



## Daily Current Affairs Prelims Quiz 04-03-2024 & 03-03-2024 (Online Prelims Test)

1) Consider the following statements with respect to Auroras

1. Auroras occurs only in Polar Regions.
2. Even though auroras are visible only during night, they are actually caused by the Sun.
3. Auroras were also seen in Jupiter and Saturn.

How many of the statement(s) given above is/are correct?

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

Answer : b

### Auroras in Ladakh

*The Indian Astronomical Observatory in Hanle, Ladakh, operated by the Indian Institute of Astrophysics, recently captured breathtaking images of the resultant auroras in the Ladakh.*

- Auroras are a phenomenon more commonly associated with Polar Regions.
- Auroras are dazzling light that are actually billions of charged particles moving into space at ultra-high speeds.
- To know more about Auroras [click here](#) .
- **Auroras in Ladakh** - Auroras recently seen in Ladakh was a **stable auroral red (SAR)** arc. An SAR arc is a band of reddish light seen in the sky.
- **Unlike auroras where various colors appear in moving patterns, SAR displays are static and monochromatic.**
- Both appear during periods of geomagnetic activity triggered by a wave of charged matter blasted out of the Sun, but their mechanism of formation is slightly different.
- The **source** of this extraordinary event was traced back to the Sun, where a **massive coronal mass ejection (CME)** erupted from Active Region 13283 near the solar disk centre.
- The impact of this collision initiated a geomagnetic storm that quickly escalated to a "G4 severe" classification.

2) Consider the following statements with respect to International Space Station (ISS)

1. It is the largest human-made object ever to orbit Earth.
2. It is assembled largely by the United States and Russia, with assistance and components from a multinational consortium including India.
3. It is placed in geosynchronous orbit (GEO).

How many of the statement(s) given above is/are correct?

- a. Only one

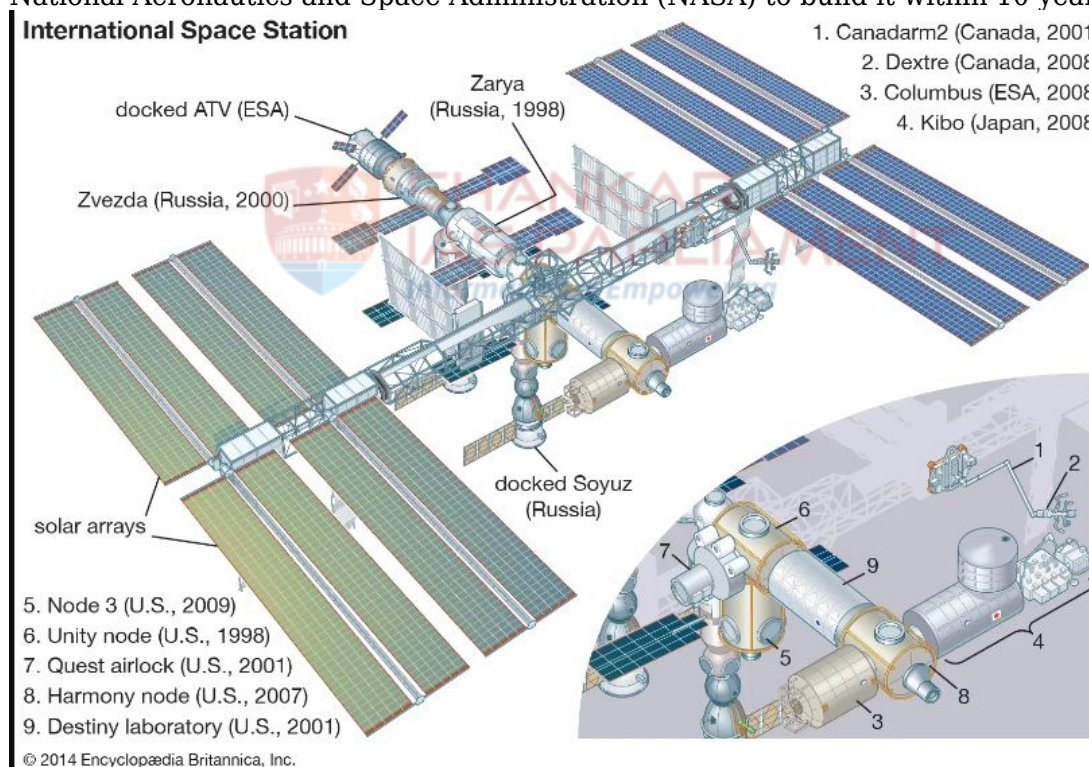
- b. Only two
- c. All three
- d. None of the above

