



Daily Current Affairs Prelims Quiz 27-06-2024 (Online Prelims Test)

1) Consider the following statements with respect to Microwave Obscurant Chaff (MOC)

1. It is a niche technology used in the Microwave Remote Sensing Satellite.
2. It is developed by the Defence Research and Development Organisation (DRDO).

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 : b

Microwave Obscurant Chaff (MOC)

Recently DRDO has handed over the Medium Range-Microwave Obscurant Chaff Rocket which uses Microwave Obscurant Chaff (MOC) technology to the Indian Navy.

- Microwave Obscurant Chaff (MOC) is a niche technology developed by **Defence Research and Development Organisation (DRDO)**'s Defence Laboratory, Jodhpur.
- It **obscures radar signals and creates a microwave shield around platforms and assets**, thus reducing radar detection.
- It is **not used in the Microwave Remote Sensing Satellite**.
- MOC is a special type of fibres, with diameter of few microns and unique microwave obscuration properties and have been assembled in the medium range chaff rocket.
- **Medium Range-Microwave Obscurant Chaff Rocket** - When fired, it creates a cloud in space that blocks microwaves, spreading over a large area and lasting long enough to effectively shield against hostile threats with Radio Frequency seekers.
- The Phase-I trials of MR-MOCR were successfully conducted from Indian Navy ships, demonstrating the MOC cloud blooming and being persistent in space.
- In Phase-II trials, the Radar Cross Section (RCS) reduction of an aerial target to the extent of 90% has been demonstrated and cleared by the Indian Navy.

2) Consider the following statements with respect to Ex-HOPEX

1. It is a joint air exercise between India and Israel.
2. It aims to promote bilateral and regional cooperation between the countries.

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 : b

Ex-HOPEX

Recently Indian Ambassador to Cairo reached Berghat Airbase in Egypt and met the IAF's team participating in Ex-HOPEX.

- Ex-HOPEX or Exercise HOPEX is a **joint exercise between Indian Air Force and Egyptian Air Force**.
- The aim of this exercise is to promote bilateral and regional cooperation between two countries.
- It is the fourth joint exercise and witnessed the **participation of Indian Air Force's (IAF) Rafale fighter jets**.
- The C-17 Globemaster and **IL-78 tankers also participating** in the exercise.
- **India Egypt relations** - Diplomatic relations between India and Egypt began on 18 August 1947 at the ambassadorial level.
- Both countries have cooperated closely on multilateral forums as **founding members of the Non-Aligned Movement**.
- In the year 2022, *India and Egypt celebrated the 75th anniversary of diplomatic relations, which reflects the depth of the relationship.*

3) Cosmic Gems Arc, Sometimes seen in the news recently, is associated with?

- a. A relatively small rocky object orbiting the Sun since the big bang event.
- b. An energy that was discovered recently that causes the expansion of the universe to accelerate.
- c. It is a strongly-lensed galaxy emitting light when the Universe was roughly 460 million years old.
- d. A crowded group of 100,000 or more stars all traveling together, as part of a galaxy.

