

Daily Current Affairs Prelims Quiz 06-01-2024 (Online Prelims Test)

- 1) Consider the following statements with respect to Plasma Waves
 - 1. They an interconnected set of particles and fields which propagate in a periodically repeating fashion.
 - 2. Plasma Waves are found only in Earth in the entire Solar System.

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

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

Answer: a

Plasma Waves

Recently the researchers at Indian Institute of Geomagnetism (IIG) have examined the existence of high-frequency plasma waves in the Martian plasma environment.

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- It is an interconnected set of particles and fields which propagate in a periodically repeating fashion.
- The waves that are emanate from the sun having Low-density, ionized gases are called as *plasmas*.
- Plasma is a *good electrical conductor* with properties that are strongly affected by electric and magnetic fields.
- Various plasma waves are often *observed in the Earth's magnetosphere*, a magnetic field cavity around the Earth.
- In general, plasma waves are identified as the short-time scale fluctuations in the in the electric and magnetic field observations.
- These plasma waves play an important role in the energization and transport of the charged particles in the Earth's magnetosphere.
- Some of the plasma waves like <u>electromagnetic ion cyclotron waves</u> act as a cleaning agent for the Earth's radiation belt, which is hazardous to our satellites.
- Mars The planet do not have any intrinsic magnetic field therefore the high-speed solar wind coming from the Sun interacts directly with the Mars atmosphere, like an obstacle in the flow.
- The researchers at Indian Institute of Geomagnetism (IIG), have examined the *existence of high-frequency plasma waves in the Martian plasma environment*.
- Researchers are curious to understand the existence of various plasma waves in the vicinity of un-magnetized planets like Mars.
- Indian Institute of Geomagnetism (IIG) is an autonomous institute of Department of Science and Technology.
- 2) Consider the following statements with respect to PRITHVI VIgyan (PRITHVI) Scheme.

- 1. It is a joint initiative of the Ministry of Science and Technology and Ministry of Defence.
- 2. The scheme aims to produce indigenous class of Agni and Prithvi missiles under Make in India Program.
- 3. SAGE (Seismology and Geosciences) is one of the sub-schemes of the PRITHVI scheme.

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

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

Answer: b

PRITHvi VIgyan (PRITHVI) Scheme

Recently the cabinet approved the overarching scheme "PRITHvi VIgyan (PRITHVI)" of the Ministry of Earth Sciences.

- PRITHVI stands for Promoting Research in Earth Systems Science, Technology, & Human Resource Development.
- It is an initiative of *Ministry of Earth Sciences (MoES)*.
- Various components of PRITHVI scheme are inter-dependent and are carried out in an integrated manner through combined efforts of the concerned Institutes under MoES.
- The scheme enables development of integrated multi-disciplinary earth science research and innovative programs across different MoES institutes.
- Major Objectives Augmentation and sustenance of long-term observations of the atmosphere, ocean, geosphere, cryosphere and solid earth to record the vital signs of the Earth System and change.
- Development of modelling systems for understanding and predicting weather, ocean and climate hazards and understanding the science of climate change.
- Exploration polar and high seas regions of the Earth towards discovery of new phenomena and resources.
- Development of technology for exploration and sustainable harnessing of oceanic resources for societal applications.
- Translation of knowledge and insights from Earth systems science into services for societal, environmental and economic benefit.
- **Sub schemes** It integrates 5 existing sub-schemes that includes:
 - 1. ACROSS Atmosphere & Climate Research-Modelling Observing Systems & Services
 - 2. O-SMART Ocean Services, Modelling Application, Resources and Technology
 - 3. PACER Polar Science and Cryosphere Research
 - 4. SAGE Seismology and Geosciences
 - 5. REACHOUT Research, Education, Training, and Outreach
- These programs collectively aim to enhance our understanding of the Earth's vital signs and translate scientific knowledge into practical services that benefit India.
- 3) Consider the following statements with respect to Mitigation Work Programme (MWP)
 - 1. It is part of Global Stocktake, which was originally proposed during the COP28.
 - 2. The programme is a brainchild of India's Ministry of Environment Forest and Climate Change.

