



EXCEL CIVILS ACADEMY

DAILY CURRENT AFFAIRS

Date: 14-12-2023

KEYS

1. Answer: C

Activists in the United Kingdom are coming together to stop the construction of a two-mile road tunnel close to the great circle of Stonehenge by the government.

About Stonehenge:

- It is a massive stone circle monument located on Salisbury Plain in southern England.
- It was declared a UNESCO World Heritage Site of outstanding universal value in 1986.

When was Stonehenge built?

- Work started on this super stone circle around 5,000 years ago in the late Neolithic Age, but it took over 1,000 years to build in four long stages.
- Archaeologists believe the final changes were made around 1,500BC, in the early Bronze Age.
- Stones Used: The bigger stones at Stonehenge, known as sarsens, weigh 25 tons on average and are widely believed to have been brought from Marlborough Downs, 32 kilometers to the north.
- Most of the monument's smaller stones, referred to as "bluestones" (as they have a bluish tinge when wet or freshly broken), weigh between 2 and 5 tons and came from quarries in the Preseli Hills in west Wales, about 225 km away from Stonehenge.
- Scientists are still unsure exactly how prehistoric people moved the stones over such long distances.

Purpose:

- Though there is no definite evidence as to the intended purpose of Stonehenge, it was presumably a religious site and an expression of the power and wealth of the chieftains, aristocrats, and priests who had it built.
- It is just one part of a larger sacred landscape that contained many other stone and wooden structures, as well as burials.
- It was aligned with the Sun and possibly used for observing the Sun and Moon and working out the farming calendar.

2. Answer: B

Researchers at Berhampur University, Odisha, recently discovered a new species of marine amphipod named *Demaorchestia alanensis*.

About *Demaorchestia alanensis*:

- It is a new species of marine amphipod—a shrimp-like crustacea of the genus *Demaorchestia*.
- The present discovery has added one more species to the genus *Demaorchestia*, raising the global species number in the group to six.

What are Amphipods?

- Amphipods are any member of the invertebrate order Amphipoda (class Crustacea) inhabiting all parts of the sea, lakes, rivers, sand beaches, caves, and moist (warm) habitats on many tropical islands.
- They are often mistaken for tiny shrimp, which they resemble.
- They can be found in all marine habitats (even the deepest ocean trenches, e.g., *Hirondellea dubia*), and have also colonised freshwater and terrestrial habitats.
- The generic diversity of amphipods is apparently higher in cool waters than in warm ones.
- They are important food for many fish, invertebrates, penguins, shore birds, small cetaceans, and pinnipeds.
- Most amphipods are active swimmers, propelled by three pairs of abdominal appendages.

3. Answer : B

About Fault Line:

- It is a line determined by the intersection of a geological fault and the earth's surface.
- A fault is a fracture or zone of fractures between two blocks of rock.
- This is caused by the stresses created as sections of a plate are moving in different directions.
- All faults are related to the movement of Earth's tectonic plates. The biggest faults mark the boundary between two plates.
- Faults allow the blocks to move relative to each other.
- This movement may occur rapidly, in the form of an earthquake, or it may occur slowly, in the form of creep.
- Faults may range in length from a few millimeters to thousands of kilometers, such as the San Andreas Fault in California and the Anatolian Fault in Turkey, both of which are visible from space.
- Most faults produce repeated displacements over geologic time.
- The fault surface can be horizontal, vertical or some arbitrary angle in between.
- There are a number of different types of faults, but most can be divided into three categories: strike-slip faults, normal faults, and thrust faults.

Strike-slip fault:

- It occurs in an area where two plates are sliding past horizontally with little to no vertical movement.
- Fault being the most famous, which has caused many powerful earthquakes.

Normal fault:

- Normal faults cracks where one mass of rock slides downward and pulls away from another mass of rock.
- Normal faults create space. Two blocks of crust pull apart, stretching the crust into a valley.

Reverse faults:

- Reverse faults also called thrust faults, slide one block of crust on top of another.

- This involves upward movement as the two plates collide and buckle upwards.

4. Answer: D

The Kawal Tiger Reserve is evolving into a thriving haven for an intriguing aquatic species, the smooth-coated otter, referred to as “Neeti Pilli” in Telugu.

About Smooth-Coated Otter:

- It is a species of otter, the only extant representative of the genus *Lutrogale*.
- Scientific Name: *Lutrogale perspicillata*

Distribution:

- They are found throughout much of southern Asia, from India eastward.
- There is also an isolated population found in the marshes of Iraq.

Habitat:

- They are mostly found in lowlands, coastal mangrove forests, peat swamp forests, freshwater wetlands, large forested rivers, lakes, and rice paddies.
- Some build permanent burrows near water with an underwater entrance and a tunnel that leads to a chamber above the high-water line.
- Although adapted for water, smooth-coated otters are equally comfortable on land and can travel long distances overland in search of suitable habitat.

Features:

- They are the largest otter in Southeast Asia. The fur is light to dark brown dorsally and light brown to almost gray ventrally.
- They have short, tightly packed under fur and longer, water-repellant guard hairs.
- They are strong swimmers and hunt in groups. When fishing, they travel in a V-formation going upstream.
- Conservation Status:
- IUCN Red List: Vulnerable

5. Answer: B

Karrar Combat Drones:

- It is an Unmanned Combat Air Vehicle (UCAV) developed by Iran.
- It is the first long-endurance, combat-capable Iranian drone.
- It will be strategically deployed along border areas, providing air defense units with the capability to intercept and neutralize hostile aerial threats at significantly reduced costs compared to traditional manned fighter sorties.

