

Chillai Kalan: The harshest Phase of winter in Kashmir

Key Points:

- ❖ The 40-day-long period known as Chillai Kalan, marking the harshest phase of winter in Kashmir, commenced on Saturday with an unprecedented cold spell. According to the meteorological department, Srinagar experienced its coldest December night in five decades as temperatures plunged to a chilling minus 8.5 degrees Celsius.
- ❖ **Chillai Kalan:** Harshest winter period in Kashmir from **21st December to 29th January** annually. Persian term meaning 'major cold'.
- ❖ **Phases following Chillai Kalan:** **Chillai Khurd (Small Cold):** 20 days long, from **30th January to 18th February**. **Chillai Bachha (Baby Cold):** 10 days long, from **19th February to 28th February**.
- ❖ **Impact on Kashmir:** **Temperature:** Drops considerably, with minimum temperatures often **below freezing point**. Maximum temperature also decreases significantly.
- ❖ **Snowfall:** Highest chances occur during these 40 days.
- ❖ **Water bodies:** Freezing of lakes and rivers, including the **Dal Lake**.
- ❖ This 40-day period brings significant hardships for the people of Kashmir.



PM Modi Visits Kuwait: Historic First in 43 Years

Key Points:

- ❖ Prime Minister Narendra Modi arrived in Kuwait on Saturday for a two-day official trip. During his stay, he will hold bilateral talks with the Gulf country's leadership and meet the Indian diaspora. Kuwaiti Emir Sheikh Meshal Al-Ahmad Al-Jaber Al-Sabah had invited PM Modi to Kuwait. Indira Gandhi was the last PM to visit the country in 1981.



Why is Kuwait Important for India?

Energy Supply:

- ❖ Kuwait is one of the key suppliers of oil to India. As a major oil-producing country, Kuwait provides a steady supply of crude oil, which is essential for India's energy needs. India imports a significant portion of its oil from the Middle East, and Kuwait plays a crucial role in this.

Labor Migration:

- ❖ There is a large Indian expatriate community in Kuwait, with over a million Indians residing and working there. Many of them are employed in sectors such as construction, services, and healthcare. This migration contributes to India's economy through remittances, which are a vital source of income for many families in India.

Trade and Economic Relations:

- ❖ India and Kuwait maintain strong trade relations, with India exporting goods such as machinery, textiles, and food products, while importing oil and other commodities. This trade benefits both economies and fosters mutual economic growth.

Strategic Location:

- ❖ Kuwait's location in the Gulf region, close to the crucial oil shipping lanes, makes it strategically important for energy security. Its geopolitical position also enhances India's engagement in the region.

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- ❖ India is among the top trading partners of Kuwait.
- ❖ The Indian community is the largest expatriate community in Kuwait. Indians form 21 per cent (1 million) of the total population of Kuwait and 30 per cent of its work-force (approximately 9 lakh).
- ❖ Indian workers top the private sector as well as the domestic sector workforce list, according to the Indian Embassy in Kuwait.
- ❖ Kuwait and India's bilateral trade was valued at \$10.47 billion in the financial year 2023-24.
- ❖ Kuwait is also India's sixth-largest crude supplier, meeting 3 per cent of the country's energy needs. Indian exports to Kuwait reached \$2 billion for the first time, while investments by the Kuwait Investment Authority in India exceed \$10 billion.

Prime Minister Narendra Modi was on Sunday awarded Kuwait's highest honour 'The Order of Mubarak Al Kabeer'.

- ❖ It is the 20th international award bestowed upon him by a country.
- ❖ **'The Order of Mubarak Al Kabeer' is a knighthood order of Kuwait.** It is awarded to Heads of State and foreign Sovereigns and members of foreign royal families in sign of friendship. "I am honoured to be conferred the Mubarak Al-Kabeer Order by His Highness the Amir of Kuwait, Sheikh Meshal Al-Ahmad AlJaber Al Sabah. I dedicate this honour to the people of India and to the strong friendship between India and Kuwait," PM Modi posted on X. It has been previously awarded to foreign leaders like Bill Clinton, Prince Charles and George Bush. Last month, PM Modi was conferred with the highest national award of Guyana, 'The Order of Excellence' during his visit to the nation.



