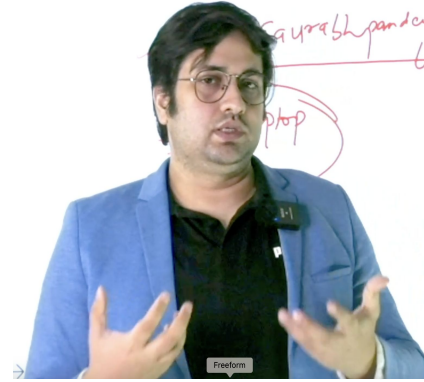


Topics - MINDS MAPS included (Daily current affairs 20th & 19th APRIL 2025

- What is K2-18b?
- Stem Cell Therapies for Parkinson's Disease
- Cosmic Rotation:
- Jyvasfylavirus
- Role of CoQ9 and CoQ10.
- Supreme Court of India on governor role
- Solimões
- The Supreme Court's Ruling on Wikipedia



By saurabh Pandey

Does the planet K2-18b show signs of life?

What have scientists discovered in the new research? Which molecule indicates the possible presence of life?

Yamdevan Mukundh

The story so far:
On April 18, an international research team uploaded a paper in which it reported that the distant exoplanet K2-18b may be habitable. The claim was met with cautious excitement by astronomers. While finding places in the universe that could harbour life is a vital quest in the field, experts – including the team that made the finding – are cautious because many similar claims in the past have had to be retracted after closer inspection.

What is K2-18b?

K2-18b is an exoplanet – a planet outside the solar system. It's located 124 lightyears away from the earth in the constellation Leo, orbiting the star K2-18. It is 5.24 times wider and roughly nine-times more massive than the earth, dimensions that suggest it likely possesses a hydrogen-rich atmosphere. The amount of stellar radiation it receives from its star is comparable to what the earth receives from the sun. It was discovered by the Kepler telescope in 2015. In 2019, the Hubble Space Telescope found that its atmosphere contains signs of water vapour. Four years later, the James Webb Space Telescope (JWST) also detected signs

of carbon dioxide and methane. Scientists had previously shown in modelling studies that it's possible to find methane and carbon dioxide and no ammonia in a hydrogen-rich atmosphere if (but not only if) there is a liquid water ocean on a planet's surface.

What kind of planet might K2-18b be?

According to the new work, K2-18b might be a hydrogen world, covered with an ocean overlaid by a hydrogen-rich atmosphere. The JWST is designed to study such planets better than other telescopes can, although K2-18b itself isn't confined to be hydrogen. Some computer models suggest it may also have a stratosphere and some carbon oxides and cyanide in the middle atmosphere. Researchers have also said its surface conditions may be close to the runaway greenhouse threshold – when the concentration of greenhouse gases in the atmosphere prevents any heat from escaping the surface. This is why Venus is a hellcape.

In the new paper, the team reported the presence of two compounds – either dimethyl sulphide (DMS) or dimethyl disulphide (DMDS) – in K2-18b's atmosphere. Scientists have suggested that DMS could be a biomarker, a sign of life, on exoplanets. DMS on earth is made mostly in the oceans. Phytoplankton produce a molecule called dimethylsulphoniopropionate. When they die, enzymes break up the molecule to release DMS. It's also emitted when bacteria break up plant matter. In 2015, researchers reported that 70% of soil bacteria contain a gene that allows them to produce DMS.

Is K2-18b really habitable?

Experts have said the only way to find extraterrestrial life is for them to directly detect it. This is why NASA launched its Clipper mission in 2026 to study Jupiter's moon Europa. Attempts to look for conditions suitable for life that too only fail as we know it and the presence of specific molecules from a distance can only be suggestive of habitable conditions.

Many uncertainties in these studies also arise from astronomers' instruments and the accuracy of models they use to simulate conditions in outer space. Hitherto unknown chemical processes may be capable of creating the molecules scientists consider to be biomarkers. Or JWST not being able to detect certain compounds could mean they're present at concentrations below its detection threshold.

In 2022, the team had reported detecting a hint of DMS on K2-18b, now it has said the compound may actually be present in 1,000-times greater quantities than on the earth. Since DMS is short-lived, something on the surface could be constantly producing it. However, the paper only reported a significant detection of DMS or DMDS, not DMS alone.

