

THINK IAS

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DAILY

CURRENT **गामा**

31 July 2024

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 **SAMYAK IAS, NEAR RIDDHI-SIDDHI, JAIPUR**

Art and Culture

1. Charminar - The Hindu

Geography

2. Landslides - Indian Express
3. Seine River - Indian Express
4. Mekedatu Project - Indian Express

Society

5. PARAKH - Indian Express

World Affairs

6. Russia's Wagner admits severe losses in Mali battles - The Hindu

Economy

7. Losing spice: Kashmir's prized saffron crop hit by dry spells - The Hindu
8. United States overtakes UAE as India's second largest LNG supplier - The Hindu

Environment

9. Behind Leh flight cancellations: high temperatures, low air density - Indian Express

Sci and Tech

10. Death in Brazil: What is Oropouche fever? - Indian Express
11. Dementia has 2 new risk factors— untreated vision loss, high cholesterol: Lancet study - Indian Express

Miscellaneous

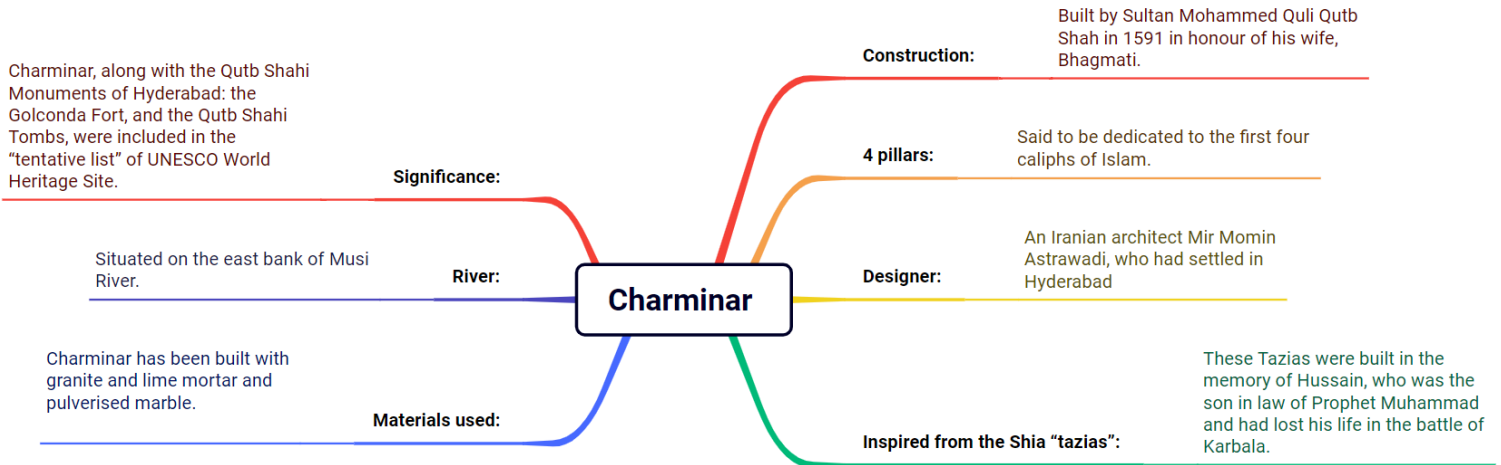
12. Ministry of Steel invites applications for National Metallurgist Awards -2024 - PIB
13. First STI Conclave on "Traditional Knowledge for Sustainable Livelihoods" organised jointly by ISTIC-UNESCO and CSIR - PIB
14. Shaheed-i-Azam Sardar Udham Singh - Indian Express

Rajasthan Current Affairs

Art and Culture

1. Charminar - The Hindu

Context



Geography

2. Landslides - Indian Express

- **About:** The movement of a mass of rock, debris, or earth down a slope under the direct influence of gravity.
- **Occurrence:** Occur mainly in mountainous terrains where there are conducive conditions of soil, rock, geology and slope.
- **Causes:** Heavy rainfall, earthquakes, snow melting and undercutting of slopes due to flooding, excavation, cutting of hills and trees, excessive infrastructure development, and overgrazing by cattle.