World Bank ADB approve loans for the Amravati Project of Andhra Pradesh

Key Points:

- ❖ The World Bank and the Asian Development Bank have approved separate loans to the Amaravati Inclusive and Sustainable Capital City Development Program of the Andhra Pradesh government.
- ❖ The Programme seeks to develop the new capital city of Andhra Pradesh, Amaravati, as a smart and green city with world-class infrastructure. Both the World Bank and the ADB will finance the development of the first phase of the Amaravati project.

- ❖ Both the multilateral institutions will provide loans in Japanese Yen. Japan is a partner in developing Amaravati as a new modern city in Andhra Pradesh and has agreed to provide financial and technical assistance.
- ❖ **\$800 Million loan from the World Bank:** The World Bank Executive Board approved the \$ 800 million loan for the Amaravati project in a meeting in Washington, D.C, USA on 19 December 19 2024. The duration of the loan is 29 years, including a grace period of 6 years. The loan will be provided in Japanese Yen.
- ❖ **ADB sanctions \$788.8 million loan** for Amaravati The Asian Development Bank has approved a \$788.8 million loan for the Amaravati project. In Japanese Yen, the loan value is 121.97 billion.



About Amravati

- ❖ After the bifurcation of Andhra Pradesh into two separate states of Andhra Pradesh and Telangana in 2014, Hyderabad was given to Telangana. Hyderabad was to be the common capital of both states for the next 10 years till 2024, and Andhra Pradesh will build its new capital.
- ❖ The Andhra Pradesh Government chose Amaravati in Vijayawada as the new Capital of the State. The Andhra assembly passed the Andhra Pradesh Capital Region Development Authority Act 2014, and the state government established the Andhra Pradesh Capital Region Development Authority to develop the state capital at Amaravati.
- ❖ The Andhra Pradesh Capital Region Development Authority has launched the Amaravati Inclusive and Sustainable Capital City Development Program to develop a modern city in 217 sq. km in Vijayawada.

HM Amit Shah chairs 72nd Plenary meeting of NEC at Agartala

Key Points:

- ❖ The Union Home Minister and Minister of Cooperation, Amit Shah, chaired the 72nd plenary session of the North Eastern Council (NEC) at Agartala, Tripura, on 21 December 2024.
- ❖ The last plenary session of the North Eastern Council was hosted by Agartala in 2008. Under the provision of the North Eastern Council Act 1971, as amended in 2002, the Council meeting is held at least twice a year.
- ❖ A pre-plenary technical session was held on 20 December, where the central ministries presented their development agendas for the entire North Eastern region. These regional developmental agendas were discussed in the plenary session chaired by Amit Shah.



Who attended the 72nd plenary session of the North Eastern Council?

- ❖ The 72nd plenary session of the North Eastern Council was attended by Amit Shah, Union Minister for Development of North East Region (DoNER) Jyotiraditya Scindhia, Union Minister of State for DoNEAR Sukanta Majumder, governors and chief ministers of all eight northeastern states. Chief Ministers of the North-Eastern State present on the occasion were Manik Saha of Tripura; Himanta Biswa Sarma of Assam; Pema Khandu of Arunachal Pradesh; N. Biren Singh of Manipur; Lalduhoma of Mizoram; Neiphiu Rio of Nagaland and Prem Singh Tamang of Sikkim.

What is the North Eastern Council?

- ❖ The North Eastern Council was set up under the North East Council Act 1971 provisions. It was inaugurated on 7th November 1972 by Prime Minister Indira Gandhi in Shillong, Meghalaya. Initially, it consisted of seven states of the North East- Assam, Meghalaya, Tripura, Arunachal Pradesh, Nagaland, Mizoram and Arunachal Pradesh. In 2002, the North East Council Act was amended, and Sikkim was made the eighth member of the Council.

