



Daily Current Affairs Prelims Quiz - 06-01-2021 - (Online Prelims Test)

1) With respect to *Earth Quakes*, consider the following statements:

1. An earthquake having a magnitude (M) less than 2.0 is termed as Micro Earthquake.
2. After Shock are a relatively small tremor that commonly precedes a relatively large magnitude earthquake.
3. Isoseismal is a line joining points on the Earth's surface, along which the intensity due to an earthquake is the same and it is usually a closed curve around the epicenter.

Which of the statements given above are correct?

- a. 1 and 2 only
- b. 1 and 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

Answer : b

- *The National Capital Region of Delhi experienced 4 small earthquakes during April - August 2020, with the first event of magnitude 3.5 on 12 April 2020 in the northeastern boundary of NCT Delhi, during the prevailing lockdown time.*
- These earthquakes were followed by a dozen of micro-events including, a few aftershocks.

Earthquakes

- These are the manifestations of sudden release of strain energy accumulated in the rocks over extensive periods of time in the upper part of the Earth.
- Earthquakes are classified as, Slight ($M < 5.0$), Moderate ($5.0 - 7.0$) depending upon the magnitude on Richter's scale.
- An earthquake having a magnitude, $M < 2.0$ is termed as Micro Earthquake.

Foreshock

- A relatively small tremor (or an earthquake) that commonly precedes a relatively large magnitude earthquake (called the "main shock"), by seconds to weeks or months and originates in or near the rupture zone of the main shock.

Aftershock

- An earthquake that follows a large magnitude earthquake called, "main shock" and originates in or around the rupture zone of the main shock. Generally, major earthquakes are followed by a number of aftershocks, which show a decreasing trend in magnitude and frequency with time.

Isoseismal

- A line connecting points on the Earth's surface, along which the intensity due to an earthquake is the same. It is usually a closed curve around the epicenter.

2) *National Center for Seismology (NCS)*, the nodal agency for monitoring earthquake activity in India works under?

- Ministry of Home Affairs
- Ministry of Earth Sciences
- Ministry of Science & Technology
- Ministry of Environment, Forest & Climate Change

Answer : b

- *The National Capital Region of Delhi experienced 4 small earthquakes during April - August 2020, with the first event of magnitude 3.5 on 12 April 2020 in the northeastern boundary of NCT Delhi, during the prevailing lockdown time.*
- All these events were located by the National Seismological Network (NSN), being operated and maintained by National Seismological Centre (NCS).

National Center for Seismology (NCS)

- It is the nodal agency of the Government of India for monitoring of earthquake activity in the country.
- It works under the **Ministry of Earth Sciences**, Government of India.
- NCS maintains National Seismological Network of 115 stations each having state of art equipment and spreading all across the country.
- NCS also monitors earthquake swarm and aftershock through deploying temporary observatory close to the affected region.
- Apart from earthquake monitoring, NCS is also actively involved in the Seismic Hazard Microzonation and seismological research.

3) Assertion (A): Ammoniacal Nitrogen content is high in River Yamuna.

Reason (R): Untreated waste water from industries in the region are discharged into River Yamuna.

In the context of the above two statements, which one of the following is correct?

- Both A and R are true and R is the correct explanation of A
- Both A and R are true, but R is not the correct explanation of A
- A is true, but R is false
- A is false, but R is true

Answer : a

- *The Central Pollution Control Board (CPCB) has constituted a study group to suggest solutions for increase in ammoniacal nitrogen in the Yamuna.*
- The study group will comprise of Delhi Jal Board (DJB), Haryana State Pollution Control Board, Delhi Pollution Control Committee, Irrigation and Water Resources departments of Haryana and Delhi.
- The study group has been asked to submit its report within a month.

Ammonia

- It is one of several forms of nitrogen that exist in aquatic environments.
- Unlike other forms of nitrogen, which can cause nutrient over-enrichment of a water body at elevated concentrations and indirect effects on aquatic life, **ammonia causes direct toxic effects on aquatic life** according to the US Environment Protection Agency.
- Ammonia is mainly produced for commercial fertilizers and other industrial applications.

Causes

- The possible reasons for high Ammoniacal Nitrogen could be discharge of untreated sewage from upstream towns in Haryana, discharge from industrial units, common effluent treatment plants (CETPs), sewage treatment plants (STPs), illegal discharge of sewage from unsewered colonies in outer Delhi through tankers, lean flow in the Yamuna and anaerobic decomposition of accumulated sludge on the riverbed.

4) Shoolpaneshwar Wild Life Sanctuary is located in?

- Assam
- Odisha
- Gujarat
- Maharashtra

Answer : c

- Tribals in Gujarat have been protesting against a notification of the Ministry of Environment, Forest and Climate Change.
- This notification had classified 121 villages around the Shoolpaneshwar Wildlife Sanctuary in Narmada district, Gujarat as eco-sensitive zones.

Shoolpaneshwar Wild Life Sanctuary

- It was created in 1982 as 'Dumkhal Sanctuary' - home for sloth bears.
- It is found at the congregation of Vindhyan-Satpura hill ranges.
- The sanctuary derives its name "Shoolpaneshwar" from a temple of Lord Shiva, which once existed in this region on the banks of river Narmada.
- The area is predominantly tribal with 'Vasavas' as the main tribe.

