



Daily Current Affairs Prelims Quiz 17-09-2022 (Online Prelims Test)

1) Based on the National Family Health Survey (NFHS) 2021, identify the states that have Fertility Rate above the replacement rate:

1. Bihar
2. Tamil Nadu
3. Kerala
4. Uttar Pradesh
5. Meghalaya

Choose the correct option.

- a. 1 and 4 only
- b. 2 and 3 only
- c. 1, 4 and 5 only
- d. 2, 3, and 5 only

Answer : c

National Family Health Survey (NFHS) 2021 - Fertility Status

- At the time of Independence, India's fertility rate was 6 per woman.
- The government launched the first ever family planning programme in the world in 1952.
- The fertility rate declined to 5 in 1972.
- India's fertility rate further declined to 4 in 1990s when Kerala became the first state in India to have a fertility rate below replacement level.
 - Replacement level fertility: Total fertility levels of about 2.1 children per woman.
 - This value represents the average number of children a woman would need to have to reproduce herself by bearing a daughter who survives childbearing age.
- As reported by the National Family Health Survey (NFHS) 2021, only 5 states have a fertility rate above the replacement rate.
- The states are: Bihar (3), Meghalaya (2.9), Uttar Pradesh (2.4), Jharkhand (2.3), and Manipur (2.2).
- The steady dip in fertility rates has been explained as an effect of increased use of contraception, better health care, and increase in the mean marriage of women.'

2) Consider the following statements regarding the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA):

1. The objective of the treaty is to recognise the contribution of farmers to the diversity of crops.
2. It works under the aegis of International Food Policy Research Institute (IFPRI).
3. It is also known as the seed treaty and India is a signatory to the treaty.

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 : b

International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)

- It works under the aegis of the Food and Agriculture Organisation of the United Nations.
- It is also known as the Seed Treaty.
- It is comprehensive international agreement for ensuring food security through the conservation, exchange and sustainable use of the world's Plant Genetic Resources for Food and Agriculture (PGFRA).
- India is a signatory to the treaty.

Objectives

- To recognise the farmer's contribution to the diversity of crops.
- To establish a global system to provide farmers, plant breeders and scientists with access to plant genetic materials.
- To conserve and sustainable use plant genetic resources for food and agriculture, and fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity.

3) Consider the following statements regarding Shanghai Cooperation Organisation (SCO):

1. It is an intergovernmental organization formed in 2001, currently comprises eight Member States.
2. India is one of the founding members of the SCO.
3. India is the next Chair of SCO for the year 2023 taking over from Uzbekistan.

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

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

Answer : b

Shanghai Cooperation Organisation (SCO)

- India will take over as the chair of the Shanghai Cooperation Organisation from Uzbekistan in 2023.
- It is an intergovernmental organization founded in Shanghai on 2001.
- The SCO currently comprises eight Member States (China, India, Kazakhstan, Kyrgyzstan, Russia, Pakistan, Tajikistan and Uzbekistan).
- Four Observer States are interested in acceding to full membership (Afghanistan, Belarus, Iran, and Mongolia).
- Six "Dialogue Partners" (Armenia, Azerbaijan, Cambodia, Nepal, Sri Lanka and Turkey).
- In 2021, the decision was made to start the accession process of Iran to the SCO as a full member, and Egypt, Qatar as well as Saudi Arabia became dialogue partners.
- In the current SCO summit, Iran signed the memorandum to join as a full time member.

Secretariat

- The SCO Secretariat, based in Beijing, is the main permanent executive body of the SCO.
- The Secretariat is headed by the Secretary-General, nominated by the Council of Ministers of Foreign Affairs and approved by the Heads of State Council.

4) Consider the following statements regarding Project Cheetah:

1. It is the world's first inter-continental large wild carnivore translocation project.
2. Under the project, India had recently re-introduced the Asiatic Cheetah in Kuno National Park, Madhya Pradesh.
3. Cheetah is listed as Vulnerable under the IUCN Red list of threatened species.

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 : b

Project Cheetah

- Cheetah was declared extinct from India in 1952.
- The basic aim of the Project Cheetah is to revitalise and diversify India's wildlife and its habitat.
- It is world's first inter-continental large wild carnivore translocation project.
- Eight Cheetahs are arriving in India from Namibia and will be released into the Kuno National Park in Madhya Pradesh.
- The project is also aimed at developing metapopulation in India that allows the cheetah to perform its functional role as a top predator.
- Cheetahs will help in the restoration of open forest and grassland ecosystems in India.
- As part of the project, 50 cheetahs will be introduced in various National Parks over five years.
- Cheetah happens to be the only large carnivore that got extinct from India due to over-hunting and habitat loss.

Cheetah

- Scientific name - *Acinonyx jubatus*
- Population - Around 7,100 cheetahs left in the wild
- IUCN Status - Vulnerable
- Listed under Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

5) Consider the following statements regarding the Atomic Clocks:

1. It combines a quartz crystal oscillator with an ensemble of atoms to achieve greater stability.
2. It contains elements like cesium or calcium and a source of microwave radiation.
3. It is used on board GPS satellites that orbit the Earth to measure time to a very high accuracy.

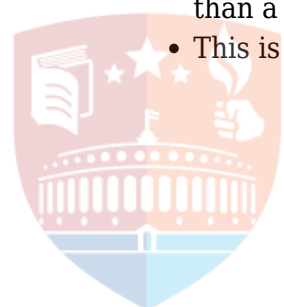
Which of the above statement(s) is/are correct?

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

Answer : d

Atomic Clocks

- To determine a spacecraft's distance from Earth, navigators send a signal to the spacecraft, which then returns it to Earth.
- The time the signal requires to make that two-way journey reveals the spacecraft's distance from Earth, because the signal travels at a known speed (the speed of light).
- Most modern clocks, from wristwatches to those used on satellites, keep time using a quartz crystal oscillator.
- These devices take advantage of the fact that quartz crystals vibrate at a precise frequency when voltage is applied to them.
- By space navigation standards, quartz crystal clocks aren't very stable.
- After only an hour, even the best-performing quartz oscillators can be off by a nanosecond (one billionth of a second).
- After six weeks, they may be off by a full millisecond (one thousandth of a second), or a distance error of 185 miles (300 kilometres).
- That would have a huge impact on measuring the position of a fast-moving spacecraft.
- Atomic clocks combine a quartz crystal oscillator with an ensemble of atoms to achieve greater stability.
- An atomic clock contains an element like cesium or calcium and a source of microwave radiation.
- NASA's Deep Space Atomic Clock will be off by less than a nanosecond after four days and less than a microsecond (one millionth of a second) after 10 years.
- This is equivalent to being off by only one second every 10 million years.



IAS PARLIAMENT
Information is Empowering
A Shankar IAS Academy Initiative