

### WHY IS WORLD EARTH DAY OBSERVED?



#### What is the History of World Earth Day?

Every year, **April 22** is observed as Earth Day. It was first observed in **1970** (making 2024 its 54th anniversary) in the US when 20 million took to the streets to **protest against environmental degradation**. The event was triggered by the **1969 Santa Barbara oil spill** and other issues. In **2009**, the **United Nations** designated Earth Day as International Mother Earth Day. Earth Day is **now observed** in 192 countries, and coordinated by the nonprofit **Earthday.org**.

#### What is the Significance of World Earth Day?

It aims to build the world's largest environmental movement to drive transformative change for people and the planet. It emphasises **the need for collective action to repair and heal the planet's ecosystems**, combat climate change, and preserve biodiversity. As a result, the **landmark Paris Agreement**, which sets a common target to reduce global greenhouse emissions, was **signed on Earth Day 2016**.

#### What is the Theme of the World Earth Day 2024 and its Significance?

It is "**Planet vs. Plastics**." Plastic production now has grown to more than 380 million tons per year globally. The theme highlights **the threat plastics pose to the planet and human health**. It calls for an **end to all plastic waste** by demanding a 60% reduction in the production of plastics by the year 2040.

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### WHAT IS ARTEMIS ACCORDS?



Sweden is the newest nation to sign onto NASA's Artemis Accords for peaceful and responsible exploration.



# CROSS & CLIMB ROHTAK



**Artemis Accords** are a **non-binding set of principles** designed to guide civil space exploration and use in the 21st century. These principles will help to ensure the maintenance of a **safe and predictable outer space environment**.

- **Co-led by NASA** and the U.S. Department of State, the Artemis Accords was established in 2020, together with **seven other founding member nations** (Australia, Canada, Italy, Japan, Luxembourg, the United Arab Emirates and the United Kingdom).
  - As of April 2024, there were **38 signatories, including India**.
- **Principles:**
  - **Peaceful uses:** cooperative activities are exclusively for peaceful purposes and in accordance with international law.
  - **Transparency:** commit to broad dissemination of information regarding their national policies and exploration plans. Agree to share scientific information with the public on a good-faith basis consistent with Article XI of the Outer Space Treaty (OST).
  - **Interoperability:** agree to develop infrastructure to common standards for space hardware and operating procedures that include fuel storage, landing systems, communication, power, and docking interfaces.
  - **Emergency Assistance:** commit to offering all reasonable efforts to render assistance and comply with the rescue and return agreement as outlined in the Outer Space Treaty.
  - **Registration of Objects:** registration of space objects (on the surface, in orbit or in space) by signatory nations can help to mitigate risk of harmful interference.
  - **Release of Scientific Data:** commit to the open sharing of scientific data arising from space exploration missions. Not mandatory for private-sector operations.
  - **Preserving Outer Space Heritage:** undertake to ensure new activities help preserve and do not undermine space heritage sites of historical significance.
  - **Space Resources:** signatories affirm that extraction of resources does not inherently constitute national appropriation under Article II of the Outer Space Treaty.

- **Deconfliction of Space Activities:** undertake exploration with due consideration to the United Nations guidelines for the long-term sustainability of outer space activities as adopted by the UN Committee for Peaceful Uses of Outer Space (COPUOS) in 2019. Activities, where potential harmful interference could occur, should be restricted to pre-identified ‘Safety Zones’. The size, location, and nature of operations in a Safety Zone should be notified to all signatories and the UN Secretary-General.
  - **Orbital Debris:** signatories agree to limit harmful debris in orbit through mission planning that includes selecting flight orbital profiles that minimise conjunction risk, minimising debris release during the operational phase, timely passivation, and end-of-life disposal.
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## NATIONAL ORGAN AND TISSUE TRANSPLANT ORGANIZATION (NOTTO)

All cases of organ transplants will be allocated a unique National Organ and Tissue Transplant Organisation (NOTTO)-ID for both the donor and the recipient.



- The Union Health Ministry has issued the directive to **eliminate commercial dealings in organs**, especially those involving foreign citizens. It has also called for stricter monitoring of such transplants by the local authorities.
- **NOTTO-ID is mandatory** for considering the allocation of organs in the case of a deceased donor transplant; this ID in the case of a living donor transplant shall also be generated at the earliest, maximum within 48 hours after the transplant surgery is done. **NOTTO-ID must be generated by the hospital** from the NOTTO website.