Scientists have also been modelling the physical conditions on K2-18b to check for alternative explanations for its chemistry. One study in 2023 said "most of the current hydrogen world observational targets are not likely to sustain a liquid water ocean". In 2024, a U.S. team published a paper saying the JWST observations can be explained by K2-18b being "a gas-rich mini-Neptune" that "does not need a biosphere or other unknown source of methane to explain the data". In January, an international team reported that "a comprehensive reanalysis" of K2-18b data collected by JWST confirmed the presence of methane but yielded "no statistically significant or reliable evidence for carbon dioxide or DMS". This conclusion doubted whether K2-18b was a hydrogen world.

Several take-aways – including the TRAPPIST system, the exoplanet WASP-42b – have taught scientists to scrutinise such claims.

What is K2-18b?

Introduction to K2-18b

- K2-18b is an intriguing exoplanet located 124 light-years away in the constellation Leo.
- It orbits the star K2-18 and is a prime candidate for studying the potential for life beyond our solar system

Location and Discovery

The Kepler Telescope's Role:

- Discovered in 2015 by the Kepler Space Telescope.
- K2-18b is 5.2 times wider and about nine times more massive than Earth.

Hubble Space Telescope Findings:

- In 2019, detected water vapor in K2-18b's atmosphere.
- In 2023, the James Webb Space Telescope found carbon dioxide and methane

Physical Characteristics

Size and Mass Comparison:

- K2-18b is significantly larger and more massive than Earth, suggesting a hydrogen-rich atmosphere.

Atmosphere Composition:

- Receives stellar radiation similar to Earth.
- Potential for a liquid water ocean due to the presence of methane and carbon dioxide.

The Potential of Liquid Water

- Liquid water presence suggests K2-18b could be a Hycean world—an ocean-covered planet with a thick hydrogen atmosphere.

What Kind of Planet is K2-18b?

- **The Hycean World Concept:**
 - Vast ocean with a thick atmosphere.
 - Possible stratosphere and complex atmospheric chemistry.
- **Surface Conditions and Greenhouse Effect:**
 - Surface conditions may be on the verge of a runaway greenhouse effect, similar to Venus.

Biomarkers and Signs of Life

The Role of Dimethyl Sulphide (DMS):

Presence of DMS or DMDS in the atmosphere is a potential biomarker.

Implications for Astrobiology:

Discovery of DMS could indicate life, altering our understanding of life in the universe.

Future Research and Exploration

Continued exploration by the JWST and other telescopes will enhance our understanding of K2-18b and similar exoplanets.

Conclusion

K2-18b represents humanity's quest to understand our place in the universe, with its potential for life and intriguing characteristics



How far is K2-18b from Earth?

K2-18b is located 124 light-years away from Earth in the constellation Leo.

What is the significance of water vapor on K2-18b?

The presence of water vapor suggests that K2-18b may have conditions suitable for life.

What is a Hycean world?

A Hycean world is a type of exoplanet that is covered by an ocean and has a hydrogen-rich atmosphere.

What are biomarkers, and why are they important?

Biomarkers are substances that indicate the presence of life. They are crucial for astrobiology and the search for extraterrestrial life.

What telescopes are studying K2-18b?

The Kepler Space Telescope, Hubble Space Telescope, and James Webb Space Telescope are all involved in studying K2-18b.

Trials demonstrate safety of stem cell therapy for Parkinson's

The Hindu Bureau

Two independent clinical trials demonstrate the safety of stem cell therapies for Parkinson's disease. The papers, published in *Nature*, investigate the use of cells derived from human induced pluripotent stem cells and human embryonic stem cells, respectively.

Parkinson's disease is a neurodegenerative disease

characterised by the progressive loss of neurons that produce dopamine, a neurotransmitter. Cell therapy, specifically replenishing dopamine-producing neurons (dopaminergic) in the brain, could provide a potentially more effective treatment with fewer adverse effects.

To examine the safety and potential side effects of cell therapy for Parkin-

son's disease, researchers at Kyoto University, Japan conducted a phase I/II trial. Seven patients received transplantation of dopaminergic progenitors derived from human induced pluripotent stem cells into both sides of the brain. No serious adverse events were reported, and the transplanted cells produced dopamine without overgrowth or forming tu-

mours. The researchers also observed a decrease in motor symptoms associated with Parkinson's disease (a secondary outcome of the study) in four of the six participants who continued the trial to efficacy evaluation while not taking their standard medication, and in five while taking medication. However, these results varied according to the measures used, with some measures showing

minimal changes.

In a separate phase I clinical trial, researchers from Memorial Sloan Kettering Cancer Center, New York, explored the safety of a dopaminergic neuron progenitor cell product (bemdaneprocél) derived from human embryonic stem cells. Twelve patients received surgical transplantation of bemdaneprocél to the putamen on both sides of the brain.

