



## Daily Current Affairs Prelims Quiz 31-10-2023 (Online Prelims Test)

1) Operation Sesha, sometimes seen in the news recently, is associated with of the following?

- To curb the illegal trade of Timber.
- To curb child sexual abuse material in social media.
- To curb the increasing Narcotics substances among school students.
- To provide safety and security to lady passengers travelling alone.

Answer : a

### Operation Sesha

*Recently the Union Finance Ministry launched the 4th phase of 'Operation Sesha' to curb the illegal trade of Timber, including Red Sanders.*

- Operation Sesha was launched in 2015 to bust organised syndicates of smugglers of precious woods.
- The name Sesha has been derived from Seshachalam forest in Andhra Pradesh, bordering Karnataka.
- Under this initiative, the directorate of revenue intelligence of Indian Customs works in collaboration with probe agencies of several other countries to curb illegal trade of timber.
- The Indian customs department will run the 4th phase of Operation Sesha in collaboration with WCO's Regional Intelligence Liaison Offices (RILOs) in Asia-Pacific and Middle-East.
- Phase IV of 'Operation Sesha' aims to curb the illegal trade of Timber, including Red Sanders.
- The use of artificial intelligence could play a huge role in the 4th phase of the operation.
- World Customs Organization (WCO) was established in 1952 as the Customs Co-operation Council (CCC).
- It is an independent intergovernmental body whose mission is to enhance the effectiveness and efficiency of Customs administrations.
- WCO is the only international organization with competence in Customs matters and can rightly call itself the voice of the international Customs community.

2) Consider the following statements with respect to Ice Sheet

- An ice sheet is essentially a mass of glacial ice that covers less than 50,000 square kilometres of land.
- The gain of mass in the ice sheet leads to a rise in global mean sea level and loss of it leads to fall in global mean sea level.
- Arctic ice sheet and Antarctica ice sheet are only two major ice sheet that contain about two-thirds of all the freshwater on Earth.

How many of the statements given above are correct?