Types of Movement

Falls: Falls are rapid movements of rocks and boulders detached from steep slopes or cliffs along fractures, joints, and bedding planes.

Topple: It is the forward rotation of a mass of debris or rock out of a slope. The slope failure generally occurs at point near the base of the block of rock.

Slides: A slide is a downslope movement of material that occurs along a slip surface.

Rotational slide: In this slide the slide movement is roughly rotational about an axis which is parallel to the ground surface and transverse across the slide.

Translational slide: In this slide the landslide mass moves along a planar surface with rotation or backward tilting

Types of Materials

Rock: hard or firm mass.

Debris: 20% to 80% of the particles are larger than 2mm, and the remainder is less than 2mm".

Earth: material in which 80% or more of the particles are smaller than 2mm.

Soil: an aggregate of solid particles, generally of minerals and rocks.

Mud: material in which 80% or more of the particles are smaller than 0.06mm.

Types of flows

Debris flow: It is a form of rapid mass movement in which a combination of loose soil, rock, organic matter, slurry that flows downslope. They are commonly caused by intense precipitation or rapid snow melt.

Earth flow: It is down slope viscous flow of fine grained material saturated with water.

Mudflow: A mudflow is wet or viscous fluid mass of fine and coarse grained material flows rapidly along drainage channels.

Creep: Creep is the slow, steady, downward movement of material under gravity occurs in large area.

Lateral Spreads: It is the lateral movement usually occur on very gentle slopes or flat terrain. The failure is caused by liquefaction due to earthquake.

3. Seine River - Indian Express

- **About:** France's second-longest river after the Loire, covering a distance of 775 kilometers.
- **Drainage basin/ Paris Basin:** ~ 79,000 square kilometers and drains mainly northern France.
- **Origin:** Rises 446 meters above sea level in the wine-making region of Burgundy, near the town of Dijon.

- **Major tributary:** As the Seine approaches Paris, it is joined by the Marne, one of its largest tributaries, on the right bank.
- **Major city:** It flows through Paris for about 13 kilometers from west to east.
- **Mouth:** It finally empties into the English Channel, an arm of the Atlantic Ocean separating northern France and southern England.
- **Significance:** One of Europe's great historic rivers, and its drainage network carries most of the French inland waterway traffic.



4. Mekedatu Project - Indian Express

Context

Karnataka Chief Minister recently said his government was ready to discuss with Tamil Nadu regarding implementation of Mekedatu project across river Cauvery, but the neighbouring state was not coming forward despite it not "causing any problem to them".

