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PRELIM POINTERS

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Key Facts about Reang Tribe



Overview:

The ethnic Reang community has demanded that Tripura declare a holiday on Hojagiri Day, which celebrates the traditional Hojagiri dance.

About Reang Tribe:

- The Reang tribe, who locally call themselves "**Bru**", is the **second largest tribal community of Tripura** after the old Tripuri clan.
- They are the **only Particularly Vulnerable Tribal Group (PVTGs)** residing in the state of **Tripura**.
- Apart from Tripura, they are **also found in** the neighbouring state of **Mizoram** and a few in **Assam**.
- According to the 2011 census of India report, the total population of the Reang tribe is about 1,88,080.
- Reangs are said to have **come first from Shan State of upper Burma** (now Myanmar) in different waves to the Chittagang Hill Tracts and then to the Southern part of Tripura.
- Similarly, another group entered Tripura via Assam and Mizoram during the 18th Century.
- Reangs belongs to **Indo-Mongoloid racial stock**.
- Their **language** is known as "**Kaubru**," which has a **tonal effect on the Kuki language**, though broadly it is the **Kok-Borok dialect**.
 - The language belongs to the **Tibeto-Burmese linguistic family**.
- Ethnically, Reangs are divided into **two major clans: Meska and Molsoi**.
- The Reangs are a well-knit ethnic group having a rigid, well-ordained, and **well-structured self-governing system**.
- **Economy**: The Reangs are **primarily an agriculturist tribe**. In the past, they mostly used to practise the '**Huk**' or **Jhum cultivation**, like most other Tripuri tribes. But **now shifted to modern agriculture practice**.

- **Religious Belief:**

- At present, most of the Reangs in Tripura follow **Hinduism**, and most of their deities are akin to gods and goddesses of Hindu faith.
- Reangs have **faith in different deities** like Buraha, Bonirao, Songragma, Jampira, Lampra, etc.

- **Hojagiri folk dance** of the Reang clan had achieved an unprecedented acclaim all over the world.

Q1: Who are Particularly Vulnerable Tribal Groups (PVTGs)?

PVTGs are a more vulnerable group among tribal groups in India. These groups have primitive traits, geographical isolation, low literacy, zero to negative population growth rate and backwardness. Moreover, they are largely dependent on hunting for food and a pre-agriculture level of technology. Currently, there are 2.8 million PVTGs belonging to 75 tribes across 22,544 villages in 220 districts across 18 states and Union Territories in India.





Antlion species



Overview:

Researchers recently spotted a large-sized adult antlion, *Palaepatus contrarius*, that resembles a dragonfly for the first time in Tamil Nadu on the Madras Christian College (MCC) campus.

About Antlions:

- Antlions are **insects** belonging to the **order Neuroptera**. They are classified in the family Myrmeleonidae.
- They are **named for the predatory nature of the larvae**, which commonly **trap ants and other small insects in pits dug into the ground**.
- Antlions are found throughout the world, **primarily in dry, sandy regions**.
- It is very **difficult to spot them during the day** and can be **spotted at night near illuminated spots**.
- **Features:**
 - **Adult** antlions **resemble damselflies**, but they have **softer bodies**, a **lacy wing** pattern, and **long clubbed antennae**.
 - The **bodies** of antlions are **long and slender** and **grayish** in color.
 - The wings are generally clear, but some species have spots on their wings.
 - Antlions are **weak fliers** and can be found at night near lights.
 - They come in various shapes and sizes, with larvae typically measuring from a few millimeters to several centimeters, depending on the species.



- Antlion **larvae have rounded bodies with long sickle-shaped jaws**. The larvae are **found at the base of cone-shaped pits** in sandy areas.
- They usually remain in the **larval stage for one to two years**, depending on the species.
- Once they pupate, they require up to one month to complete their development. **Adult antlions survive for one to two months**.
- Antlions are **harmless** and cause no damage to flowers, people, or structures.
- They are **highly beneficial** and **feed on ants and other insects** that fall into their traps.

What is Palpares contrarius?

- It is a **large-sized adult antlion**.
- Though it looks like a dragonfly, it has an antenna and a distinct fluttering flight, which separates it from them.

Q1: What is antennae?

The antennae are a pair of sense organs located near the front of an insect's head capsule. Although commonly called "feelers", the antennae are much more than just tactile receptors. They are usually covered with olfactory receptors that can detect odor molecules in the air (the sense of smell). Many insects also use their antennae as humidity sensors, to detect changes in the concentration of water vapor. Mosquitoes detect sounds with their antennae, and many flies use theirs to gauge air speed while they are in flight.