Composition of the North Eastern Council

- ❖ The North Eastern Council includes the Governors and Chief Ministers of the eight states of the North East. The President has the power to nominate three members to the Council. The President has the power to nominate the Chairman of the Council, and the President has nominated the Union Home Minister as the Chairman of the Council.

Function of the North Eastern Council

- ❖ The North Eastern Council is an advisory body whose recommendations are not binding on the central or state governments. The Council is a regional planning body for the entire northeastern region. It formulates regional development plans in which at least two states of the region are beneficiaries. It also reviews the regional plans and recommends measures for better coordination amongst the state governments for better implementation.

8th Pay Commission Delay: Employees' Federation plans nationwide agitation in new year

Key Points:

- ❖ Government employees across India are closely monitoring developments regarding the 8th Pay Commission. While no official confirmation has been made, speculation is arising about whether the commission will

be formed or whether alternative mechanisms will take its place.

- ❖ Pay Commissions are government-appointed bodies tasked with reviewing and recommending salary structures for Central government employees. Since India's Independence, seven such commissions have been implemented, with the most recent, the 7th Pay Commission, taking effect in 2016.
- ❖ **Justice A.K Mathur will be heading the Seventh Pay Commission**, announcement of which was done on 4 February 2014. **The first pay commission was established in January 1946 and it submitted its report in May, 1947 to the interim government of India.**
- ❖ That commission raised the minimum monthly salary from Rs 7,000 to Rs 18,000, while top officials' salaries increased to Rs 2.5 lakh per month. Traditionally, a Pay Commission is set up every 10 years, influencing the income and living standards of millions of employees and pensioners.
- ❖ Will There Be an 8th Pay Commission? Historically, new commissions have been established every decade, suggesting that the 8th Pay Commission could be announced soon and implemented by 2026.
- ❖ However, the Ministry of Finance has recently stated in Parliament that the 8th Pay Commission is "presently not under consideration." This has led to speculation about a shift in approach.
- ❖ According to a report by Financial Express, instead of forming a new commission, the government may consider linking salary revisions to performance metrics or inflation rates, allowing for more frequent adjustments. Despite these hints, there are no concrete details, leaving government employees and pensioners uncertain about their financial futures.

- ❖ Expectations From the 8th Pay Commission If the 8th Pay Commission is set up, employees are likely to push for several key changes:
- ❖ **Higher Minimum Salary:** Employee unions are demanding an increase in the minimum salary from ₹18,000 to between ₹26,000 and ₹30,000 per month, citing inflation and rising living costs. **Fitment Factor:** The fitment factor, which currently stands at 2.57, may be revised to 3.5 or 3.8 to reflect better salary adjustments.
- ❖ The fitment factor for government employees refers to a multiplier used to determine their salary when they are moved to a new pay scale, typically under the implementation of a new pay commission. It is used to adjust their basic salary according to the revised pay structure.
- ❖ **Dearness Allowance (DA):** Given biannually to offset inflation, DA may become more responsive to inflationary trends.
- ❖ **Pension Revisions:** Parity in pensions has been a long-standing demand, particularly for those who retired before the implementation of the 7th Pay Commission.
- ❖ **Updated Allowances:** Housing and travel allowances could see revisions to match current cost-of-living expenses.

UP & Manipur sign MoU for implementation of Ek Bharat Shreshtha Bharat

- ❖ Uttar Pradesh and Manipur have signed a Memorandum of Understanding (MoU) to implement the Ek Bharat Shreshtha Bharat programme as paired states. The agreement between the representatives of both state governments was signed in Lucknow, Uttar Pradesh, in December 2024. Manipur is the third state in which Uttar Pradesh has signed an MoU under

the Ek Bharat Shreshtha Bharat programme. Before Manipur, Uttar Pradesh signed such an MoU with Arunachal Pradesh and Meghalaya. For Manipur, it was the second agreement with a state after a similar MoU with Madhya Pradesh.

Duration of the MoU

- ❖ The duration of the MoU between Manipur and Uttar Pradesh is three years from the date of signing. The MoU can be extended for a further three years with the mutual consent of the two states.

