

8. Short News

1. Operation Hawkeye Strike & Recent U.S. Operations

Operation Hawkeye Strike

Action- Extensive U.S. airstrikes across Syria targeting ISIS.

Trigger- Launched in response to an ISIS-linked attack in Palmyra, Syria, that killed two U.S. soldiers.

Name Origin- Named after Iowa's nickname, "Hawkeye State," to honor the fallen soldiers.

Other Recent U.S. Military Operations

Operation Name	Location	Target / Purpose
Op. Southern Spear	Red Sea & Gulf of Aden	vs. Houthi Rebels (Yemen); to protect commercial shipping.
Op. Absolute Resolve	Syria & Iraq border	vs. ISIS; to dismantle leadership and sleeper cells.
Op. Midnight Hunter	Syria	vs. ISIS Leadership; night-time precision raids.
Op. Prosperity Guardian	Red Sea	Naval Coalition; to protect maritime trade from missiles/drones.

2. Weimar Triangle

India participated for the first time in this format (External Affairs Minister S. Jaishankar joined in Paris).

Significance- Marks a deepening of India's diplomatic ties with Europe.

About the Group

Members- Germany, France, and Poland.

Established- 1991 in Weimar, Germany.

Original Goal- To support Poland's integration into NATO and the European Union after the fall of communism.

Current Role- Revived strongly after the 2022 Russia-Ukraine war to coordinate support for Ukraine and strengthen European defense.

3. Catastrophe Bonds (CAT Bonds)

Kerala has asked the Union Government to introduce CAT bonds to manage financial losses from frequent natural disasters (floods, landslides).

Definition- Insurance-linked securities that transfer disaster risks from the government to global investors.

Mechanism - Investors buy the bond and provide principal capital.

If no disaster- Investors get their money back + high interest.

If disaster strikes- The principal is used for relief work, and investors bear the loss.

Benefit- Provides quick, debt-free cash for relief without straining the government budget.

Global Users- Successfully used by Mexico and the Philippines.

Other Important Bond Types

Green Bonds- For climate-friendly projects (renewable energy).

Blue Bonds- For Ocean/water projects (fisheries, marine conservation).

Masala Bonds- Rupee-denominated bonds issued abroad to raise foreign capital (no currency risk for issuer).

Municipal Bonds- Issued by cities (ULBs) for urban infrastructure.

Social Bonds- For social welfare (health, education).

4. Param Shakti & National Supercomputing Mission

Param Shakti Supercomputer

Location- Inaugurated at IIT Madras.

Speed- 3.1 Petaflops (3.1 quadrillion calculations per second).

Key Feature- India's **first fully domestically developed** supercomputing system.

Tech- Built using indigenous **RUDRA servers** and open-source software.

Usage- For research in aerospace, climate modeling, and drug discovery.

National Supercomputing Mission (NSM)

Goal- To build a self-reliant High-Performance Computing (HPC) ecosystem in India.

Launch- 2015.

Nodal Agencies- MeitY (Electronics & IT) + DST (Science & Tech).

Implementation- C-DAC (Pune) + IISc (Bengaluru).

Key Indigenous Technologies

1. Rudra Servers- Made-in-India HPC servers.
2. Trinetra- Indigenous high-speed interconnect network.
3. Param 8000 (1991)- India's first supercomputer.
4. AIRAWAT- India's AI-focused supercomputer (globally ranked).

5. NV Centres in Diamonds

Researchers found that specific defects in diamonds, known as Nitrogen-Vacancy (NV) centres, can be used to create powerful quantum technologies like a "diamond maser" (microwave laser).

NV Centres - Diamonds are rigid grids of carbon atoms. An NV centre is a "perfect defect" formed when one carbon atom is replaced by a Nitrogen atom, and the spot next to it is left empty (a Vacancy).

Room Temperature- They function at room temperature, unlike most quantum systems that need extreme freezing.

Sensitivity- Highly sensitive to magnetic and electric fields, making them excellent sensors.

Latest Discovery- Scientists used ~9 trillion NV centres to generate a continuous microwave beam (Maser). They used a "bucket brigade" method to transfer energy between spins, turning a disruptive force into a useful one.

Potential Applications

1. Medical imaging (MRI improvements).
2. Ultra-stable frequency sources (clocks).
3. Environmental monitoring.

6. Bhairav Battalions

The Army's newly raised Bhairav Battalions will debut in the Army Day Parade in Jaipur.

New Unit Type- High-speed, offensive units designed to bridge the gap between elite Para Special Forces and regular Infantry.

Role- Capable of executing special operations from tactical to operational depth.

Focus- Modern warfare, specifically drone operations.

Structure & Strength- Currently, 15 battalions exist; the target is to raise 25. Part of a plan to create a pool of over 1 lakh drone operatives.

Origin- Formed based on lessons from global conflicts and India's own Operation Sindoor.

Related Development- Creation of Rudra Brigades, which integrate infantry, tanks, artillery, and drones for combined power.

7. Exercise Sanjha Shakti

A Military-Civil Fusion exercise conducted by the Indian Army.

Location- Dighi Hills Range (under Southern Command).

Objective

1. To improve coordination between the Army and Civil Agencies.
2. To ensure rapid response and public safety in "Rear Areas" (hinterland) during disasters or internal security threats.

Participants- Over 350 personnel, including the Army and 16 civilian agencies (Maharashtra Police, Force One, Fire Services).

Key Takeaway- Highlights that security in rear areas requires joint planning between armed forces and civilian institutions.