UPSC Daily Current Affairs 26 Jul 2021

Kakatiya Ramappa Temple

(Topic- GS Paper I- Art and Culture, Source- The Hindu)

Why in the news?

• Recently, at the 44th session of the World Heritage Committee of UNESCO, the 13th-century Ramappa temple in Palampet, Telangana, was declared as a UNESCO World Heritage Site.

More on the news

- The 44th session of the World Heritage Committee (WHC) is going online in Fuzhou, China.
- The nomination for a World Heritage Site for the Ramappa and Kakatiya temples was made in 2014.

Opposed by ICOMOS

• Earlier, the International Council on Monuments and Sites (ICOMOS) cited nine shortcomings at the site after an initial visit in 2019.

About Kakatiya Ramappa Temple

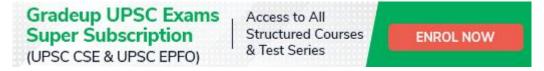


- The Rudreswara temple was constructed in 1213 AD during the reign of the Kakatiya Empire by RecharlaRudra, a general of Kakatiya king Ganapati Deva.
- It is also known as the Ramappa temple, after the sculptor who executed the work in the temple for 40 years.
- The main temple is flanked by the collapsed structures of the Kateshwarayya and Kameshwarayya temples in Palampet, about 220 km from Hyderabad.

Presiding Deity

• The presiding deity is Ramalingeswara Swamy.

Features



- The temple complexes of Kakatiyas have a distinct style, technology and decoration exhibiting the influence of the Kakatiyan sculptor.
- The temple, known for its exquisite craftsmanship and delicate relief work, is a savvy blend of technical know-how and materials of its time.
- The foundation is built with the "sandbox technique", the flooring is granite and the pillars are basalt.
- The lower part of the temple is red sandstone while the white gopuram is built with light bricks that reportedly float on water.

Note:

• Kakatiya Dynasty was the South Indian dynasty that ruled Andhra Pradesh in India from 1083 CE to 1323 CE.

Related Information

About International Council on Monuments and Sites (ICOMOS)

- It is a non-governmental organization associated with UNESCO.
- It is located in Paris, France.

Mission

- Its mission is to promote the conservation, protection, use and enhancement of monuments, building complexes and sites.
- It is an advisory body of the World Heritage Committee for the implementation of the World Heritage Convention of UNESCO.
- As such, it reviews the nominations of cultural world heritage and ensures the conservation status of properties.

Background

• Its creation in 1965 is the logical outcome of initial conversations between architects, historians and international experts that began in the early twentieth century and that materialized in the **adoption of the Venice Charter in 1964.**

Right to be Forgotten

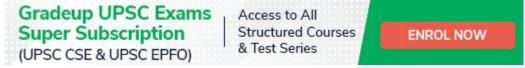
(Topic- GS Paper II-Polity & Governance, Source- The Hindu)

Why in the news?

• Recently, Ashutosh Kaushik who won reality shows Bigg Boss in 2008 and MTV Roadies 5.0 has approached the Delhi High Court with a plea saying that his videos, photographs and articles etc. be removed from the internet citing his "**Right to be Forgotten**".

About 'Right to be Forgotten' in the Indian context

• The Right to be Forgotten falls under the purview of an individual's right to privacy, which is governed by the Personal Data Protection Bill that is yet to be passed by Parliament.



- The Supreme Court described privacy and its importance in the landmark decision of K.S. Puttaswamy v. Union of India in 2017 that Right to Privacy is a fundamental and inalienable right and attaches to the person covering all information about that person and the choices that he/ she makes.
- The right to privacy is protected as an intrinsic part of the right to life and personal **liberty** under Article 21 and as a part of the freedoms guaranteed by Part III of the Constitution.

The Personal Data Protection Bill and Right to be Forgotten'

- The Personal Data Protection Bill was introduced in Lok Sabha on December 11, 2019, and it aims to set out provisions meant for the protection of the personal data of individuals.
- Clause 20 under Chapter V of this draft bill titled "Rights of Data Principal" mentions the "Right to be Forgotten."
- It states that the "data principal (the person to whom the data is related) shall have the right to restrict or prevent the continuing disclosure of his personal data by a data fiduciary".
- Therefore, broadly, under the Right to be forgotten, users can de-link, limit, delete or correct the disclosure of their personal information held by data fiduciaries.
- A data fiduciary means any person, including the State, a company, any juristic entity or any individual who alone or in conjunction with others determines the purpose and means of the processing of personal data.

China, Pak. outline 'joint action' to align Afghanistan strategies

(Topic- GS Paper II-IR, Source- The Hindu)

Why in the news?

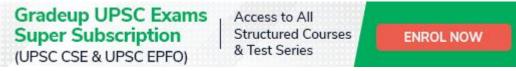
 China and Pakistan have recently said that they would more closely cooperate and work together in Afghanistan amid the changing situation in the country, as their Foreign Ministers proposed building the China Pakistan Economic Corridor (CPEC) into "a hub of regional connectivity".

They outlined a five-point joint plan on working in Afghanistan.