5) Vienna Accord of 2015 refers to which of the following?

- Convention on Road Traffic
- Convention on Consular Relations
- Convention for the Protection of the Ozone Layer
- Joint Comprehensive Plan of Action on the Nuclear Program of Iran

Answer : d

- Iran had recently confirmed that it was now enriching uranium to 20 percent purity, well beyond the threshold set by its 2015 Vienna Accord.

Iran Nuclear Deal

- The Iran nuclear deal, officially the Joint Comprehensive Plan of Action (JCPOA), was signed between **Iran and the P5 (the five permanent members of the UN Security Council)**-the US, UK, France, China and Russia) plus Germany and the European Union in Vienna in July 2015.
- It has also been referred as Vienna Accord, 2015.
- Under the agreement, which came into force in January 2016, Tehran agreed to limit its nuclear program in return for relief from crippling economic sanctions imposed by the UN, US and the EU.

6) Which of the following statements are *incorrect* with respect to *Lithium Metal*

1. It is highly reactive and flammable and must be stored in mineral oil.
2. Argentina is the leading producer of lithium, where Chile has the largest reserve of Lithium metal.

Select the correct answer using the codes given below:

- 1 only

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

Answer : b

Lithium Metal

- It is a soft, silvery-white alkali metal. Under standard conditions, it is the lightest metal and the lightest solid element.
- Lithium metal is isolated electrolytically from a mixture of lithium chloride and potassium chloride.
- Recently India has inked a pact with an Argentine firm to jointly prospect lithium in the South American country.
- Australia and Chile are world's leading lithium-producing country over the past decade.
- At the same time both the nations are top 2 countries that hold abundant lithium resources, where Chile has 55.5% of world's lithium reserves and Australia has 18.1%, where Argentina (11%) has 3rd largest reserves of the metal.

7) Consider the following statements with respect to *Edible Mushrooms*

1. Edible Mushrooms are rich in Vitamin B and D2.
2. The anti-oxidant compounds provides cancer fighting abilities.
3. Union government has advised state governments to include Mushroom in mid-day meals scheme

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

- a. 1 only
- b. 2 only
- c. 2 and 3 only
- d. All of the above

Answer : d

Edible Mushroom

- Union government has advised state governments to include mushrooms in the Integrated Child Development Services (ICDS) and Mid-Day Meals (MDM) schemes.
- These suggestions were on the inclusion of pre-primary classes in the MDM scheme and the provision of a simple and energetic breakfast under the scheme.
- Edible Mushroom contains mineral like potassium, copper, iron and phosphorus.
- It is rich in Vitamins B and they are exposed to sunlight, making them a natural source of D2.
- Choline in Mushroom helps in muscle movement, maintaining structure of cellular membranes and memory.
- The antidioxidant compounds such as polyphenols, polysaccharides, ergothioneine, glutathione, and selenium are known to be behind the mushrooms' cancer-fighting ability.

8) *Grand Renaissance Dam* is located across which of the following river?

- a. Yarlung Zangbo, Tibet
- b. Mekong River, China
- c. Xingu River, Brazil
- d. Blue Nile, Ethiopia

Answer : d

Grand Renaissance Dam

- Its construction was initiated in 2011 on the Blue Nile tributary of the river that runs across one part of Ethiopia.
- The dam will full fill Ethiopia's goal to secure electricity for its population and to sustain and develop its growing manufacturing industry.
- The dam has created dispute among Ethiopia and Egypt, with Sudan having found itself dragged into the issue.

9) Consider the following statements with respect to *Uranium Enrichment*

1. It is done by increasing the percentage of uranium-235 to create an effective nuclear fuel.
2. The enrichment process requires the uranium to be in gaseous form.

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

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

Answer : c

Uranium Enrichment

- It is a process that is necessary to create an effective nuclear fuel out of mined uranium by increasing the percentage of uranium-235 which undergoes fission with thermal neutrons.
- Nuclear fuel is mined from naturally occurring uranium ore deposits and then isolated through chemical reactions and separation processes.
- These chemical processes used to separate the uranium from the ore are not to be confused with the physical and chemical processes used to enrich the uranium.
- The enrichment process requires the uranium to be in a gaseous form.
- This is achieved through a process called conversion, where uranium oxide is converted to a different compound (uranium hexafluoride) which is a gas at relatively low temperatures.

10) Which of the following statements are correct with respect to *Prevention of Cruelty to Animals Act*

1. Animal Welfare Board of India (AWBI) was established under this act.
2. It provides a time period of 3 months for persecution for any offences, beyond which there will be no persecution.

Select the correct answer using the codes given below:

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

Answer : c

Prevention of Cruelty to Animals Act

- This Act provides for punishment for causing unnecessary cruelty and suffering to animals.
- The Act defines animals and different forms of animals.
- Discusses different forms of cruelty, exceptions, and killing of a suffering animal in case any cruelty has been committed against it, so as to relieve it from further suffering.

- This Act provides for the limitation period of 3 months beyond which no prosecution shall lie for any offences under this Act.



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