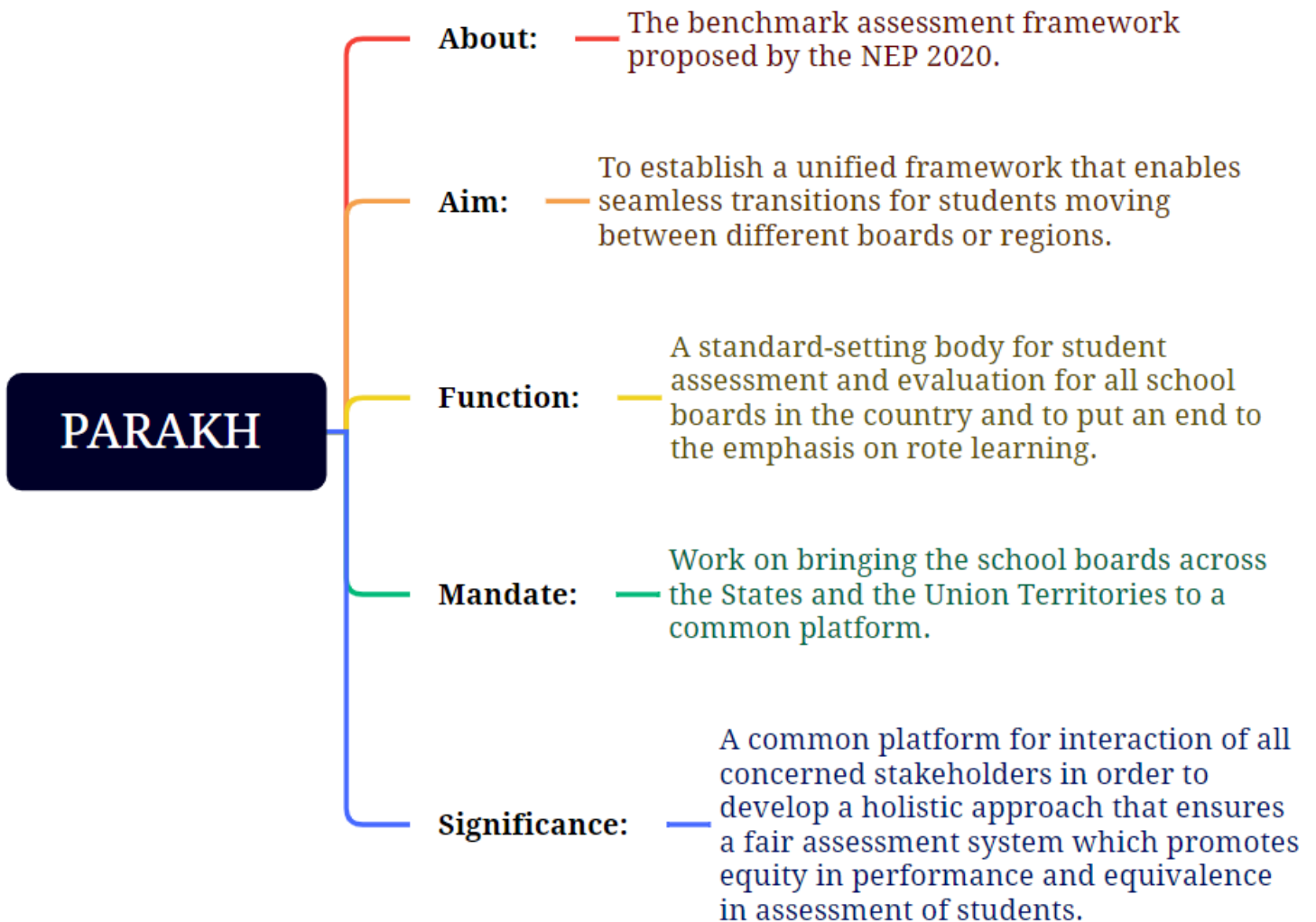
Mekedatu Project

- **About:** A multi-purpose (drinking water and power) project proposed by Karnataka, which involves building a balancing reservoir near Kanakapura in Ramanagara district, Karnataka.
- **Location:** About 90 km away from Bengaluru and 4 km ahead of the border with Tamil Nadu.
- **River:** Proposed at the confluence of Cauvery River & its tributary Arkavathi.
- **Dimensions:** A 99-metre-high, 735-metre-long concrete gravity dam
- **Other components:** An underground powerhouse, and a water conductor system.
- **Expected capacity:** 66,000 TMC (thousand million cubic feet) of water
- **Usage:** Expected to supply over 4 TMC of water to Bengaluru city for drinking purposes.



Society

5. PARAKH - Indian Express



World Affairs

6. Russia's Wagner admits severe losses in Mali battles - The Hindu

Context

Russia's Wagner mercenary group said recently it had suffered severe losses, including a commander, during battles with separatist forces in northeast Mali last week.

PMC Wagner/ Wagner Group

PMC Wagner/ Wagner Group

About:

A private military company and a network of mercenaries.

Origin:

First emerged in 2014 during Russia's annexation of Crimea and has since operated in Syria and at least a half dozen African countries, including Libya, Sudan, Mozambique, Mali, and the Central African Republic.

Founder:

Yevgeny Prigozhin and Dmitry Utkin, a former special forces officer in Russia's GRU military intelligence.

Symbol:

A solid black roundel with a white image of a human skull in the scope, symbolizing victory over death.