Five participants received a low dose and seven received a high dose. There were no severe adverse events related to the therapy during 18 months of follow-up. Some improvement in motor function (a secondary outcome of the study) was observed in patients in both the low-dose and high-dose cohorts. However, the degree of improvement varied across measured parameters.

Stem Cell Therapies for Parkinson's Disease

Understanding Parkinson's Disease

What is Parkinson's Disease?

- Affects millions globally, not limited to the elderly.
- Caused by the death of dopamine-producing neurons.
- Leads to motor function decline and reduced quality of life.

The Role of Dopamine in Parkinson's Disease

- Dopamine is crucial for smooth movements.
- Its deficiency results in symptoms like tremors and stiffness.
- Stem cell therapy aims to replenish these neurons

The Promise of Stem Cell Therapy

What is Stem Cell Therapy?

- Uses stem cells to repair or replace damaged tissues.
- Potential to revolutionize treatment for diseases like Parkinson's.

Types of Stem Cells Used in Research

- Human Induced Pluripotent Stem Cells (iPSCs)
- Human Embryonic Stem Cells (hESCs)
- Both types are explored for developing dopaminergic neurons.

FAQs

What is Parkinson's disease?

A neurodegenerative disorder with dopamine neuron loss, causing motor symptoms.

What are stem cell therapies?

Use stem cells to repair or replace damaged cells, offering new treatment avenues.

What types of stem cells are used in Parkinson's research?

Human induced pluripotent stem cells (iPSCs) and human embryonic stem cells (hESCs).

What were the outcomes of the clinical trials?

No serious adverse events; some patients showed motor function improvements.

What does the future hold for stem cell therapies in Parkinson's disease?

Promising results, but further research is needed for efficacy and safety confirmation

THE HINDU SESSION TO BE ON NEW CHANNEL

Type - LET'S CRACK UPSC CSE ON YOU TUBE

CLICK ON LIVE

SESSION TO START FROM NEXT WEEK - MON/TUESDAY

TIMING - 8:30 AM





New study suggests the universe could be spinning

A new study suggests the universe may rotate extremely slowly. Researchers developed a mathematical model of the universe that added a tiny amount of rotation. It suggests the universe could rotate once every 500 billion years – too slow to detect easily, but enough to affect how space expands over time. The idea does not break any known laws of physics, and it might explain why measurements of the universe's growth do not quite agree. The next step is finding ways to spot signs of this cosmic spin.

Cosmic Rotation: A New Perspective on the Universe



A new study suggests that the universe may rotate very slowly.



Researchers developed a mathematical model that includes a slight rotation of the universe.



The proposed rotation period is once every 500 billion years, making it challenging to detect.



This slow rotation could influence the expansion of space over time.



The concept is consistent with existing laws of physics and does not contradict them.



The study may help clarify discrepancies in measurements of the universe's growth.



Future research will focus on identifying potential signs of this cosmic spin.

Summary: A study proposes that the universe rotates once every 500 billion years, potentially affecting its expansion and helping to resolve measurement discrepancies



Brisk walking pace lowers risk of heart rhythm abnormalities

A brisk walking pace, and the amount of time spent at this speed, may lower the risk of atrial fibrillation, tachycardia (rapid heartbeat), and bradycardia (very slow heartbeat), as per a study. A slow pace was defined as walking at less than 4.8 km an hour; steady/average pace as 4.8-6.4 km per hour; and a brisk pace as more than 6.4 km per hour. A brisk walking pace was associated with lower (35% and 43%, respectively) risks of all heart rhythm abnormalities.

Science Facts

- A brisk walking pace, and the amount of time spent at this speed, may lower the risk of atrial fibrillation, tachycardia (rapid heartbeat), and bradycardia (very slow heartbeat), as per a study.



Question Corner

More common

How common are giant viruses?


For the first time in Finland, researchers have isolated a giant virus which was named Jyvaskylavirus. The discovery shows that giant viruses are more common in northern regions than researchers have thought. It also illustrates that there are still many structures whose origins and functions have not been properly studied. In recent years, giant viruses have been discovered that can be as large as bacteria. These viruses infect amoebas and other microscopic organisms. Most of the giant viruses identified so far have been


found in Europe and South America, and their life cycles and distribution are poorly understood. The giant virus, named Jyvaskylavirus, was discovered when environmental samples were mixed with a culture of the amoeba *Acanthamoeba castellanii*. Researchers elucidated the genome and structure of the Jyvaskylavirus, which was found to be related to Marseilleviruses previously isolated from France. Other new giant viruses were also detected in environmental samples.


