



### **Daily Current Affairs Prelims Quiz 25-05-2023 (Online Prelims Test)**

1) Consider the following statements with respect to AI Research, Analytics and knowledge Assimilation (AIRAWAT)

1. It is a cloud computing platform for Big Data analytics with advanced AI processing capabilities.
2. It is based on the recommendations of the National Strategy for Artificial Intelligence (NSAI).
3. It works under the aegis of Ministry of Science and Technology.

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

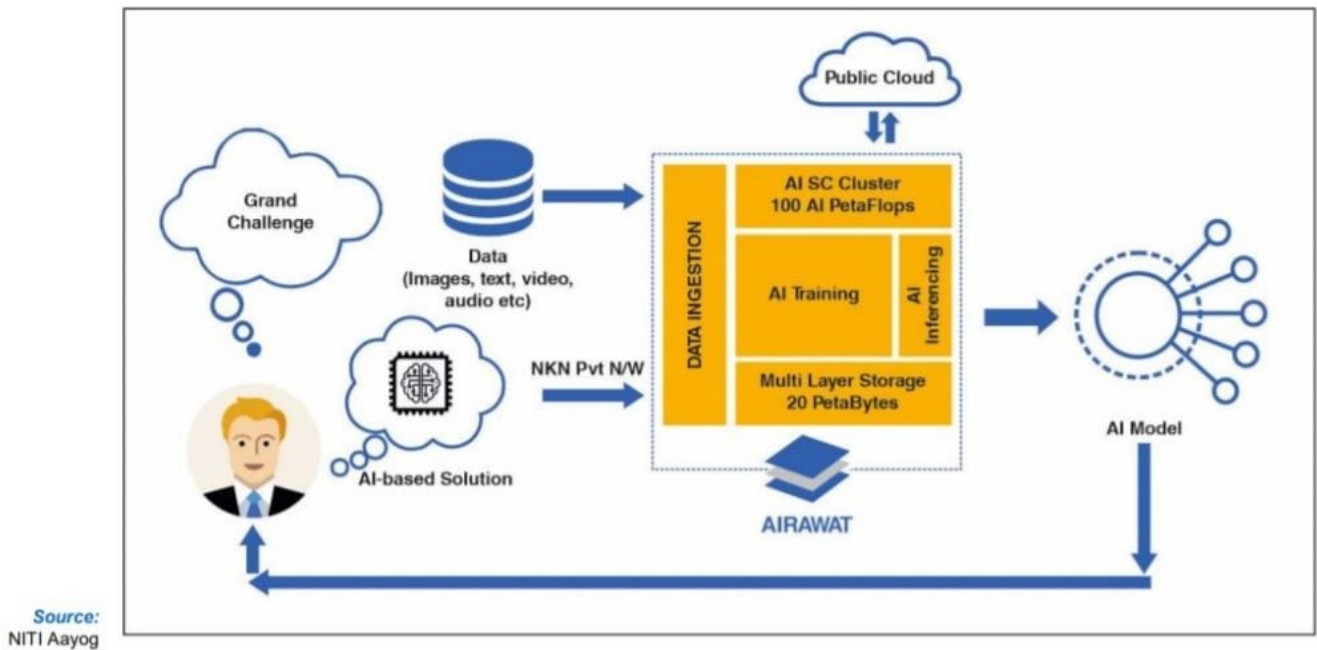
- a. 1 and 2 only
- b. 2 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer : a

*AI supercomputer 'AIRAWAT' has secured the 75th position in the prestigious Top 500 Global Supercomputing List.*

### **AIRAWAT (AI Research, Analytics and knowledge Assimilation)**

- It is an AI-based cloud computing infrastructure (supercomputer) based on the recommendations of the National Strategy for Artificial Intelligence (NSAI).
- This platform will assist in the R&D of new technologies that help in solving business and governance use cases.
- The installation of AIRAWAT is at C-DAC Pune.



- **Ministry** - Ministry of Electronics and Information Technology (MeitY)
- The AIRAWAT PoC of 200 AI Petaflops integrated with PARAM Siddhi, AI of 210 AI Petaflops gives a total peak compute of 410 AI Petaflops Mixed Precision.
- It has sustained compute capacity of 8.5 Petaflops (Rmax) Double Precision.
- The peak compute capacity (Double Precision, Rpeak) is 13 Petaflops.

## Supercomputers

- Supercomputers aggregate the computational power of multiple servers or compute devices for processing huge amounts of data and performing complex calculations.

**Peta flops** - A unit of computing speed equal to 1000 million million ( $10^{15}$ ) floating-point operations per second.

2) Consider the following statements with respect to Mohenjo-Daro's Dancing Girl

1. It was sculpted during the Indus Valley Civilization (IVC).
2. Mohenjo-Daro is located in the present day Sindh Province of Pakistan.
3. It was made of iron using the lost wax casting technique.

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

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

Answer : a

*PM Modi unveiled the famous Dancing Girl of Mohenjodaro at the International Museum Expo in Delhi's Pragati Maidan.*

## Dancing Girl

- It is a bronze statuette created over 4,500 years ago during the Indus valley Civilisation.
- It was found in the ancient Mohenjo-Daro site in 1926.
- This statue reflecting the aesthetics of a female body as conceptualized during that historical period.
- The bronze girl was made using the lost-wax casting technique.
- The statuette was named Dancing Girl based on an assumption of her profession.
- She is one of two bronze artworks found at Mohenjo-Daro that shows a more natural pose than compared to other more formal figures.
- The statuette has large eyes, a flat nose, healthy cheeks, curly hair, and a broad forehead.
- She is a tall figure with long legs and arms, high neck, subdued belly, and sensuously modeled.
- The girl wears some bangles and a necklace.
- She has 25 bracelets on her left arm and four bangles on her right arm and is holding an object in her left hand.
- Her long hair styled as big bun rested on her shoulder.