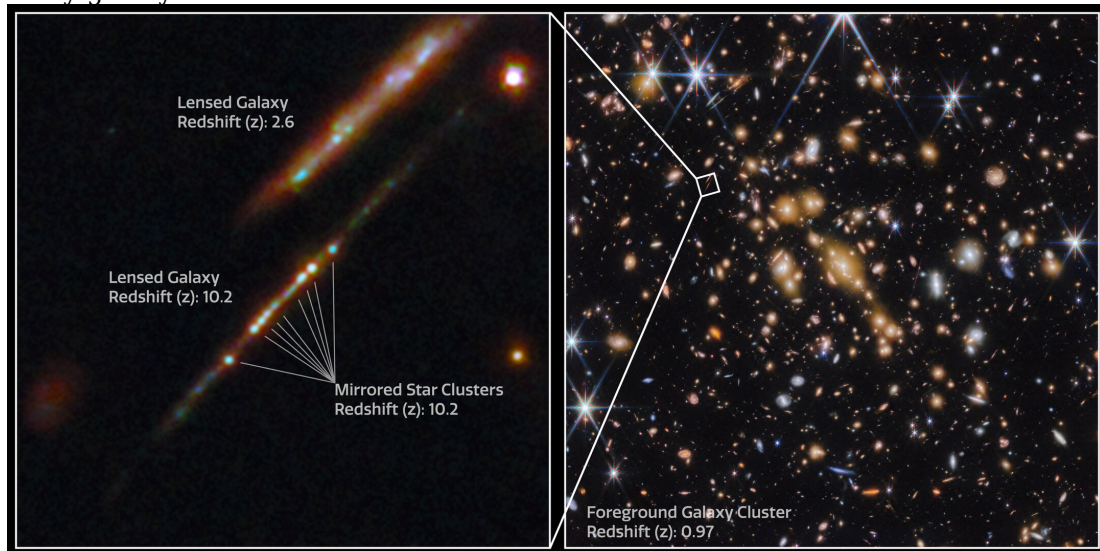
Answer : c

Cosmic Gems Arc

An international team of astronomers have recently detected five young massive star clusters in the Cosmic Gems arc (SPT0615-JD1).

- The Cosmic Gems arc (SPT0615-JD1) is extremely distant, emitting light when the Universe was only about 460 million years old, which is about 97% back in cosmic time.
- The Cosmic Gems arc was initially discovered using the Hubble Space Telescope as part of the RELICS (Reionization Lensing Cluster Survey) program.
- The **primary goal of RELICS** is to find and study very distant galaxies from the early universe, particularly those from the epoch of reionization.
- The discovery was made possible by a combination of factors such as:
 - Webb's high sensitivity and resolution in near-infrared wavelengths.
 - Gravitational lensing by a massive foreground galaxy cluster.
- These star clusters are significant because:
 - They provide insight into star formation in very early galaxies.
 - They may be precursors to globular clusters seen in modern galaxies.
 - They contribute the majority of ultraviolet light from their host galaxy.
 - They are much denser than nearby star clusters.
- This discovery has implications for understanding:
 - The formation of globular clusters.
 - The reionization of the early Universe.
 - The formation of very massive stars and black hole seeds.

- Early galaxy evolution.



4) Consider the following statements with respect to Bannerghatta Biological Park (BBP)

1. It is home to free ranging leopards and acts as a natural habitat for tigers and elephants, being situated at Karnataka.
2. Chinnara vana darshana scheme aims to provide nature education to school children by taking them to neighbouring reserve forest area or sanctuary national park.

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



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Answer : c

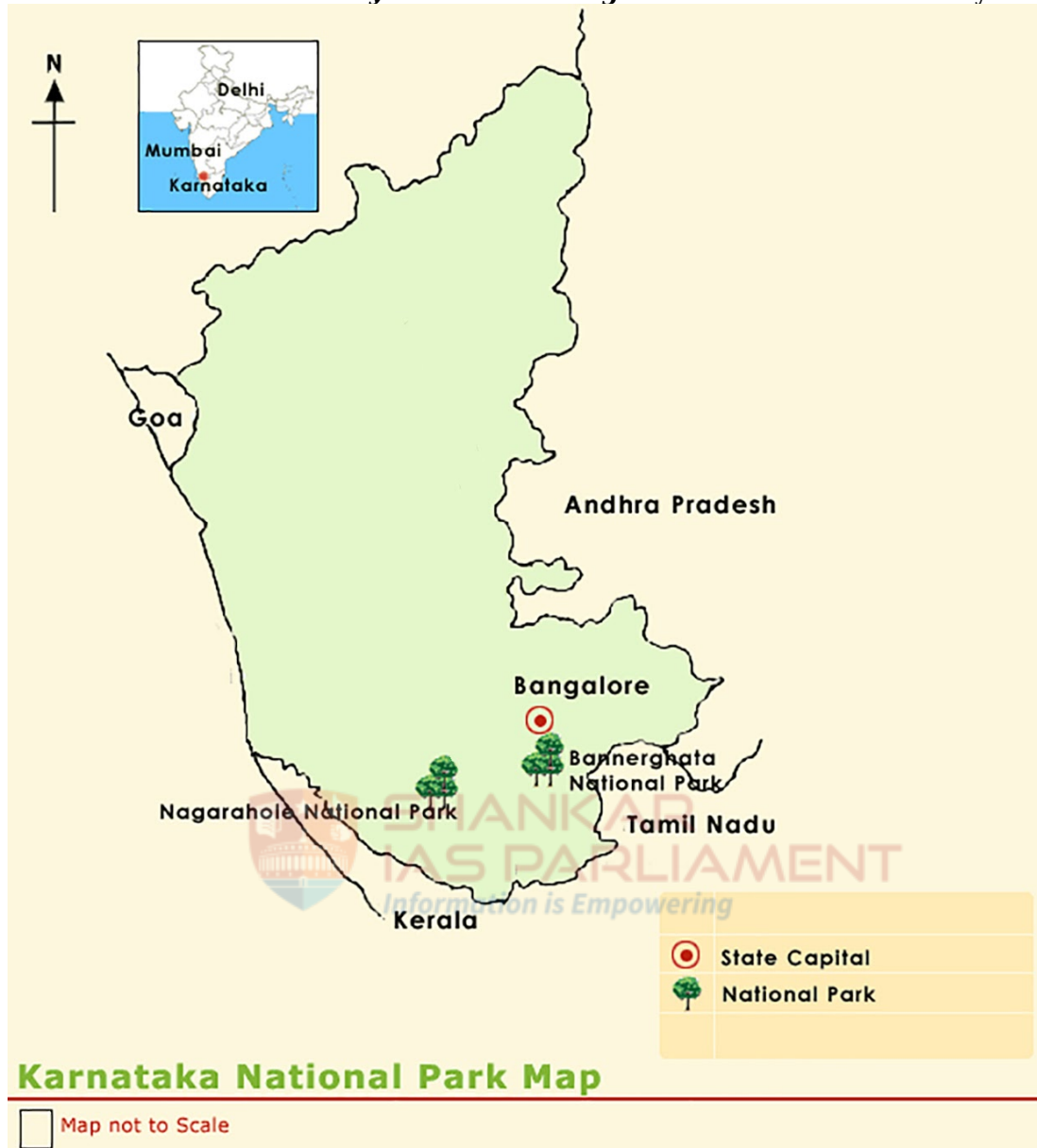
Bannerghatta Biological Park (BBP)