Readers may send their questions / answers to
questioncorner@thehindu.co.in


Discovery of Jyvaskylavirus


Key Insights


 **Discovery of Jyvaskylavirus:** Researchers in Finland have isolated a new giant virus named Jyvaskylavirus.


 **Geographical Insights:** The discovery suggests that giant viruses are more common in northern regions than previously thought.

 **Unexplored Structures:** Many structures related to giant viruses remain unstudied, particularly concerning their origins and functions.

 **Size Comparison:** Giant viruses can be as large as bacteria, primarily infecting amoebas and other microscopic organisms.

 Global Distribution: Most giant viruses identified so far have been found in Europe and South America, with unclear life cycles and distribution.

 Genomic Analysis: The genome and structure of Jyvaskylavirus were elucidated, showing a relation to Marseilleviruses from France.

 Additional Discoveries: Other new giant viruses were also detected in environmental samples during the research.

Summary: Researchers in Finland have isolated a new giant virus, Jyvaskylavirus, revealing the prevalence of such viruses in northern regions and highlighting the need for further study on their origins and functions

Role played by coenzymes in human food



**SPEAKING OF
SCIENCE**

D. Balasubramanian

Enzymes are proteins that catalyse reactions in a cell, making metabolism efficient. For efficient functioning, many enzymes require some molecules as cofactors. These helper molecules are called coenzymes. Coenzymes are naturally occurring organic molecules that bind to and support the activity of enzymes. Coenzyme Q, also known as ubiquinone, is a molecule containing several isoprene units, which are antioxidants and offer stability against stress. Ubiquinone is present in every cell membrane and is crucial for energy production. It comes in 10 different types (CoQ1...Q10). Each one of them is a molecule

in the respiratory chain as a water-insoluble, but lipid-soluble antioxidant. All these coenzymes play a vital role in the function of the mitochondrion, the major energy producers in the cell. In this article, we focus mainly on CoQ9 and CoQ10.

Most cereal crops produce CoQ9, which has nine isoprene units.

CoQ9 is rich in wheat, rice, oats, barley, corn, rye, and millet. It is also rich in bamboo, barley, and flowering plants such as cinnamon, avocado, and pepper.

Importance of CoQ10

In humans, CoQ10 is a component of the mitochondrial electron transport chain, a process that generates most of the body's cellular energy. Organs such as the heart have high energy demands and contain high concentrations of CoQ10. CoQ9 is



CoQ9 is rich in wheat, rice, barley, corn, rye, millet. SANDEEP SAXENA

rich in our daily foods as it is predominant in rice, wheat, and maize. But we need more of CoQ10 for our health, since genetic factors, aging, and neurological problems require additional levels of this ubiquinone.

In 2008, Montini and coworkers from Milan, Italy, showed that supplementing CoQ10 helped patients who had neurological problems; re-

sults were published in *The New England Journal of Medicine*.

Similarly, in 2012, Shamma Ahmed and colleagues from the Institute of Neurology and National Hospital, London showed that infants with CoQ10 deficiency could be helped upon the addition of a ubiquinone analogue. And several dieticians and medical companies prescribe and sell drugs which are

equivalent to CoQ10.

Producing CoQ10

In this connection, Kadowaki and others from the National Institute of Agrobiological Sciences, Ibaraki, Japan, showed in 2006 in *FEBS Letters* that rice plants can be genetically engineered to produce CoQ10. Here, the authors were able to engineer the gene called 'DdsA' in rice plants to produce CoQ10. And in 2010, the same group introduced this gene in rice plants, which have more sugar content, and more CoQ10 was produced, the yield being 1.3 to 1.6 times higher. And epigenetic engineering using the Nobel-winning CRISPR-Cas9, which allows the editing of precise sites in the genome, has been tried successfully by Muneaki Nakamura and others (*Nature Cell Biology*, 2021)

'Gene-edited plants make jump from farm to factory' was the title given in the February 20, 2025, issue of the journal *Nature* in its Research Highlights selection, referring to the paper by Jing-Jing Xu and coauthors from the Centre of Excellence in Molecular Plant Sciences of the Chinese Academy of Sciences, Beijing. In this paper, the authors studied hundreds of plant species, concentrating on CoQ1, the enzyme that synthesises the polyisoprenoid chain of CoQ. In rice, they genetically modified this enzyme by multiplex prime editing, a sophisticated CRISPR-based technique, to generate biofortified rice varieties that contain up to 75% CoQ10. Such a painstaking analysis has revealed how to engineer a variety of edible crops ('farm') in order to produce antioxidant supplements ('factory').

