

UPSC CURRENT AFFAIRS MCQS 28-02-2024

Q1:

Consider the following statements regarding Garbhini-GA2:

- 1. It is the first India-specific artificial intelligence (AI) model to precisely determine the age of a fetus in a pregnant woman in the second and third trimesters.**
- 2. It has been designed by researchers at the Indian Institute of Technology Madras and the Translational Health Science and Technology Institute (THSTI), Faridabad.**

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

Explanation:

Researchers recently developed Garbhini-GA2, an India-specific artificial intelligence model to precisely determine the gestational age of a foetus.

Garbhini-GA2 is the first India-specific artificial intelligence (AI) model to precisely determine the age of a foetus in a pregnant woman in the second and third trimesters. It has been designed by researchers at the Indian Institute of Technology Madras and the Translational Health Science and Technology Institute (THSTI), Faridabad. It is part of an interdisciplinary group for advanced research on birth outcomes – the Department of Biotechnology (DBT) India initiative (GARBH-Ini) programme. The Garbhini-GA2 accurately estimates the foetus' age, reducing error by almost three times. Once validated in pan-India cohorts, Garbhini-GA2 holds the potential to be widely deployed in clinics across the country, contributing to improved maternal and infant healthcare outcomes and reducing mortality rates. Hence, statements 1 and 2 both are correct.

Q2:

Consider the following statements regarding Flue Cured Tobacco:

- 1. It contains low sugar content.**
- 2. It is rich in natural tannins which creates its distinct mild and slightly sweet flavor and aroma.**
- 3. In India, Flue Cured Virginia (FCV) Tobacco is mainly produced in India in two states, Tamil Nadu and Maharashtra.**

How many of the statements given above are correct?

A: Only one

B: Only two

C: All three

D: None

Answer: A

Explanation:

Government of India permits sale of Flue Cured Virginia (FCV) Tobacco on Tobacco Boards auction platform and waives off penalty on sale of excess production of registered growers and unauthorized production of unregistered growers in Karnataka.

Curing is a process by which the harvested tobacco leaf is made ready for the market. It is a well standardized process especially in FCV tobacco to achieve the desirable qualities in the cured leaf along with the removal of moisture.

There are three types of tobacco curing methods traditionally used: Air-Cured, Fire-Cured, and Flue-Cured.

Key characteristics of Flue Cured Tobacco:

- Produces primarily cigarette tobacco.
- Contains high sugar content.
- Contains medium to high levels of nicotine.
- Rich in natural tannins which creates its distinct mild and slightly sweet flavor and aroma.



Hence, statement 1 is incorrect while statement 2 is correct.

In India Flue Cured Virginia (FCV) Tobacco is mainly produced in India in 2 states, Andhra Pradesh and Karnataka. **Hence, statement 3 is incorrect.**

Q3:

INDRA RV25: 240N, recently seen in news is a:

A: A satellite

B: A vaccine

C: A new comet

D: A turbojet engine

Answer: D

Explanation:

Hyderabad based Raghu Vamsi Machine Tools Private Limited recently launched its fully indigenous Micro Turbojet Engine “INDRA RV25: 240N”.

INDRA RV25: 240N is a micro turbojet engine. It is designed and developed indigenously by Hyderabad-based firm Raghu Vamsi Machine Tools with support from IIT Hyderabad. It has primarily been developed for unmanned aerial vehicles (UAVs) or drones. The engine has applications in UAVs, air taxis, jetpacks, auxiliary power units, range extenders, and power generation in the future. **Hence, option (d) is correct.**

Q4:

Consider the following statements regarding the United Nations Environment Assembly:

- 1. With universal membership of all 193 UN Member States, the United Nations Environment Assembly (UNEA) is the world's highest-level environmental decision-making body.**
- 2. It meets every year to define goals for worldwide environmental strategies and enhance global environmental law.**

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: A

Explanation:

Recently, the sixth assembly of the United Nations Environmental Programme (UNEA-6) commenced in Nairobi, Kenya with a call for multilateral actions to address the rising environmental crisis fuelled by climate change.

With universal membership of all 193 UN Member States, the United Nations Environment Assembly (UNEA) is the world's highest-level environmental decision-making body. The United Nations Environment Assembly (UNEA) is UNEP's main governing body and the highest political forum on environmental issues. **Hence, statement 1 is correct.**

The United Nations Environment Assembly (UNEA) meets every two years to define goals for worldwide environmental strategies and enhance global environmental law. The theme of UNEA-6 is “effective, inclusive and sustainable multilateral actions to tackle climate change, biodiversity loss and pollution”. **Hence, statement 2 is incorrect.**

Q5:

With reference to Aerosols, consider the following statements:

- 1. They are tiny solid or liquid particles suspended in air or a gas.**
- 2. Aerosols can be natural, such as fog or gas from volcanic eruptions, or artificial, such as smoke from burning fossil fuels.**
- 3. Aerosol particles are either emitted directly into the atmosphere (primary aerosols) or produced in the atmosphere from precursor gases (secondary aerosols).**

How many of the statements given above are correct?

A: Only one

B: Only two



C: All three

D: None

Answer: C

Explanation:

Stratospheric Aerosol Intervention (SAI), also known as Stratospheric Aerosol Injection, is a geo-engineering or climate engineering approach that uses tiny reflective particles or aerosols to reflect sunlight into space in order to cool the planet and reverse or stop global warming. They are tiny solid or liquid particles suspended in air or a gas. Aerosols can be natural, such as fog or gas from volcanic eruptions, or artificial, such as smoke from burning fossil fuels. Aerosol particles are either emitted directly into the atmosphere (primary aerosols) or produced in the atmosphere from precursor gases (secondary aerosols). Aerosol particles are tiny, but numerous, and often comprise a number of inorganic and organic substances. **Hence, all statements are correct.**