

January - 05

TNPSC BITS

- ❖ The Joint Military Exercise 'Desert Cyclone 2024' between India and UAE is held in Rajasthan.
- ❖ Gujarat has set a Guinness record by performing mass Surya Namaskar simultaneously at 108 places in the state including Modhera Sun Temple with more than 4000 people participation.

INTERNATIONAL

Genocide case against Israel



- ❖ South Africa moved the International Court of Justice (ICJ), for an urgent order declaring that Israel was in breach of its obligations under the 1948 Genocide Convention.
- ❖ The ICJ is a United Nations platform for resolving disputes between states.
- ❖ The term 'genocide' has been defined using set criteria in the UN's Convention on the Prevention and Punishment of the Crime of Genocide-1948.
- ❖ In the present Convention, genocide means any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such:
 - Killing members of the group;

- Causing serious bodily or mental harm to members of the group;
 - Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
 - Imposing measures intended to prevent births within the group;
 - Forcibly transferring children of the group to another group.”
- ❖ In 2019, the Gambia, on behalf of the OIC (Organisation of Islamic Cooperation), petitioned the court against Myanmar over its atrocities against the Rohingya people.

ECONOMY

Production Linked Incentive extension



Production Linked Incentive Scheme (PLI) for Large Scale Electronics Manufacturing

Incentive: 4% to 6% on incremental sales (over base year) of goods manufactured in India

Target Segments: Mobile phones and specified electronic components

Eligibility: Subject to thresholds of incremental investment and incremental sales of manufactured goods

Tenure of the Scheme: Five years subsequent to the base year as defined (FY19-20)

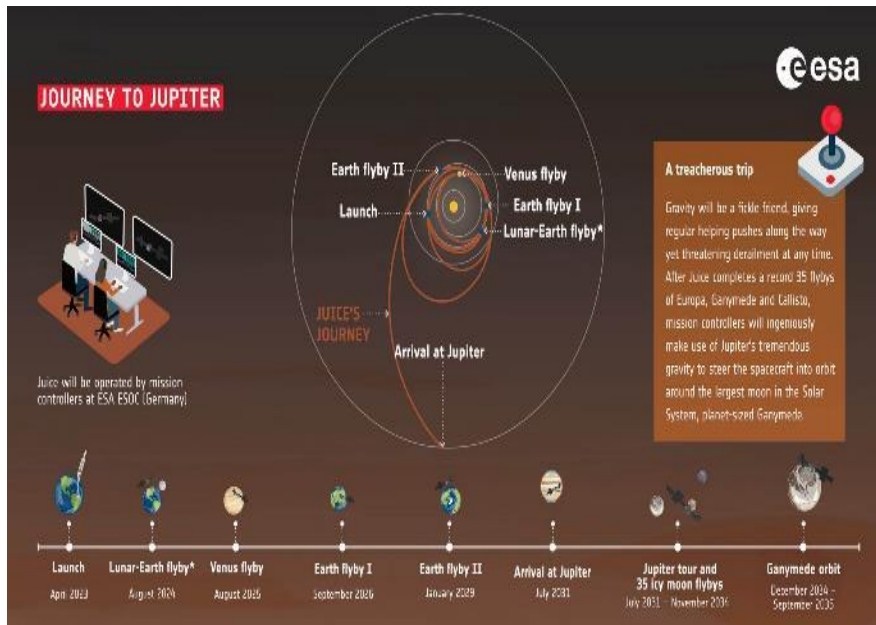
- ❖ The Ministry of Heavy Industries extend the Production Linked Incentive (PLI) Scheme for Automobile and Auto Components by one year with "partial amendments".
- ❖ It aims to provide clarity and flexibility to the scheme.

- ❖ The incentive will be applicable for a total of five consecutive financial years, starting from the financial year 2023-24.

