



Daily Current Affairs Prelims Quiz 28-11-2023 (Online Prelims Test)

1) A23a, sometimes seen in the news, is related to which of the following?

- a. A protein that edits the faulty gene that leads to blood disorders and potentially cures the person for life.
- b. A Predator armed drones that India has recently procured from the USA.
- c. A large icebergs drifting away beyond Antarctic waters.
- d. A deepest point newly found in the Arctic Ocean.

Answer : c

A23a

The British Antarctic Survey recently found that one of the world's largest icebergs is drifting beyond Antarctic waters after being grounded for more than three decades.

- A23a is one of the world's largest icebergs is drifting beyond Antarctic waters, after being grounded for more than 3 decades.
- The iceberg split from the Antarctic's Filchner Ice Shelf in 1986 and it became stuck to the ocean floor and had remained for many years in the Weddell Sea.
- The iceberg is about three times the size of New York City and more than twice the size of Greater London, measuring around 4,000 square kilometres.
- The iceberg has been drifting for the past year and now appears to be picking up speed and moving past the northern tip of the Antarctic Peninsula, helped by wind and ocean currents.

Image taken on November 15, 2023



Elephant Island

A23a iceberg

Joinville Island

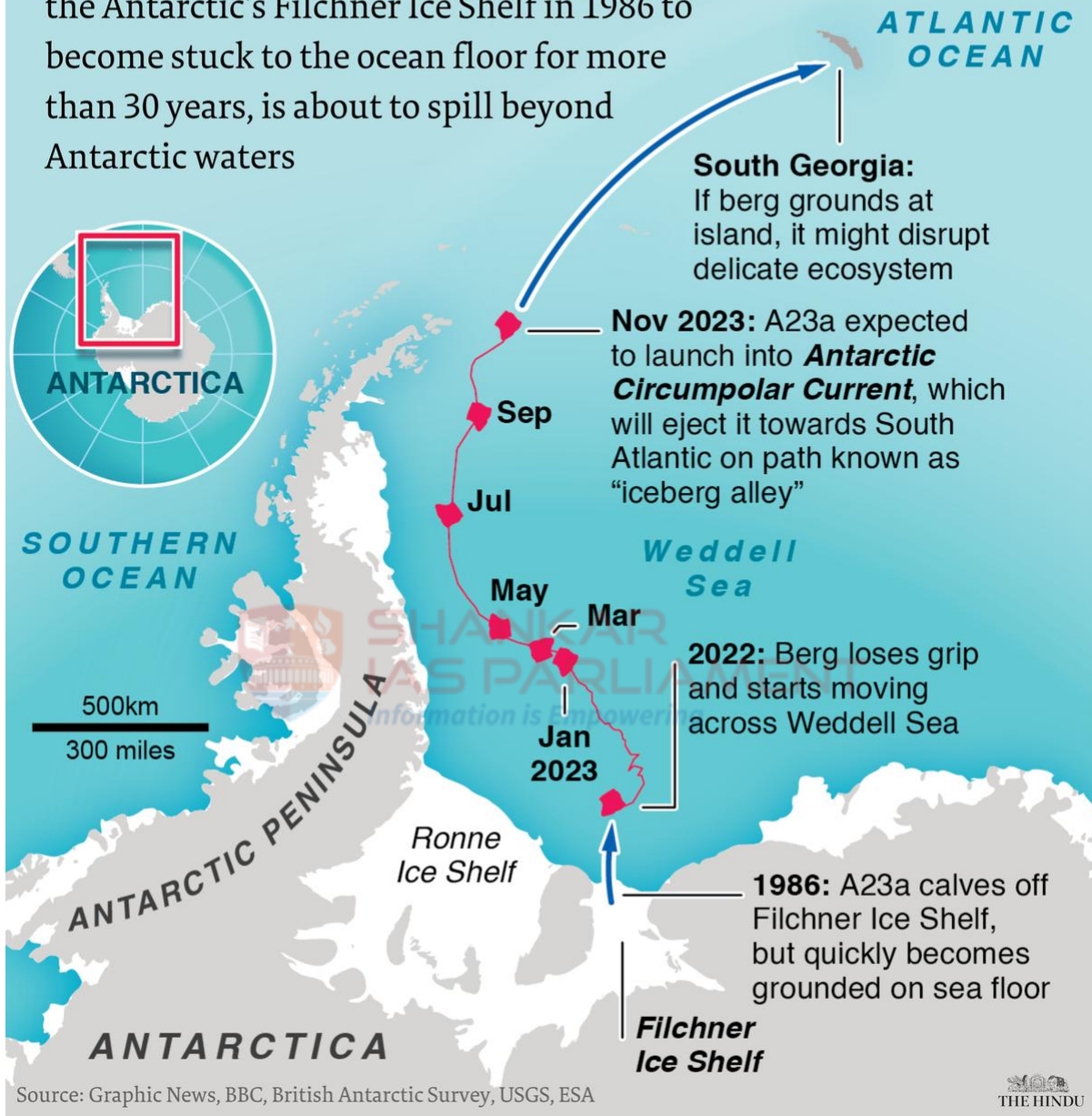
Antarctica

Source: European Union/Copernicus Sentinel-3/Handout via Reuters

THE HINDU

One of world's largest icebergs moving beyond Antarctic waters

The iceberg, known as A23a, which split from the Antarctic's Filchner Ice Shelf in 1986 to become stuck to the ocean floor for more than 30 years, is about to spill beyond Antarctic waters



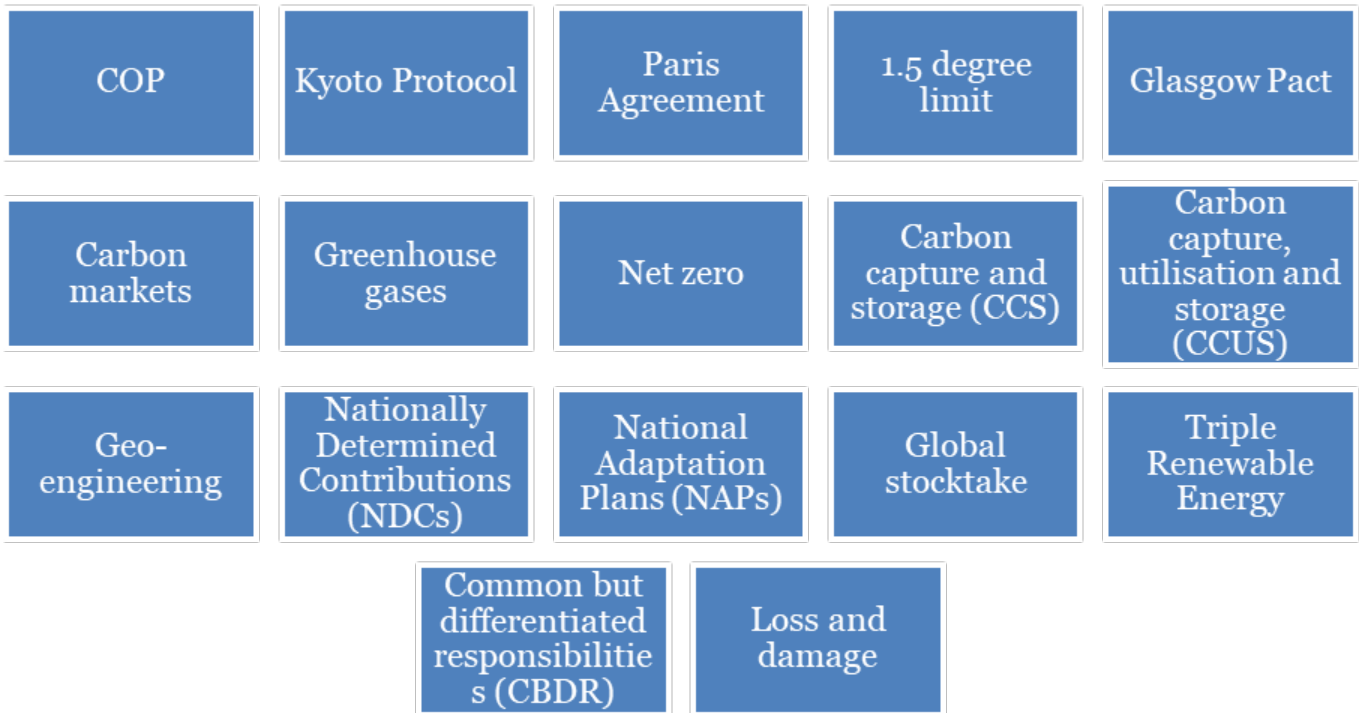
2) 'Just Transition', often seen in the news is related to which of the following?

