

# **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
  - o The Bharatiya Nyaya Sanhita (BNS) 2023,
  - o 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 <u>Planet Killer</u> 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 <u>National</u> <u>Education Policy (NEP) 2020.</u>
- **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 <u>15 years</u> and above in <u>all state/UTs</u> 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

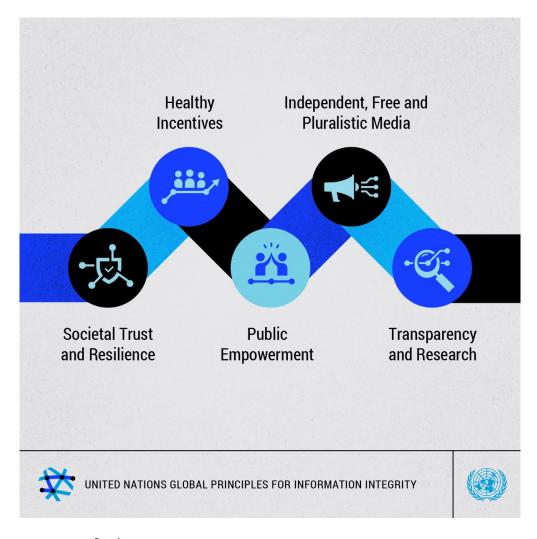
# **UN Global Principles for Information Integrity**

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