### **About National Organ and Tissue Transplant Organization (NOTTO):**

- It is a national-level organization set up under **the Directorate General of Health Services**, Ministry of Health and Family Welfare, Government of India.
- It functions as the apex centre of coordination and networking for:
  - **procurement and distribution of organs** and tissues; and

- registry of organs and tissue donation and transplantation in the country.
- It has the following two divisions:
- **National Human Organ and Tissue Removal and Storage Network:**
  - It would function as the apex centre for all India activities of **coordination and networking** for the procurement and distribution of organs and tissues and registry of organs and tissue donation and transplantation in the country.
  - It has been mandated as per the **Transplantation of Human Organs (Amendment) Act 2011**.

### **National Biomaterial Centre (National Tissue Bank):**

- The Transplantation of Human Organs (Amendment) Act 2011 has included the component of tissue donation and registration of tissue Banks.
- The main thrust and objective of establishing the centre is to **fill up the gap between ‘Demand’ and ‘Supply’** as well as **‘Quality Assurance’** in the availability of various tissues.
- **Activities:** Coordination for tissue procurement and distribution; Donor Tissue Screening; Removal of Tissues and Storage; Preservations of Tissue; Laboratory screening of Tissues; Tissue Tracking; Sterilization, Records maintenance; Data Protection and Confidentiality; Quality Management in tissues; Patient Information on tissues; Development of Guidelines; Protocols and Standard Operating Procedures; Trainings, Assisting as per requirement in registration of other Tissue Banks;

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### **ZERO SHADOW DAY**

A group of students was provided a first-hand experience of the Zero Shadow Day (ZSD) phenomenon at an event organised by the Pondicherry Science Forum (PSF).



- It is a **sub-solar point** where the **sun is directly overhead** at a particular latitude.

- When the sun is at the zenith (the highest point in the sky) its rays will be hitting a particular point exactly perpendicular to the surface. This will make the shadow of a person exactly under him, making it look like there are no shadows.

## When does it occur?

- There are **two zero shadow days every year** in May and July/August, observed in places that lie between the tropic of Cancer and the tropic of Capricorn.
- One falls during the **Uttarayan** (when the Sun moves northwards), and the other is during **Dakshinayan** (when the Sun moves southwards).
- It lasts for a small part of a second, but the effect can be seen for a minute to a minute-and-a-half.

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## SUMMIT OF THE FUTURE



Recently, the UN Secretary General has said that the reform of Multilateral Development Banks (MDBs) will be a key theme at this year's Summit of the Future.

- It is a high-level event, bringing world leaders together to forge a new international consensus on how we deliver a **better present and safeguard the future**.
- It serves as a moment to mend eroded trust and demonstrate that international cooperation can effectively tackle current challenges as well as those that have emerged in recent years or may yet be over the horizon.
- The high-level event will bring together UN Member States, UN agencies, non-governmental organizations (NGOs), civil society organizations (CSOs), academic institutions, the private sector and youth under the theme, 'Summit of the Future: Multilateral Solutions for a Better Tomorrow'.
- It aims to build upon the **Sustainable development Goal (SDG) Summit** and deliver an action-oriented Pact for the Future to accelerate progress towards the Sustainable

Development Goals. It will be achieved through an action-oriented outcome document called the **Pact for the Future**.

- UN Member States have agreed the Summit of the Future is centered around five key targets:
    - Reaffirm the UN Charter
    - Reinvigorate multilateralism
    - Boost implementation of existing commitments
    - Agree on solutions to new challenges
    - Restore trust
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## WHAT IS COPYRIGHT INFRINGEMENT?



The Andhra Pradesh High Court ruled that textbooks dealing with mathematical equations and science subjects do not come under copyright law, as their content is non-literary in nature.

- Copyright refers to the right given by the law to **creators of literary, dramatic, musical and artistic works** and producers of cinematograph films and sound recordings.
- Copyright is a bundle of rights that includes rights of reproduction, communication to the public, adaptation and translation of a work.
- The Copyright Act of 1957 aims to safeguard creative works considered to be a creator's intellectual property. A copyrighted work will be considered "infringed" only if a **substantial part** is made use of **without authorisation**.
- In cases of infringement, the copyright owner can take legal action and is entitled to remedies such as **injunctions and damages**. The **District Court concerned** has the jurisdiction in civil suits regarding copyright infringement.
- Any person who **knowingly infringes** or abets the infringement of the copyright in any work **commits criminal offence** under Section 63 of the Copyright Act.

