Q: Consider the following statement regarding UDAN scheme (Ude Desh Ka Aam Nagrik):

- 1. It is aimed at enhancing connectivity to remote and regional areas of the country.
- 2. It is a key component of Centre's National Civil Aviation Policy.
- 3. The scheme will be funded by the central government only.

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: a

Explanation:

- The scheme is aimed at enhancing connectivity to remote and regional areas of the country and making air travel affordable.
- It is a key component of Centre's National Civil Aviation Policy led by Prime Minister Narendra Modi and launched in June 2016.
- Under the scheme, nearly half of the seats in Udan flights are offered at subsidised fares, and the participating carriers are provided a certain amount of viability gap funding (VGF) an amount shared between the Centre and the concerned states.
- The scheme will be jointly funded by the central government and state governments.
- The scheme will run for 10 years and can be extended thereafter.

Q: Consider the following statement regarding Basic Structure of the Constitution:

- 1. It is properly defined in the constitution.
- 2. Supremacy of law and judicial review is the part of it.
- 3. Indira Nehru Gandhi, Minerva Mills, Waman Rao and I.R.Coelho highlighted the concept of it.

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: b Explanation:

- The doctrine of basic structure though is not exactly defined but through its contents which have been provided by the judicature clarifies a scope defining the frame or the structure of the constitution.
- From time-to-time basic structure is enhanced with some new contents and hence the Supreme Court is yet to define the exact basic structure of the constitution.
 - Supremacy of the constitution
 - ✤ Rule of law
 - Sovereignty, liberty and republic nature of Indian polity.
 - ✤ Judicial review
 - Harmony and Balance between fundamental rights and directive principles.
 - Separation of power.
 - Federal character.
 - Parliamentary system.
 - Rule of equality.
 - ✤ Unity and integrity of the nation.
 - Free and fair elections. o Powers of SC under Article 32,136,142,147
 - ✤ Power of HC under Article 226 and 227.
 - Limited power of parliament to amend the constitution.
 - ♦ Welfare state.
 - Freedom and dignity of an individual.
- The Basic Structure concept got highlighted in various judgments of Supreme Court such as Indira Nehru Gandhi, Minerva Mills, Waman Rao and I.R.Coelho etc.

Q: 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

Ans: c

Explanation:

- Sengol was kept in Allahabad Museum will be installed in the new Parliament building by Prime Minister Narendra Modi.
- Tamil kings had this sengol (a Tamil word for sceptre), which is a symbol of justice and good governance.
- The two great epics Silapathikaram 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 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.

Q: 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 Electronics and Information Technology (MeitY).

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3 $\,$
- d) 1, 2 and 3

Ans: d

Explanation:

- 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 of Electronics and Information Technology (MeitY) are in charge
- 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 aggregate the computational power of multiple servers or compute devices for processing huge amounts of data and performing complex calculations.

Q: 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.

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: a

Explanation:

- Dancing Girl 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 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.