Answer : a

## International Space Station (ISS)

*The Russian space officials recently confirmed that they are safe and poses no danger due to the air leak at the International Space Station.*

- International Space Station (ISS), space station assembled **in low Earth** orbit largely by the United States and Russia, with assistance and components from a multinational consortium.
- **It is the largest human-made object ever to orbit Earth.**
- **India is not part of the International Space Station (ISS).**
- It is a partnership between 11 European countries (represented by ESA), the United States (NASA), Japan (JAXA), Canada (CSA) and Russia (Roscosmos).
- The project, which began as an American effort, was long delayed by funding and technical problems.
- **Originally called Freedom** in the 1980s by U.S. Pres. Ronald Reagan, who authorized the National Aeronautics and Space Administration (NASA) to build it within 10 years.



3) Consider the following passage:

It has almost the same density that of gold. The two important mineral sources of the element are Scheelite and Wolframite. It has melting point higher than those of tantalum and platinum. It is the element with the highest atomic number to be found naturally in some living beings.

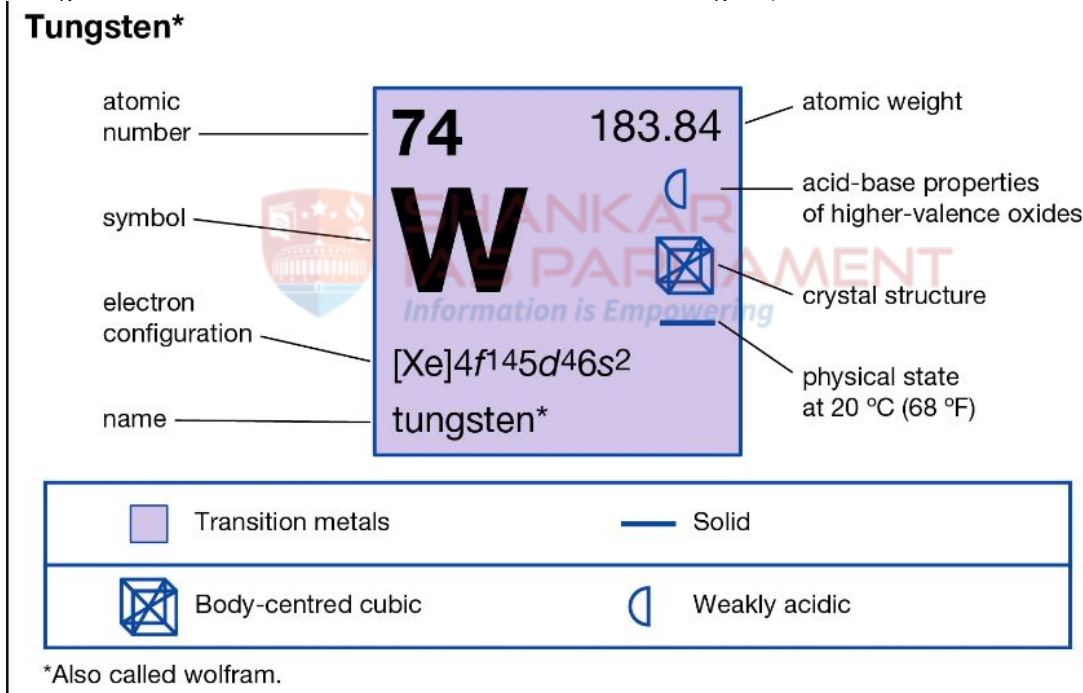
The above passage best describes which of the following element?