Kyasanur Forest Disease



Overview:

The Chikkamagaluru District health officials are on high alert to prevent Kyasanur Forest Disease (KFD), also known as monkey fever, in the district.

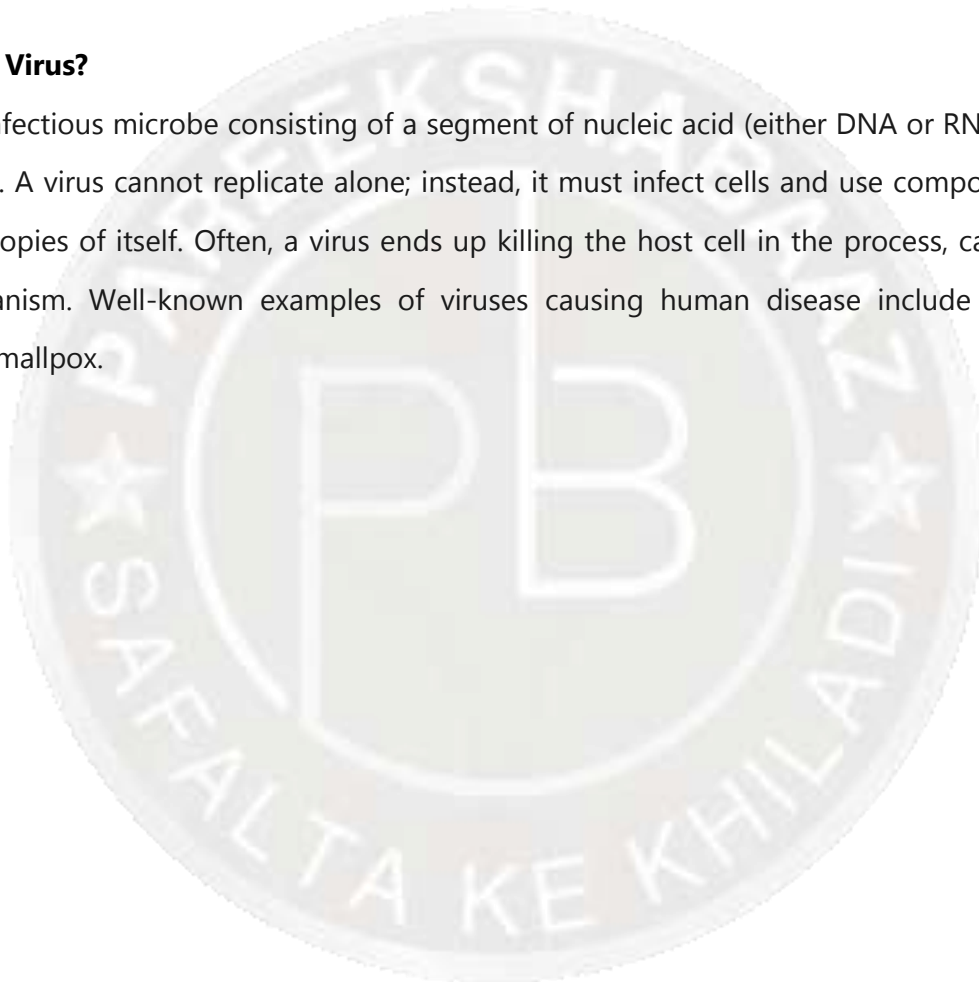
About Kyasanur Forest Disease (KFD):

- KFD, also referred to as **Monkey Fever**, is a **tick-borne viral haemorrhagic disease** mostly found in **southern India**.
- The disease was **first reported from the Kyasanur Forest of Karnataka** in India in 1957; hence, it is known as Kyasanur Forest disease (KFD).
- The **causal agent, Kyasanur Forest Disease Virus** (family Flaviviridae, genus **Flavivirus**), is a member of the tick-borne encephalitis (TBE) complex.
- **Transmission:**
 - It is transmitted by a range of tick species, with *Haemophysalis spinigera* being considered the principal vector.
 - A wide range of small rodents, monkeys, and birds are thought to play a role in KFD virus transmission.
 - **Transmission to humans** may occur after a **tick bite or contact with an infected animal**, most importantly a sick or recently dead monkey.
 - **No person-to-person transmission** has been established yet.
 - The **epidemic period** usually begins in October or November and **peaks from January to April**, then declines by May and June.
 - **Symptoms:** Sudden onset of **high-grade fever, prostration, nausea**, vomiting, diarrhea and occasionally **neurological and haemorrhagic manifestations**.