Understanding Enzymes and Coenzymes: The Role of CoQ9 and CoQ10.

What Are Enzymes?

- Enzymes are proteins acting as catalysts in cells, speeding up chemical reactions.
- They ensure efficient metabolism, akin to factory workers maintaining smooth operations.
- Without them, life-sustaining reactions would be too slow.

The Function of Enzymes in Metabolism

- Metabolism involves complex chemical reactions essential for body function.
- Enzymes break down nutrients, synthesize molecules, and facilitate energy production.
- They are crucial for processes like digestion and DNA replication

The Role of Cofactors and Coenzymes

What Are Coenzymes?

Coenzymes are organic molecules that bind to enzymes, enhancing their activity. They function like keys fitting into locks, enabling enzymes to work effectively.

Importance of Coenzymes in Enzyme Activity

- Coenzymes act as sidekicks, supporting enzymes in their tasks.
- Without them, many enzymes would be ineffective.

Introduction to Coenzyme Q (Ubiquinone)

- Coenzyme Q (ubiquinone) is vital for cellular energy production.
- Found in every cell membrane, it has antioxidant properties due to its isoprene units

Types of Coenzyme Q

- Exists in ten forms, CoQ1 to CoQ10, each playing a role in the respiratory chain.
- Acts as a lipid-soluble antioxidant, protecting cells from oxidative damage.

Focus on CoQ9

Sources of CoQ9

- Found in cereal crops like wheat, rice, oats, and barley.
- Also present in bamboo, cinnamon, avocado, and pepper

The Significance of CoQ10

CoQ10 in Human Health

- Essential for organs with high energy demands, like the heart.
- Plays a critical role in the mitochondrial electron transport chain.

CoQ10 and Energy Production

Converts food into usable energy, crucial for overall health.

Research on CoQ10 Supplementation

Studies Supporting CoQ10 Benefits

- Beneficial for individuals with neurological issues.
- Studies in 2008 and 2012 showed positive effects on patients with CoQ10 deficiency.

Producing CoQ10: Advances in Biotechnology

Genetic Engineering of Rice for CoQ10

- Biotechnology advancements allow CoQ10 production through genetic engineering.
- Japanese researchers increased CoQ10 yield in rice by manipulating genes.

The Role of CRISPR Technology

CRISPR allows precise genome edits, creating biofortified rice with 75% more CoQ10.

Conclusion

- Enzymes and coenzymes like CoQ9 and CoQ10 are crucial for metabolism and health.
- Understanding these molecules opens doors to innovative health solutions.

A restoration of sanity to the constitutional system



SAKSHI PANDEY
Editor
CSF
www.csfindia.com

The judgment of the Supreme Court of India, on April 8, 2025, namely, *The State Of Tamil Nadu vs The Governor of Tamilnadu and Anr.*, can be called a landmark one as it has brought greater clarity to the constitutional provision dealing with the giving of assent to a Bill by a Governor. In this case, the background to the case is about the Governor of Tamil Nadu, R.N. Ravi, who had kept with him 10 Bills without taking any decision on them for many years. Finally, when the Assembly passed the Bills again and sent them to him, the Governor, instead of giving his assent, as per the mandate of Article 200 of the Constitution, sent them to the President of India for consideration. He sent the Bills to the President only after the Government of Tamil Nadu approached the top court.

The Bench of the Court (Justice J.B. Pardiwala and Justice R. Mahadevan) has now held that the action of the Governor in sending the Bills to the President at that stage to be unconstitutional and has struck it down. The Court also struck down the action taken by the President on those Bills – she had withheld assent. Invoking its special power under Article 142, the Court declared that all those Bills rejected by the President shall be deemed to have been assented to.

It is perhaps the first time in the history of the Court that Bills passed by the legislature of a state and withheld by the President have been declared as assented to by the Court. It is an extraordinary remedy to an extraordinary situation created by an extraordinary action of a State Governor.

In fact, Tamil Nadu is not the only State where the Governor has sat on Bills passed by the legislature. It has happened in Kerala, Telangana and Punjab. Kerala has now approached the Court on the same issue, which is yet to be heard.

