



Daily Current Affairs Prelims Quiz 13-05-2023 (Online Prelims Test)

1) Consider the following statements with respect to Electronic Voting Machines (EVMs)

1. An Electronic Voting Machine (EVM) is an electronic device used for recording votes.
2. It is developed by Election Commission of India in collaboration with Bharat Electronics Limited and Electronics Corporation of India Limited.
3. Although India does not import EVMs from abroad, foreign technologies are used in Indian EVMs.

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

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

Answer : b

Election Commission of India (ECI) denied claims of Randeep Surjewala, who had said that Electronic Voting Machines (EVMs) from South Africa were being used for voting.

Electronic Voting Machines (EVMs)

- India does not use any EVMs produced abroad.
- **Producers** - EVMs are produced indigenously by 2 PSUs viz. Bharat Electronics Ltd. and Electronics Corporation of India Ltd.
- For the machines, the Software Programme Code is written in-house, by these two companies, not outsourced, and subjected to security procedures at factory level to maintain the highest levels of integrity.
- **EVM Parts** - Control unit and a balloting unit connected by a 5-metre cable.
- An EVM comprises of a control unit which is placed with the polling officer and a balloting unit which is placed inside the voting compartment.
- The control unit has been termed the EVM's 'brain'.
- **Voting** - The balloting unit is turned on only after the polling officer presses the Ballot button on it and the vote is then cast.
- The Software Programme Code is not outsourced, and subjected to security procedures at factory level to maintain the highest levels of integrity.
- The programme is converted into machine code and only then given to the chip manufacturer abroad.
- Because we don't have the capability of producing semi-conductor microchips within the country.
- Each ECI-EVM has a serial number and the Election Commission by use of EVM-tracking software can find out from its database which machine is located where.
- Any attempt to replace a microchip is detectable and can make EVM inoperative.
- The process of destruction of EVM & its chip is carried out in the presence of the Chief Electoral Officer of the state or his representatives inside the factory of manufacturers.

2) Consider the following statements with respect to Carbon Dating

1. Carbon dating is a widely used method to determine the age of organic materials.
2. Half - Life in carbon dating means the radioactive C-14 in organic materials reduces to one half of itself while c-12 remains the same.
3. Potassium-argon dating and Uranium-thorium-lead dating are also the methods have the same principle with respect to carbon dating.

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

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

Answer : d

Allahabad High Court ordered a scientific survey, including carbon dating, of a Shivling that have been found at the Gyanvapi mosque complex, Varanasi.

Carbon Dating

- Carbon dating is a widely used method to determine the age of organic materials, things that were once living.
- The dating method is based on Carbon-14 (C-14), an isotope of carbon with an atomic mass of 14, is radioactive, and decays at a well known rate.
- The most abundant isotope of carbon in the atmosphere is C-12 and a very small amount of C-14 is also present.
- The ratio of C-12 to C-14 in the atmosphere is almost static, and is known.
- **Half Life** - While C-12 is stable, the radioactive C-14 reduces to one half of itself in about 5,730 years known as its half-life.
- There are other methods to calculate the age of inanimate things that are more than 40,000-50,000 years old because after 8-10 cycles of half-lives, the amount of C-14 becomes almost very small.
- **Radiometric Dating Methods** - It is based on the same principle as carbon dating and is known as radiometric dating methods.
- Two commonly employed methods for dating rocks are potassium-argon dating and uranium-thorium-lead dating.
- The radioactive isotope of potassium decays into argon, and their ratios can give a clue about the age of rocks.
- Uranium and thorium have several radioactive isotopes, and all of them decay into the stable lead atom.
- The ratios of these elements present in the material can be measured and used to make estimates about age.

3) Consider the following statements with respect to WHO Report on Pre-term Births

1. Pre-term babies refers to babies born alive before 37 weeks of pregnancy have been completed.
2. Preterm birth is the single largest killer of children under 5 years of age according to the WHO report, 2020.
3. Maternal mortality and Neonatal and child mortality comes under the Sustainable Development Goal 3.

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

- a. 1 and 3 only

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

Answer : d

WHO report says that India recorded maximum preterm births in 2020.