About the 'Ek Bharat Shreshtha Bharat'

- ❖ Prime Minister Narendra Modi announced the 'Ek Bharat Shreshtha Bharat' on 31st October 2015 on the occasion of the 140th birth anniversary of Sardar Vallabhbhai Patel, the first deputy Prime Minister and Home Minister of India.
- ❖ The idea behind the Ek Bharat Shreshtha Bharat programme is to promote sustained cultural and non-political activities between different regions of the country to understand each other better, strengthening national unity.
- ❖ Each state/Union Territory is paired with a different state for a specified period, during which they carry out a structured engagement with one another in the spheres of cultural events, festivals, language, literature, cuisine, tourism, etc.

Objectives of the Ek Bharat Shreshtha Bharat

- ❖ The objectives of the Ek Bharat Shreshtha Bharat are as follows;
- ❖ Celebrate Unity in Diversity and strengthen emotional bonds between the people;
- ❖ Promote the spirit of national integration through a sustained structured engagement between States and Union Territories through a year-long planned engagement;
- ❖ Showcase the rich heritage and culture, customs and traditions of the paired State, fostering a sense of common identity;

- ❖ Create an environment that promotes learning between states by sharing best practices and experiences.
- ❖ **Nodal Ministry for the EK Bharat Shreshtha Bharat** The government of India has designated the Union Ministry of Education as the Nodal ministry for coordinating programmes under the EK Bharat Shreshtha Bharat.

Following is the updated list of the paired States/Union Territories.

- ❖ Bihar - Tripura and Mizoram
- ❖ Uttar Pradesh- Manipur, Meghalaya, Arunachal Pradesh
- ❖ Uttarakhand- Karnataka
- ❖ Gujarat- Chhattisgarh
- ❖ Tamil Nadu - Union Territory of Jammu and Kashmir and the Union Territory of Ladakh
- ❖ Madhya Pradesh- Manipur and Nagaland
- ❖ Himachal Pradesh- Kerala • Maharashtra- Odisha
- ❖ Punjab- Andhra Pradesh
- ❖ Goa- Jharkhand
- ❖ Lakshadweep- Andaman and Nicobar
- ❖ Haryana- Telangana • Rajasthan- Assam
- ❖ Delhi-Sikkim
- ❖ Chandigarh and Puducherry -Dadra Nagar Haveli and Daman and Diu.

Union Ministry of Defence (MoD) Signed a contract with Larsen and Toubro(L&T) to buy 100 K9 VAJRA-T Self-Propelled Tracked Artillery Guns

- ❖ The Union Ministry of Defence (MoD) has signed a contract with the Indian company Larsen and Toubro(L&T) to buy 100 K9 VAJRA-T Self-Propelled Tracked Artillery Guns for the Indian Army at the cost of Rs 7628.70 crore. This is the second deal for the K9 Vajra --T Artillery Gun with the L&T.
- ❖ In 2017, the MoD signed a Rs 4366 crore deal with L&T to procure 100 Artillery Guns. Earlier, the Cabinet Committee on Security (CCS), chaired by Prime Minister Narendra

Modi, had approved the purchase of additional K9-Vajra T Guns in a meeting held on 12 December 2024.

- ❖ The inking of the deal with an Indian defence company is part of the Indian government's effort to promote the indigenous defence ecosystem in the country and make the country self-reliant in critical defence technology and equipment.

About the K9 VAJRA-T Artillery Guns

- ❖ The K9 Vajra-T Artillery Guns is an indigenous version of the South Korean mobile howitzer (K9) developed by the Samsung Techwin company, now known as Hanwha Defence.
- ❖ The Artillery Gun has been modified according to the needs of the Indian Army and has been co-produced by Larsen and Toubro Heavy Engineering and Hanwha Defence in India.
- ❖ The modified Artillery Gun is called K9 Vajra -T. The K9 Vajra-T Gun is being produced at the Talegaon plant of the L&T near Pune, Maharashtra. K9 Vajra -T is the first Artillery Gun produced by a private Indian company for the Indian Army.