The Bill does not die

Article 200 lays down the course of action to be followed by the Governor when a Bill duly passed by the legislature is presented to him. The logical course the Governor should follow is to give assent to the Bill. But if he does not follow this and decides to withhold assent to the Bill, the said Article says that he may declare that he is withholding assent. It would thus appear that once the Governor withholds assent, the Bill will die a natural death. The wording of this Article would convey such a meaning. But this part of the Article was very cogently explained by the Court in *State Of Punjab vs Principal Secretary to The Governor of Punjab and Another* (2023). The Court made it unambiguously clear that a declaration by the Governor that he is withholding assent does not bring an end to the Bill. It held that withholding of the Bill should be followed by sending the Bill to the legislature for reconsideration as soon as possible.

When the Bill is thus sent to the legislature, it would reconsider it promptly and send it back to the Governor either in the form in which it was passed originally or with amendments suggested



P.D.T. Achary

is former Secretary
General, Lok Sabha

The importance
of the top
court's
judgment on
the Tamil Nadu
Governor lies in
the need to
make suitable
changes in the
Constitution
that relate to
the issue of
assent to Bills

by the Governor. Either way, the Governor will have to give assent to the Bill. He cannot exercise any veto against it. The Court has explained this point in the following words: "If the governor decides to withhold assent under the substantive part of Article 200 the logical course of action is to pursue the course indicated in the first proviso of remitting the Bill to the state legislature for reconsideration ... if the first proviso is not read in juxtaposition to the power to withhold assent conferred by the substantive part of Article 200 the governor as the unelected head of the state would be in a position to virtually veto the functioning of a duly elected legislature by simple declaring that assent is withheld without any further recourse".

This judicial explanation has been carried forward by the Court in the Tamil Nadu case. The Court has reiterated this position, namely, withholding assent is not the end of the story so far as the Bill is concerned but the Governor is mandated to send the Bill back to the legislature for its reconsideration and the Governor shall give assent to the Bill which is sent to him after reconsideration.

The Court's 'time limit' and legality

Three crucial points have been decided by the Court which make this judgment truly historic. The first relates to the time limit fixed within which the Governor as well as the President of India should decide the issue of assent. The minimum period is one month and the maximum, three months. If the Governor or the President does not adhere to this time limit, the aggrieved State can seek the intervention of the constitutional court. Obviously, the Court went to the extent of fixing a time limit in this case because of the fact that the Governor sat on the Bills for years without taking any decision. The Court has said that the Governor does not have the power to exercise a pocket veto or an absolute veto while exercising his power under Article 200.

Following the judgment, questions have been raised on the legality of a time limit under Article 200. The Court has clarified it in the judgment – it has stated that it is guided by the inherent expedient nature of the procedure prescribed under Article 200 and the well-settled legal principle that where no time limit for the exercise of a power is prescribed, it should be exercised within a reasonable period. The Court has viewed the deliberate inaction on the part of the Governor in assenting to the Bills or reserving them for the consideration of the President as a serious threat to the federal polity.

The second point relates to the question of discretion of the Governor in withholding assent or reserving the Bill for the consideration of the President.

The Court has taken the position that the Governor can take either action only on the advice of the Council of Ministers. The judgment says that when the Governor withholds assent, he has to send the Bill to the legislature for

reconsideration and when the Assembly sends the Bill back to the Governor with or without the amendments suggested by him, the Governor has to give assent.

But there is a problem with this proposition.

For example, what is the occasion when the Governor has to advise the Governor to withhold assent and send the Bill to the Assembly for reconsideration? When the legislature can send back the Bill after reconsideration without accepting any of the amendments suggested by the Governor, how can it be then said that the Council of Ministers have advised the Governor to propose amendments to the legislature when the government commands a majority there? In fact, on the question of discretion, the Court has not been consistent as different Benches have given different opinions thereon.

Constitutional heads and judicial review

The third, and most crucial, point is about judicial review of the decision of the Governor and the President. The basic proposition laid down by the Court after reviewing a catena of cases is that "no exercise of power under the constitution is beyond the pale of judicial review". So, it has held that there is no reason to exclude the discharge of functions by the Governor or the President under Articles 200 and 201, respectively, from judicial review.

The judgment has been assailed by the Kerala Governor who has said that this is a case of judicial overreach and that it is the job of Parliament, and not the Court, to amend the Constitution. While it is true that Parliament alone has the right to amend the Constitution, it is the job of the judiciary to explain and interpret the constitutional provisions. Another issue that has been raised by a section of lawyers is that the issues decided by Justice Pardiwala's Bench can be decided only by a Constitution Bench under Article 145(3). In fact, the Constitution Bench under Article 145(3) decides substantial questions of law as to the interpretation of the Constitution.