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 : d

Mitigation Work Programme

The Second Global Dialogue and Investment-Focused Event under the Sharm el-Sheikh Mitigation Ambition and Implementation Work Programme (MWP) took place from October 2023 in Abu Dhabi.

- Mitigation Work Programme is a part of Global Stocktake which was originally proposed by the *United States* at *COP26*.
- It aims to encourage countries to heighten mitigation ambition in their climate plans in order to stay within 1.5 degrees Celsius (°C) of warming.
- The Second Global Dialogue and Investment-Focused Event under the Sharm el-Sheikh Mitigation Ambition and Implementation Work Programme (MWP) took place from October 2023 in Abu Dhabi.
- However, it has seen pushback from developing countries who initially questioned how its role differed from the Global Stocktake, which is itself a mechanism written in to scale up ambition.
- There are 2 possible reasons for the failure of the MWP to discuss substance in Dubai:
 - 1. Unwillingness to prejudge the Global Stocktake (GST) until the final day and commit more than what it agreed to.
 - 2. The atmosphere of mistrust that exists among Parties with respect to who will bear the mitigation burden.
- 4) Consider the following statements with respect to Pallas's Fish Eagle
 - 1. It is the largest eagle species in the world.
 - 2. The species is found only in India's west coast region.
 - 3. It is classified as endangered by the IUCN Red List.

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

Pallas's Fish Eagle

The rare Pallas's fish eagle was recently spotted after a decade on Asia's largest brackish water lagoon, Chilika Lake in Odisha.

- Pallas's fish eagle (Haliaeetus leucoryphus) is also known as Pallas's sea eagle or band-tailed fish eagle, is a *large*, *brownish sea eagle*.
- It is not the largest eagle species in the world.
- Conservation It is listed as *Endangered* on the IUCN Red List.
- It is a winter migrant, which is protected under the **Schedule-I** of the Wildlife Protection Act, 1972.
- **Distribution** It can be found in the east Palearctic in Kazakhstan, Russia, Tajikistan, Turkmenistan, Uzbekistan, Mongolia, China, *India*, Nepal, Bangladesh, Myanmar and Bhutan.
- It is endemic to Asia.

- **Breeding** It breeds during winter in the northern and north-eastern parts of the Indian subcontinent and migrates to Mongolia and thereabouts for the summer.
- **Diet** Its diet consists primarily of *large freshwater fish*. ▶
- 5) Consider the following statements with respect to Etikoppaka Toys
 - 1. These toys are manufactured in the state of Andhra Pradesh.
 - 2. Etikoppaka Toy is a Geographical Indication (GI) tagged product.
 - 3. These toys have no sharp edges and are rounded on all sides.

How many of the statements given above is/are correct?

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

Answer: c

Etikoppaka Toys

The Etikoppaka Toy industry is flourishing in recent times due to several initiatives taken by the Union Government including 'vocal for local' initiative.

- The Etikoppaka toy industry is believed to be around 400 years old.
- In early days, some craftsmen *from Etikoppaka*, a Village in Andhra Pradesh made in small wooden bowls and boxes for household purposes.
- These versatile items found utility in storing salt, turmeric, and other aromatic substances, with women especially preferring them for keeping 'kum-kum' or their precious gold jewellery.
- Initially, wooden creations from Etikoppaka were sold at stalls near temples and during weekly markets, better known as 'vaaram santha'.
- Over time, local kings, zamindars, and landlords began placing orders for these wooden products, utilising them both in kitchens and as decorative elements in homes.
- The turning point in their history came when artisans ventured into crafting toys for children.
- The introduction of *Lakkapidathalu*, a kitchen set featuring vibrant vessels, a stove, a rotimaking plate with a stick, and plates marked a breakthrough in the toy industry.
- Etikoppaka toys was granted the Geographical Indication (GI) tag in 2017.
- The Etikoppaka toys industry have been flourishing in the recent times.
- These toys have no sharp edges and are rounded on all sides.
- The industry has provided livelihood to a number of women in the village.
- Challenges It includes:
 - 1. Significant scarcity of 'Ankud' wood
 - 2. Rising prices of dyes
 - 3. Increased transportation and labour costs
 - 4. Invasion by China-made toys
 - 5. Absence of young individuals embracing ancestral occupations to sustain the hereditary profession.

