



Daily Current Affairs Prelims Quiz 23-12-2023 (Online Prelims Test)

1) Consider the following statements with respect to Biological Invasion

1. It is process where a species is intentionally or accidentally introduced in a new location outside its natural range.
2. Stray cats and dogs are the worst invasive species in the world.

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 : c

Biological Invasion

Gopi Krishnan, an invasion biologist recently stated that Invasive species are responsible for incurring huge economic losses every year for the country.

- Biological invasion is a multi-step process wherein a species is intentionally or accidentally transported and then introduced to a new location outside its natural range.
- They are usually transported for agriculture, ornamental or recreation purposes.
- These species may soon establish a self-sustaining population and disperse to other regions.
- Since it negatively impacts the new ecosystem it is called an invasive species, although they are not inherently invasive.
- *Invasive species are also responsible for incurring huge economic losses every year for India.*
- In future, the following could set off a possible biological invasion:
 - Flushing pet fish or turtle down the toilet,
 - Releasing pet fish or turtle in a pond and
 - Letting a pet bird fly away and abandoning a pet dog or cat.
- Stray cats and dogs are considered among the worst invasive species in the world and are responsible for killing scores of native birds and terrestrial animals annually.
- According to scientists at CSIR-Centre for Cellular and Molecular Biology (CCMB), the pet could become an invasive species and destroy an entire eco-system.
- **Examples** - When the pet owner wants to give up the fish, usually it is released into a nearby pond or a lake.
- In the lake they grow into huge numbers and lead to decline of native fishes through competition for food and other resources.
- Other fish species like goldfish, alligator gar and arapaima can also grow into huge sizes, up to 5 feet in length.
- Controlling invasive species is extremely difficult due to the lack of natural predators, high reproduction, and adaptability to newer conditions.
- **Possible solutions** - People who want to give away their pet should contact animal shelters

or animal welfare organisations instead of letting them loose into the open.

- Buying exotic and banned pet species should be avoided.

2) Consider the following statements with respect to Gyrocopters

1. It is a type of aircraft that flies by means of auto-rotation.
2. It cannot be operated under turbulent weather conditions.
3. India's first-ever gyrocopter safari operated in Himachal Pradesh.

How many of the statements given above are correct?

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

Answer : a

Gyrocopters

The Uttarakhand state is all set to introduce India's first-ever gyrocopter safari to promote tourism in the state.

- A gyrocopter is also called **autogyro** which is a rotary-wing aircraft that flies by means of auto-rotation.
- It is distinguished by the absence of an engine turning the rotors, and resembles a **small helicopter**.
- A **rotor** is a moving part of an electromagnetic system in an electric motor, generator or alternator.
- Unlike a helicopter, the rotor of a gyrocopter is not powered directly by a motor, but turns by the action of the relative airflow on the blades.
- The 1st flying autogyro was invented in Spain in 1923 by Juan de la Cierva.
- **India's first-ever gyrocopter safari is to be launched in Uttarakhand.**
- **Advantages** - The operating and maintenance costs of the gyrocopter are of a much lower level, especially when compared to a helicopter.
- **The gyrocopter can be flown safely and steadily under both strong wind and turbulent conditions.**
- Since it is microlight driven by autorotation, it is able to fly **extremely slowly** while being very agile.
- **Short take-off and landing distances** (10 to 50 meters) enable the gyrocopter to take-off almost vertically and also to land with high approach angles.
- The gyrocopter is one of the **safest aircrafts** in the world.
- It is used in the **para-public missions** such as police operations, border control, coast guarding, emergency management and for agricultural purposes.



3) Consider the following statements with respect to Indian Ocean Naval Symposium (IONS), 2023

1. It is a voluntary initiative that seeks to increase maritime co-operation among Indian Ocean littoral states.
2. India was the chair of the IONS at the inaugural edition.

How many of the statements given above are **incorrect**?

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

Answer : d

Indian Ocean Naval Symposium (IONS), 2023

The 8th edition of IONS was concluded recently which provides maritime co-operation among navies of the littoral states of the Indian Ocean Region.