Closer scrutiny would reveal that none of these points comes under the category of substantial question of law within the meaning of that Article. As a matter of fact, the Court has only brought out the inherent meaning and amplified the dimensions of it in Articles 200 and 201 with the objective of preventing the subversion of the constitutional order. By doing so, the Court has restored sanity to the constitutional system which had come under severe strain due to plain arbitrariness and deliberate inaction on the part of constitutional authorities.

Decades ago, India had seen the unedifying spectacle of a President sitting on the postal Bill for years, with a helpless Union government unable to do anything. This underscores the need to make suitable changes in the relevant provisions of the Constitution relating to the issue of assent to Bills, whether they are passed by Parliament or a State legislature. The cue must be from this judgment. Therein lies the importance of this judgment.

The Landmark Judgment of the Supreme Court of India on governor role



Introduction

On April 8, 2025, the Supreme Court of India delivered a landmark judgment in the case of *The State Of Tamil Nadu vs The Governor of Tamilnadu and Anr.* This decision clarified constitutional provisions regarding the assent to a Bill by a Governor, impacting future governance in India

Background of the Case

The Role of the Governor: Acts as a bridge between the state legislature and the central government.

The Bills in Question: Governor R.N. Ravi kept ten Bills pending, later sending them to the President, sparking controversy

The Supreme Court's Decision

- Unconstitutionality of the Governor's Action: The Court ruled the Governor's action as unconstitutional and nullified the President's decision to withhold assent.
- The Court's Use of Article 142: Invoked special powers to declare all rejected Bills as assented to, addressing the extraordinary situation

The Bill Does Not Die

- The Court emphasized that a declaration by the Governor to withhold assent does not equate to the death of the Bill. Instead, the Governor is required to send the Bill back to the legislature for reconsideration, ensuring that the legislative process continues.

Time Limits and Legal Clarity

The Court's Time Frame

- One of the most crucial aspects of the judgment is the establishment of a time limit for the Governor and the President to decide on assent. The Court stipulated a minimum of one month and a maximum of three months for these decisions. If this timeline is not adhered to, the aggrieved state can seek intervention from the constitutional court.

The Legality of Time Limits

- The Court clarified that the imposition of a time limit is guided by the need for expediency in governance. The deliberate inaction of the Governor poses a threat to the federal structure, and the Court's ruling aims to prevent such scenarios in the future.

Discretion of the Governor

Advice of the Council of Ministers

- The judgment also addressed the discretion of the Governor in withholding assent. The Court ruled that the Governor can only act on the advice of the Council of Ministers. If the Assembly sends the Bill back, the Governor is obliged to give assent, reinforcing the accountability of the Governor to the elected legislature.

Judicial Review and Its Importance

The Role of the Judiciary

- The Court underscored that no exercise of power under the Constitution is beyond judicial review. This principle ensures that the actions of the Governor and the President are subject to scrutiny, thereby upholding the rule of law and preventing arbitrary governance.

Conclusion

- The Supreme Court's judgment in *The State Of Tamil Nadu vs The Governor of Tamilnadu and Anr.* marks a pivotal moment in Indian constitutional law.
- By clarifying the roles and responsibilities of the Governor and establishing a framework for timely decision-making, the Court has reinforced the principles of democracy and accountability.
- This landmark ruling serves as a reminder of the judiciary's role in safeguarding the Constitution and ensuring that the legislative process is not hindered by inaction.

Facts



- In fact, the Constitution Bench under Article 145(3) decides substantial questions of law as to the interpretation of the Constitution.
- Article 201 of the Indian Constitution outlines the procedure when a Governor reserves a bill for the President's consideration. It specifies that the President must either assent to the bill or withhold assent, but doesn't specify a time limit for the President's decision

Golden hour



River dwellers sail in canoes down the Solimões River during the sunset in Alvarães, Amazonas state, northern Brazil on Thursday. AFP

Mapping

- **Solimões is the name often given to upper stretches of the Amazon River in Brazil from its confluence with the Rio Negro upstream to the border of Peru.**



