

**1. Consider the following statements**

- 1) Anti radiation missiles are space weapons designed to incapacitate or destroy satellites for strategic military purposes.
- 2) RudraM-I is the first indigeneous anti-radiation missile developed by Defence Research and Development Organisation (DRDO)

Which of the statements given above is/are correct?

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

**Answer: B**

**Explanation**

- **Statement 1 refers to Anti satellite missile and not anti-radiation missile.**
- An anti-radiation missile can **locate and target radiation-emitting sources** such as enemy radars, communication sites and other radio frequency-emitting targets. Hence **statement 1 is incorrect.**
- They can play a key role in neutralising any jamming platforms of the enemy or take out radar stations, thereby clearing a path for fighter jets to carry out an offensive and prevent their own systems from being jammed.
- **RudraM-I is the first indigeneous anti-radiation missile developed by Defence Research and Development Organisation (DRDO).** Hence statement 2 is correct.

**Why in the news?**

- The RudraM-I was successfully flight-tested onto a radiation target located on Wheeler Island off the coast of Odisha recently. The missile was launched from an SU-30 Mki fighter aircraft.

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2. Nagorno-Karabakh region is a disputed territory between which of the following countries?

- a) Armenia and Azerbaijan
- b) Russia and Japan
- c) India and China
- d) Israel and Palestine

**Answer: A**

**Explanation:**

- Nagorno-Karabakh, also known as Artsakh, is a **landlocked region** in the South Caucasus, within the mountainous range of Karabakh.
- Nagorno-Karabakh is a **disputed territory**, internationally recognized as part of **Azerbaijan**, but mostly governed by the Republic of Artsakh, a de facto independent state with an **Armenian** ethnic majority established on the basis of the Nagorno-Karabakh Autonomous Oblast of the Azerbaijan Soviet Socialist Republic.
- Azerbaijan has not exercised political authority over the region since the advent of the Karabakh movement in 1988. Since the end of the Nagorno-Karabakh War in 1994, representatives of the governments of Armenia and Azerbaijan have been holding peace talks on the region's disputed status.

<https://www.bbc.com/news/world-europe-18270325>

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### 3. Consider the following statements with respect to 'Cytokine storm syndrome'

1. It is characterised by the overproduction of immune cells due to dysregulation in the immune system process
2. In the past, it had been associated with the Spanish flu and H1N1 (swine flu) disease outbreaks

Which of the statements given above is/are correct?

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

Ans: C

**Explanation**

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- A cytokine storm syndrome or CSS is characterised by the **overproduction of immune cells and the cytokines themselves** because of a dysregulation in the immune system process.
- Cytokines are signalling proteins that are released by cells at local high concentrations. It is **triggered when a virus (or antigen) enters the body for the first time**.
- A cytokine storm **can occur due to an infection, auto-immune condition, or other diseases**.
- Signs and symptoms include **high fever, inflammation (redness and swelling)**, severe fatigue, and nausea

### Implications

- A severe immune reaction, leading to the secretion of too many cytokines in the bloodstream, can be harmful since an **excess of immune cells can attack healthy tissue as well**
- **Few diseases in which CSS has been seen**
  - Ø **Spanish Flu** in 1918-20 that killed more than 50 million people worldwide
  - Ø **H1N1 (swine flu)** and
  - Ø **H5N1 (bird flu)**

### Cytokine responses against human corona viruses

- SARS-CoV-1 (which caused SARS), SARS-CoV-2 (which is responsible for the current COVID-19 pandemic), and MERS can result in **acute lung injury and acute respiratory distress syndrome (ARDS)**
- **Correlation with COVID-19:** Here a cytokine storm is associated with a **surge of activated immune cells into the lungs**, which, instead of fighting off the antigen, leads to lung inflammation and fluid build-up and **respiratory distress**.
- If the **clinical features of CSS are not recognised** and adequate treatment is not promptly instituted, **multiple organ failure** can result.

**4. Which of the following states has become the first Har Ghar Jal State in the country by providing tap water connection to every rural household?**

- a) Kerala
- b) Karnataka
- c) Andhrapradesh
- d) Goa

**Answer: D**

**Explanation**

- **Goa** becomes first Har Ghar Jal State in country by providing tap water connection to every rural household
- The state has provided tap water connection to two lakh 30 thousand rural households. North Goa with one lakh 65 thousand rural households and South Goa with 98 thousand rural households in 191 Gram Panchayats are fully saturated with assured piped water supply through tap connections.
- Jal Shakti Ministry said, Goa's achievement is an **example for other States** to emulate and ensure every rural home gets tap connection and especially in these times of Covid-19 pandemic.

**5. The Nobel Peace Prize for 2020 is awarded to which of the following institutions?**

- a) World Food Programme
- b) Doctors without borders
- c) World Health Organisation
- d) None of the above

**Answer: A**

**Explanation:**

- The **Norwegian Nobel Committee** has decided to award the Nobel Peace Prize for 2020 to the **World Food Programme (WFP)** for its efforts to combat hunger.
- The World Food Programme (WFP) is the **food-assistance branch of the United Nations** and the world's largest humanitarian organization focused on hunger and food security.

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- In 2019, the WFP provided assistance to close to 100 million people in 88 countries who are victims of acute food insecurity and hunger.
- In 2015, eradicating hunger was adopted as one of the UN's Sustainable Development Goals. The WFP is the UN's primary instrument for realizing this goal.
- The World Food Programme was an active participant in the diplomatic process that culminated in May 2018 in the UN Security Council's unanimous adoption of Resolution 2417, which for the first time explicitly addressed the link between conflict and hunger.

<https://www.nobelprize.org/prizes/peace/2020/press-release/>