## Lost Wax Technique

- This wax model is then covered with a clay coating, leaving some holes as passageways.
- When the clay-covered moulds are heated in the oven, the wax melts out.
- After the mould has cooled down, the outer clay cover is chipped off and the finishing touches are done to the solid bronze statue.

3) Consider the following statements with respect to Sengol

1. It is a historical symbol of Independence as it signifies the transfer of power from the British to the Indians.
2. It has a Nandi bull on top, symbolising justice.

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 : c

*Sengol was kept in Allahabad museum will be installed in the new Parliament building by Prime Minister Narendra Modi.*

## Historical significance

- Tamil kings had this sengol (a Tamil word for sceptre), which is a symbol of justice and good governance.
- The two great epics Silappathikaram and Manimekalai records the significance of a sengol.
- A ceremony performed during the Chola dynasty, in which the transfer of power from one king to the other was sanctified and blessed by Samayacharyas (spiritual leaders).
- It also has historical significance of Independence as it signifies the transfer of power from the British (Lord Mountbatten, the last British viceroy), to the Indians (Nehru).
- Nehru and Rajaji reached out to Thiruvaduthurai Atheenam, a well-known mutt in Tanjore district, Tamilnadu for the manufacturing of sengol.

## Sengol

- It derives from the Tamil word semmai, meaning righteousness.
- The sceptre measures 5 feet in length and has a Nandi bull on top, symbolising justice.
- This is a gold coated silver scepter.
- The ceremony added the song played during the ceremony was composed by the 7th-century Tamil saint Tirugnana Sambandar.
- The Sengol was kept in Allahabad museum.

4) Consider the following statements with respect to Reusable Launch Vehicle (RLV)

1. RLV has 4 stages like PSLVs to propel the vehicle into orbit.
2. It uses conventional solid booster designed for low burn rate.
3. ISRO doesn't launch any reusable launch vehicles yet.

Which of the statement(s) given above is/are **not correct**?

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

Answer : b

*A SpaceX Falcon 9 rocket carrying a Qatari communications satellite launches from the Kennedy Space Center in Florida.*

### Reusable Launch Vehicle (RLV)

- The RLV has only two stages to propel the vehicle into orbit.
- Once the fuel in the first stage has been expended, the vehicle will shed it, and carry on with the second stage.
- Once it has been shed, the first stage will re-enter the atmosphere and land in an autonomous fashion at a pre-determined location.
- After some maintenance, it will be available for reuse.
- The configuration of RLV-TD is similar to that of an aircraft and combines the complexity of both launch vehicles and aircraft.
- The winged RLV-TD has been configured to act as a flying test bed to evaluate various technologies, namely, hypersonic flight, autonomous landing and powered cruise flight.
- In future, this vehicle will be scaled up to become the first stage of India's reusable two stage orbital launch vehicle.
- RLV-TD consists of a fuselage (body), a nose cap, double delta wings and twin vertical tails.
- It also features symmetrically placed active control surfaces called Elevons and Rudder.
- This technology demonstrator was boosted to Mach no: 5 by a conventional solid booster (HS9) designed for low burn rate.
- The selection of materials like special alloys, composites and insulation materials for developing an RLV-TD and the crafting of its parts is very complex and demands highly skilled manpower.
- Many high technology machinery and test equipment were utilised for building this vehicle.

### India

- In 2010, ISRO began developing a winged reusable rocket, taking the first step towards realising a two-stage-to-orbit (TSTO) launch vehicle that could be fully reusable.
- On 2016, the winged vehicle successfully flew at hypersonic speed.

5) Match the following sports that involves animals with their respective states

1. Jallikattu - Tamil Nadu
2. Kambala - Assam
3. Dhirio bull fight - Goa
4. Bulbul fight - Karnataka

Select the correct answer using the codes given below

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

Answer : c

*Jallikattu, the traditional rural sport involving bulls, has received judicial approval.*

## **Jallikattu**

- The term Jallikattu is a union of two words - 'Calli' (coins) and 'Kattu' (tie), which denotes a bundle of coins tied to the bull's horns.
- Jallikattu is a 2,000 years old competitive bull taming sport in Tamil Nadu which contestants attempt to tame a bull for a prize, wherein if they fail, the bull owner wins the prize.
- It is celebrated in the second week of January at the time of the Pongal (harvest) festival.
- Kangayam, Pulikulam, Umbalachery, Bargur and Malai Maadu are among some native cattle breeds reared for Jallikattu.
- Its first references date back to a seal discovered at Mohenjodaro, which is dated between 2,500 BC and 1,800 BC.
- Back then, it was called Eru Thazuval, meaning embracing the bull.
- Jallikattu also finds mention in Silappadikaram, one of the great Tamil epics from the Sangam age.
- The best guide to the cultural universe of Jallikattu is C S Chellappa's brilliant novella, 'Vaadivasal' (Arena), written in the 1940s.

## **Sports involving Animals**

- Rekla - Tamil Nadu
- Bail Gadi Shariat - Maharashtra
- Kambala - Karnataka
- Maramudi Bull Surfing - Kerala
- Dhirio bull fight - Goa
- Buffalo fight during Bhogali Bihu festival - Assam
- Camel racing - Rajasthan
- Bulbul fight - Assam
- Cock fighting - Andhra Pradesh, Chattisgarh, Jharkhand Kambala - Karnataka