- a. Rhenium
- b. Titanium
- c. Tungsten
- d. Vanadium

Answer : c

## Tungsten

- Tungsten (W) is chemical element, an exceptionally strong refractory metal of Group 6 (VIb) of the periodic table.
- It is used in steels to increase hardness and strength and in lamp filaments.
- **Source** - Scheelite and Wolframite are two important mineral sources of tungsten.
- **Melting point** - Among all elements, **tungsten has the highest Melting point, around 3,700 kelvin, a value higher than those of tantalum and platinum.**
- This property rendered tungsten the most suitable element to use in the incandescent light bulb.
- **Atomic number** - Tungsten is the element with the highest Atomic number to be found naturally in some living beings.
- The atomic number of Tungsten is **74**.
- It is found in some archaea and bacteria. In more complex organisms, it is mildly toxic.
- **Density** - Tungsten has a density of 19.3 grams per cubic centimeter (g/cm<sup>3</sup>).
- This is comparable to the density of **uranium and gold** and about 1.7 times the density of lead.
- Tungsten has been used to make counterfeit bars of gold, which are otherwise very valuable.



4) Consider the following statements with respect to Hangul

1. It is the only surviving Asiatic member of the red deer family.
2. It is enlisted as critically endangered under the IUCN Red List.
3. The population of Hangul has steadily decreased in the recent years.

How many of the statement(s) given above is/are correct?

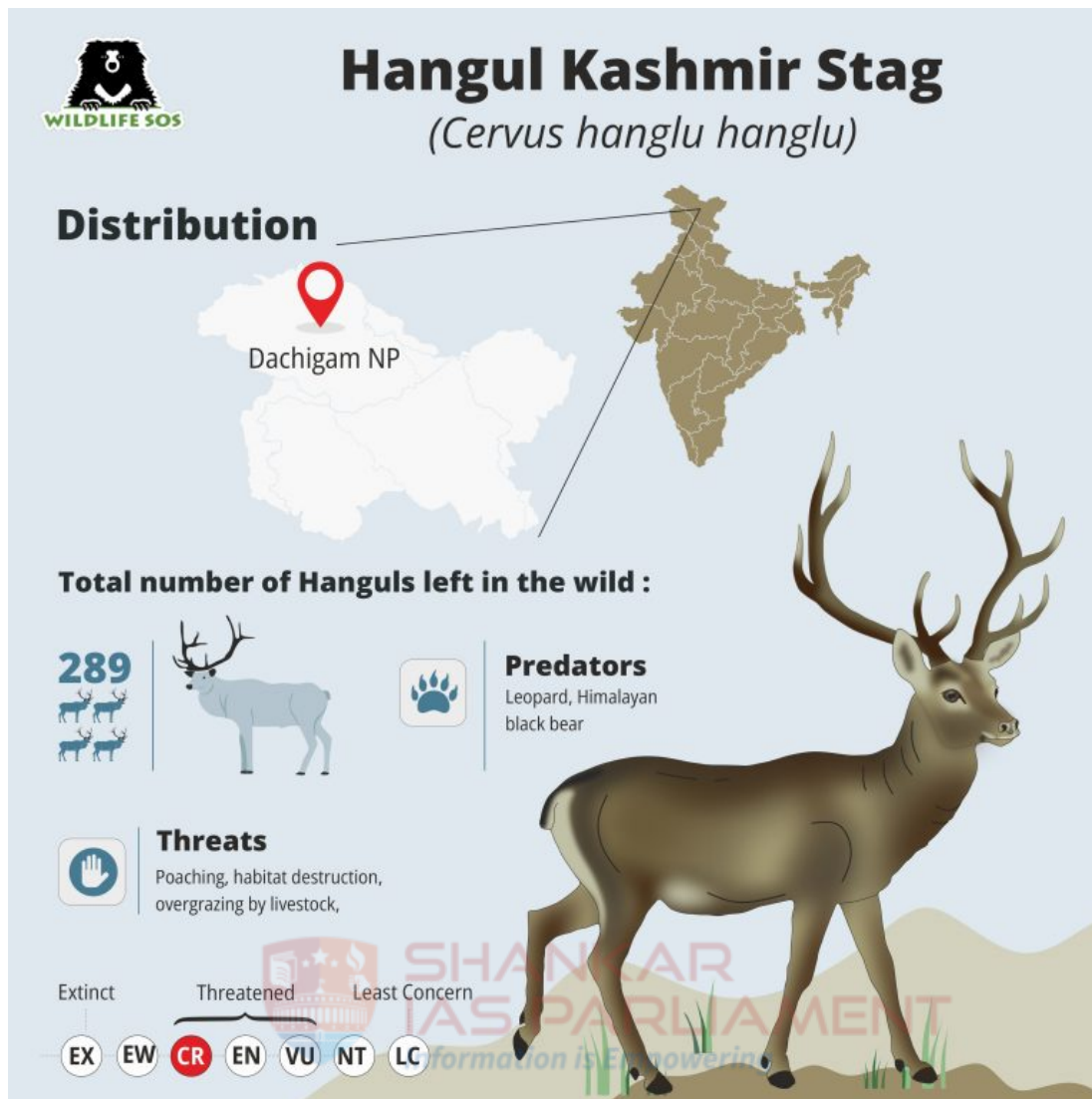
- a. Only one
- b. Only two
- c. All three
- d. None of the above