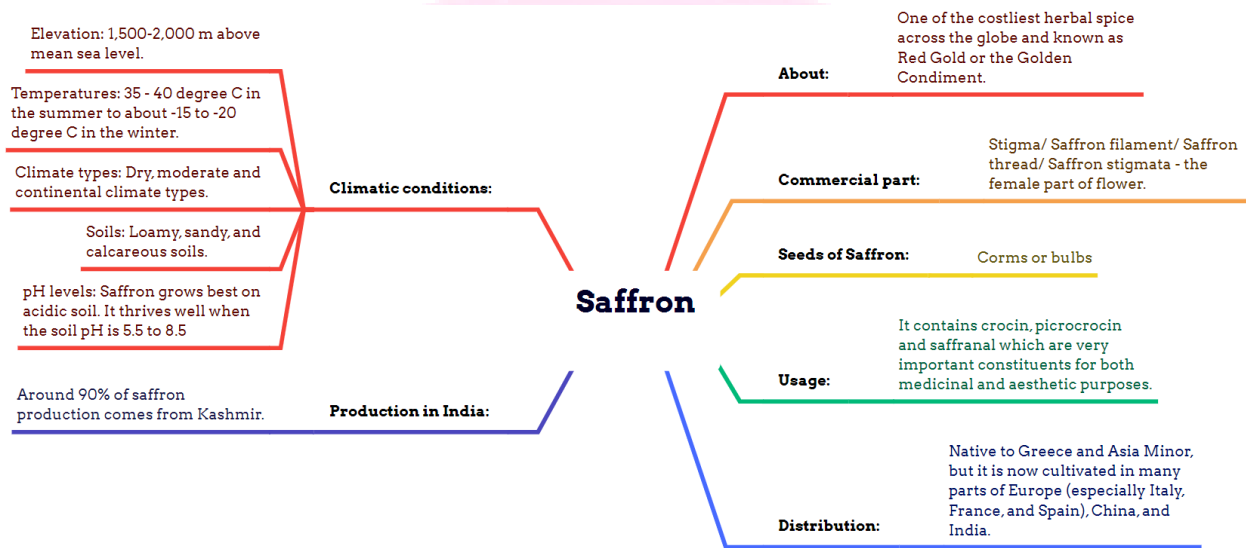
Economy

7. Losing spice: Kashmir's prized saffron crop hit by dry spells - The Hindu

Context

Faced with declining production owing to climate change, many saffron farmers are converting their fields into apple orchards or growing mustard.

Saffron



8. United States overtakes UAE as India's second largest LNG supplier - The Hindu

Context

The U.S. displaced the UAE to emerge as India's second largest supplier of liquefied natural gas (LNG) in 2023, accounting for 3.09 million tonne (mt). LNG is emerging as a substitute fuel in the transition towards green energy.

Trade dynamics

- **World LNG report 2024 statistics:** The U.S. supplied India 1.8 mt LNG in the pre-pandemic period (2019) and the quantity increased to 3.86 mt in 2021.
- **India's imports:** As the fourth largest LNG importer, scaled back in 2022 owing to rising prices and shipments from the U.S. declined to 2.16 mt. UAE's share rose to 2.85 mt last year.
- **Qatar - India's largest LNG supplier for five years:** In 2023, shipments from Qatar rose to a high of 10.92 mt.
- **Decline in the share of African nations in India's LNG imports:** Nigeria and Angola, which supplied 2.7 mt and 2.9 mt LNG, respectively, to India pre-pandemic (2019), saw their cargoes shrink to 0.73 mt each in 2023.

Environment

9. Behind Leh flight cancellations: high temperatures, low air density - Indian Express

Context

Sizzling day-time temperatures in Leh, Ladakh, led to many flight cancellations recently.

Mechanism of aircrafts

- **Cutting of air:** When an aircraft begins to move, the air over the top of the wings moves faster than that under the bottom.
- **Movement of air:** This faster-moving air then creates a lower pressure above the wing, when compared to the pressure under it.
- **Pressure difference:** It generates a force (called lift) underneath the wings that helps the aircraft take off.