- Between **5 and 10%** of people who are known to be **affected by KFD die**.
- **Treatment:**
 - There is **no cure for KFD**.
 - **Supportive care is crucial**, including fluid balance, providing oxygen, managing blood pressure, and treating additional infections.
- **Vaccine:** A **vaccine for KFD is available** and recommended in the parts of India where KFD is found.

Q1: What is a Virus?

A virus is an infectious microbe consisting of a segment of nucleic acid (either DNA or RNA) surrounded by a protein coat. A virus cannot replicate alone; instead, it must infect cells and use components of the host cell to make copies of itself. Often, a virus ends up killing the host cell in the process, causing damage to the host organism. Well-known examples of viruses causing human disease include AIDS, COVID-19, measles and smallpox.



CBSE Merit Scholarship Scheme for Single Girl Child



Overview:

In an official notification, the Central Board of Secondary Education (CBSE) has invited online applications for the single girl child merit scholarship scheme.

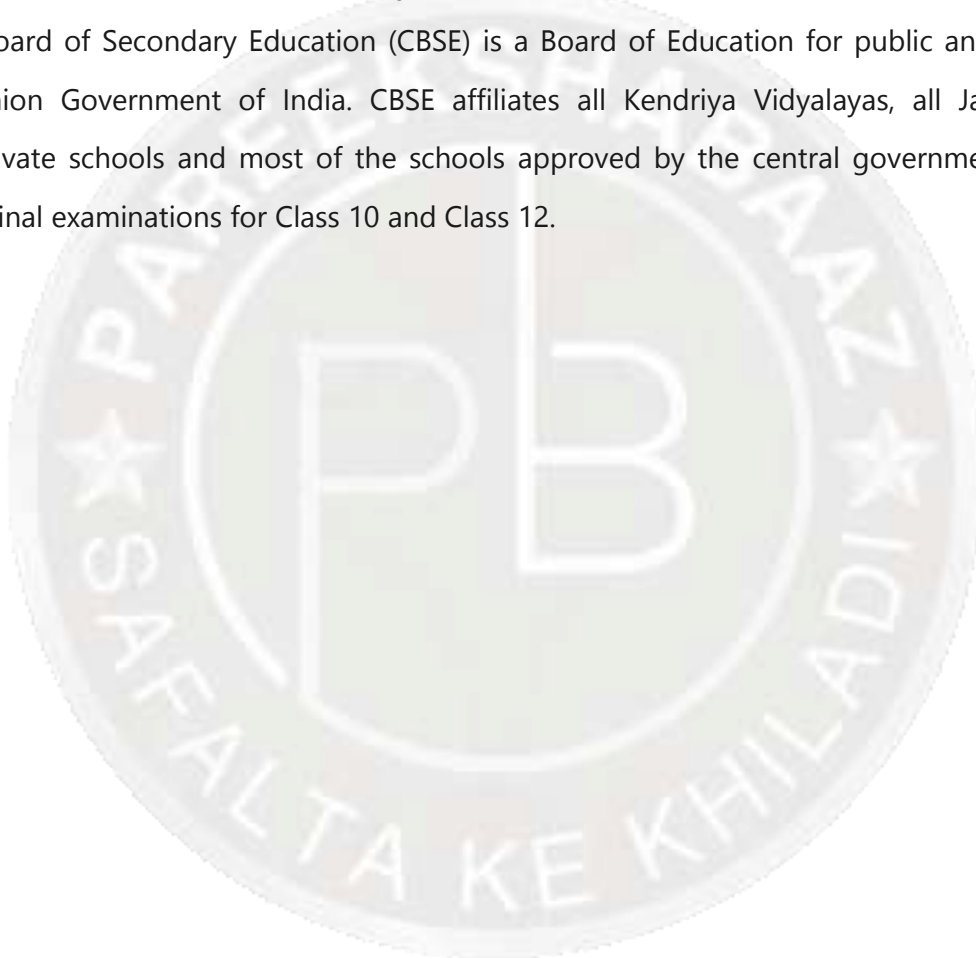
About CBSE Merit Scholarship Scheme for Single Girl Child:

- It aims to provide scholarships to **meritorious female students** who are the **only children of their parents** and have **passed the CBSE Class X examination** with **60% or more marks** and are **continuing** their further school education in **Class XI and Class XII**.
- The scheme is aimed at recognizing the efforts of parents in promoting education among girls and to providing encouragement to meritorious students.
- It provides **financial aid every month** to the selected students, so they can continue their higher education.
- **Eligibility Criteria:**
 - The applicant should be the **single girl child** of her parents and be an **Indian national**.
 - To be eligible for the scholarship scheme, all single girl students must **have 60 percent** or more marks **in the CBSE Class 10 Examination**.
 - They should be **studying Class 11 and 12 in CBSE-affiliated schools** with **tuition fees not exceeding Rs 1,500 per month**.
 - **NRI applicants** of the Board are **also eligible** for the award. The **tuition fee** for the NRIs should be a **maximum of Rs. 6,000/- per month**.
 - Students with **gross parental/family income up to Rs. 8 lakh per annum** are eligible for scholarships under the scheme.