- Indian Ocean Naval Symposium (IONS) is a **voluntary** initiative that seeks to increase maritime co-operation among navies of the littoral states of the Indian Ocean Region.
- It provides an **open and inclusive forum** for discussion of regionally relevant maritime issues.
- During the Conclave of Chiefs, Thailand assumed the duties of Chair of IONS and Work Plan for next 2 years was finalised.
- **Republic of Korea Navy was the latest 'Observer' to the Symposium.**
- At present it has 34 countries (25 members and 9 observers).
- The Flag designed by India was selected as the IONS Flag at the Symposium.

- India also took over as the co-Chair (CoC) of IONS Working Groups on Maritime Security and Humanitarian Assistance/Disaster Relief (HADR) for the forthcoming cycle.
- India was the chair of the IONS at the inaugural edition in 2008.
- India is also scheduled to take over as the Chair of IONS (2025-27) during 9th CoC planned to be conducted in India in end 2025.

4) Consider the following statements with respect to Blue Sea Dragon

1. It is a type of sea slug that have brightly coloured underbelly.
2. It can be found in both temperate and tropical waters.

Which of the above statement(s) is/are correct?

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

Answer : c

Blue Sea Dragon

The Blue Sea Dragon, a venomous marine organism typically found in the deep sea was recently discovered in Chennai, Tamil Nadu.

- Blue Sea Dragon (*Glaucus atlanticus*) is a type of mollusk or sea slug which is known as a nudibranch.
- Nudibranchs are marine mollusks that are soft-bodied and shell-less.
- Blue Sea Dragon is also known as blue glaucus.
- It has **brightly coloured underbelly** that make them to expose to airborne predators.
- The blue side of its body acts as camouflage against the backdrop of ocean waves, while the pearlized silver/grey side blends in with the bright sea surface, hiding it from predators below.
- **Size** - It rarely grows larger than 3 centimetres long or just over 1 inch.
- **Range** - It can be found on the surface of the *Atlantic, Pacific, and Indian oceans in temperate and tropical waters* throughout the world.
- **Food** - It feed on other aquatic creatures that live near the water's surface.
- Its favourite meals is made up primarily of venomous siphonophores.



5) Consider the following statements with respect to Red Sea

1. Israel, Yemen and Eritrea are the bordering countries of Red Sea.
2. It connects the Mediterranean Sea with the Atlantic Ocean through the Suez Canal.
3. The Red Sea occupies part of a large rift valley in the continental crust of Africa and Arabia.

How many of the statements given above are correct?

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

Answer : a

Red Sea

Recently Houthi rebels attacked the shipping routes in Red Sea as a retaliation to the Israel-Hamas war.

- Red Sea is one of the most significant shipping routes in the world that supports free movement of commercial shipping.
- It contains some of the world's hottest and saltiest seawater.
- The US-led [Operation Prosperity Guardian](#) was recently conducted to improve maritime security in the Red Sea.
- It connects the Mediterranean Sea with the **Indian Ocean** through the narrow Suez Canal.
- **Bordering countries** - Egypt, Saudi Arabia, Yemen, Sudan, Eritrea and Djibouti.
- **Physical features** - The Red Sea lies in a fault depression that separates two great blocks of Earth's crust, namely Arabia and North Africa.

- **The Red Sea occupies part of a large rift valley in the continental crust of Africa and Arabia.**
- **Rainfall** - It receives very *little precipitation* in any form.
- **No water enters the Red Sea from rivers.**
- **Mineral resources** - 5 major types of mineral resources are found in the Red Sea are:
 1. Petroleum deposits
 2. Evaporate deposits (sediments laid down as a result of evaporation, such as halite, sylvite, gypsum and dolomite)
 3. Sulfur
 4. Phosphates
 5. Heavy-metal deposits

Reported security incidents in the Red Sea and Gulf of Aden,
25 November - 19 December 2023.

● Explosion ● Suspicious approach ● Boarded ● Drone activity



500 km
500 miles

Guardian graphic. Source: United Kingdom Maritime Trade Operations. Note: data are reports not individual events, so duplicates are possible.