



**Daily Current Affairs Prelims Quiz 14-06-2022 - (Online Prelims Test)**

1) Consider the following statements regarding nixtamalization:

1. Nixtamalisation is a method by which the Mesoamericans used to soak and cook their maize in an alkaline solution.
2. The process induces pellagra, calcium, and mycotoxin into the corn kernels and yields Spherulites polymer as its byproduct.

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 : a

**Nixtamalization**

- Nixtamalisation is a method by which the ancient peoples of Mesoamerica like the Maya used to soak and cook their maize in an alkaline solution and make it more palatable, nutritious, and non-toxic.
- Nixtamal is derived from the Nahuatl word nextamalli, meaning 'nixtamalized maize dough'.
- Maize is the primary crop of the Americas and has been cultivated in the region for millennia.
- Maize, beans, and squash are called the 'Three Sisters' and formed the basis of diets throughout pre-Columbian North and Mesoamerica.
- Scientists find maize starch spherulites (polymer), a unique byproduct of nixtamalization.

2) Consider the following statements:

1. Anocovax is an inactivated SARS-CoV-2 Delta (COVID-19) antigen with Alhydrogel as an adjuvant, exclusively for animals.
2. Surra is a disease caused by a blood-borne parasite and transmitted by biting flies in animals and is prevalent in all the agro-climatic parts of India.

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

**Anocovax**

- Anocovax is a SARS-CoV-2 Delta (Covid-19) vaccine for animals that is inactivated.
- The Indian Council of Agricultural Research (ICAR), the country's main agri-research agency that falls under the Union Agriculture Ministry said in a statement that the immunity produced by Anocovax neutralizes both Delta and Omicron versions of SARS-CoV-2 and dogs, lions, leopards, mice, and bunnies are all safe to receive the vaccine.
- Surra ELISA kit, a suitable diagnostic assay for Trypanosoma evansi infection in multiple animal species, was also launched.
- Surra is one of the most important haemoprotozoan diseases of the different livestock species caused by Trypanosoma evansi.
- The disease is prevalent in all the agro-climatic parts of India.

3) Consider the following statements:

1. BrahMos is fired from a range far enough to allow the attacker to evade defensive counter-fire.
2. The liquid ramjet takes the missile closer to three times the speed of sound in the cruise phase.
3. The 'fire and forget' type missile can achieve a cruising altitude of 100 km and a terminal altitude as low as 10 m to hit the target.

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

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

Answer : a

**BrahMos**

- BrahMos is a two-stage missile with a solid propellant booster engine.
- Its first stage brings the missile to supersonic speed and then gets separated.
- The liquid ramjet or the second stage takes the missile closer to three times the speed of sound in the cruise phase.
- The missile has a very low radar signature, making it stealthy, and can achieve a variety of trajectories.
- The 'fire and forget' type missile can achieve a cruising altitude of 15 km and a terminal altitude as low as 10 m to hit the target.
- They are standoff range weapons, which are fired from a range far enough to allow the attacker to evade defensive counter-fire.

4) The term microlensing is associated with which of the following statements?

- a. Used in nuclear weapons, a highly specialized shaped explosive charges.
- b. The light from the background space is bent by the gravitational field.
- c. It is photo thermal phenomenon, when an excitation laser is focused on non-fluorescent sample.
- d. Distortion of light caused by layers of air having different temperatures.

Answer : b

## **Microlensing**

- It is a form of gravitational lensing in which the light from a background source is bent by the gravitational field of a foreground lens to create distorted, multiple, and/or brightened images.
- The separation of order a milli-arcsecond between multiple images is generally too small to be resolved by modern telescopes.
- The combined light of all images is instead observed as a single image of the source, blended

with any light that may be emanating from the lens itself.

- The brightness of the combined image is a function of the projected separation of the source and lens on the observer's sky and thus can change as the source, lens, and observer move relative to one another.
- The time variability of the combined image, namely an apparent change in source brightness as a function of time recorded as a microlensing light curve, is the usual observational signature of microlensing.

5) Consider the following statements regarding Web 5.0:

1. It gives the user control of their own data and identity by building an extra decentralized web.
2. From Web 2.0 onwards, it envisions the Internet without the threat of censorship from both governments or big techs.

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 : a

### Web 5.0

- Web 5.0 is aimed at “building an extra decentralized web that puts you in control of your data and identity”.
- Simply put, Web 5.0 is Web 2.0 plus Web 3.0, allowing users to own their identity on the Internet and ‘control their data’.
- Both Web 3.0 and Web 5.0 envision an Internet without the threat of censorship - from governments or big tech, and without fear of significant outages.
- Web 3.0 isn’t truly decentralized or owned by its users, but is instead controlled by various “venture capitalists and limited partners”.