Q: Consider the following statement regarding Just Energy Transition Partnership (JET-P):

1. It is a mechanism for multilateral financing by developed countries to support an energy transition in developing countries.
2. It aims to reduce emissions in the energy sector and accelerate the coal phase-out.
3. India become the fourth country after South Africa, Indonesia and Vietnam to sign the JET-P deal.

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:

- Just Energy Transition Partnership (JET-P) is a mechanism for multilateral financing by developed countries to support an energy transition in developing countries.
- It aims to reduce emissions in the energy sector and accelerate the coal phase-out.
- Transition describes the gradual movement towards lower carbon technologies, while 'Just' qualifies that this transition will not negatively impact society, jobs and livelihoods.
- It was launched at the COP26 in Glasgow with the support of the United Kingdom (UK), the United States (US), France, Germany, and the European Union (EU).
- Senegal has become the fourth country after South Africa, Indonesia and Vietnam to sign the JET-P deal, with the International Partners Group comprising France, Germany, the European Union, the United Kingdom and Canada.
- India refused to give its consent, saying that coal cannot be singled out as a polluting fuel and that energy transition talks need to take place on equal terms.

Q: Consider the following statement regarding Hastinapur Wildlife Sanctuary:

1. It is located in the state of Haryana.
2. It is a part of the "Asia Flyway" project.
3. Turtle Rehabilitation Program also has its centre near the Hastinapur Sanctuary.

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:

- Hastinapur Wildlife Sanctuary is located in the state of **Uttar Pradesh.**
- It lies alongside the northern tip **of the River Ganga**, flowing thru the districts of Muzaffarnagar and Bijnor.
- It has a variety of landforms and is a mixture of different habitats such as **wetlands, marshes, dry sand beds** and gently sloping ravines.
- Under the aegis of the World-Wide Fund (WWF), the Turtle Rehabilitation Program also has its centre near the Hastinapur Sanctuary.
- It is a part **of the "Asia Flyway" project,** and many migratory Birds, both local and foreign, flock in numbers near the numerous water bodies present in the region.

Q: Consider the following statement regarding Euclid Space Telescope:

1. It is named after the Greek mathematician Euclid of Alexandria.
2. This mission is part of ESA's Cosmic Vision programme.

Choose the correct option from the codes given below:

a) 1 Only
b) 2 Only
c) 1 and 2
d) None of the above

Ans: c
Explanation:

- Euclid Space Telescope is named after the Greek mathematician Euclid of Alexandria.
- This mission is part of ESA's Cosmic Vision programme, which plans to explore the origin and components of the Universe and the fundamental laws that govern it.

- The spacecraft will have a 1.2-metre-wide telescope and two instruments;

Q: Consider the following statement regarding Halogens:

1. In Greek it means salt-producing because it reacts with many metals to produce salts.
2. They are a group of elements located in Group 17 of the periodic table.
3. Unlike metals, they exist in all three different states of matter in their standard state.

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:

- The term Halogen in Greek means salt-producing because it reacts with many metals to produce salts.
- They are a group of elements located in Group 17 of the periodic table, which includes fluorine (F), chlorine (Cl), bromine (Br), iodine (I), and astatine (At).
- In 1826, Swedish chemist Jons Berzelius coined the term halogen for the entire group of elements.
- Unlike metals, they exist in all three different states of matter in their standard state.
- For example, fluorine is found naturally as a gas, bromine as a liquid, and the larger iodine is found naturally as a solid.
- Halogens are the most reactive nonmetals on the periodic table and are powerful oxidising agents.

Q: Consider the following statement regarding Aspartame:

1. It is the world's most commonly used low-calorie artificial sweetener.
2. It is made up of two amino acids: aspartic acid and phenylalanine.
3. It is used worldwide as a sugar substitute in thousands of foods and drinks.

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:

- Aspartame is the world's most commonly used low-calorie artificial sweetener, which is approximately 200 times sweeter than sucrose (common sugar)
- It was discovered by James M. Schlatter, a chemist, in 1965 and was introduced to replace sucrose.
- The U.S. Food and Drug Administration (FDA) approved aspartame for use in some dry foods in 1981 and for carbonated beverages in 1983.
- It is made up of two amino acids: aspartic acid and phenylalanine, which are naturally occurring amino acids in many protein-rich foods.
- In the body, aspartame is metabolised into its constituent components, aspartic acid, phenylalanine, and a small amount of methanol.-
- It is used worldwide as a sugar substitute in thousands of foods and drinks, including cereals, sugar-free chewing gum, low-calorie fruit juices and diet sodas.