How do higher temperatures affect an aircraft's flight?

- **Higher temperatures expand the air:** Due to it, the air becomes less dense or thinner & fewer molecules are available underneath the aircraft's wings to create enough lift to push the plane into the sky.
- **Affects the performance of an aircraft's engine:** The combustion that creates an engine's power is severely impacted as there are fewer molecules of oxygen to mix with the fuel.
- **Reduction in the thrust:** The force which moves an aircraft through the air — produced by the engines is also reduced due to thin air.
- **Makes landings more challenging:** In addition to the brakes on the wheels, pilots use reverse thrust to slow down the aircraft while landing. In case of thin air, the reverse thrust generated might not be enough.

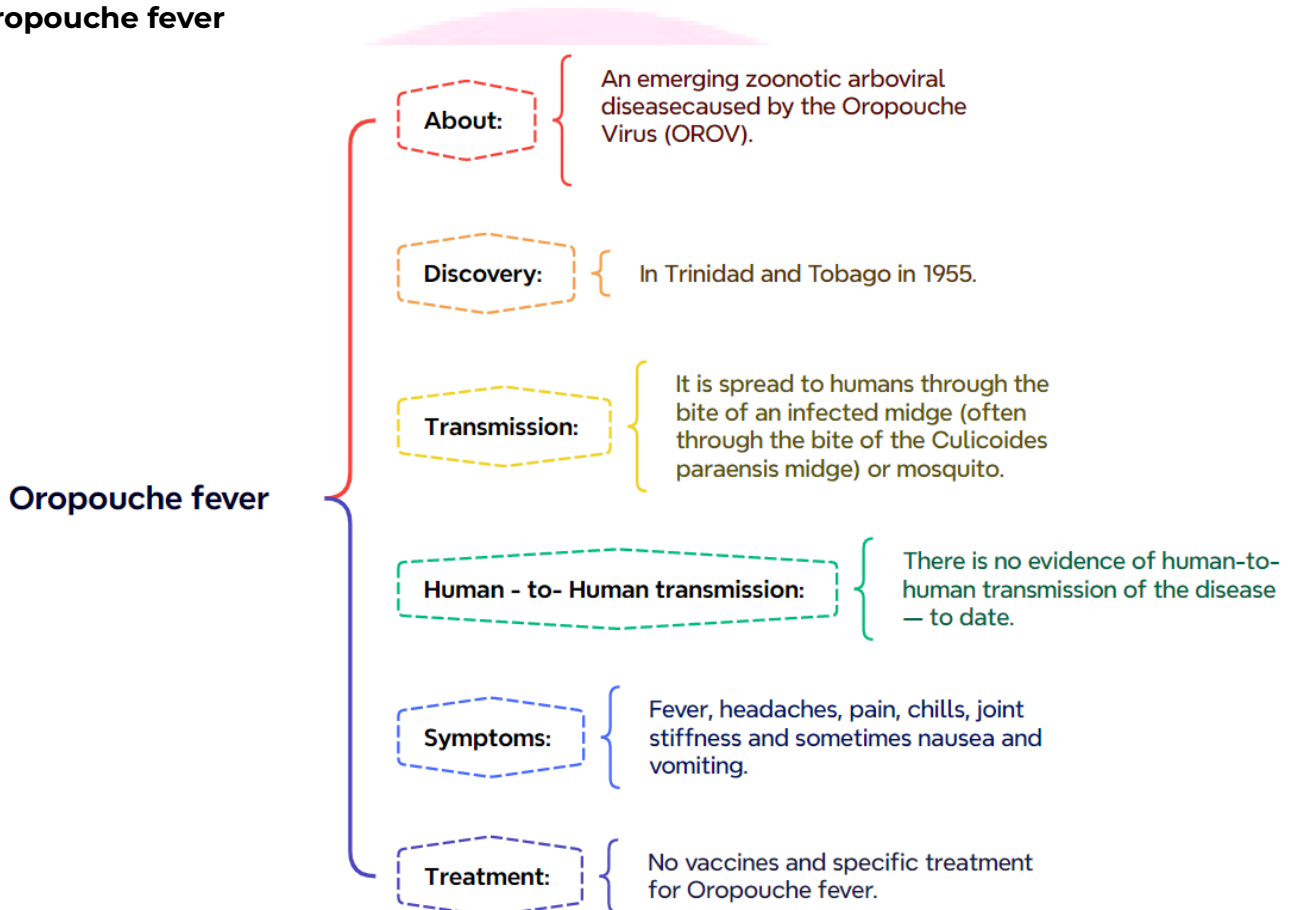
Sci and Tech

10. Death in Brazil: What is Oropouche fever? - Indian Express

Context

Two people in the Brazilian state of Bahia were the first people to die from Oropouche fever.

Oropouche fever



11. Dementia has 2 new risk factors— untreated vision loss, high cholesterol: Lancet study - Indian Express

Context