What is Copyright Act of 1957?

- It protects original literary, dramatic, musical and artistic works and cinematograph films and sound recordings from unauthorized uses.
- Unlike the case with patents, copyright protects the expressions and not the ideas. There is **no copyright in an idea**.
- Copyright **does not** ordinarily **protect titles by themselves or names**, short word combinations, slogans, short phrases, methods, plots or factual information. Copyright does not protect ideas or concepts. To get the protection of copyright a work must be original.

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## AYUSHMAN BHARAT TO ALL SENIOR CITIZENS

### Why in news?

While releasing its election manifesto for the 2024 Lok Sabha elections, a prominent political party promised to expand its Ayushman Bharat Health Insurance scheme to cover senior citizens.

### Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PMJAY)

- **About**
  - Launched in September 2018, the scheme covers over nearly 40% of the population targeted towards poorest and the vulnerable.
    - It was launched as a second component of the ‘Ayushman Bharat’ scheme.
  - It aimed to offer medical coverage of Rs. 5 lakh per family per year for secondary and tertiary care hospitalisation to poor and vulnerable families.
- **Eligibility**
  - Earlier, the scheme targeted to cover 10.74 crore poor, deprived rural families and identified occupational category of urban worker’s families.
  - However, states implementing AB-PMJAY have broadened their reach to encompass 13.44 crore families (65 crore people).
  - The beneficiaries are identified by latest Socio-Economic Caste Census (SECC) data.
- **Benefits**

- It provides cashless access to Health Benefit Packages which covers surgery, medical and day care treatments, cost of medicines and diagnostics.

## **Ayushman Bharat for senior citizens - Need**

- **Ageing population**
  - India is reaping the benefits of the demographic dividend at present. However, the declining fertility rate and increasing life expectancy mean that India's population is growing old.
  - The aging population will mean increased expenditure on health and long-term care, labour force shortages, public dissaving, and old-age income insecurity.
  - The senior citizens live with the highest burden of chronic health conditions and their complications, the cost of health is higher for them.
- **Low insurance coverage**
  - As per the India Ageing Report 2023, just over 20% of people over the age of 60 years are covered under health schemes such as Central Government Health Scheme, Employees State Insurance Scheme etc.
  - The India Ageing Report found that the main reasons for a lack of coverage in elderly are low awareness (52.9%) and non-affordability (21.6%).
- **Diseases of the old**
  - The elderly are not only affected by chronic, non-communicable diseases and their complications, they are also more prone to infectious diseases because of a weakened immune system.
- **Analysis of the expenditure incurred by the govt under Ayushman Bharat**
  - According to the official data, the government has incurred the most money for five key specialties under the scheme: cardiology, general medicine, general surgery, orthopedics, and medical and radiation oncology.
  - This data shows that the government already is incurring most of the money in providing treatment that is predominantly required for the elderly population.





# CROSS & CLIMB ROHTAK



## POSSIBLE US SANCTIONS ON NETZAH YEHUDA BATTALION OF ISRAEL

### **What is the Netzah Yehuda Battalion?**

It is an all-men battalion of IDF established in 1999 for ultra-orthodox Jews and other religious nationalist recruits from west-bank settler movement. It accommodates their religious observances by scheduling prayer and study times and restricts their interactions with female soldiers.

### **Why is US imposing Sanctions on Netzah Yehuda?**

Netzah Yehuda came on the radar of United States agencies after the death of an elderly Palestinian-American man in detention. They have also been charged of killing or assaulting Palestinians (nearly 500 Palestinians have been killed since Israel-Hamas war started). Human rights organizations have long accused the IDF justice system of whitewashing Netzah Yehuda's wrongdoing, and the military of acting with impunity.

### **What Sanctions can be Imposed?**

The battalion and its members will be banned from receiving US Army assistance or training under the **Leahy Law**, framed in 1997 by US senator Patrick Leahy which prohibits American foreign aid and its defence training programs to cater to foreign security, military and police units- who face credible allegations of human right violations.

### **What Did Israel React?**

Israel maintains that Netzah Yehuda serves as an active combat unit and works within the legal standards. The sanctions have left Israel Prime Minister fuming who said that there should be no sanctions as its soldiers are fighting terrorist monsters, and the intention to impose sanctions on an IDF unit is the height of absurdity and a moral nadir (lowest point) and that the sanctions are a part of plan to force Israel to allow the establishment of Palestinian state and to forsake Israel's security.

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