- It generally means starting a transition from unsustainable energy use to sustainable energy use.
- It refers to the unavoidable social and financial transition impacts caused by extreme weather events.
- It describes a shift to a low-carbon or net-zero economy without jeopardising the rights of workers and the needs of communities.
- It refers to a five-year review in which countries assess where they are in the fight against climate change.

Answer : c

Just transition

- The term describes a shift to a low-carbon or net-zero economy without jeopardising the rights of workers and the needs of communities, which could be affected due major changes to industries like fossil fuels.
- The other important climate terms includes:



- **COP** - Is an international climate meeting organised annually by the United Nations (UN).
- COP is short for Conference of the Parties and 'Parties' refer to 198 countries that have joined the international treaty called the UN Framework Convention on Climate Change (UNFCCC).
- **Kyoto Protocol** - Is an international treaty that placed obligations on the set of rich and industrialised countries to cut their greenhouse gas emissions by assigned amounts.
- It was adopted in Kyoto, Japan, in 1997, and came into effect in 2005.
- **Paris Agreement** - Adopted in 2015 at COP21 in Paris, the agreement is aimed to limit rising global average temperature.
- It legally binds 195 nations, for the first time ever, to combat climate change and adapt to its effects.
- **Glasgow Pact** - The pact called for phase down of coal and phase out of fossil fuel.
- This was the first time that a UN climate agreement explicitly mentioned coal.
- The pact also marked the resolution of the deadlock over carbon markets.
- **Carbon markets** - Such markets are essentially trading systems in which carbon credits are sold and bought.
- They allow countries, or industries, to earn carbon credits for the greenhouse gas emission reductions they make in excess of their targets.
- **Carbon capture, utilisation and storage (CCUS)** - It goes a step further than Carbon capture and storage (CCS) and uses the captured carbon in the production of goods such as alcohols, biofuels, plastics or concrete.
- **Geo-engineering** - It is the deliberate large-scale intervention in the Earth's natural systems to tackle climate change.
- There are numerous proposed geo-engineering techniques, including carbon dioxide removal (CDR).
- **Global stocktake** - It refers to a five-year review in which countries assess where they are in the fight against climate change, and what needs to be done in the next five years to make this fight more effective and potent.

3) Consider the following statements with respect to Rat-Hole Mining

1. Rat-hole mining is a method of extracting coal from narrow, horizontal coal beds.
2. This practice of mining is prevalent in Meghalaya.
3. The practice of rat-hole mining is banned in India.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

Answer : c

Rat-Hole Mining

With large metal pieces hindering machine drilling in Uttarakhand tunnel rescue operation, now it has been planned to use Rat-Hole Mining method to drill the remaining few meters.

