

PM'S INDEPENDENCE DAY ADDRESS

Why in News?

- While delivering his 10th address (last of his second term) from the ramparts of the Red Fort, the India PM has articulated a wide range of ideas in his Independence Day speech.
- These ideas include Vedic phrase “Sangachhadhwam” or taking along all, a resolve to fight corruption, abandoning “ghulami ki manasikta” or the mentality of servitude, etc.

Key Highlights of the PM's 10th Speech Delivered on 77th Independence Day:

PM MODI INDEPENDENCE DAY SPEECH: TOP 10	
• Govt to increase number of 'Jan Aushadhi Kendra'	• Corruption, nepotism, appeasement the biggest obstacles
• Many steps taken to control inflation	• 10 crore fake beneficiaries of welfare schemes removed
• Every rupee going towards welfare of citizens	• Regional aspirations need to be taken care of
• The whole country stands with the people of Manipur	• Govt to launch 'Vishwakarma Yojana' to help workers
• In 2047, India will be a developed nation	• India will not stop now, ratir agencies lauding India

• **The resolution of the crisis in Manipur:** It is possible only through “peace” and that the Central and state governments are putting all

their efforts into it.

- **Inflation:** The PM promised that his government would take measures to bring relief to the common people.
- **Sarvajan Hitay, Sarvajan Sukhaye:**
 - For people having traditional skills [like the Raj Mistris (construction workers), Sunar (goldsmith), Suthar (carpenters), etc - mostly from the OBC community] the PM announced **Vishwakarma Yojana**.
 - The PM said the government would launch a **new scheme to help those living in rented houses** in cities to build their own homes.
 - If these people want to build their own houses, the government, under the new scheme, will assist them with relief in interest rates and loans from banks.
 - His government is working to increase the number of “**Jan Aushadhi Kendras**” from 10,000 to 25,000.
- **Women-led development:**
 - He announced his dream to see 2 crore “**Lakhpati didis**” in village Self-Help Groups (SHGs).

- For this, his government has decided to start a **new scheme**, in which SHG women will be trained to operate and repair drones.
 - **Track record in the last nine years:**
 - His government had brought reforms and transformed the country into a “**vishwamitra** (friend of the world)”.
 - The Centre’s contribution to state governments had gone up to Rs 100 lakh crore from Rs 30 lakh crore in 9 years for housing schemes (PMAY), Ayushman Bharat, JJM, etc.
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HIMACHAL CLOUDBURST

Why in news?

- Over 50 people have died within 24 hours in incidents related to heavy rains in Himachal Pradesh.
- Chief Minister Sukhvinder Singh Sukhu said that along with landslides, reports of cloudbursts have also emerged in the state.

Cloudbursts

- A cloudburst is a **localised** but intense rainfall activity. Short spells of very heavy rainfall over a small geographical area can cause widespread destruction.
- Not all instances of very heavy rainfall, however, are cloudbursts. A cloudburst has a very specific definition.
- Rainfall of **10 cm or more in an hour over a roughly 10 km x 10-km area** is classified as a cloudburst event.
- By this definition, **5 cm of rainfall in a half-hour period over the same area** would also be categorized as a cloudburst.

How common are cloudbursts?

- Cloudbursts are not uncommon events, particularly during the monsoon months.
- Most of these happen in the Himalayan states where the local topology, wind systems, and temperature gradients between the lower and upper atmosphere facilitate the occurrence of such events.

Consequence of cloudburst

- Because of the nature of terrain, the heavy rainfall events often trigger landslides and flash floods, causing extensive destruction downstream.
- Although these events take place in very small areas which are often devoid of rainfall measuring instruments. The consequences of these events, however, are not confined to the small areas.

Forecasting of cloudbursts

- The India Meteorological Department forecasts rainfall events well in advance, but it does not predict the quantum of rainfall — in fact, no meteorological agency does.
- The forecasts can be about light, heavy, or very heavy rainfall, but weather scientists do not predict exactly how much rain is likely to fall at any given place.
- Also, the forecasts are for a relatively large geographical area, usually a region, a state, a meteorological sub-division, or at best a district.
- The forecasts get more and more uncertain for smaller areas.

Are cloudburst incidents increasing?

- There is no long-term trend that suggests that cloudbursts, as defined by the IMD, are rising.
- However, incidents of extreme rainfall, as also other extreme weather events, are increasing — not just in India but across the world.
- While the overall amount of rainfall in India has not changed substantially, an increasing proportion of rainfall is happening in a short span of time.
- That means that the wet spells are very wet, and are interspersed with prolonged dry spells even in the rainy season.
- This kind of pattern, attributed to climate change, does suggest that cloudburst events might also be on the rise.

