

## Weekly Quiz (23<sup>rd</sup> - 29<sup>th</sup> Oct)

Q1. Consider the following about National Green Hydrogen Mission

1. Missions aim is to make India self-reliant in using, producing and exporting green hydrogen.
2. The Mission will facilitate demand creation, production, utilization and export of Green Hydrogen.
3. It aims to entail over Rs 8 lakh crore of total investments and is expected to generate six lakh jobs.

How many of the above statements is/are correct?

- a) Only 1
- b) Only 2
- c) Only 3
- d) All are incorrect

Q2. The FSSAI under its Food Safety and Standards (Labelling and Display) Regulations, 2020 has comprehensively outlined the information to be included on the labels of food products, this includes which of the following?

1. Product name
2. Shelf life
3. Nutrition facts
4. Vegetarian/non-vegetarian logos
5. Ingredient lists
6. Allergen warnings

How many of the above statements is/are incorrect?

- a) Only 1, 3, 4, and 5
- b) Only 3 and 5
- c) Only 4 and 6
- d) None of the above

Q3. Consider the following statements about osteoporosis

1. At least 46 million women in India currently live with post-menopausal osteoporosis.
2. As per 2019 study, India was the highest contributor to osteoporosis fracture-related deaths/disabilities worldwide.
3. Osteoporosis, is a disease in which the density and quality of nerves are reduced.

How many of the above statements is/are incorrect?

- a) Only 1
- b) Only 2
- c) Only 3
- d) All are correct

Q4. Consider the following statements about LUH

1. It is the third indigenous Multi-Role Combat Helicopter.
2. It includes a weather radar system for real-time weather information.
3. Cockpit lighting works with night-vision goggles for low-visibility conditions.

How many of the above statements is/are correct?

- a) Only 1
- b) Only 2
- c) Only 3
- d) None of the above

Q5. Which of the following was the theme of Osteoporosis day 2023?

- a) Build better nerves
- b) Build better heart
- c) Build better limbs
- d) Build better bones

Q6. Recently, centre has decided to introduce DNA, Face Matching Systems at Police Stations across country. Consider the following statements about the same.

1. It will be implemented under the Criminal Procedure Identification Act.
2. Criminal Procedure Identification Act enables police and Central investigating agencies to collect, store, and analyse physical and biological samples, including retina and iris scan of arrested persons.

Which of the above is/are incorrect?

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

Q7. Which of the following is/are incorrect about Hydrogen energy?

- a) It has zero carbon content
- b) Non-polluting source of energy
- c) Highest energy content by volume and the lowest energy content by weight
- d) All the above are correct

Q8. Consider the following statements about Construction Industry

1. It contributes to 13% of global GDP.
2. It is expected to grow significantly in the coming years — at an estimated CAGR of 11% — from \$8.2 trillion to \$17 trillion by 2029.
3. Some challenges faced by the industry are ageing workforce, fewer skilled labour, design changes and unforeseen site conditions..

How many of the above statements is/are correct?

- a) Only 1
- b) Only 2
- c) Only 3
- d) All the above are incorrect

Q9. How many of the following are incorrect reasons for India to observe China-Bhutan Boundary Talks?

1. For India, given the breakdown in its ties with China over the standoff at the Line of Actual Control from 2020, any hint of closer ties between China and one of its closest neighbours is a cause for worry.
2. China has asked to “swap” areas in Doklam under Bhutanese control with areas in Jakarlung and Pasamlung which China claims.
3. The Doklam trijunction cuts very close to India’s Siliguri corridor a narrow area that connects the North Eastern States to the rest of India.
4. India’s worry is over China’s demand for full diplomatic relations with Bhutan, and opening an Embassy in Thimphu.

Codes:

- a) Only 1
- b) Only 2
- c) Only 3
- d) All the above are correct

Q10. Consider the following statements about Mars

1. It is about one third the size of Earth.
2. As Mars orbits the Sun, it completes one rotation every 24.6 hours, which is very similar to one day on Earth (23.9 hours).
3. Mars has distinct seasons like Earth, but they last shorter than seasons on Earth.
4. The reason Mars looks reddish is due to oxidation magnesium in the rocks, and dust of Mars.

How many of the above is/are correct?

- a) Only 1
- b) Only 2
- c) Only 3
- d) Only 4

Q11. Consider the following statements about internal structure of Mars

1. Mars has large but low-density core, composed of liquid iron and lighter elements such as sulphur, carbon, oxygen and hydrogen
2. Mars’s liquid iron core is likely to be surrounded by a fully molten silicate layer. New study suggests its core is smaller and denser than previously proposed.

Which of the above is/are incorrect as per the new study about interior of Mars?

- a) Only 1
- b) Only 2
- c) Both 1 & 2
- d) None of the above

Q12. Consider the following about ball lightning

1. It is a ball of luminosity that usually occurs near the impact point of a flash and moves horizontally at a speed of a few centimetres per second.
2. It is usually accompanied by a hissing sound, and has a lifetime of several hours.

3. The colour is quite variable and the ball often ends with an explosion.
4. Also called globe lightning, it occurs at times of minor electrical activity in the atmosphere.

How many of the above is/are incorrect?

- a) Only 1
- b) Only 2
- c) Only 3
- d) Only 4

Q13. Which of the following is/are used in cloud seeding?

- a) Bromide chloride flare
- b) Silicate chloride flare
- c) Iodide chloride flare
- d) Calcium chloride flare

Q14. Recently, IITM Pune demonstrates cloud seeding can produce rainfall. How many of the following are correctly mentioned about the same study?

1. All cumulus clouds produce rainfall when cloud seeding is done.
2. A cloud seeding experiment carried out in Solapur city, which falls on the windward side of the Western Ghats and hence gets good number of cumulus clouds.
3. The primary objective was to investigate the efficacy of hygroscopic seeding in deep convective clouds and to develop a cloud seeding protocol.
4. Convective clouds with a depth of over one kilometre and likely to evolve into deep cumulus clouds were not targeted.

Codes:

- a) Only 1
- b) Only 2
- c) Only 3
- d) All the above

Q15. Commercially viable Hydrogen can be produced from hydrocarbons including which of the following

1. Natural gas
2. Oil and coal through processes like steam methane reforming, partial oxidation, and coal gasification
3. From renewables like water, sunlight, and wind through electrolysis and photolysis

Codes:

- a) Only 1 & 3
- b) Only 2 & 3
- c) Only 1 & 2
- d) All the above