- **Scholarship amount:**
 - Students who are selected for the scholarship will receive an amount of **₹500/- per month.**
 - The amount is payable for a maximum period of two years. Payment will be made through ECS/NEFT.
- **Renewal options:** Existing scholarship holders can renew their scholarship for Class XII if they **secured 50% or more marks in their Class XI exams.**

Q1: What is the Central Board of Secondary Education (CBSE)?

The Central Board of Secondary Education (CBSE) is a Board of Education for public and private schools, under the Union Government of India. CBSE affiliates all Kendriya Vidyalayas, all Jawahar Navodaya Vidyalayas, private schools and most of the schools approved by the central government of India. CBSE conducts the final examinations for Class 10 and Class 12.



Guru Teg Bahadur



Overview:

Guru Teg Bahadur Martyrdom Day is observed every year on 24 November to honour the sacrifice of the ninth Sikh Guru.

About Guru Teg Bahadur:

- Guru Teg Bahadur's name earlier was Teyag Mal and he was **the ninth** of ten Gurus of the **Sikh religion**.
- His father and the **sixth Guru of Sikhs**, Guru Hargobind Sahib (1595-1644) changed the name to Teg Bahadur.
- He got his name from his fighting and sword skills on the battlefield.
- He was known as **Hind ki Chadar**, or the 'Shield of India.'
- **Works**
 - He **built the city of Anandpur Sahib** (in Rupnagar/Ropar district, on the edge of Shivalik Hills, near the Sutlej River, in Punjab). Here the last two Sikh Gurus lived and where Guru Gobind Singh founded the Khalsa Panth in 1699.
 - **Religious work:** He contributed more **than 100 poetic hymns to Granth Sahib** which cover various topics, such as the nature of God, human attachments, body, mind, dignity, service etc.
 - **Diplomat:** He was **instrumental in the conciliation** between **Raja Bishan Singh** and Raja Paranpal, thus avoiding a war.
- **Martyrdom:**

- He was first arrested by the Mughals on the orders of Aurangzeb in 1665.
- He was publicly beheaded in 1675 on the orders of **Mughal emperor [Aurangzeb](#) in Delhi.**
- His martyrdom is remembered as the **Shaheedi Divas** of Guru Tegh Bahadur every year on 24 November, according to the **Nanakshahi calendar** released by the Shiromani Gurdwara Parbandhak Committee in 2003.

Q1: What is Adi Granth?

It is the sacred scripture of Sikhism, a religion of India. It is a collection of nearly 6,000 hymns of the Sikh Gurus (religious leaders) and various early and medieval saints of different religions and castes.





What is Dongfeng-100 (DF-100)?



Overview:

China increased the range of its supersonic cruise missile DF-100, i.e., Dongfeng-100.

About Dongfeng-100 (DF-100):

- Dongfeng-100, also known as **Changjian-100 (CJ-100)**, is a **Chinese supersonic cruise missile**.
- It was publicly introduced during China's 70th National Day parade on October 1, 2019.
- It is designed for precision strikes and features capabilities aimed at engaging a wide variety of targets, including land-based infrastructure, reinforced installations, underground bunkers, and large warships.
- **Features:**
 - The missile is a **land-based system** with a **range** reportedly between 3,000 and **4,000 kilometers**.
 - 10×10 transporter erector launchers are used to launch it. But it can also be launched from a bomber.
 - It has a length exceeding 9 meters, a projectile diameter ranging between 0.7 and 1 meter, and a payload capacity of over 500 kilograms.
 - The missile is **powered by a ramjet engine** and achieves **speeds of Mach 5 during its terminal phase**.
 - It boasts **supersonic speeds** throughout **nearly all phases of its flight**, enhancing the missile's survivability and ability to penetrate air defenses.
 - This missile goes up to a height of 30 kilometers after launch, after which it turns towards the target.

- Its **guidance system** includes **inertial navigation**, **terrain matching**, scene matching, and **satellite positioning**, providing high accuracy.

Q1: What are Cruise Missiles?

Cruise missiles are unmanned vehicles that are propelled by jet engines, much like an airplane. They can be launched from ground, air, or sea platforms. Cruise missiles remain within the atmosphere for the duration of their flight and can fly as low as a few meters off the ground. Flying low to the surface of the earth expends more fuel but makes a cruise missile very difficult to detect



Narsapur lace Craft



Overview:

The famous Narasapuram lace craft has bagged the prestigious Geographical Indication (GI) tag.

