

## Squamates

- A study in Nature finds a near-complete skeleton of an early reptile from the Middle Jurassic period of Scotland.
- The fossil may improve our understanding of the anatomical transformations that led to the establishment of the body plan of reptiles such as modern lizards.
- The skeleton is of *Bellairsia gracilis*, a primitive squamate.
- Squamates are a group of reptiles that includes more than 10,000 living species descended from a shared common ancestor that lived 240 MYA.
- Squamata is the largest order of reptiles, comprising lizards, snakes, and amphisbaenians, which are collectively known as Squamates or scaled reptiles.



THE HINDU

## UNESCO on the glacier

- A third of the glaciers on the UNESCO World Heritage list are under threat, regardless of efforts to limit temperature increases, a study conducted by the UN body has found.
- However, the study said it was still possible to save the other two-thirds if the rise in global temperature did not exceed 1.5°C compared to the pre-industrial era.

- Importance of Glacier
- Half of humanity depends directly or indirectly on glaciers as their water source for domestic use, agriculture, and power.
- Glaciers are also pillars of biodiversity, feeding many ecosystems,
- “When glaciers melt rapidly, millions of people face water scarcity and the increased risk of natural disasters such as flooding, and millions more may be displaced by the resulting rise in sea level.
- The UNESCO study, in partnership with the International Union for Conservation of Nature (IUCN), showed that these glaciers have been retreating at an accelerated rate since 2000 due to CO<sub>2</sub> emissions, which are warming temperatures.
- They are currently losing 58 billion tonne of ice every year equivalent to the combined annual water use of France and Spain and are responsible for nearly 5% of observed global sea level rise.

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## Baltal-Zojila region

- The first-ever recording of the snow leopard from the Baltal-Zojila region has renewed hopes for the elusive predator in the higher altitudes of Jammu and Kashmir and Ladakh.
- “It is the first record of snow leopard from the Baltal-Zojila area.
- Zoji La (sometimes Zojila Pass) is a high mountain pass in the Himalayas.
- It is in the Indian Union Territory of Ladakh, Kargil district, Kashmir. Located in the Drass, the pass connects the Kashmir Valley to its west, with the Drass and Suru

valleys to its northeast and the Indus valley further east.

- National Highway #1 running between Srinagar and Leh in the western section of the Himalayan mountain range, traverses the pass
- Baltal is a camping ground for pilgrims, north of Sonamarg on the Sind River at the base of Zojila pass.

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### **Falcon Heavy launch**

- In November 1, Elon Musk-owned SpaceX launched the Falcon Heavy rocket into a geosynchronous Earth orbit from the Launch Complex 39A at the Kennedy Space Center in Florida, U.S.

#### **What is its current mission?**

- The rocket is carrying satellites to space for the U.S. military in a mission named as U.S. Space Force (USSF)-44.
- The mission deployed two spacecraft payloads, one of which is the TETRA 1 microsatellite created for various prototype missions in and around the geosynchronous earth orbit.
- The other payload is for national defence purposes.
- It will place the satellites for the Space Systems Command's Innovation and Prototyping.
- Space Systems Command (SSC) is the oldest military space organization in the United States Armed Forces.
- It is responsible for developing, acquiring, equipping, fielding, and sustaining lethal and resilient space capabilities.
- SSC mission capability areas include launch acquisition and operations,

communications and positioning, navigation and timing, space sensing, battle management command, control, and communications, and space domain awareness and combat power.

- The Falcon Heavy uses three boosters for added thrust and lift capacity.
- The center booster plunged into the ocean as planned and the two side boosters landed on ground pads at the Cape Canaveral Space Force Station.

#### **What are the specifications of the Falcon Heavy rocket?**

- SpaceX claims Falcon Heavy to be the most powerful rocket in the world today by a factor of two.
- With a lifting capacity of around 64 metric tonnes into orbit, Falcon Heavy can lift more than twice the payload of the next closest operational vehicle, the Delta IV Heavy.
- The rocket has a height of 70 m, a width of 12.2 m and a mass of 1,420,788 kg.
- Falcon Heavy has 27 Merlin engines which together generate more than five million pounds of thrust at lift-off, equalling around eighteen 747 aircraft at full power.
- This makes it the most capable rocket flying.
- Merlin is a family of rocket engines developed by SpaceX for use on its Falcon 1, Falcon 9, and Falcon Heavy launch vehicles.
- Merlin engines use RP-1 and liquid oxygen as rocket propellants in a gas-generator power cycle.

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## Uniform civil code

### What did the Constituent Assembly say about the UCC?

- Article 44 contained in part IV of the Constitution says that the state “shall endeavour to secure for the citizens a uniform civil code throughout the territory of India”.
- While there is no draft or model document yet for the UCC, the framers of the Constitution envisioned that it would be a uniform set of laws that would replace the distinct personal laws of each religion with regard to matters like marriage, divorce, adoption, and inheritance.
- Part IV of the Constitution outlines the Directive Principles of State Policy, which, while not enforceable or justiciable in a court of law, are fundamental to the country’s governance.
- Members of the Assembly took starkly contrasting stances on the UCC.
- Some also felt that India was too diverse a country for the UCC.
- Member Naziruddin Ahmad from Bengal argued that certain civil laws in all communities were “inseparably connected with religious beliefs and practices”.
- He felt the UCC would come in the way of Article 19 of the draft Constitution (now Article 25) which guarantees the right to freedom of religion subject to public order, morality, and health.
- Member K.M. Munshi however, rejected the notion that a UCC would be against the freedom of religion as the Constitution allowed the government to make laws covering secular activities related to

religious practices if they were intended for social reform.

- Dr. B.R. Ambedkar had more of an ambivalent stance toward the UCC. He felt that while desirable, the UCC should remain “purely voluntary” in the initial stages. He stated that the Article “merely” proposed that the state shall endeavour to secure a UCC, which means it would not impose it on all citizens.
- Supreme Court in 2019 hailed Goa as a “shining example” of an Indian State which has a functioning UCC, experts point out that the ground reality in Goa is more complex and that the Code has legal pluralities.

### What has the Supreme Court said about the UCC?

- It’s *Mohd. Ahmed Khan vs Shah Bano Begum* judgment of 1985, where a divorced Muslim woman demanded maintenance from her former husband, the apex court while deciding whether to give prevalence to the CrPc or the Muslim personal law, called for the implementation of the UCC.
- The Court also called on the government to implement the UCC in the 1995 *Sarla Mudgal* judgment as well as in the *Paulo Coutinho vs Maria Luiza Valentina Pereira* case (2019).
- In 2018, the Law Commission submitted a 185-page consultation paper on the reform of family law.
- The paper stated that a unified nation did not necessarily need “uniformity”, adding that secularism could not contradict the plurality prevalent in the country.

- In fact, the term “secularism” had meaning only if it assured the expression of any form of difference, the Commission noted.
- While saying that a UCC “is neither necessary nor desirable at this stage”, the report recommended that discriminatory practices, prejudices, and stereotypes within a particular religion and its personal laws should be studied and amended.
- The Commission suggested certain measures in marriage and divorce that should be uniformly accepted in the personal laws of all religions.

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