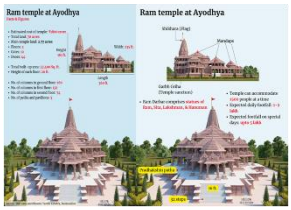
AYODHYA RAM TEMPLE: A NEW-AGE ARCHITECTURAL MARVEL CARVED IN STONE

Why in News?

- A new landmark of India - both structural and spiritual - rises on Ayodhya's horizon as a new-age architectural marvel of elegant sandstones, diligently carved by craftspeople with dedication and devotion to Lord Ram.

Major Features of the Ram Temple:



- **Main Complex**:
  - The Ram Mandir is a Hindu temple in Ayodhya, Uttar Pradesh. It is located at the site of Ram Janmabhoomi, the birthplace of Lord Rama.
  - No iron or steel has been used in the construction of the grand structure. Stones have been sourced from **Rajasthan's Bansi Paharpur area**.
  - The temple complex, built in the traditional **Nagara style**, will be 380 feet long from the east to the west, 250 feet wide and 161 feet high.
  - Each floor of the temple will be 20 feet high and have a total 392 pillars and 44 gates.
  - Around the grand temple is a rectangular periphery called **percota**, a feature found in temples in south India, but not generally in north India.
  - The percota will be 14 feet wide and the periphery span 732 metres. The temple will be nestled within the percota periphery.
  - Images of Lord Hanuman, other deities, peacocks and flower patterns have been carved onto the stones, lending the structure a divine look.
  - More than 3,000 kg of flowers of over 20 varieties have been used to decorate the grand structure.

Main Entrance:

- Ornate statues of elephants, lions, Lord Hanuman and Garuda were installed at the main entrance leading to the temple earlier this month.
- These statues have also been made using sandstone brought from Bansi Paharpur.

- **Green Complex**:
  - A major part of the temple compound will be a green area with hundreds of trees.
  - About 70 per cent of the complex will be a green area.
  - The complex will have two sewage treatment plants — a water treatment plant and a dedicated electricity line from the power house.
  - The fire brigade post will be able to source water from an underground reservoir.

POST OFFICE ACT, ITS UNBRIDLED POWERS OF INTERCEPTION

- Recently, **significant legislative changes were enacted with the President's assent to the Post Office Bill2023 and the Telecommunications Bill2023.**
- **These bills aim to replace outdated colonial-era laws**, specifically the Indian Post Office Act, 1898 and the Indian Telegraph Act 1885, signalling a crucial shift in communication regulations.
- However, **concerns have emerged, particularly regarding the lack of procedural safeguards and potential misuse of interception** powers granted under these new laws.

The Post Office Bill 2023

- It **represents a critical legislative milestone in India's ongoing efforts to modernise communication laws,** particularly the antiquated Indian Post Office Act, 1898.
- Enacted with the President's assent on December 24, 2023, **this bill is poised to redefine the regulatory landscape governing postal services in the country.**
- However, **a closer examination reveals both positive and concerning aspects, notably the provisions related to interception powers** and the absence of procedural safeguards.
- **This legislative overhaul reflects the need to adapt to the contemporary digital age** and ensure that communication regulations align with current technological advancements.

Key Features of Telecommunications Bill 2023

- **Replacement of Outdated Legislation**
  - The primary objective of the Bill is **to replace two colonial-era legislations—the Indian Telegraph Act1885and the Indian Wireless Telegraphy Act1933.**
  - This replacement is a **strategic move to align regulatory frameworks with contemporary technological advancements** in the telecommunications sector.
- **Introduction of Section 20(2)**
  - **A critical component** of the Bill is the **introduction of Section 20(2), which pertains to the interception of messages.**
  - **This section is like Section 5(2) of the Indian Telegraph Act 1885, but with procedural details now incorporated into the Act itself.**
- **Similarities with Rule 419A**
  - **Section 20(2) is similar to Rule 419A** introduced under the **Telegraph Rules in 2007.**
  - **Rule 419A provided a framework for interception in emergent cases** and delegated powers to law enforcement agencies, reflecting a need for safeguards in specific situations.
  - **The Telecommunications Bill appears to adopt a similar approach** but within the main legislative text.