WHO Report on Pre-term Births

- Babies born alive before 37 weeks of pregnancy are complete are called preterm babies.
- Based on gestational age, there are 3 categories of preterm births, as defined by the WHO:
 - Extremely preterm (less than 28 weeks)
 - Very preterm (28 to less than 32 weeks)
 - Moderate to late preterm (32 to 37 weeks)
- Preterm births can happen both spontaneously or for several medical reasons, including infection, or other pregnancy complications that require early induction of labour or caesarean birth.

Findings of the Report

- According to the WHO report, rates of preterm birth have barely changed between 2010 and 2020.
- In fact, it is even rising in some parts of the world.
- In 2020, an estimated 13.4 million babies were born preterm.
- Preterm birth is the single largest killer of children under 5 years of age.
- According to estimates, around 1 million newborns died due to preterm birth-related complications in 2020.
- Preterm birth rates were 9.9% in 2020, compared to 9.8% in 2010.
- In high-burden regions such as South Asia, it is increased in 2020 when compared to 2010.
- In Sub-Saharan Africa it maintained as per 2010 in 2020.
- Pre-term birth rates reduced in Czech Republic, Austria, Brunei, Singapore, Spain, the Netherlands, Denmark, Hungary, Brazil and Sweden.
- Preterm birth is associated with long-term damage to respiratory and cardiac systems for many survivors and can also have a neurodevelopmental impact.
- Disabilities can range from less severe outcomes to major disabilities like diplegia.

4) Consider the following statements with respect to Moroccan Locust

1. It was traditionally considered as one of the most dangerous agricultural pests in the Mediterranean zone.
2. The amount of spring rainfall is critical for the development cycle of this agriculture threatening species.
3. It has the capability to migrate in swarms from the Canary Islands to Afghanistan.

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

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

Answer : d

Food and Agriculture Organization (FAO) of the United States alerted that the large-scale outbreak of the Moroccan locust can cause threat to across 8 provinces in Afghanistan.

Moroccan Locust

- The Moroccan locust, *Dociostaurus maroccanus* was traditionally considered as one of the most dangerous agricultural pests in the Mediterranean zone.
- It has the capability to migrate in swarms made it a major enemy of agriculturists from the Canary Islands to Afghanistan.
- Climatic factors, in particular the amount of spring rainfall, are critical for the developmental cycle of *D. maroccanus*.
- Anthropogenic factors appear to have the most powerful effect on the locust's population dynamics.
- Deforestation and overgrazing create the necessary prerequisites for colonization by the Moroccan locust.
- On the other hand, converting grasslands into croplands makes the habitat totally unsuitable for the insect because females can lay eggs into undisturbed soil.
- These two conflicting tendencies appear to govern the current evolution of Moroccan locust populations, their manifestations being different according to the geographical zone.
- Although in some regions (e.g. in many European countries) *D. maroccanus* has lost its formerly high economic importance.
- North African and central Asian countries the species continues to flourish and may even increase its pest status.

5) Consider the following statements with respect to United Nations Forum on Forests (UNFF18)

1. It is a subsidiary body established under Economic and Social Council of the United Nations (ECOSOC) based on the Rio Declaration.
2. It is mandatory for UN members to adopt Strategic Plan of Global Forest Goals and associated targets to be achieved by 2030.

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 : a

UNFF18 held in New York, discussed the contributions of SFM to energy, livelihoods and the SDGs.

United Nations Forum on Forests (UNFF18)

- The UN General Assembly adopted the first ever UN Strategic Plan for Forests 2017-2030.
- It is a subsidiary body established under Economic and Social Council of the United Nations (ECOSOC).
- The Strategic Plan provides a global framework for actions at all levels to sustainably manage all types of forests and trees outside forests and halt deforestation and forest degradation.
- At the heart of the Strategic Plan are 6 Global Forest Goals and 26 associated targets to be achieved by 2030, which are voluntary and universal.
- They support the objectives of the International Arrangement on Forests.
- It aims to contribute to progress on the

- Sustainable Development Goals,
- The Aichi Biodiversity Targets,
- The Paris Agreement adopted under the UN Framework Convention on Climate Change.

Quadrennial programme for the period 2017-2020

- Odd-year sessions will focus on discussions on implementation, technical advice and exchange of experiences.
- Even-year sessions will focus on policy dialogue, development and decision-making.
- The Forum has universal membership, and is composed of all Member States of the United Nations and specialized agencies.



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