- Only one
- Only two

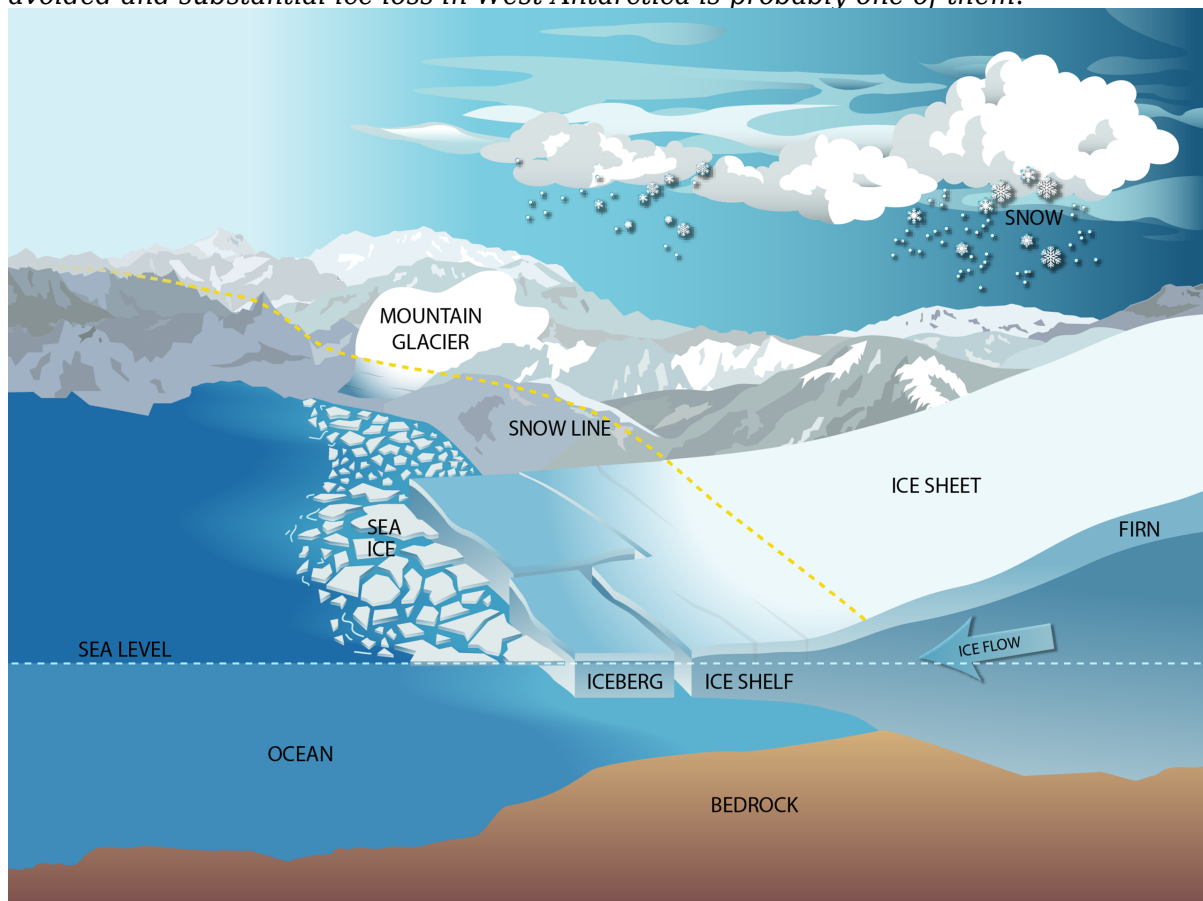
- c. Only three
- d. None of the above

Answer : d

## Ice Sheet

*The recent study has found that the water in West Antarctica will continue to get warmer three times faster than the 20th century, leading to an increased melting of the region's ice sheet.*

- An ice sheet is essentially a mass of glacial ice that covers **more** than 50,000 square kilometres of land.
- Ice sheets contain about 99% of the fresh water on Earth and are sometimes called continental glaciers.
- As ice sheets extend to the coast and over the ocean, they become ice shelves.
- **Greenland ice sheet** and Antarctica ice sheet are only two major ice sheet that contain about two-thirds of all the freshwater on Earth.
- *When ice sheets gain mass, they contribute to a fall in global mean sea level and when they lose mass, they contribute to a rise in global mean sea level.*
- Ice shelves stabilise the land-based glaciers just behind them.
- If an ice shelf thins or disappears, these glaciers tend to speed up, discharging more ice into the ocean and causing sea level rise.
- Ice sheets are different from sea ice, which is the free-floating ice that surrounds the Polar Regions.
- **Sea ice is created by sea water freezing.**
- The recent study found that in West Antarctica, the region's ice shelves have been depleting, glaciers have been flowing faster towards the ocean and the ice sheet has been shrinking.
- *The earth have reached the point where some impacts of climate change can no longer be avoided and substantial ice loss in West Antarctica is probably one of them.*



3) Consider the following statements with respect to the Champions of the Earth Award

1. It is the UN's highest environmental honour awarded annually.
2. The award honours individuals, groups and organizations whose actions have a transformative impact on the environment.
3. Indian Prime Minister Narendra Modi is one of the recipients of the Champions of the Earth for 2018.

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

### Annual Champions of the Earth Award

- The Champions of the Earth award is the UN's highest environmental honour. Since 2005
- Champions of the Earth are celebrated in 4 categories that includes:
  1. **Policy leadership** - In the public sector leading global or national action for the environment.
    - They shape dialogue, lead commitments and act for the good of the planet.
  2. **Inspiration and action** - Taking bold steps to inspire positive change to protect our world.
    - They lead by example, challenge behaviour and inspire millions.
  3. **Entrepreneurial vision** - Challenge the status quo to build a cleaner future.
    - They build systems, create new technology and spearhead a groundbreaking vision.
  4. **Science and innovation** - To push the boundaries of technology for profound environmental benefit.
    - They invent possibilities for a more sustainable world.
- The 2023 Champions of the Earth announced by the United Nations Environment Programme (UNEP) includes a city mayor, a non-profit foundation, a social enterprise, a government initiative and a research council.
- **Policy Leadership** - Josefina Belmonte Belmonte, mayor of Quezon City in the Philippines
- **Inspiration and Action** - UK-based Ellen MacArthur Foundation.
- **Entrepreneurial Vision** - China's Blue Circle and José Manuel Moller of Chile.
- **Science and Innovation** - Council for Scientific and Industrial Research.
- The award has recognized 116 laureates, ranging from world leaders to technology inventors. They include 27 world leaders, 70 individuals and 19 groups or organizations.
- Indian Prime Minister Narendra Modi is one of the recipients of the Champions of the Earth for 2018.