SCIENCE AND TECHNOLOGY

Double gravity assist

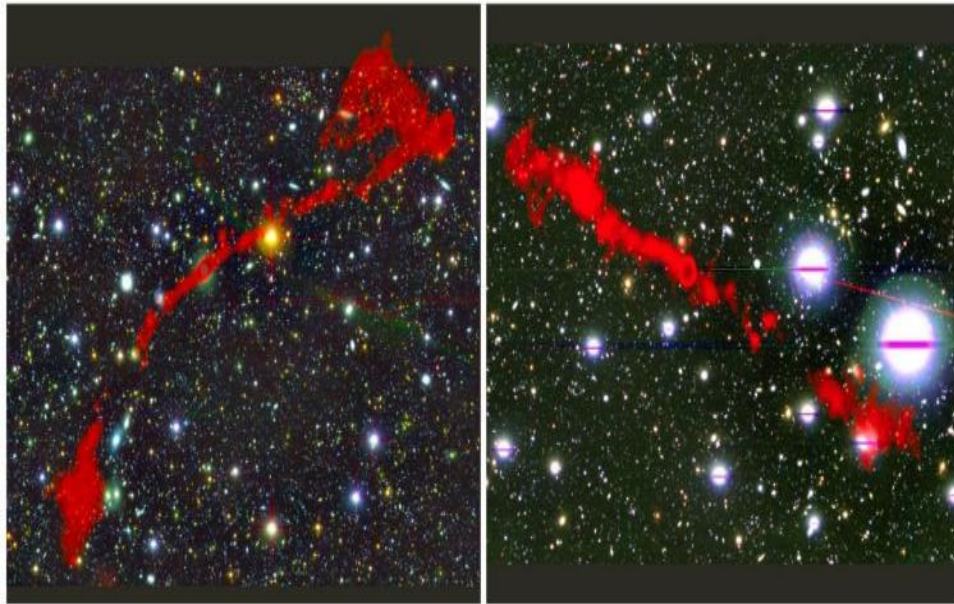
- ❖ European Space Agency's (ESA) Jupiter Icy Moons Explorer (JUICE) probe used double gravity assist.
- ❖ For the first time ever, from Earth and Moon used to propel itself towards Jupiter.
- ❖ This was a notable achievement considering JUICE's substantial weight of around 6000 kg.
- ❖ This mission aims to study Jupiter along with its three intriguing moons – Ganymede, Callisto, and Europa.



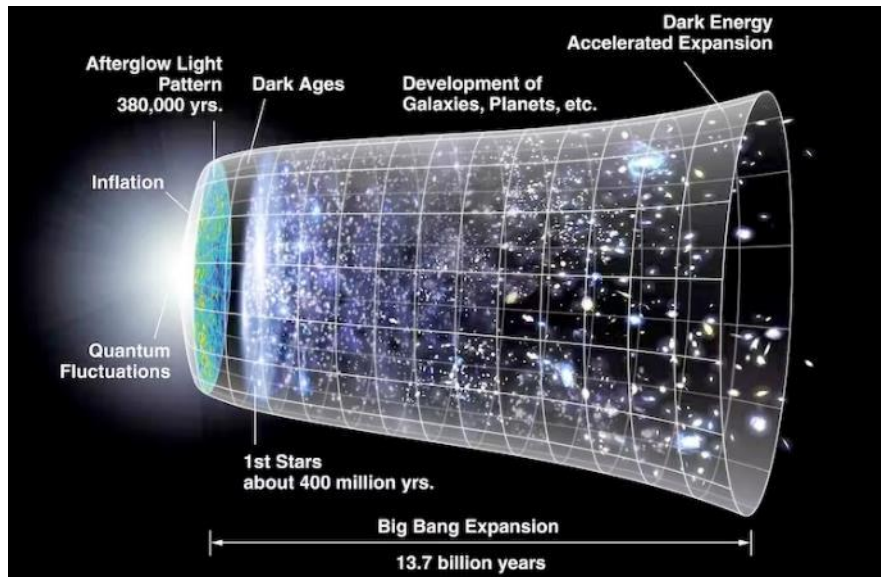
“Teenage” Galaxies in Cosmic Adolescence

- ❖ The James Webb Space Telescope shows that the teenage galaxies are unusually hot.
- ❖ They reaching about 24,000 degrees Fahrenheit (13,350 degrees Celsius) compared to modern galaxies.
- ❖ Teenage galaxies, though already forming a substantial number of stars, exhibit a rapid growth phase.
- ❖ These adolescent galaxies are formed about 2 to 3 billion years after the Big Bang.

- ❖ Also, they contain some unexpected chemical elements like oxygen, hydrogen and Nickel.



Cosmic Expansion 2023



- ❖ Euclid telescope observed that the galaxies belonging to the Perseus Cluster and others move further away.
- ❖ This was showing the expansion of universe.
- ❖ The universe's expansion makes galaxies move away from each other.