South India's first and the country's largest leopard safari was inaugurated by Environment Minister at the Bannerghatta Biological Park (BBP) recently.

- Bannerghatta Biological Park Bengaluru is a unique region of ecological importance as it's situated on the northern terminal point of Mysuru Elephant Reserve in **Karnataka**.
- **It is home to free ranging leopards and acts as a natural habitat for tigers and elephants.**
- The Park at Bannerghatta has the following major components:
 - A **Butterfly garden** to sustain local butterfly population
 - A butterfly conservatory enclosed under polycarbonate roof
 - Research and captive breeding laboratory
 - A museum
- The Park plays a major role in conservation of rich floral, faunal diversity, sequester carbon and sustains regional hydrology.
- **Leopard safari at BBP** – Is the south India's first and the country's largest leopard safari.
- An area of 20 hectares has been demarcated and fenced for the safari.
- The leopard safari area is **made up of undulating terrain with natural rocky outcrops and semi-deciduous forest.**
- **Chinnara vana darshana scheme** – It aims to provide nature education to 6th to 9th

standard school children by taking them to neighbouring Reserve Forest area or Sanctuary National Park.

- The scheme was **initiated by the Karnataka government** in the financial year 2015-16.



5) Consider the following statements with respect to Target Olympic Podium Scheme (TOPS)

1. It is a flagship program of the ministry of youth affairs and sports to provide financial support to India's top athletes.
2. The Mission Olympic Cell is a dedicated body created to assist the athletes who are selected under the scheme.

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

Target Olympic Podium Scheme (TOPS)

Judoka Tulika Maan, a rising star in Indian judo has recently stated that she has received substantial assistance from the Government's Target Olympic Podium Scheme (TOPS).

- TOPS (Target Olympic Podium Scheme) is a **flagship program of the Ministry of Youth Affairs and Sports** to provide assistance to India's top athletes.
- **It was introduced in 2014** and was **revamped in April 2018** to establish a technical support team for managing the TOPS athletes and providing holistic support.
- The Scheme looks to add a premium to the preparations of these athletes so that they can win medals in the Olympics.
- The scheme is fully functional and has been extending all requisite support to probable athletes identified for the 2020 Olympic Games and Paralympic Games.
- The support includes foreign training, international competition, equipment and coaching camp besides **monthly stipend of rupees 50,000 for each athlete**.
- The Ministry of Youth Affairs & Sports is responsible for appointment of TOPS members with emphasis on ensuring representation from 'High-Priority' sports.
- The high-priority sports includes Archery, Badminton, Boxing Hockey, Shooting and Wrestling.
- TOPS constitution does not stipulate minimum or maximum members for the committee.
- **Mission Olympic Cell** - Is a dedicated body created to assist the athletes who are selected under the TOP Scheme.
- The MOC is under the Chairmanship of the Director General, Sports Authority (DG, SAI).
- The Committee meetings are attended by representatives of respective National Sports Federations (NSFs) and Project Officers of the SAI besides other members.



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