WHAT IS A LANDSLIDE AND WHAT CAUSES ONE?

- A landslide is defined as the movement of a mass of rock, debris, or earth down a slope.

- Landslides are a type of "**mass wasting**," which denotes any down-slope movement of soil and rock under the **direct influence of gravity**.
- Landslides occur mainly in mountainous terrains where there are conducive conditions of soil, rock, geology and slope.
- **Natural Causes** that trigger it include heavy rainfall, earthquakes, snow melting and undercutting of slopes due to flooding.
- Landslides can also be caused by **Anthropogenic Activities** such as excavation, cutting of hills and trees, excessive infrastructure development, and overgrazing by cattle.
- In India, rainfall-induced landslide events are more common.

How Prone is India to Landslides?

- India is considered **among the top five landslide-prone countries in the world**.
- In India, **at least one death per 100 sq. km is reported in a year due to a landslide event**.
- Rainfall variability pattern is the single biggest cause for landslides in the country, with the Himalayas and the Western Ghats remaining highly vulnerable.
- Excluding snow covered areas, **approximately 12.6% of the country's geographical land area (0.42 million sq. km) is prone to landslides**.
 - As many as 66.5% of the landslides are reported from the North-western Himalayas,
 - About 18.8% from the North-eastern Himalayas, and
 - About 14.7% from the Western Ghats.

WHAT IS PREVENTIVE DETENTION?



The Kerala High Court has underscored that the power of preventive detention can only be invoked in cases where an individual's activities pose a threat to public order or are detrimental to society.

- Preventive detention refers to the **detention of an individual without a trial or conviction by a court**.
- **The primary objective of preventive detention is not to punish an individual for a past offence but to prevent them from committing an offence in the future.**

- Preventive detention laws are enacted by governments to ensure public safety and maintain social order.

Constitutional Provisions and Safeguards:

- Article 22 of the Indian Constitution grants protection to individuals who are arrested or detained.
- It has two parts—the first part deals with cases of ordinary law, which includes situations where an individual is detained as part of a criminal investigation.
- The second part deals with cases of preventive detention law, which pertains to the detention of individuals without a trial or conviction.
- Article 22 (4) states that no law providing for preventive detention shall authorise the detention of a person for a longer period than three months unless an Advisory Board reports sufficient cause for extended detention.
- The detainee is entitled to know the grounds of his detention. The state, however, may refuse to divulge the grounds of detention if it is in the public interest to do so.

Who can make laws under Preventive Detention?

- Parliament has the exclusive power to enact a law for preventive detention for the reasons connected with defence, foreign affairs, or security of India.
- Both Parliament and State Legislature have powers to enact a law for preventive detention for the reasons related to the maintenance of public order or the maintenance of supplies or services essential to the community.
- Laws that provide for Preventive Detention:
 - In India, various laws provide for preventive detention, including the National Security Act (NSA) of 1980, the Unlawful Activities (Prevention) Act (UAPA) of 1967, and state-specific laws like the Maintenance of Internal Security Act (MISA) and the Public Safety Acts (PSA) in certain states.
 - Under these laws, authorities can detain an individual for a specific period, typically up to 12 months, without presenting formal charges or conducting a trial.

WHAT IS PIBOT?

A team of engineers and researchers from the Korea Advanced Institute of Science & Technology (KAIST) is currently developing a humanoid robot named 'Pibot' that can fly aircraft without needing to modify the cockpit.



About Pibot:

- It is the world's first humanoid pilot.
- It can fly an aeroplane just like a human pilot by manipulating all the single controls in the cockpit, which is designed for humans.
- Features:
 - It combines artificial intelligence and robotics technologies, can process the natural language of the flight manual and control the flight's operation in real-time.
 - Pibot can control its arms and fingers to dextrously operate flight instruments, even with severe vibration in an aircraft, using high-precision control technology.
 - Its external cameras allow Pibot to monitor the current state of the aircraft and the internal ones help it manage essential switches on the control panel.
 - It is capable of memorizing global flight charts to conduct mistake-free flight missions on any air route.
 - It can memorise aircraft operation and emergency manuals (QRH, an in-cockpit manual for the flight crew to refer to in case of in-flight problems) and respond immediately.
 - The humanoid robot can also communicate with air traffic controllers and humans in the cockpit using voice synthesis, allowing it to act as a pilot or a first officer.

