

**Q: Consider the following statement regarding Noor-3 Satellite:**

1. It is a satellite with potential spying capabilities.
2. It was launched by the three-stage Qased, or messenger carrier.
3. It is an imaging satellite developed by Pakistan.

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:

- Noor-3 Satellite is an imaging satellite developed by Iran.
- It is a satellite with potential spying capabilities, boosting Iran's abilities in space.
- It has been put in an orbit 450 kilometers (280 miles) above the Earth's surface.
- It was launched by the three-stage Qased, or messenger carrier.
- The spacecraft's two predecessors, Noor-1 and Noor-2, launched in April 2020 and March 2022, respectively, also atop Qased rockets.
- Noor-1 fell back to Earth in April 2022, but Noor-2 remains operational and may work in concert with Noor 3 when the latter satellite comes online.

**Q: Consider the following statement regarding Economic Advisory Council to the Prime Minister (EAC-PM):**

1. It is a statutory body.
2. There is no fixed definition of the exact number of members and staff of the EAC-PM.
3. For administrative, logistic, planning, and budgeting purposes, the NITI Aayog serves as the nodal agency.

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:

- Economic Advisory Council to the Prime Minister (EAC-PM) is an independent body constituted to give advice on economic and related issues to the Government of India, specifically to the Prime Minister.
- EAC-PM is headed by a Chairperson and consists of eminent economists as members.
- It is supported in its functions by a team of officials and administrators.
- There is no fixed definition of the exact number of members and staff of the EAC-PM.
- It is common for the Council to be reconstituted time and again with different organizational structures headed by various economists who are of recognized international eminence.
- For administrative, logistic, planning, and budgeting purposes, the NITI Aayog serves as the nodal agency for the EAC-PM.

**Q: Consider the following statement regarding 'Sankalp Saptah':**

1. It is linked to the effective implementation of the Aspirational Blocks Programme (ABP).
2. To implement it a "chintan shivirs (brainstorming sessions)" were organized at village and block levels across the country.

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:

- ‘Sankalp Saptah’ is linked to the effective implementation of the Aspirational Blocks Programme (ABP).
- To implement the ABP and prepare an effective block development strategy, “chintan shivirs (brainstorming sessions)” were organized at village and block levels across the country. The Sankalp Saptah is the culmination of these chintan shivirs.
- Sankalp Saptah will be observed in all 500 aspirational blocks.
- Each day in Sankalp Saptah will be dedicated to a specific development theme on which all aspirational blocks will work.

**Q: Consider the following statement regarding CALIPSO Mission:**

1. It is a mission to study how clouds and aerosols impact the Earth’s climate.
2. It is a joint project between NASA and CNES.
3. Data from it will help to construct 3D models of the atmosphere that improve our ability to predict future climate change.

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:

- CALIPSO (Cloud-Aerosol LIDAR and Infrared Pathfinder Satellite Observations) is a mission dedicated to studying how clouds and aerosols impact the Earth’s climate.
- It is a joint project between NASA (National Aeronautics and Space Administration) and CNES (Centre National d'Études Spatiales), the French space agency.
- Launched in 2006, CALIPSO is a satellite-based observatory.
- Scientists are using data from CALIPSO to construct 3D models of the atmosphere that improve our ability to predict future climate change.
- CALIPSO has been part of a constellation of spacecraft called the "A-Train," including Aqua, Aura, and PARASOL spacecraft, dedicated to studying the Earth’s weather and environment.

**Q: Consider the following statement regarding Antimatter:**

1. It is the same as ordinary matter except that it has the opposite electric charge.
2. It is also known as “mirror” matter.
3. The antimatter particles does not corresponding to electrons, protons, and neutrons.

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:

- Antimatter is the same as ordinary matter except that it has the opposite electric charge.
- It is also known as “mirror” matter.
- For instance, an electron, which has a negative charge, has an antimatter partner known as a positron. A positron is a particle with the same mass as an electron but a positive charge.
- The antimatter particles corresponding to electrons, protons, and neutrons are called positrons, antiprotons, and antineutrons; collectively they are referred to as antiparticles.

- These anti-particles can combine to form anti-atoms and, in principle, could even form anti-matter regions of our universe.
- Matter and antimatter cannot coexist at close range for more than a small fraction of a second because they collide with and annihilate each other, releasing large quantities of energy in the form of gamma rays or elementary particles.
- Antimatter was created along with matter after the Big Bang.