4) Gravitational constant (G) was first accurately determined by which of the following scientists?

- a. Satyendra Nath Bose
- b. Isaac Newton
- c. Henry Cavendish
- d. Albert Einstein

Answer : c

## Gravitational constant (G)

- Gravitational constant (G) is a physical constant denoted by G and used in calculating the gravitational attraction between two objects.
- It is a proportionality constant that relates the force of gravitational attraction between two bodies to their masses and their distance from each other.
- **It was first accurately determined by Henry Cavendish in 1797.**
- *The value of G is  $6.673 \times 10^{-11} \text{ Nm}^2/\text{kg}^2$  and the SI unit of G is  $\text{Nm}^2 \text{ kg}^{-2}$ .*
- G is an essential component of both Isaac Newton's law of universal gravitation and Albert Einstein's theory of general relativity.
- **In Newton's theory**, the gravitational force between two objects is directly proportional to the product of their masses and inversely proportional to the square of the distance between them.
- In his theory G is the proportionality constant.
- **In Einstein's theory of general relativity**, G appears in the equations that describe the curvature (or the 'warping') of spacetime in the presence of mass and energy.
- This theory provides a more accurate description of gravitation, particularly in extreme conditions, such as near massive celestial objects.
- The precise value of G is crucial to understand celestial mechanics and to determine the mass of celestial bodies.

5) Consider the following statements with respect to World Energy Outlook 2023

1. It is a flagship report released biennially by the International Renewable Energy Agency (IRENA).
2. The report projected that the global emissions would raise global temperatures by approximately  $2.4^\circ\text{C}$ .
3. For the first time, the report projected that fossil fuel demand will peak by the end of this decade.

How many of the statements given above are correct?

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

Answer : b

## World Energy Outlook 2023

*Recently the World Energy Outlook 2023 was released by the International Energy Agency (IEA) which has projected that the global emissions would raise global temperatures by approximately  $2.4^\circ\text{C}$ .*

- The World Energy Outlook 2023 provides in-depth analysis and strategic insights into every aspect of the global energy system.
- **The World Energy Outlook 2023 is released annually by the International Energy Agency (IEA) since 1998.**
- This Outlook assesses the evolving nature of energy security for around 50 years.
- The Outlook examines the implications of today's energy trends in key areas including investment, trade flows, electrification and energy access.
- The Outlook 2023 also examines what needs to happen at the COP28 climate conference in Dubai to keep the door open for the  $1.5^\circ\text{C}$  goal.
- **Key findings of the report** - Global emissions are on track to raise temperatures by around  $2.4^\circ\text{C}$  under existing policy settings.
- The anticipated peak in fossil fuel demand by the end of this decade (2030).

- There is an urgent need for increased investment, diversified energy sources and geopolitical considerations in the global energy transition for positive shifts towards Net-Zero commitments.
- For the first time, the report projected that fossil fuel demand will peak by the end of this decade under the Stated Policies Scenario (STEPS) scenario.
- This includes coal, where a decline is expected due to decreasing capacity additions in coal-fired power and iron and steel production.
- Oil demand, primarily driven by road transport, is set to peak before 2030, with the rise of electric vehicles (EVs) contributing to this shift.
- Natural gas, once seen as a 'golden age', is also projected to peak by 2030 as growth slows and demand decreases in the power and building sectors.
- Liquefied natural gas (LNG) demand in 2050 is also 15 % lower than projected earlier.
- Currently, most investments favour clean energy and infrastructure, amounting to approximately USD 1.8 trillion, compared to USD 1 trillion in fossil fuels.
- **India** - Report commended energy progress but underscored the continued rise in fossil and space cooling demand.
- The transformation in India's energy landscape over the last few decades, have commendable achievements in power generation, clean cooking access and petroleum refining.
- India's energy demand is set to skyrocket and this is projected to lead to a substantial increase in the demand for oil and natural gas, resulting in a significant rise in emissions.
- A concerning aspect of India's energy consumption is the surge in air conditioner ownership.
- As temperatures soar, electricity demand for cooling surges, with nearly 10 % of total electricity consumption attributed to space cooling.