A new Lancet Commission report has flagged it along with untreated vision loss as significant new risk factors for dementia, a condition characterised by memory problems and disruptions in thinking and social skills. Its most prevalent form is Alzheimer's Disease, which accounts for about 60-70 per cent of dementia cases.

Cholesterol

Cholesterol

About:

A waxy, fat-like substance that's found in all the cells in the body.

Presence in blood:

Cholesterol travels through the blood on proteins called "lipoproteins."

Two types of lipoproteins carry cholesterol:

LDL cholesterol/ "bad" cholesterol: It makes up most of your body's cholesterol.

HDL cholesterol/ "good" cholesterol: It carries cholesterol from other parts of your body back to your liver. Your liver then removes the cholesterol from your body.



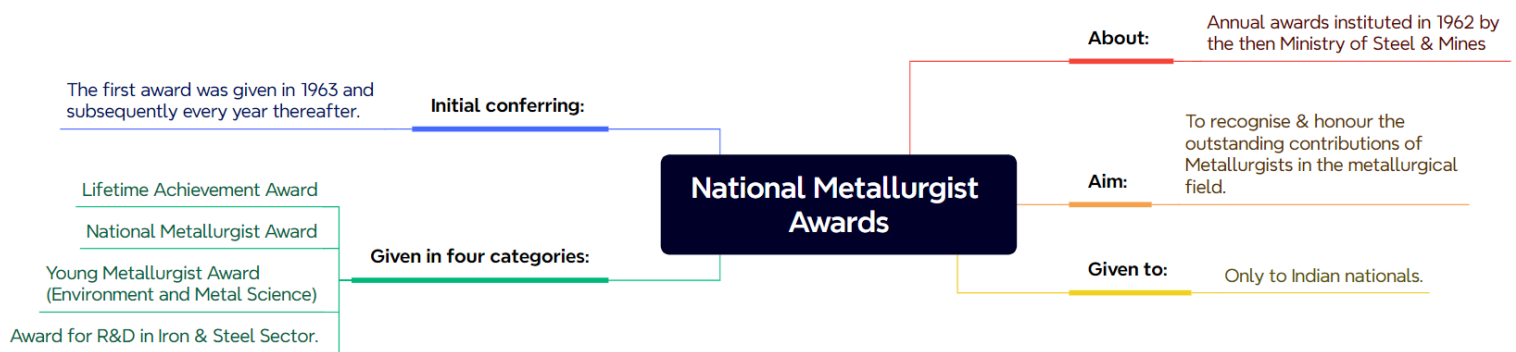
Miscellaneous

12. Ministry of Steel invites applications for National Metallurgist Awards -2024 - PIB

Context

The Ministry of Steel, Government of India confers National Metallurgist Awards to recognize outstanding contributions in the metallurgical field, covering Operations, Research & Development, Waste Management and Energy Conservation.