About Narsapur lace Craft:

- Narsapur is situated on the **bank of Godavari River in the state of Andhra Pradesh.**
- It is believed that the women of the farming community of this region started creating highly attractive artefacts from colourful lace, about 150 years ago.
- The craft has **survived the Indian famine** (1899) and the **Great Depression** (1929). By the early 1900s, above 2,000 women were involved in the craft in the Godavari region.
- The lace **work is done using thin threads** and these are again woven with thin crochet needles of varying sizes.
- Narsapur's famed hand-made crochet industry produces doilies, pillow covers, cushion covers, bed spreads, table-runners, and table cloths etc
- Many of these products are exported to markets in the US, UK, and France.

What is a GI Tag?

- Geographical Indications (GI tags) are signs used on products that **have a specific geographical origin and possess distinctive qualities**, reputation, or characteristics attributable to that place of origin.
- GI tags serve as intellectual property rights that identify a product's unique geographical source, providing legal protection and preventing unauthorised use.
- In India, the **Geographical Indications of Goods (Registration and Protection) Act, of 1999** governs the registration and protection of GIs.
- These tags play a crucial role in promoting and safeguarding the unique products and traditional knowledge of various regions.



Q1: What is Intellectual property rights (IPR)?

These are the legal privileges granted to the inventor or creator to safeguard their intellectual work (in the arts, sciences, literature, etc.) for a specific period of time. These legal rights grant the inventor or creator, or his assignee, the sole right to fully exploit their invention or creation for a specific amount of time.



Plankton



Overview:

The research found that drought in southern Africa's drylands had caused the strongest phytoplankton bloom in about 27 years, south-east Madagascar.

About Phytoplankton Bloom:

- Phytoplanktons are **microscopic plants**, but they play a huge role in the **marine food web**.
- Like plants on land, phytoplankton perform photosynthesis to convert the sun's rays into energy to support them, and they take in carbon dioxide and produce oxygen.
- **Phytoplankton bloom**
 - Phytoplankton population explosion-blooms occur when **sunlight and nutrients are abundantly available to the plants**.
 - When light, nutrients and other conditions, such as temperature, are at the best level for phytoplankton, they can rapidly multiply and flourish. This leads to the development of phytoplankton bloom.
 - They grow and reproduce to a point where they are so dense that their presence changes the color of the water in which they live.
 - Blooms can be quick events that begin and end within a few days or they may last several weeks.
- **Ecological significance**
 - Phytoplankton is estimated to produce about 50 per cent of Earth's oxygen.
 - They have a crucial role in the **global carbon cycle**.
 - They provide an essential food source for organisms like zooplanktons.



- Just like land plants, they grow more in certain seasons.

Q1: What is the carbon cycle?

It is the process that moves carbon between plants, animals, and microbes; minerals in the earth; and the atmosphere. Carbon is the fourth most abundant element in the universe.



Kanhirapoil Megalithic Site



Overview:

A remarkable archaeological discovery has come to light at Kanhirapoil in Madikkai panchayat in Kerala state and experts believe these carvings date back to the Megalithic period.

About Kanhirapoil Megalithic Site:

- It is located in the **state of Kerala**.
- **Major findings**
 - 24 pairs of **prehistoric footprints** and a **human figure** have been found carved into rock on private property.
 - The carvings, made with **iron tools**, include **footprints** varying in size from six to ten inches, suggesting representations of both children and adults.
 - At the end of the footprints, a human figure has been intricately etched, accompanied by four circular pits around it.
 - These carvings bear similarities to prehistoric rock art found in Avalakki Pera in Udupi district in Karnataka.

Key facts about Megaliths

- These were constructed either **as burial sites or commemorative** (non-sepulchral) memorials
- The former are sites with actual burial remains, such as **dolmenoid cists** (box-shaped stone burial chambers), **cairn circles** (stone circles with defined peripheries) and capstones (distinctive mushroom-shaped burial chambers found mainly in Kerala).
- Non-sepulchral megaliths include memorial sites such as menhirs.
- In India, archaeologists trace the majority of the **megaliths to the Iron Age** (1500 BC to 500 BC).
- In India, these are concentrated in the states of Maharashtra (mainly in Vidarbha), Karnataka, Tamil Nadu, Kerala, Andhra Pradesh and Telangana.



Q1: What is archaeology?

It is the study of human activity through the recovery and analysis of material culture. The archaeological record consists of artifacts, architecture, biofacts or eco facts and cultural landscapes.