KEY FACTS ABOUT VITAMIN D



Taking regular Vitamin D supplements may reduce cancer deaths in the population by 15%, according to scientists.

About Vitamin D:

- Vitamin D is a **fat-soluble vitamin** that is essential for the proper functioning of the body.
- **Functions:**
 - It helps **regulate the amount of calcium and phosphate in the body**. These nutrients are **needed to keep bones, teeth and muscles healthy**.
 - It also plays many other important roles in the body, including **regulating inflammation and immune function**.
- There are **different forms of vitamin D**, including ergocalciferol (vitamin D2) and cholecalciferol (vitamin D3).

Sources:

- **Sunlight Synthesis:** It is **made in the skin when exposed to sunlight**. During periods of sunlight, vitamin D is stored in fat and then released when sunlight is not available.
- **Dietary Sources:** Vitamin D can also be obtained from dietary sources, including **fatty fish** (such as salmon, mackerel, and tuna), **fortified dairy products, fortified cereals, egg yolks,** and certain mushrooms.
- **Deficiency:**
 - Vitamin D deficiency **can lead to weakened bones, a condition known as rickets in children and osteomalacia in adults**.
 - It may also **increase the risk of certain chronic diseases**.
 - **People who have limited sun exposure, are elderly, have dark skin, or have specific medical conditions may be at a higher risk of vitamin D deficiency** and may require supplementation.
- **Vitamin D toxicity:**
 - **Getting too much vitamin D** (known as vitamin D toxicity) **can be harmful**.
 - **Signs of toxicity include nausea and vomiting, poor appetite, constipation, weakness, and weight loss**.
 - It can lead to **toxic levels of calcium in the blood, causing a condition known as hypercalcemia**.
 - Very high levels of vitamin D **can damage the kidneys**.

PRIME MINISTERS' MUSEUM AND LIBRARY (PMML) SOCIETY

The Nehru Memorial Museum and Library (NMML) has officially been renamed the Prime Ministers' Museum and Library Society recently.



About Prime Ministers' Museum and Library (PMML) Society:

- **Status:** It is an autonomous institution under the Ministry of Culture, Government of India.
- **Location:** It is housed in the historic Teen Murti campus located south of Rashtrapati Bhavan in New Delhi.
- **PMML is dedicated to the objective of promoting advanced research on Modern and Contemporary India.**
- **History:**
 - **Designed by Robert Tor Russel and built in 1929-30** as part of Edwin Lutyens' imperial capital, Teen Murti House was the official residence of the Commander-in-Chief in India.
 - **In August 1948, after the departure of the last British Commander-in-Chief, Teen Murti House became the official residence of independent India's first Prime Minister, Jawaharlal Nehru, who lived here for sixteen years until his death on May 27, 1964.**
 - **On Jawaharlal Nehru's 75th birth anniversary on November 14, 1964 Dr. Sarvapalli Radhakrishnan, President of India, formally dedicated the Teen Murti House to the nation and inaugurated the Nehru Memorial Museum.**
 - **On 1 April 1966, the Government set up the Prime Ministers Museum and Library (PMML) Society to manage the institution.**
- **PMML has four major constituents, namely-**
 - **Memorial Museum;**
 - **Library on modern India;**
 - **Centre for Contemporary Studies;**
 - **Nehru Planetarium;**
- **Administration:** The General Council and the President and the Vice-President of the PMML Society are nominated by the Central Government.

NATIONAL COMPANY LAW TRIBUNAL

The Ministry of Corporate Affairs (MCA) is finalising draft guidelines to reduce delays at the National Company Law Tribunal.



About National Company Law Tribunal:

- It is a **quasi-judicial authority** incorporated for **dealing with corporate disputes** that are of civil nature arising under the Companies Act, 2013.
- It was constituted on 1 June 2016 under **the Companies Act, 2013**.
- It was established based on the **recommendation of the Balakrishna Eradi committee** on law relating to the insolvency and the winding up of companies.
- **Composition:** It shall consist of a President and such number of Judicial and Technical Members as may be required.
- **What are the Powers of NCLT?**
 - It is not limited or bound by the rules laid down in the Code of Civil Procedure and **is guided by the principles of natural justice**, subject to the other provisions of this Act and of any rules that are made by the Central Government.
 - It can **enforce any order** that it gives in the same manner as a court would enforce it.
 - It has the **power to scrutinize its own orders**.
 - It has the power to regulate their own procedure.
 - It is the adjudicating authority for the insolvency resolution process of companies and limited liability partnerships under the Insolvency and Bankruptcy Code, 2016.