UPSC Daily Current Affairs | Prelim Bits 28-06-2024

ABHYAS

DRDO has successfully completed developmental trials of High Speed Expendable Aerial Target (HEAT) 'ABHYAS'.

- The High-speed Expendable Aerial Target (HEAT) ABHYAS is a high-speed ***indigenously-designed target*** developed for the Indian Armed Forces.
- It is designed for autonomous flying with the help of an auto pilot made by the Aeronautical Development Establishment (ADE) of the Defence Research and Development Organisation (DRDO).
- It is equipped with ***MEMS (Micro-Electro-Mechanical Systems)*** based Inertial Navigation System (INS) for navigation.
- It has a Flight Control Computer (FCC) for guidance and control.
- It has a radar cross section, visual and infrared augmentation system required for weapon practice.
- It has pre-flight checks, data recording during the flight, replay after the flight and post-flight analysis can be carried out.

Defence Research and Development Organisation (DRDO)

- It is an agency under the Department of Defence Research and Development in Ministry of Defence.
- It is India's largest research organisation.
- **Role-** Military's research and development
- **Headquarters-** New Delhi.
- **Formed in –** 1958.
- It is formed by the merger of the
    - Technical Development Establishment.
    - Directorate of Technical Development and Production of the Indian Ordinance Factories
    - Defence Science Organisation
- Defence Research & Development Service (DRDS) is constituted in 1979.
- **Motto-** "Balasya Mulam Vigyanam" – "The source of strength is science".
- The ***Integrated Guided Missile Development Programme (IGMDP)*** under A P J Abdul Kalam is the most prominent success of DRDO.

References

1. Press Information Bureau | 'ABHYAS'
2. India Today | Abhyas high-speed expendable aerial target

Sangyaan App

Director General of RPF launches Sangyaan App recently.

- It is a Comprehensive application for anyone seeking to stay informed about the latest legal developments in India.
- **Developed by -** The Tech Team of Railway Protection Force.
- **Aim -** It aims to educate and empower RPF Personnel by providing comprehensive information to understand the provisions of both new and old criminal laws.
- It also aims to provide in-depth information on 3 new Criminal Acts
    - The Bharatiya Nyaya Sanhita (BNS) 2023,
    - The Bharatiya Nagarik Suraksha Sanhita (BNSS) 2023, and
    - The Bharatiya Sakshya Adhiniyam (BSA) 2023.
- **Key Features**
    - Comprehensive Legal Access
    - Comparison of Laws
    - Section wise analysis
    - Advanced Search Tools
    - Inclusive Legal Database
    - User-Friendly Design

References

1. Press Information Bureau | Sangyaan App
2. ET Government | Sangyaan app

Asteroid 2011 UL21

Mountain-sized asteroid, 2011 UL21 made a close approach to Earth recently.

- It is a ***giant space rock*** first discovered in 2011 and orbits the sun every ***3 years.***
- It is larger than 99% of known near-Earth asteroids.
- It is dubbed as the ***Planet Killer*** and one of the closest asteroids to approach the Earth.
- The asteroid is estimated to have a diameter of 2.5 kilometres.
- The asteroid is also one of the brightest, as it has an absolute magnitude of 15.8.
- Despite its size, it poses no threat and not projected to collide with Earth.

Near Earth Objects (NEO)

- A near-Earth object (NEO) is an asteroid or comet that ***orbits the sun and passes close to Earth's orbit.***
- NEOs are nudged into their orbits by the gravitational pull of nearby planets.
- Technically, a NEO is defined as having a trajectory that brings it within 1.3 astronomical units of the sun, and therefore within 0.3 astronomical units, or about 45 million kilometers, of Earth's orbit.
- NEOs that cross Earth's path are categorized as either Atens or Apollos:

    - **Atens -** Have a semimajor axis smaller than Earth's orbit around the sun.
    - **Apollos -** Have a semimajor axis larger than Earth's orbit.
- Asteroids as small as 20 meters in diameter can cause significant damage to the local environment and human populations.
- Larger asteroids can penetrate Earth's atmosphere and surface, creating craters or tsunamis depending on where they land.
- NEOs that are larger than 140 meters across and cross Earth's orbit are considered potentially hazardous objects (PHOs).

NASA's Near-Earth Object Program coordinates efforts to detect, track, and characterize these potentially hazardous objects (PHOs).

References

1. Times of India | Asteroid 2011 UL21
2. Hindustan Times | Asteroid 2011 UL21

ULLAS Understanding of Lifelong Learning for All in Society (Nav Bharat Saaksharta Karyakram)

The Lieutenant Governor of Ladakh recently declared that Ladakh has achieved Full Functional Literacy under the ULLAS—Nav Bharat Saaksharta Karyakram.

- It is also known as New India Literacy Programme (NILP).
- **Agency** - It is a ***centrally sponsored scheme*** implemented from 2022-2027.
- **Umbrella policy** - The scheme aligns with the recommendations of the ***National Education Policy (NEP) 2020.***
- **Aim –** The initiative fosters a learning ecosystem that reaches every individual, bridging the gaps in basic literacy and critical life skills.
- **Targeted Group -** The scheme will cover non-literates of the age group of ***15 years*** and above in ***all state/UTs*** in the country.
- **Components of the scheme**
    - Foundational Literacy and Numeracy,
    - Critical Life Skills,
    - Basic Education,
    - Vocational Skills, and
    - Continuing Education.
- **Implemented by -** The scheme is implemented through volunteerism through online mode.
- All material and resources shall be provided digitally for easy access to registered volunteers through easily accessible digital modes through ULLAS Mobile App.

