

**Q: Consider the following statement regarding the successfully flight test of Vertical Launch Short Range Surface-to-Air Missile (VL-SRSAM):**

1. It is a ship borne weaponry system.
2. The missiles is equipped with indigenous Radio Frequency (RF) seeker.
3. The VL-SRSAM system has been designed and developed by DRDO and Rafael Advanced Defense Systems.

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:

- Recently, the Defence Research & Development Organisation (DRDO) and Indian Navy successfully flight tested Vertical Launch Short Range Surface-to-Air Missile (VL-SRSAM) from the Integrated Test Range (ITR), Chandipur off the coast of Odisha.
- The VL-SRSAM, a ship borne weapon system, is meant for neutralising various aerial threats at close ranges including sea-skimming targets.
- The flight test was carried out from an Indian Naval Ship against a high-speed unmanned aerial target for demonstration of vertical launch capability.
- The missiles, equipped with indigenous Radio Frequency (RF) seeker, intercepted the target with high accuracy.
- The VL-SRSAM system has been indigenously designed and developed by DRDO.

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

1. This system is developed by the Airports Authority of India only.
2. It provides a very accurate and high-level of satellite signals for precision air navigation.
3. It is a Satellite Based Augmentation System.

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:

- GAGAN is an augmentation system jointly developed by the Airports Authority of India and the Indian Space Research Organisation (ISRO).
- It provides a very accurate and high-level of satellite signals for precision air navigation over the entire Indian airspace, with the capability of expanding to nearby regions.
- It is capable of providing navigation services for departure, en-route and landing operations to equipped planes.
- GAGAN is a Satellite Based Augmentation System or SBAS, which is a regional network of ground stations and satellites that provide GPS signal corrections, giving a better position accuracy.

**Q: Recently, the Coalition for Disaster Resilient Infrastructure (CDRI) and the Government of India (GoI) signed a headquarters agreement. Consider the following statement:**

1. CDRI was launched at the UN Climate Action Summit in 2019.
2. CDRI promotes rapid development of resilient infrastructure to respond to the Sustainable Development Goals.

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:

- CDRI was launched by Prime Minister of India Narendra Modi at the UN Climate Action Summit in New York on 23 September 2019.
- The Coalition for Disaster Resilient Infrastructure (CDRI) is a partnership of national governments, UN agencies and programmes, multilateral development banks and financing mechanisms, the private sector, and knowledge institutions that aims to promote the resilience of new and existing infrastructure systems to climate and disaster risks in support of sustainable development.
- CDRI promotes rapid development of resilient infrastructure to respond to the Sustainable Development Goals' imperatives of expanding universal access to basic services, enabling prosperity and decent work.

**Q: Consider the following statement:**

1. Daocheng Solar Radio Telescope (DSRT) is constructed on the Tibetan Plateau.
2. China is building the world largest circular radio telescope array.
3. Mingantu interplanetary scintillation telescope is built by China in Mangolia.

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:

- China has been moving at a staggering pace when it comes to space exploration and is targetting not just Mars, but asteroids and distant planets in the future.
- But, before all that, China is geared up to introduce the world to the largest circular radio telescope array that will be aimed at the Sun.
- The construction of the Daocheng Solar Radio Telescope (DSRT) on the Tibetan Plateau is going ahead at full steam.
- The Chinese Meridian Project also includes the Mingantu interplanetary scintillation telescope, which is being assessed in Inner Mongolia.

**Q: Consider the following statement regarding MQ-9B Predator armed drones:**

1. It is the first hunter-killer unmanned aerial vehicle (UAV) designed for long-endurance and high-altitude surveillance.
2. This drone recently killed Abu Bakr al-Baghdadi.

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: a

Explanation:

- India is in “advanced stages” of negotiations with the United States to procure the Predator armed drones for over \$3 billion.
- If all goes as planned, India will soon possess 30 MQ-9B Predator armed drones, cranking up its surveillance apparatus along the frontier with China as well as in the Indian Ocean region.
- The MQ-9B drone is the first hunter-killer unmanned aerial vehicle (UAV) designed for long-endurance and high-altitude surveillance.

- The US Air Force extensively uses the MQ-9 drones and it has been reported that most recently the Americans used the drone to fire the Hellfire R9X missile that killed the leader of Al-Qaeda, Ayman al-Zawahiri in Afghanistan's Kabul.