Conclusion

- These recent **legislative changes in the Post Office and Telecommunications Acts mark a significant step towards modernisation.**
- However, **the absence of procedural safeguards and potential for misuse of interception powers raise valid concerns.**
- To uphold citizens' right to privacy, **it is imperative for the government to address these issues promptly by implementing transparent procedures and accountability measures.**

EXERCISE CYCLONE

The Indian Army contingent comprising 25 personnel reached Egypt to take part in the India-Egypt Joint Special Forces Exercise CYCLONE.

About Exercise Cyclone:

- It is the **2nd edition** of the Exercise **Cyclone** which will be conducted at **Anshas, Egypt** from 22nd January to 1st February 2024.
- The first edition of the exercise was conducted last year in India.
- The Indian contingent is being represented by troops from **the Parachute Regiment** (Special Forces) and Egyptian contingent comprising 25 personnel is being represented by Egyptian Commando Squadron and Egyptian Airborne Platoon.
- Aim of the Exercise is to acquaint both the sides with each other's operating procedures in the backdrop of Special Operations in desert/ semi desert terrain under Chapter VII of United Nations Charter.
- Exercise CYCLONE is designed to develop **bilateral military cooperation** and strengthen bond between two armies through conduct of discussions and rehearsal of tactical military drills.
- It will involve planning and execution of special operations in sub conventional domain and conducted in three phases.
- While the first phase will include **Military Exhibitions and Tactical Interactions**, second phase will focus on training on **Improvised Explosive Device** (IED), counter IED and Combat First Aid. The third and final phase will encompass **Joint Tactical Exercise** based on Fighting in Built-up Area and Hostage Rescue Scenarios.
- The Exercise will provide an opportunity to both the contingents to strengthen their bond and share best practices.
- It will also act as a platform to achieve shared security objectives and foster bilateral relations between two friendly nations.

EXERCISE KHANJAR

Recently, India-Kyrgyzstan Joint Special Forces Exercise KHANJAR has commenced at the Special Forces Training School in Bakloh, Himachal Pradesh.

About Exercise Khanjar:

- It was **first initiated** in December **2011**, in Nahan, India.
- It is the **11th edition** of **India-Kyrgyzstan** Joint Special Forces Exercise.
- It is **an annual event** conducted alternately **in both the countries**.
- The Indian Army contingent comprising 20 personnel is being represented by troops from **The Parachute Regiment (Special Forces)** and the Kyrgyzstan contingent comprising 20 personnel is represented by Scorpion Brigade.
- Aim of the exercise is to exchange experiences and best practices in **Counter Terrorism** and Special Forces Operations in Built-up Area and Mountainous Terrain under Chapter VII of United Nations Charter.
- The exercise will emphasise on developing Special Forces skills, advanced techniques of insertion and extraction.
- The exercise will provide an opportunity for both the sides of fortify defence ties while addressing common concerns of international terrorism and extremism.
- The exercise will also accord opportunity to showcase capabilities of cutting edge indigenous defence equipment besides achieving shared security objectives and foster bilateral relations.

PARAKRAM DIWAS

The Prime Minister of India has extended greetings to the people of India on Parakram Diwas.

About Parakram Diwas:

- It is celebrated on **January 23** to commemorate the birth anniversary of freedom fighter **Subhas Chandra Bose.**
- This year marks the 127th birth anniversary of Bose, fondly known as ‘Netaji’.

- Parakram Diwas aims to instil fearlessness and patriotism, especially among the youth, inspiring them to stand strong in the face of challenges.

Key points about Subhas Chandra Bose

- He was born on January 23, 1897, in Cuttack, Orissa.
- In 1920, he **passed** the **civil service examination**, but in April 1921, after hearing of the nationalist turmoil in India, he resigned from his position.
- He was an **Indian nationalist leader** who was a key figure in the Indian independence movement against British colonial rule.
- Bose then joined the Indian National Congress and actively participated in the Indian independence movement.
- **President of Indian National Congress**: Bose was elected president of the Indian National Congress **for two consecutive terms** but resigned from the post following ideological conflicts with Mahatma Gandhi.
- **In 1939,** he **formed the Forward Bloc**, an organization aimed at unifying all the anti-British forces in India.
- At the outset of 2nd **World War**, he fled from India & travelled to Soviet Union, Germany and Japan, seeking an alliance.
- With Japanese assistance, he reorganized and later led the Indian National Army, formed from Indian prisoners-of-war and plantation workers from Malaya, Singapore, and other parts of Southeast Asia, against British forces.
- Also with Japanese monetary, political, diplomatic, and military assistance, he formed the Azad Hind Government in exile, and regrouped, and led the Indian National Army in battle against the allies at Imphal and in Burma.