- ❖ The relationship between a galaxy's speed and distance is governed by "Hubble's constant", which is about 43 miles (70 km) per second per Megaparsec.
- ❖ Perseus is one of the most massive structures known in the Universe.
- ❖ It is located 'just' 240 million light-years away from Earth and containing thousands of galaxies.

ENVIRONMENT

New Marine Amphipod Species

- ❖ Researchers have discovered a new species of marine amphipod — a shrimp-like crustacea of genus *Demaorchestia* in Chilika lake of Odisha.
- ❖ It belongs to the subfamily *Platorchestiinae* found along the Indian coast.
- ❖ The present contribution has added one more species to the genus *Demaorchestia*, raising the global species number in the group to six.
- ❖ The family *Talitridae* was considered one of the oldest groups of amphipods, and it was believed to have been on the planet since the Jurassic age.



Chila in Peru

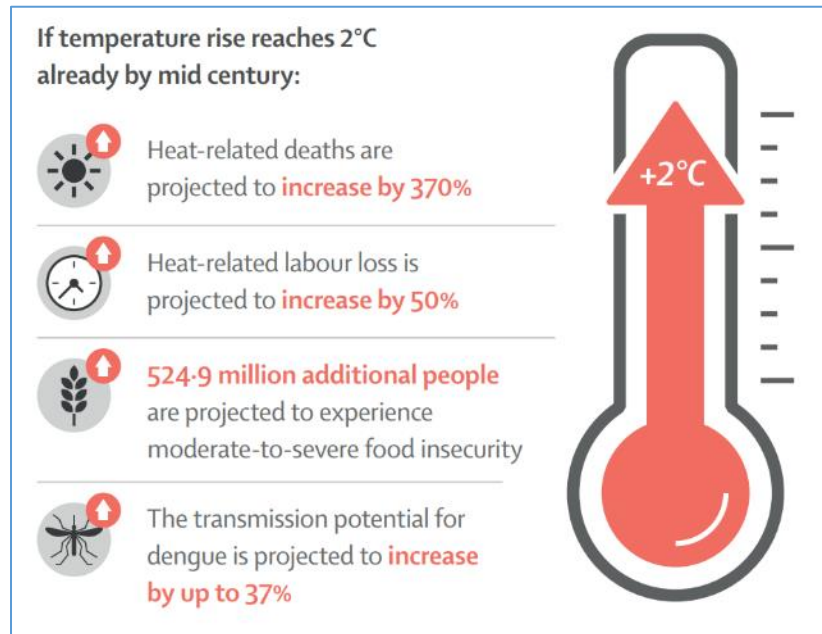
- ❖ Some mountain ranges in Peru where glaciers have almost disappeared.
- ❖ Chila has lost 99% of its glacial surface since 1962.
- ❖ Peru has lost more than half of its glacier surface in the last six decades.
- ❖ Around 175 glaciers became extinct due to climate change between 2016 and 2020.
- ❖ In 58 years, 56.22% of the glacial coverage recorded in 1962 has been lost.

- ❖ This country has 1,050 square kilometers (405 square miles) of glacial coverage left.
- ❖ This area representing about 44% of what was recorded in 1962, when the first glacier inventory was carried out.



REPORTS AND INDICES

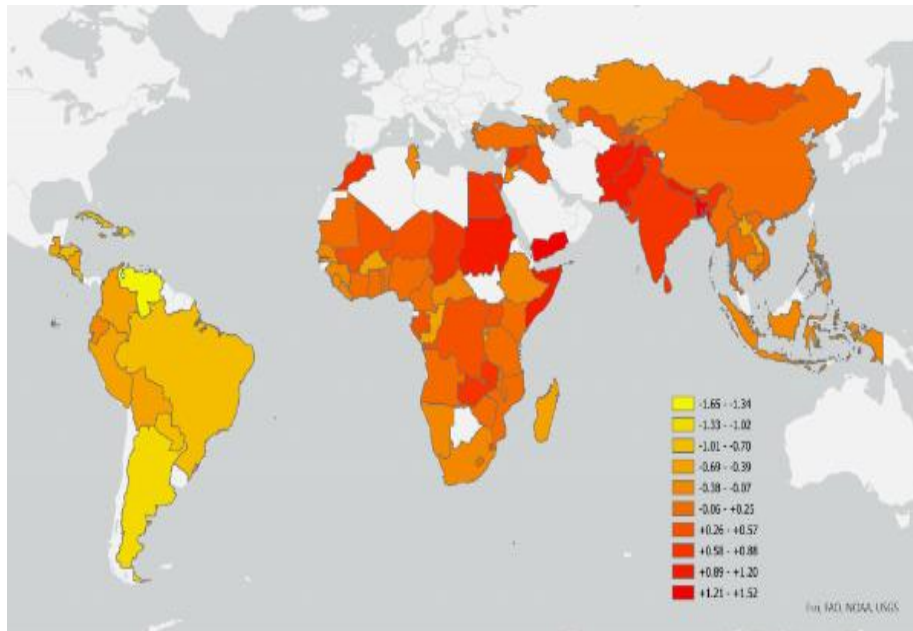
Lancet Countdown on Health and Climate Change



