



Daily Current Affairs Prelims Quiz 25-04-2022 - (Online Prelims Test)

1) Consider the following statements regarding Seafloor Spreading:

1. It is a geological process that creates crusts, the outermost shell of the Earth.
2. Seafloor spreading occurs along mid-ocean ridges and slow seafloor spreading rates leads to increased volcanic activity.

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

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

Seafloor Spreading

- Seafloor spreading is a geological process that creates crusts, the outermost shell of Earth.
- Tectonic plates separate, allowing magma from the earth's interior to fill the gap in this phenomenon.
- The magma cools to form a new oceanic crust.
- These activities occur along mid-ocean ridges — large mountain ranges rising from the ocean floor.
- Faster seafloor spreading rates mean more volcanic activity.

2) Consider the following statements regarding Social Cost of Carbon (SCC):

1. It is the estimate of economic costs, of emitting one additional ton of carbon dioxide into the atmosphere.
2. India's country-level social cost of carbon emission is the highest in the world.

Which of the above statement(s) is/are **incorrect**?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : d

Social Cost of Carbon (SCC)

- The social cost of carbon is an estimate of the economic costs, or damages, of emitting one additional ton of carbon dioxide into the atmosphere, and thus the benefits of reducing emissions.

- India's country-level social cost of carbon emission was estimated to be the highest at dollar 86 per tonne of CO₂.
- It means the Indian economy will lose dollar 86 by emitting each additional tonne of CO₂.
- India is followed by the US, where the economic damages would be dollar 48 per tonne of CO₂ emission. Saudi Arabia is close behind at dollar 47 per tonne of CO₂ emission.
- Northern Europe, Canada and the Former Soviet Union have negative SCC values because their current temperatures are below the economic optimum.

3) Consider the following statements regarding Special Launch Systems (SLS) Rockets:

1. It is a light weight reusable launch vehicle developed by ISRO in collaboration with the NASA.
2. It will be used by the ISRO for its Gaganyaan mission and by the NASA for its Artemis mission.

Which of the above statement(s) is/are **incorrect**?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

Special Launch Systems (SLS) Rockets

- The SLS is a super-heavy non-reusable launch vehicle that NASA is currently scheduled for launch as part of the Artemis program whose primary aim is to return humans to the moon for the first time since 1972.
- Once completed and successfully tested, it would be the most powerful rocket ever built by NASA.
- It travels 2,80,000 miles from the earth for over four to six weeks during the course of the mission.

4) Consider the following statements regarding Blue Straggler:

1. It is the class of stars found either in globular or open star clusters that are bigger and bluer than the rest of the stars.
2. Blue Straggler are found only in dense stellar systems, where distances between stars are less than a fraction of a light year.

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

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

Blue Straggler

- Blue stragglers are a class of stars on open or globular clusters that stand out as they are bigger and bluer than the rest of the stars.
- These are unusually hot and bright stars found in the cores of ancient star clusters known as globular.
- Blue Straggler are found only in dense stellar systems, where distances between stars are less than a fraction of a light year.
- The Milky Way's largest and brightest globular is Omega Centauri.

5) Consider the following statements regarding Space Equity Action Plan:

1. The plan is formulated by NASA with the aim of identifying and eliminating systemic barriers and ensure representation.
2. According to the plan the Canadian, Japanese, and European Space Agency will share data related to Artemis mission with NASA.

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

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

Space Equity Action Plan

- NASA's equity action plan is a response to the U.S. government's 2021 executive order aimed at advancing racial equity and support for underserved communities.
- The presidential order inspired NASA to develop the equity action plan under which the space agency plans to identify and eliminate systemic barriers and ensure representation.
- The space equity action plan lists four focus areas for underserved communities which include: Equity in procurements and contracts; Using earth science and other data to help mitigate environmental challenges; Increase in grants and cooperative agreements; Increased external civil rights compliance and access for Limited English Proficient population groups.
- An executive team, led by NASA's deputy administrator, will lead the organisation's efforts towards equity.



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