- Rat-hole mining is a method of extracting coal from narrow, horizontal coal beds which is prevalent in Meghalaya.
- The term “rat hole” refers to the narrow pits dug into the ground, typically just large enough for one person to descend and extract coal.
- Once the pits are dug, miners descend using ropes or bamboo ladders to reach the coal seams. The coal is then manually extracted using primitive tools such as pickaxes, shovels, and baskets.
- The 2 types of rat-hole mining includes:
 1. **Side-cutting** - In this methods the narrow tunnels are dug on the hill slopes and workers go inside until they find the coal seam.
 2. **Box-cutting** - A rectangular opening is made, varying from 10 to 100 sqm, and through that a vertical pit is dug, 100 to 400 feet deep.
 - Once the coal seam is found, rat-hole-sized tunnels are dug horizontally through which workers can extract the coal.
- Rat hole mining poses significant safety and environmental hazards.
- The mines are typically unregulated, lacking safety measures such as proper ventilation, structural support, or safety gear for the workers.
- The mining process can cause land degradation, deforestation, and water pollution.
- They often persist due to economic factors and the absence of viable alternative livelihoods for the local population.
- **The National Green Tribunal (NGT) banned the practice of rat-hole mining in 2014, and retained the ban in 2015.**

4) Consider the following passage:

It is covered by dry deciduous, moist deciduous and semi evergreen forests of Sahyadri hills in the Western Ghats. It is situated in the Shimoga district of Karnataka. The tree species here include Teak, Sandal, Rosewood, Honne and Nandi. The wildlife such as Elephant, Bison, Spotted deer, Tiger and Panther can be spotted here.

The above passage best describes which of the following sanctuary?

- a. Shettihalli Wildlife Sanctuary
- b. Manas Wildlife Sanctuary
- c. Coringa Wildlife Sanctuary
- d. Krishna Wildlife Sanctuary

Answer : a

Shettihalli Wildlife Sanctuary

Recently the National Green Tribunal have set a dead line of 6 months in issuing Eco-Sensitive Zone tag, which may resolve the confusion over the boundaries of the sanctuary.

- Shettihalli Wildlife Sanctuary is situated in the Shimoga (Shivamogga) district of Karnataka and is home to a variety of flora and fauna.
- The sanctuary is divided into 3 zones, namely- core zone, buffer zone and tourism zone.
- It was declared a wildlife sanctuary on November, 1974.
- The Tunga Anicut Dam is situated within the sanctuary and provides shelter for otters and water birds.
- The Mandagadde Bird Sanctuary is also a part of the Shettihalli Wildlife Sanctuary.
- It is covered by dry deciduous, moist deciduous and semi evergreen forests of Sahyadri hills in the Western Ghats.
- The tree species here include Teak, Sandal, Rosewood, Honne and Nandi.
- The wildlife such as Elephant, Bison, Spotted deer, Tiger and Panther can be spotted here.
- The hilly area forms the catchment basin for Kumadwathi River.
- The sanctuary has many tourist attraction spots like Elephant camp at Sacrebyle, Mandagadde Bird Sanctuary and Tiger and Lion Safari at Thyavarekoppa.

5) Consider the following statements with respect to Saurauia Punduana

1. It is a critically endangered plant species that is endemic to Sikkim in India.
2. The flowers of Saurauia Punduana turn white to pink on maturity and fruits of it are used in veterinary medicine.

Which of the statements given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : b

Saurauia Punduana

The Saurauia Punduana were recorded for the first time in Manipur during a recent Rapid Biodiversity Assessment (RBA) field survey.

- Saurauia Punduana is a critically endangered plant species under International Union for Conservation of Nature (IUCN) Red List.
- The native range of this species is from Bhutan to Southeastern Tibet.
- Flowers of Saurauia Punduana turn white to pink on maturity. Petals are pink, ovate to obovate curled at the tip.
- Its fruits are spherical shining white, and are used in veterinary medicine.
- **In India it is distributed across Sikkim, Arunachal Pradesh and Assam.**
- The native range of this species is from Bhutan to South-eastern Tibet that includes India, Bangladesh, Bhutan, Myanmar and Tibet.