- China outlined "joint actions" in five areas, starting with "the immediate priority of avoiding the expansion of war and preventing Afghanistan from falling into a full-scale civil war."
- The second focus would be to promote the intra-Afghan negotiations between Kabul and the Taliban and establish "a broad and inclusive political structure".
- The third joint action would be "to resolutely combat terrorist forces".
- The fourth joint action would be to "promote cooperation among Afghanistan's neighbours" and "explore the construction of a platform for cooperation among them".

On CPEC

- China's Foreign Ministry said in May both countries had been in communication with Afghanistan overextending the corridor."
- Afghanistan has imported and exported related goods through the Gwadar Port and Karachi Port.



• China, Pakistan and Afghanistan are discussing issues related to extending roads and expressways in Pakistan to Afghanistan.

India's Stand on CPEC

• India has opposed the CPEC, which passes through Pakistan-occupied Kashmir, although China has pushed ahead with projects and stepped up its investments in PoK.

Related Information

About China Pakistan Economic Corridor



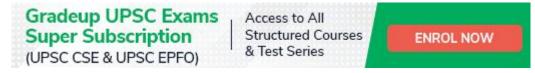
- It is a bilateral project between Pakistan and China and a part of One Belt One Road (OBOR).
- The project intended to promote connectivity across Pakistan with a network of highways, railways, and pipelines accompanied by energy, industrial, and other infrastructure development projects linking the Western part of China to the Gwadar Port in Balochistan, Pakistan.
- It is running some 3000 km from Xinjiang to Balochistan via Khunjerab Pass in the Northern Parts of Pakistan.
- It will pave the way for China to access the Middle East and Africa from Gwadar Port, enabling China to access the Indian Ocean and in return, China will support development projects in Pakistan to overcome the latter's energy crises and stabilizing its faltering economy.

Indian Science Technology and Engineering facilities Map (I-STEM)

(Topic- GS Paper II-Governance, Source- The Hindu)

Why in the news?

• Recently, the I-STEM project has been accorded extension for five years, until 2026 and enters its second phase with added features.



About the Indian Science Technology and Engineering facilities Map (I-STEM)



- It is a national web portal for sharing R&D facilities that was formally launched in January 2020
- It is an initiative of the Office of the Principal Scientific Adviser to the Govt. of India (PSA, GOI) under the aegis of Prime Minister Science, Technology and Innovation Advisory Council (PM-STIAC) mission.

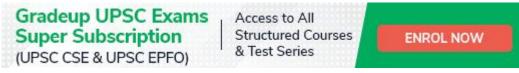
Goal

- The goal of I-STEM is to strengthen the R&D ecosystem of the country by connecting researchers with resources, in part by promoting technologies and scientific equipment development indigenously, and providing necessary supplies and supports to researchers by enabling them access to existing publicly funded R&D facilities in the country through the I-STEM web portal.
- I-STEM portal facilitates researchers to access slots for the use of equipment, as well as to share the details of the outcomes, such as, patents, publications and technologies.
- Under Phase II, the portals will host indigenous technology products listed through a digital catalogue.

G20 meet: India says made significant progress in meeting NDC targets

(Topic- GS Paper III- Environment, Source- The Hindu)

Why in the news?



- Recently, India has urged the group of 20 nations (G20) having per capita greenhouse gas (GHG) emissions above the global average to bring it down to the world average, thereby vacating 'some' carbon space for developing nations.
- India says made significant progress in meeting NDC targets.

Achievement of India NDC Targets

- The government of India informed that India has already achieved an emission reduction of 28% over 2005 levels against the targeted emission reduction of 33-35 % by 2030.
- India plans to reduce its carbon footprint by 33-35% from its 2005 levels by 2030, as part of its commitments to the United Nations Framework Convention on Climate Change adopted by 195 countries in Paris in 2015.
- India has also committed to having 40% of its total installed power generation capacity renewable by 2030.
- India already has achieved 38.5 % installed capacity from renewable and when the renewable capacity under construction is also accounted for, the share of renewable in the installed capacity goes well over 48%, which is way above the commitments made under the Paris Agreement.
- This assumes significance in a country that is the biggest emitter of greenhouse gases after the US and China and is among the countries most vulnerable to climate change.

About Paris Agreement

- It is also known as the Conference of Parties 21 or COP 21 which is a landmark environmental accord that was adopted in 2015 to address climate change and its negative impacts.
- It replaced the Kyoto Protocol which was an earlier agreement to deal with climate change.

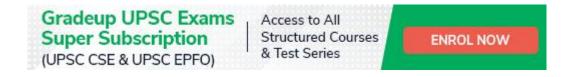
Aims

• To reduce global GHG emissions to limit the global temperature increase in this century to well below 2°C above pre-industrial levels, while pursuing means to limit the increase to 1.5°C by 2100.

It includes:

- Addressing the financial losses vulnerable countries face from climate impacts such as extreme weather.
- Raising money to help developing countries adapt to climate change and transition to clean energy.
- This part of the deal has been made non-legally binding on developed countries.
- Before the conference started, more than 180 countries had submitted pledges to cut their carbon emissions (Intended Nationally Determined Contributions or INDCs).

