

Q: Consider the following statement:

1. Croatia got independent from then-federal Yugoslavia in 1991.
2. Slovenia adopted the euro in 2007.
3. Croatia applied for EU membership in 2013.

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:

- Croatia, in southeastern Europe, has been an independent country since 1991 when it left then-federal Yugoslavia.
- The country applied for EU membership in 2003 and joined the bloc in 2013. That was the last time the EU expanded.
- Neighbouring Slovenia, also an ex-Yugoslav republic and now EU member, adopted the euro in 2007.

Q: Consider the following statement:

1. Lithuania joined the Euro common currency in 2020.
2. Croatia formally became the 20th member of the euro common currency.
3. Greece joined the Euro common currency in 2001.

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:

- Croatia formally became the **20th member of the euro common currency** as European Union finance ministers approved the country's request.
- The approval will come into being at the start of 2023.
- Croatia is the first country to join the euro since Lithuania in 2015.
- Created in 1999 among 11 countries, including Germany and France, the euro has gone through seven previous enlargements starting with Greece in 2001.
- The appeal of euro membership is reflected by the last three expansions, which brought in Baltic states between 2011 and 2015.

Q: Consider the following statement:

1. There is no emblem set out in the Constitution of India
2. The emblem design is set out in Appendix I and II of the 2005 Act.

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:

- There is no emblem set out in the Constitution of India. The emblem design is set out in Appendix I and II of the 2005 Act. Amending the Act, the government can have a new emblem if it so desires.

- If an elected government wants to make certain amendments it can go ahead and do the same, but the constitution as such doesn't have a particular provision of punishment if one does that.

Q: Consider the following statement regarding I2U2:

1. India, Israel, US and UAE are the countries in this grouping.
2. I2U2 is aimed to encourage joint investments in water, energy, transportation, space, health, and food security.
3. Some experts have dubbed I2U2 the 'West Asian Quad'.

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 new grouping will be called "I2U2" — "I" for India and Israel and "U" for the US and UAE.
- I2U2 is aimed to encourage joint investments in six mutually identified areas such as water, energy, transportation, space, health, and food security.
- It intends to mobilise private sector capital and expertise to help modernise infrastructure, low carbon development pathways for our industries, improve public health, and promote the development of critical emerging and green technologies.
- The countries have said there is no military angle to this grouping and that the focus is a constructive agenda regarding the economy and infrastructure, some experts have dubbed I2U2 the 'West Asian Quad'.

Q: The James Webb Space Telescope began releasing a new wave of cosmic images, heralding a new era of astronomy. Consider the following statement:

1. The telescope has revealed stunning details of the Southern Ring planetary nebula.
2. Planetary nebulae are the shells of gas and dust ejected from dying stars.
3. When bigger stars collapse on themselves and the outer layers explode in a 'bang' and is termed as "Black Hole".

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 James Webb Space Telescope revealed the clearest image to date of the early universe, going back 13 billion years.
- In the latest images, the telescope has revealed stunning details of the **Southern Ring planetary nebula** that were previously hidden from astronomers.
- Planetary nebulae are the **shells of gas and dust** ejected from dying stars. The James Webb Telescope's powerful infrared view brought this nebula's second star into full view, along with exceptional structures created as the stars shaped the gas and dust around them.
- Bigger stars (at least five times the mass of our sun) collapse on themselves and the outer layers explode in a 'bang', a phenomenon known as '**supernova**'. Supernova is the largest explosion known to man.
- After a supernova explosion, a 'neutron star' the collapsed core of the star is left behind. If there's sufficient mass, a black hole is formed.
- A black hole is a spot in space where gravity is so strong that even light cannot escape its pull. The gravity is so strong because matter has been squeezed into a tiny space.

