

- Sarod maestro of international repute Rajeev Taranath has passed away in Mysuru
- Sarod is a stringed instrument made of coconut shell, tun wood, drone, shikri, and ivory. This is a traditional instrument that is found in various parts of North India. A popular plucked instrument, it is used in North Indian classical music for solo concerts.

Indian Express:GS 3-Science and Tech-Page 13

Scientists back new Alzheimer's drug: its benefits vs the risks

ANONNA DUTT
NEW DELHI, JUNE 11

DONANEMAB, a new therapy for Alzheimer's disease developed by drug maker Eli Lilly, has received unanimous support from independent scientists advising the United States Food and Drug Administration (USFDA), bringing it a step closer to clinical use.

"The potential risks of donanemab, appropriately managed as instructed in labeling, are outweighed by the demonstrated benefits on the clinical endpoints in those with AD (Alzheimer's disease)," the FDA advisory committee said in a briefing document.

With two predecessors with a similar mechanism of action having been approved by the regulator, the convening of the advisory committee in March had come as a surprise to many, including the company.

How do the benefits of the drug stack up against its risks?

The drug is meant only for the early stages of Alzheimer's – those who have mild cognitive impairment or mild dementia. The drug shows significant clinically meaningful slowing of the disease – meaning a person on the drug retains their functions for a longer time.

Most ARIA events – amyloid-related imaging abnormalities such as brain bleeds and seizures – were found to be non-serious, and resolved or stabilised after discontinuation of therapy, according to the FDA document weighing the risks and benefits.

"The key risks can be mitigated through appropriate labeling and clinical monitoring, and further characterized through post-authorization studies... Overall, given the seriousness of AD and the limited options for disease-modifying treatments, donanemab provides a clinically meaningful treatment benefit for pa-

tients with AD," the document said.

What is donanemab; how does it work?

Like the two other Alzheimer's drugs approved over the past three years, donanemab is a monoclonal antibody that targets deposits of amyloid beta proteins in the brain, one of the defining features of Alzheimer's disease.

The phase 3 study shows that donanemab slows down cognitive decline in early Alzheimer's patients by 35.1% at 76 weeks. The result was

based on a study with 1,736 patients, of whom 860 received the infusion every four weeks till the amyloid beta plaque cleared. The main adverse effect is swelling or bleeding in the brain, most of which is asymptomatic. The study showed that 24% participants given donanemab had brain

swelling and 19.7% had brain bleeds. Three treatment related deaths were reported.

Why is this breakthrough important?

Dr M V Padma Srivastava, Chairperson of Neurology at Paras Health, Gurugram, and former head of the department of neurology at AIIMS, Delhi said: "The world is getting older and the burden of diseases such as

Alzheimer's is on the rise. Most countries around the world need drugs such as this. In developing countries with huge populations, the burden [of Alzheimer's] is likely to be higher."

An estimated 5.3 million people are currently living with dementia in India. Alzheimer's is one of the most common forms of dementia. This prevalence is likely to increase to 14 million by 2050.

Dr Srivastava, however, said that these

"horrendously" expensive drugs need to be evaluated against the benefits that they bring. "While the treatment can give a few more good years to a person, should they sell their home to get the treatment? These things have to be decided," she said.

She agreed, however, that "it is a much-needed innovation and could pave the way for something better."

Why was the approval delayed?

Earlier this year, Eli Lilly was informed that the USFDA wanted to understand further the data relating to the therapy, including implications of the limited dosing protocol.

During the trial, the therapy was stopped in patients who achieved a certain level of clearing of amyloid beta plaques. This limited dosing is one of the features that sets donanemab apart from the two other therapies approved in the category.

The additional scrutiny of the drug also came after a US congressional committee examined the approval process for the first drug, aducanumab, developed by Japanese and American companies Eisai and Biogen, and found it to be "rife with irregularities".

The committee found an unusually close collaboration with the drugmaker; and that approval was given even after the clinical trial was cancelled by the company after an independent report indicated that the drug was unlikely to effectively slow cognitive decline and functional impairment, and despite an expert panel's recommendation against it.

The second drug, lecanemab, also developed by Biogen, was greeted with cautious optimism by doctors. This is because it indeed demonstrated a slowing of cognitive decline with fewer side effects for a disease that does not have any effective treatment yet.

EXPLAINED
MEDICINE

- After much debate on the cost-benefit analysis and whether the new Alzheimer's drug, Donanemab, was worth administering given its modest benefits and side effects, a committee of independent advisers to the US Food and Drug Administration (FDA) voted unanimously that the benefits outweigh the risks.
- The drug, made by Eli Lilly, had generated much excitement as it slowed cognitive decline in patients in the early stages of the disease.
- Donanemab is a monoclonal antibody that targets amyloid beta protein plaques in the brain, one of the defining features of Alzheimer's
- Alzheimer's disease is the most common type of dementia. It is a progressive disease beginning with mild memory loss and possibly leading to loss of the ability to carry on a conversation and respond to the environment.
- Alzheimer's disease involves parts of the brain that control thought, memory, and language.
- It can seriously affect a person's ability to carry out daily activities.

HEADLINES OF THE DAY

PIB:GS 3-Defense

Ministry of Defence

JAPAN INDIA MARITIME EXERCISE – 24 (JIMEX – 24) COMMENCED AT
YOKOSUKA JAPAN

Posted On: 11 JUN 2024 5:49PM by PIB Delhi



It is Maritime bilateral exercise between India - Japan

- **This is the eighth edition of JIMEX**
- JIMEX series of exercises commenced in January 2012 with special focus on maritime security cooperation.