References

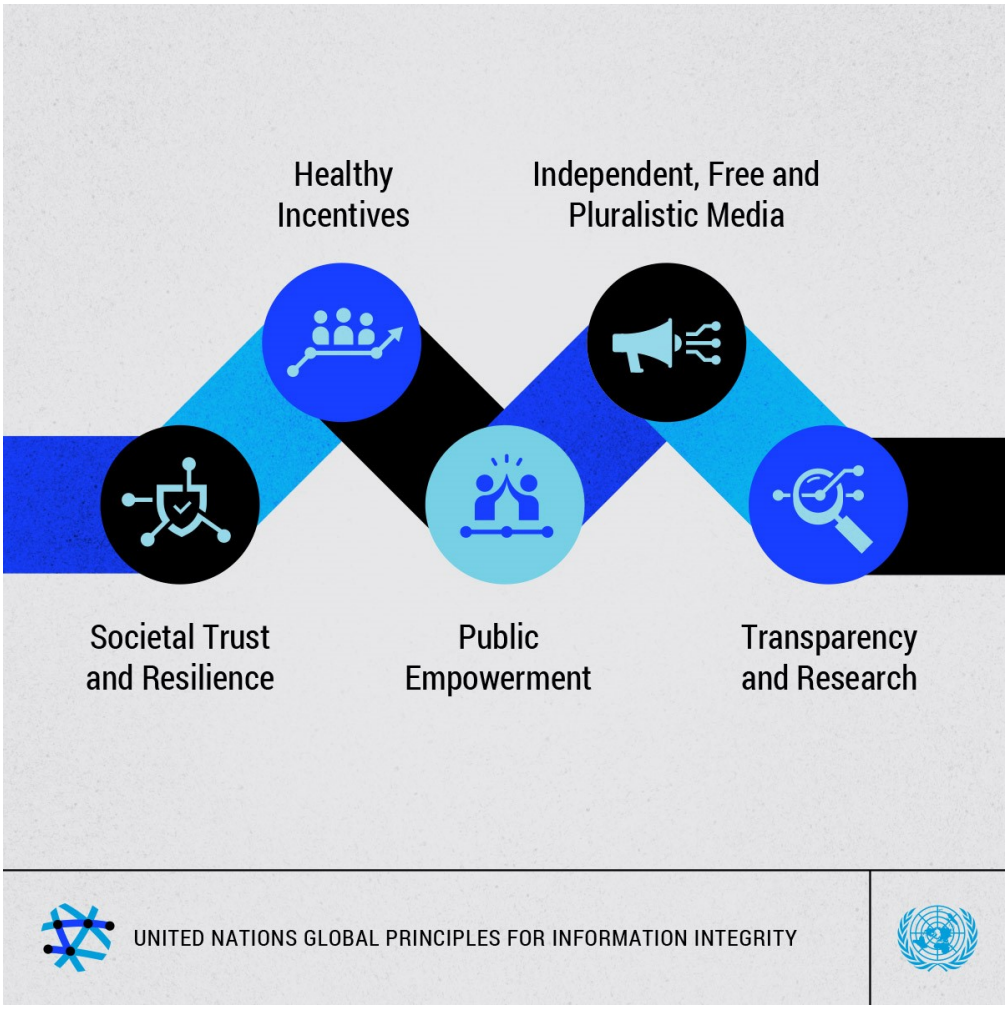
1. Press Information bureau | Nav Bharat Saaksharta Karyakram

2. [Vikaspedia | Nav Bharat Saksharta Karyakramme]

UN Global Principles for Information Integrity

The United Nations Secretary-General Antonio Guterres recently unveiled the Global Principles for Information Integrity.

- It is a comprehensive framework aimed at addressing the escalating threats posed by misinformation, disinformation, and hate speech in the digital realm.
- It is developed through extensive consultations with Member States, the private sector, youth leaders, media, academia, and civil society.
- The principles aim to create healthier and safer information environments that uphold human rights and promote peaceful societies and a sustainable future.
- **5 Principles**
  - Societal trust and resilience,
  - Healthy incentives,
  - Public empowerment,
  - Independent, free and pluralistic media,
  - Transparency and research.



- **Key recommendations**
  - **Combating disinformation and hate speech -** All stakeholders, including

governments, tech companies, advertisers, and media, should avoid using, supporting, or amplifying disinformation and hate speech for any purpose.

- **Promoting media freedom -** Governments should ensure timely access to information, maintain a free, viable, independent, and plural media landscape.
- It should provide strong protections for journalists, researchers, and civil society.
- **Enhancing Tech Company responsibilities -** Technology companies should incorporate safety and privacy by design in all products, apply policies consistently across countries and languages.
- Additionally, they should prioritise crisis response and support information integrity during elections.
- **Ethical AI development -** AI developers must take immediate measures to ensure AI applications are designed, and used ethically and safely, upholding human rights.
- **Reforming business models** - Tech companies should explore business models that do not rely on programmatic advertising and prioritise human rights, privacy, and safety.
- Users should have greater control over their online experiences and personal data.
- **Transparency in advertising -** Advertisers should demand transparency in digital advertising processes.
- **Data transparency and accountability -** Tech companies and AI developers should ensure meaningful transparency, allow researchers and academics access to data while respecting user privacy.
- **Protecting children -** Special measures should be taken to protect and empower children, with governments providing resources for parents, guardians, and educators.

Reference

Down to Earth | Global framework to fight online misinformation

SHANKAR IAS PARLIAMENT
Information is Empowering