Answer : b

## Hangul (*Cervus elaphus hanglu*)

Experts recently suggested that the roars or calls made by hangul during rutting indicate that their number will cross 300 this spring, the first time in more than three decades.

- The hangul is also known as the Kashmir stag, is a subspecies of the Central Asian red deer.
- The scientific name for the hangul is *Cervus elaphus hanglu* and they are, by nature, high-altitude forest dwellers.
- **The hangul is the only surviving Asiatic member of the red deer family and the state animal of Jammu and Kashmir.**
- The Hangul was widely found in the hilly and mountainous regions of Kashmir in the early 20th century with their numbers estimated to be around 5000.
- **Threats** - Due to hunting and encroachment of their natural habitat, the number fell to just around 150 in 1970.
- Multiple disturbances, including stress on forest areas and human intervention, did disturb the habitat of hangul.
- **Protection** - It is enlisted as a **critically endangered** species in the International Union for Conservation of Nature Red List.
- *It is placed under Schedule I of the Indian Wildlife (Protection) Act, 1972.*
- In the 1970s, the Government of Jammu and Kashmir along with the support of IUCN and World Wildlife Fund (WWF) prepared a project for the protection of the habitat of Hangul.
- **Radio-collaring** of hanguls in 2013 and 2020 is proving pathbreaking for the conservation plans.
- **Distribution** - Their distribution had earlier spanned over Dachigam National Park and its nearby areas, Rajparian Wildlife Sanctuary, Overa Aru, Sind Valley, and the forests of Kishtwar and Bholderwah.
- **But now, they are mostly spotted in the protected areas of Dachigam National Park and Tral Wildlife Sanctuary in Jammu and Kashmir.**
- **Population trend** - Since 1947, the population of hangul witnessed a sharp decline.
- In 1947, around 2000 were spotted and the number fell to 384 by 1968.
- In 1988, the population was estimated to be around 1,000 and fell drastically to 140 to 160 in 1992, as militancy raged in Kashmir and the movement of large columns of security forces and also of militants increased in the area.
- The hangul population was estimated at a mere 197 in 2004, touched the lowest of 183 in 2015.
- According to Wildlife department the hangul population since 2015 the population of hangul is **steadily increasing** and in 2021 it was 261.



5) The Swachhata Green Leaf Rating (SGLR) Initiative, sometimes seen in the news is related to which of the following?

- To Rank and provide incentive to the start-ups that supports sustainable green energy.
- To improve sanitation practices in India's tourism sector.
- To provide rating to the hospitals based on the maintenance of Swachhata (cleanliness) in their campus.
- To improve sanitation in all railway station in India.

Answer : b

### Swachhata Green Leaf Rating (SGLR) Initiative

Recently Jal Shakti Ministry in collaboration with the ministry of tourism introduced the Swachhata Green Leaf Rating initiative to boost tourism hygiene.

- The Swachhata Green Leaf Rating (SGLR) Initiative aims to improve **sanitation practices in India's tourism sector**.
- It aids to develop an economically viable, responsible, and resilient tourism industry.
- SGLR rating was launched by the Department of Drinking Water & Sanitation (DDWS), Ministry of Jal Shakti, in collaboration with the Ministry of Tourism.**
- The Rating is not just a recognition but a commitment to shaping the future of our tourism industry.
- The SGLR initiative seamlessly aligns with the Travel for LiFE (TFL) program under Mission

LiFE, fostering awareness about sustainable tourism.

- The Bison Resort in Madhya Pradesh's Narmadapuram has emerged as a pioneer by securing the inaugural Five Swachhata Green Leaf Rating Certificate of Recognition.