Features:

- The Karrar drone, which was first introduced in 2010, has an operational range of up to 1,000 kilometers (620 miles).
- It has a maximum speed granted by its turbojet installation of 560 miles per hour.
- It reportedly boasts a service ceiling altitude of 47,000 feet.
- It has been equipped with the Majid thermal missile with a range of 8 kilometers.
- The Iranian-made Majid air defense missile features advanced thermal and optical seekers, enhancing its tracking and interception capabilities.

6. Answer: C

- Recently, the Ministry of Environment, Forests and Climate Change has launched the Indian Forest & Wood Certification Scheme.
- This national forest certification scheme offers voluntary third-party certification designed to promote sustainable forest management and agroforestry in the country.
- The scheme includes forest management certification, tree outside forest management certification, and chain of custody certification.
- It can provide market incentives to various entities that adhere to responsible forest management and agroforestry practices in their operations.
- Parties involved: This includes state forest departments, individual farmers, or Farmer Producer Organizations engaged in agroforestry and farm forestry, as well as other wood-based industries in the value chain.
- The Forest Management certification is based on the Indian Forest Management Standard, consisting of 8 criteria, 69 indicators and 254 verifiers, which is an integral part of the National Working Plan Code 2023, launched earlier this year.
- A separate Trees outside Forests Standard, is now introduced.
- It will be overseen by the Indian Forest and Wood Certification Council, which will act as a multistakeholder advisory body.
- The Council is represented by members from eminent institutions such as Indian Council of Forestry Research and Education, Forest Survey of India, Quality Council of India, Indian Institute of Forest Management including representatives from the Ministries of Agriculture and Farmers' Welfare and Ministry of Commerce and Industry, State Forest Departments, Forest Development Corporations, and representatives from wood-based industries.
- Indian Institute of Forest Management, Bhopal will act as the scheme operating agency and will be responsible for overall management of the scheme.

7. Answer: B

- The cinereous vulture (*Aegypius monachus*), one of the largest raptors in the world has been sighted at the Asola Bhatti Wildlife Sanctuary.

- It is also known as the Eurasian Black Vulture or monk vulture.
- It is one of the heaviest and largest raptors in the world.
- It is one of the two largest Old World vultures.
- It is an altitudinal migrant — which means it migrates from a higher to a lower altitude.
- Habitat: This vulture is a bird of hilly, mountainous areas, especially favoring dry semi-open habitats such as meadows at high altitudes over much of the range.
- Distribution: It is a Eurasian species. It is mainly found in Spain and inland Portugal, South France, central Asia, northern India, northern Manchuria, Mongolia and Korea.
- Conservation status
- IUCN: Near threatened
- Wildlife Protection Act 1972: Schedule IV

8. Answer: C

- Recently, the Saiga (*Saiga tatarica*) species category was changed from Critically Endangered to Near Threatened by the International Union for Conservation of Nature (IUCN).
- It is a large migratory herbivore.
- This antelope has an extremely unusual appearance with an over-sized and flexible nose, the internal structure of which acts like a filter.
- Their large noses filter out dust kicked up by the herd in the warm summers and warms the icy air before it reaches their lungs in the winters.
- Habitat: It inhabits open dry steppe grasslands and semi-arid deserts.

Distribution:

- The antelope were once found throughout the Eurasian Steppe, the great band of grassland that stretches from Hungary in Europe to Manchuria in Asia.
- The Saiga has two sub-species: *Saiga tatarica tatarica* (found in most of the range) and *Saiga tatarica mongolica* (found only in Mongolia).
- Conservation status
- IUCN: Near threatened
- CITES :Appendix II
- Threats: Hunting and habitat destruction.

9. Answer: B

- Yemen's Houthis have been targeting vessels in the southern Red Sea and the Bab al-Mandab strait.

- It is strait between Arabia (northeast) and Africa (southwest) that connects the Red Sea (northwest) with the Gulf of Aden and the Indian Ocean (southeast).
- It forms a vital strategic link in the maritime trade route between the Mediterranean Sea and the Indian Ocean via the Red Sea and the Suez Canal
- It is one of the world's most important routes for global seaborne commodity shipments, particularly crude oil and fuel.
- It is bordered by Yemen on the Arabian Peninsula and Djibouti and Eritrea on the African coast.
- Key points about the Red Sea
- It is a semi-enclosed inlet (or extension) of the Indian Ocean between the continents of Africa and Asia. It is one of the world's warmest seas.
- The northern portion of the Red Sea is bifurcated by the Sinai Peninsula into the Gulf of Aqaba and the Gulf of Suez, where it is connected to the Mediterranean Sea via the famous Suez Canal.
- Bordering Countries:
- Yemen and Saudi Arabia border the Red Sea to the east.
- It is bordered by Egypt to the north and west and by Sudan, Eritrea, and Djibouti to the west.

10. Answer: A

- NASA's James Webb Space Telescope captured a stunning new image of a star that exploded in the supernova remnant Cassiopeia A (Cas A).
- It is a remnant of a massive star that exploded some 340 years ago.
- It is the youngest remnant off the massive star in our galaxy known to mankind.
- It belongs to the prototypical type of supernova remnant and has been extensively studied by a number of ground-based and space-based observatories,
- The remnant spans about 10 light-years and is located 11,000 light-years away in the constellation Cassiopeia.
- It gives information related to the supernovae phenomenon and its complexities.