WHAT IS FILOBOT?

Recently, a new innovative plant-inspired robot which is named FiloBot has been developed that climbs up structures just like climbing vines.

About FiloBot:

- It is different from conventional climbing robots as it **doesn't depend on pre-programmed movements.**
- It instead **absorbs 3D printing** filament through its head and extends its length over time, just like a creeper.
- The team utilised a combination of plant **behaviours like phototropism**, negative phototropism and gravitropism and utilises these naturally occurring behaviours in high-tech robots.
- The tests for FiloBot have been successful and displayed remarkable adaptability that adjusts its growth trajectory dynamically in response to moving light intensity.

Significance

- By equipping autonomous systems with transportable additive manufacturing techniques merged with bioinspired behavioural strategies, future **robots can navigate unstructured and dynamic environments** and even be capable of self-building infrastructure.
- This new innovation has opened new **potential impact of technology** that can be **applied in robotics**, where adaptability and responsiveness redefine the capabilities of climbing robots.

Other similar innovations

- A similar snake-like robot was unveiled by NASA's Jet Propulsion Laboratory (JPL), which was specifically crafted to work on rough terrains of our solar system's planets and moons.
- The robot named **Exobiology Extant Life Surveyor** (EELS 1.0) is engineered to navigate diverse landscapes, including ice, sand, cliff walls, deep craters and lava tubes.

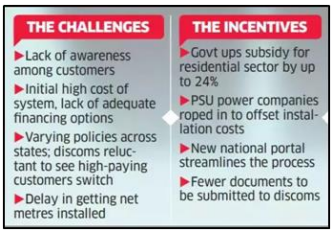
PRADHAN MANTRI SURYODAYA YOJANA

Why in news?

- PM Modi announced the 'Pradhan Mantri Suryodaya Yojana', a government scheme under which one crore households will get rooftop solar power systems.

Previous schemes to promote rooftop solar system

- **About**
  - In 2014, the government launched the Rooftop Solar Programme.
  - This had aimed to achieve a cumulative installed capacity of 40,000 megawatts (MW) or 40 gigawatts (GW) by 2022.
    - Watt is a unit of power and is calculated as the amount of energy used over time, specifically one Joule per second.
  - The scheme aimed to expand India's rooftop solar installed capacity in the residential sector by providing Central Financial Assistance and incentives to DISCOMs (distribution companies).
- **Achievement**
  - However, this target could not be achieved. But by the end of 2023, rooftop solar energy generation was just 11 GW.
    - And energy generated from residences was only about a fifth of that.
  - As a result, the government extended the deadline from 2022 to 2026.



Pradhan Mantri Suryodaya Yojana

- This scheme is a new attempt to help reach the target of 40 GW rooftop solar capacity.
- It will involve installing solar power systems at rooftops for residential consumers.
- The scheme would help not only reduce electricity bills of the poor and middle class, but also push India's goal of becoming self-reliant in the energy sector.

India's current solar capacity

- **Installed capacity**
  - According to the Ministry of New and Renewable Energy, solar power installed capacity in India has reached around 73.31 GW as of December 2023.
  - Meanwhile, rooftop solar installed capacity is around 11.08 GW as of December 2023.
  - Overall, solar power has a major share in the country's current renewable energy capacity, which stands at around 180 GW.
- **High performing states**
  - In terms of total solar capacity, Rajasthan is at the top with 18.7 GW. Gujarat is at the second position with 10.5 GW.
  - When it comes to rooftop solar capacity, Gujarat tops the list with 2.8 GW, followed by Maharashtra by 1.7 GW.

Need for an expansion of solar energy in India

- According to the latest World Energy Outlook by the International Energy Agency (IEA), India is expected to witness the largest energy demand growth of any country or region in the world over the next 30 years.
  - IEA is an intergovernmental organization that provides data, policy recommendations, and analysis on the global energy sector.
  - IEA's goal is to help countries provide sustainable and secure energy for everyone.
- To meet this demand, the country would need a reliable source of energy and it can't be just coal plants.
- Although India has doubled down on its coal production in recent years, it also aims to reach 500 GW of renewable energy capacity by 2030.