Intended Nationally determined contributions



- The Paris Agreement requires all Parties to put forward their best efforts through nationally determined contributions (NDCs) and to strengthen these efforts in the years ahead.
- This includes requirements that all Parties report regularly on their emissions and their implementation efforts.
- It is not legally binding.
- India also reaffirmed its **Intended Nationally Determined Contributions** commitments to meeting the goals under the Agreement to combat climate change.

India's INDC, to be achieved primarily, by 2030

- India promised to reduce the "emissions intensity of its GDP by 33-35 % by 2030 from 2005 level.
- It will achieve about "40% cumulative electric power installed capacity from non-fossil fuel-based energy resources (mainly renewables like wind and solar power) by 2030" with the help of the transfer of technology and low-cost international finance, including from the Green Climate Fund.
- India also promised an additional carbon sink (a means to absorb carbon dioxide from the atmosphere) of 2.5 to 3 billion tonnes of carbon dioxide equivalent through additional forest and tree cover by the year 2030.

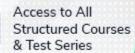
Bipyrazole organic crystals

(Topic- GS Paper III-Science and Technology, Source- News18)

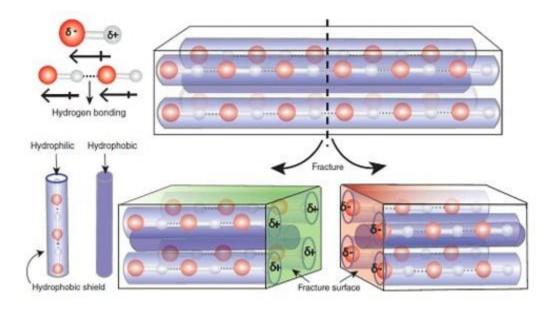
Why in the news?

• Recently, Scientists have developed Bipyrazole **organic crystals that** repair their mechanical damage without the need for any external intervention.

About Bipyrazole organic crystals







- It belongs to piezoelectric crystals.
- Piezoelectric crystals are a class of materials that generate electricity when it undergoes a mechanical impact.
- The piezoelectric molecules developed by the scientists recombine following mechanical fracture without any external intervention, autonomously self-healing in milliseconds with crystallographic precision.

Significance

- The devices that are used daily often break down due to mechanical damage, forcing users either to repair or replace them.
- It decreases the life of the equipment and increases maintenance costs.
- In many cases, like in a spacecraft, human intervention for restoration is not possible.

PDS 70: Moon-forming region seen around exoplanet for the first time

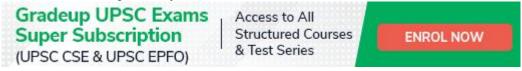
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Why in the news?

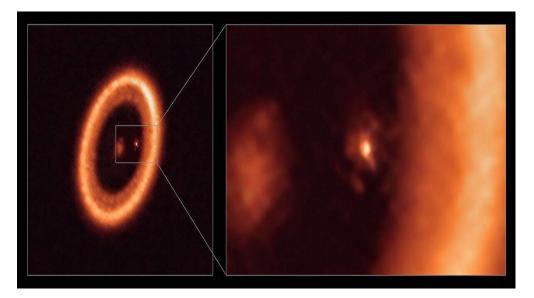
• Scientists for the first time have spotted a Moon-forming region around a planet beyond our solar system - a Jupiter-like world surrounded by a disc of gas and dust massive enough that it could spawn three moons the size of the one orbiting Earth.

More in the news

- The researchers used the **ALMA observatory in Chile's Atacama de**sert to detect the disc of swirling material accumulating around one of two newborn planets seen orbiting a young star called **PDS 70**, located a relatively close 370 light-years from Earth.
- It is called a circumplanetary disc, and it is from these that moons are born.



About PDS 70



- It's a Jupiter-like world surrounded by a disc of gas and dust massive enough that it could spawn three moons the size of the one orbiting Earth.
- The orange-coloured star PDS 70, roughly the same mass as our Sun, is about 5 million years old.
- It is PDS 70c a Moon-forming disc was observed.
- PDS 70c orbits its star at 33 times the distance of the Earth from the sun, similar to the planet Neptune in our solar system.
- Birth of a moon Stars burst to life within clouds of interstellar gas and dust scattered throughout galaxies.
- Leftover material spinning around a new star then coalesces into planets, and circumplanetary discs surrounding some planets similarly yield moons.
- The dominant mechanism thought to underpin planet formation is called "core accretion,"

Core accretion

- Core accretion occurs from the collision and coagulation of solid particles into gradually larger bodies until a massive enough planetary embryo is formed (10-20 Earth masses) to accrete a gaseous envelope.
- A scenario where, small dust grains, coated in ice, gradually grows to larger and larger sizes through successive collisions with other grains.
- This continues until the grains have grown to a size of a planetary core, at which point the young planet has a strong enough gravitational potential to accrete gas which will form its atmosphere.

Significance

• The discovery offers a deeper understanding of the formation of planets and moons.