Features of the Vajra-T Artillery Guns

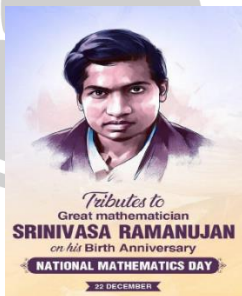
- ❖ The Vajra-T Artillery Gun is a shoot-and-scoot type of artillery gun. The Indian Army normally uses towed artillery guns, which are attached to a vehicle and towed to a battlefield.
- ❖ The Vajra-T is a self-propelled artillery gun equipped with a 1,000-horsepower engine. It can move at over 60 km per hour and travel up to 450 km. The gun has a 155 mm/52 calibre ordnance with a maximum firing range of 40 km.

- ❖ The K9 can fire ammunition in MRSI mode-multiple rounds of simultaneous impact. It can fire eight rounds per minute into enemy targets simultaneously. The gun can be deployed in plains, desert sectors, and high-altitude areas with sub-zero temperatures.

National Mathematics Day

Key Points:

- ❖ National Mathematics Day, celebrated annually on December 22, marks the birth anniversary of the brilliant Indian mathematician, **Srinivasa Ramanujan**.
- ❖ This day is dedicated to recognising his profound contributions to mathematics and highlighting the pivotal role the subject plays in shaping modern society. The 2024 theme, "**Mathematics: Bridge to innovation**," highlights its crucial role in advancements.



- ❖ Srinivasa Ramanujan was born on December 22, 1887, in Erode, Tamil Nadu. Despite having no formal training in mathematics, he made groundbreaking discoveries in fields like infinite series, number theory, and continued fractions.

- ❖ One of his most famous discoveries, the number 1729, is known as the smallest number that can be expressed as the sum of two cubes in two distinct ways. Ramanujan's work on infinite series led to an efficient formula for calculating π , which is still used in modern numerical methods.

SASTRA Ramanujan Prize 2024

Key Points:

- ❖ **Recipient:** Awarded to **Alexander Dunn** from the **Georgia Institute of Technology, US**.
- ❖ Recognized for breakthroughs in: **Modular forms, half-integral weight forms, and metaplectic forms**. Relationship between **prime numbers** and **integer partitions**.
- ❖ **About SASTRA Ramanujan Prize**
- ❖ **Established:** 2005 by **SASTRA University, Tamil Nadu**.
- ❖ **Cash Prize:** USD 10,000.
- ❖ **Eligibility:**
- ❖ Awarded annually to mathematicians aged **32 or below**.
- ❖ Focuses on exceptional contributions in areas inspired by the work of **Srinivasa Ramanujan**.

Alexander Dunn to receive 2024 Sastra Ramanujan Prize

The 2024 SASTRA Ramanujan Prize will be awarded to Alexander Dunn of the Georgia Institute of Technology, U.S. A press release said the prize is being given to Mr. Dunn, who has achieved several breakthroughs in the study of modular forms, half-integral weight forms, metaplectic forms and their connections to prime numbers and integer partitions. The prize will be awarded on December 20 and 22 at SASTRA University, Kumbakonam.

Ruixiang Zhang to receive SASTRA Ramanujan Prize

The 2024 SASTRA Ramanujan Prize will be awarded to Ruixiang Zhang of the University of California, Berkeley. This annual award honors the most outstanding contributions to Indian mathematics great Ramanujan. In a small group, the prize will be awarded to all mathematicians in America in Number Theory on December 20 at SASTRA University in Kumbakonam. Ruixiang Zhang received his Ph.D. from Tsinghua University in 2015 and worked at the Institute for Advanced Study, Princeton, and the University of Wisconsin. Since 2021, he has been an assistant professor at the University of California, Berkeley. His fundamental work on spectral analysis of number theory, harmonic analysis, and geometry building on his doctoral thesis, he and Ruixiang Zhang proved a generalization of the main conjecture in Vinogradov's theory, which is concerned with the sums of numbers related to certain points.