National Metallurgist Awards



13. First STI Conclave on “Traditional Knowledge for Sustainable Livelihoods” organised jointly by ISTIC-UNESCO and CSIR - PIB

Context

The International Science, Technology, and Innovation Centre for South-South Cooperation (ISTIC) under the auspices of UNESCO together with the Council of Scientific and Industrial Research (CSIR) constituents, Traditional Knowledge Digital Library Unit (CSIR-TKDL Unit), New Delhi, and CSIR-Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad, India is organizing a STI Conclave on “Traditional Knowledge for Sustainable Livelihoods”.

ISTIC-UNESCO

ISTIC-UNESCO

About:	A UNESCO Category 2 Centre.
Host:	The Malaysian Government has hosted this since 2008.
Significance:	An international platform offering sustainable programmes and services and augmenting sustainable development for South-South Cooperation.
Mission:	A leading international platform offering sustainable programmes and services in producing holistic talents towards institutional excellence and augmenting sustainable development for South-South Cooperation.
Aim:	To support the exchange of students, researchers, scientists, and technologists among developing countries.

UNESCO Category 2 Centre

- **About:** A global network of institutions of excellence in the Organization's domains of competence.
- **Significance:** An integral part of the Organization's Comprehensive Partnership Strategy.

14. Shaheed-i-Azam Sardar Udham Singh - Indian Express

- **Birth:** In Sunam in Punjab's Sangrur district in 1899
- **Role:** Joined the Ghadar Party in 1924 to organise overseas Indians with the purpose of overthrowing colonial rule.
- **13th March, 1940:** He shot Michael O'Dwyer instead of General Dyer at a meeting of the East India Association and the Royal Central Asian Society at Caxton Hill.



“
What Great Honour
Could Be Bestowed on Me
Than Death for the
Sake of My Motherland.

”
UDHAM SINGH

26 December 1899-31 July 1940

- **Martyrdom:** He was sentenced to death and was hanged on 31st July, 1940 at Pentonville Prison in London.

Rajasthan Current Affairs

1. Balcony solar panel tested in Jaipur for the first time in the country

- A balcony solar system was installed in the Rajasthan Electricity Regulatory Commission (REC) building in Jaipur on 30 July 2024 for testing to generate electricity from the solar system in an apartment.
- Rajasthan became the first state in the country to test and launch the balcony solar system.
- It is a ready-to-use, plug and play solar system.
- One kilowatt will generate 100 units of electricity in a month.
- A guideline will soon be issued for common consumers to install balcony solar system.
- This balcony solar system will not be connected to the grid. It will have a micro inverter, which will allow direct use of electricity in the house.

2. Jaipur will become the only city in the country to have five safaris

- Tiger Safari has been developed in 30 hectares area near Nahargarh Biological Park in Jaipur.
- It has been developed at a cost of approximately Rs. 4 crore.
- At present, facilities of Leopard Safari are available in Jhalana, Leopard Safari in Amargarh, Elephant Safari in Amer and Lion Safari in Nahargarh Biological Park in Jaipur.
- Tiger Safari will be the fifth safari in Jaipur and Jaipur will be the only city in the country to have five safaris.

3. Neena Singh

- Rajasthan's first woman IPS officer
- Neena Singh retired on 31 July 2024.
- She is a 1989 batch Indian Police Service officer.
- Neena Singh has been the first woman Director General of CISF.
- Neena Singh has served on many important posts including Sirohi SP, Ajmer Range IG.

4. Rajasthan Institute of Medical Science (RIMS) will be established in Jaipur on the lines of AIIMS.

- Rajasthan University of Health Sciences, Jaipur will be developed as Rajasthan Institute of Medical Science (RIMS) on the lines of AIIMS.
- Along with alternative facilities of hospitals attached to SMS Medical College, high level treatment facilities will be available.
- A budget of Rs 750 crore has been set for this in a phased manner.
- In this, facilities of delivery, dialysis, cath lab, trauma as well as MRI CT scan will be started.

- In this, Ayush wing will be established for those who get treatment through traditional medical system.
- In its first phase, there is a plan to create departments like broad specialty, then super specialty and in the last phase, tropical medicine, virology, traumatology.
- In the second phase, departments like transfusion medicine, virology, traumatology, rare disease, cancer and organ transplant will be started.