- ❖ It warns that from 2018 to 2022, average summer temperatures increased by 0.5°C compared to the 1986–2005 baseline average, with severe implications for public health.

- ❖ 1,337 tonnes of carbon dioxide still emitted every second.
- ❖ 43% increase in the total number of heatwave days experienced by children under the age of one from 2013-2022 compared to the 1986-2005 period.
- ❖ Adults over 65 saw a staggering 216% increase in heatwave days during the same timeframe.
- ❖ 191 billion potential labor hours lost in 2022 alone, a 54% increase from 1991-2000.
- ❖ This loss was amounted to a potential income loss of US\$219 billion in 2022, equivalent to 6.3% of the country's GDP.
- ❖ Agricultural workers bore the brunt, experiencing 64% of potential hours lost and 55% of potential income losses.

Climate crisis: Inequality hotspot study



- ❖ It ranked 87 countries based on the level of climate change threat faced by women working in agricultural sectors.
- ❖ India stood 12th on the risk index developed by researchers from six institutes.
- ❖ The other Asian countries included Bangladesh, Pakistan, Afghanistan and Nepal, ranking second, fourth, seventh and eighth respectively.
- ❖ Agri-food systems encompass production, post-harvest handling and distribution.
- ❖ Within African and Asian regions, central, east and southern Africa and west and south Asia were particularly at risk.

- ❖ They face the highest climate risks such as droughts, floods or shortened crop-growing season.

STATES

Jammu and Kashmir panchayati raj Act



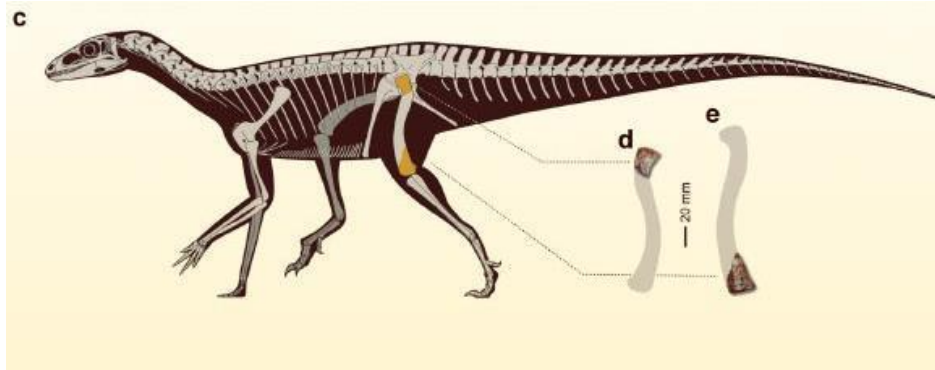
- ❖ J&K administrative council amended the Panchayati Raj Act 1989 to incorporate reservation for OBCs.
- ❖ It aims to make the Act more effective by ensuring transparency in the functioning of panchayat bodies.
- ❖ It includes the incorporation of a definition of OBCs for providing reservation, the method of disqualification from membership, suspension and removal of sarpanch, naib sarpanch, and Panch by the government.

MISCELLANEOUS

New dinosaur species - silesaur

- ❖ A new genus and species of silesaur being named *Amanasaurus nesbitti* has been discovered in Brazil.
- ❖ *Amanasaurus nesbitti* lived in what is now Brazil during the Carnian age of the Late Triassic epoch, some 233 million years ago.

- ❖ The ancient creature was a member of Silesauridae, an extinct family of Triassic dinosauriform reptiles.
- ❖ They are most commonly considered to be a group of non-dinosaur dinosauriforms, and the sister group of dinosaurs.



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