A welcome move

Arbitrary takedown orders on Wikipedia will stifle flow of information

The Supreme Court, in quashing the Delhi High Court's orders against Wikimedia to take down a Wikipedia page on the basis of a defamation case filed by the news agency, Asian News International (ANI), has set right an error by the High Court. A High Court judgment, passed on April 2, allowed the taking down of the Wikipedia page by saying that the statements were defamatory and were not a verbatim reproduction of the text in the references that it quoted; that the references were themselves "editorials" or "opinionated articles" and that being an encyclopaedia, Wikipedia carried a "higher responsibility". The reasoning is problematic as the references are based on long form reporting and quotes from independent investigators, and are not "opinions" or "editorials" as the High Court made them out to be. The Court has clearly differed with the High Court's reasoning by observing that the takedown order was based on too wide a prayer, and noted that the directions to remove all false, misleading and defamatory content were too broadly worded. The Bench has now directed the news agency to make a fresh plea to the High Court pointing out specific portions to be removed from the webpage. The fact that Wikipedia is an Internet intermediary which enjoys safe harbour provisions as the content creation and moderation are handled by users of its site should suggest that any wide-ranging takedown order could punish the very model on which the encyclopaedia operates.

Wikipedia is a community-driven encyclopaedia freely available on the Internet and is maintained by volunteers across the world. Even if the quality of articles is not uniform, their editors generally include experts and Wikipedia allows users to edit the content provided they stick to site guidelines. Disputes on content leading to "editing wars" are generally resolved by discussions on the page and measures such as placing the page on "extended confirmed protection" or "full protection", allowing only "extended confirmed users" for the former and administrators for the latter to make changes. These users are not selected by Wikimedia but elected by community members based on their prior editing activity and reputation. These processes have ensured a significant degree of reliability on the encyclopaedia, even as it has become a repository of more than 62.95 million articles in over 350 languages. In asking for the takedown of articles by interpreting critical information as defamation and by even threatening penal action against Wikipedia, judicial actions could unwittingly lead to the stifling of open discussion of entities on the encyclopaedia, thereby acting against the interest of the free flow of information.

The Supreme Court's Ruling on Wikipedia: A Step Towards Upholding Free Information.

Introduction

- The Supreme Court has overturned the Delhi High Court's orders against Wikimedia in a defamation case filed by ANI.
- This decision emphasizes the importance of free information in the digital era.

Background of the Case

The Defamation Claim by ANI

ANI filed a defamation suit against Wikipedia, alleging misrepresentation of facts.

The Delhi High Court's Initial Ruling

The court favored ANI, ordering the takedown of the Wikipedia page for alleged inaccuracies

The Supreme Court's Intervention

Quashing the High Court's Orders

The Supreme Court found the High Court's interpretation of defamation overly broad.

Key Observations by the Supreme Court

Emphasized that Wikipedia's content was based on credible sources, not mere opinions.

Understanding Wikipedia's Role

Wikipedia as a Community-Driven Platform

Operates on contributions from global volunteers, ensuring diverse perspectives.

The Importance of User-Generated Content

Allows for content editing and improvement, fostering accountability

The Implications of the Ruling

Impact on Wikipedia's Operations

Protects Wikipedia's model of user-generated content and community moderation.

The Balance Between Defamation and Free Speech

Highlights the need to protect free speech while preventing defamation

Conclusion

The ruling is a victory for free information and the collaborative nature of Wikipedia. It underscores the importance of safeguarding platforms that enable open dialogue.

THE HINDU SESSION TO BE ON NEW CHANNEL

Type - LET'S CRACK UPSC CSE ON YOU TUBE

CLICK ON LIVE

SESSION TO START FROM NEXT WEEK - MON/TUESDAY

TIMING - 8:30 AM



PDF Download → <https://t.me/gesreporter>



THE HINDU Analysis By saurabh sir for upsc
1 882 subscribers

Pinned Message
The hindu session is live 🔥🔥🔥

<https://youtu.be/JQC9g4tXVI?si=8L4HsagHQ2TVDEIQ>

YouTube
30th & 29th September 2024 | The Hindu Editorial & News Analysis | Daily current affairs | S pandey
#thehinduanalysisbysaurabhpandey #dailycurrentaffairs #thehinduanalysis #thehinduanalysisbysaurabhpandey #Saurabhpandeyupsc
Session covers the hind...

BY Saurabh Pandey sir For upsc aspirants

THE HINDU ANALYSIS
30th & 29th September-2024
saurabh pandey

Why Tropical Storm John unique
Why Flood in Nepal?

Saurabh pandey UPSC
<https://youtu.be/JQC9g4tXVI?si=8L4HsagHQ2...>
The hindu session is live 🔥🔥🔥 176 11:37 AM

THE HINDU Analysis By saurabh sir for upsc pinned "The hindu session is live 🔥🔥🔥"

sp sir 29th and...24 the hindu.pdf
5.8 MB · 164 12:20 PM

Broadcast