

Today's Prelims Topics

Measles

Context

United States is currently facing a resurgence of Measles with 1046 confirmed cases.

About Measles

- Measles is a highly contagious disease caused by the measles virus.
- The virus is a single-stranded, enveloped RNA virus.
- Transmission: Coughs and sneezes of infected individuals.
 - It can also spread through direct contact with nasal or oral secretions.
- Symptoms can lead to serious complications such as ear infections, diarrhea, pneumonia, death (fatality rate is between 5–10%).

Symptoms

- High temperature
- Runny or blocked nose
- Cough and sneezing
- Red, watery eyes
- White spots inside the mouth
- Red rashes apperaing 3-5 days after sympotoms begin

Facts

- Measles is a human-only disease and does not infect other animals.
- The first effective vaccine was introduced in 1963.
- Vaccination reduces the risk of contracting measles by 20 times.
- Measles-Rubella Elimination Campaign 2025–26:
 - The government has launched the campaign under the 'ACT NOW' strategy, aiming to eliminate Measles and Rubella in a manner similar to the successful eradication of Polio and Maternal & Neonatal Tetanus.
 - The objective is to achieve **100% immunisation coverage** among children by ensuring administration of **two doses** of the **Measles-Rubella (MR) vaccine**.
- Under the **Universal Immunisation Programme (UIP)**, the MR vaccine is provided free of cost to all eligible children.
 - o The two recommended doses are administered at: 9–12 months and 16–24 months

Source: Indian Express



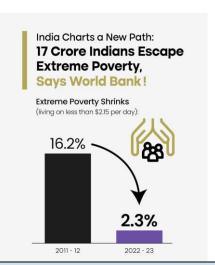
India's Extreme Poverty Fell Sharply: World Bank

Context

- According to the World Bank, 17 crore Indians were lifted out of poverty between 2011-12 and 2022-23.
 - o Extreme poverty fell sharply from 16.2% to just 2.3%.

Key Points

- **Numerical Decline:** Extreme poverty in India fell from 344.47 million in 2011-12 to 75.24 million in 2022-23.
- State Contributions:
 - Major Contributors (2011-12): Uttar Pradesh, Maharashtra, Bihar, West Bengal, and Madhya Pradesh together accounted for 65% of India's extreme poor.
 - These five states contributed to **two-thirds of the total reduction** in extreme poverty from 2011-12 to 2022-23.
- Poverty Line Metrics: Using the earlier \$2.15 per-day poverty line (based on 2017 prices), India's poverty rate fell from 16.2% in 2011 to 2.3% in 2022, translating to a reduction from 205.93 million to 33.66 million individuals.
- Rural vs. Urban Reduction: Rural poverty decreased from 18.4% to 2.8%, while urban poverty declined from 10.7% to 1.1% between 2011-12 and 2022-23.
- Multidimensional Poverty Index (MPI): The MPI, which considers factors like health, education, and standard of living, dropped from 53.8% in 2005-06 to 15.5% in 2022-23.



MPI (Multidimensional Poverty Index): use a range of indicators (monetary, health, education and others) to calculate a summary poverty figure for a given population.

Government Initiatives

- **Pradhan Mantri Awas Yojana:** Provided affordable housing to poor households, improving living standards.
- **Pradhan Mantri Ujjwala Yojana:** Ensured access to clean cooking fuel (LPG) for rural and economically weaker sections.
- Jan Dhan Yojana: Expanded financial inclusion by opening bank accounts for millions of unbanked individuals.
- **Ayushman Bharat:** Offers free health insurance to low-income families, reducing out-of-pocket medical expenses.

Source: News18



Biobank to Preserve DNA of Species

Context

Delhi zoo to set up an on-site wildlife biobank to preserve DNA of endangered species.

About it

- Setup by: National Zoological Park (NZP), Delhi, in collaboration with the Centre for Cellular and Molecular Biology (CCMB), Hyderabad and Laboratory for the Conservation of Endangered Species (LaCONES).
- Purpose: Preserve genetic material (DNA, tissues, reproductive cells) from animals at the zoo.
 - Aid in long-term conservation, research, and health interventions.
 - Support ex-situ conservation efforts under Central Zoo Authority (CZA).
- Part of: Consortium of Indian Zoos for Biobanking of Wildlife Genetic Resources, initiated in 2019.

What is DNA (Deoxyribonucleic Acid)?
Hereditary material in almost all living organisms.
It carries genetic instructions used in growth development, functioning, reproduction
Each cell in an organism has the same DNA.
It's what makes species and individuals genetically unique.

Why is DNA Important in Wildlife Conservation?
Preserves Genetic Diversity
Enables Scientific Research
Supports Cloning and Assisted Reproduction
Helps Track Illegal Wildlife Trade

Facts

- 1st such biobank was set up at Padmaja Naidu Himalayan Zoological Park, Darjeeling.
- Endangered species at NZP listed under Wildlife Protection Act, 1972 (Schedule I & II), including:
 - Asiatic Lion, Bengal Tiger, Indian Elephant, Indian Rhinoceros,
 - o Indian Wolf, Indian Bison (Gaur), Dhole, Eld's Deer,
 - O Himalayan Black Bear, Gharial, Marsh Crocodile,
 - o Indian Rock Python, Spectacled Cobra, etc.

Source: IndianExpress



Parliamentary Forum of BRICS Condems Terror in Pahalgam

Context

The **BRICS Parliamentary Forum** condemned the Pahalgam terror attack and pledged collective action against terrorism.

About BRICS

- The term "BRIC" was first introduced in 2001 by Goldman Sachs,
 - O Acronym for Founding Members Brazil, Russia, India, and China.
- Current Members: 11.
 - O South Africa joined in 2010, transforming BRIC into BRICS.
 - o 2024: Egypt, Ethiopia, Iran, and the UAE as full members from January 1, 2024.
 - O January 2025: Indonesia became a full member and countries like Belarus, Bolivia, Kazakhstan, Cuba, Malaysia, Nigeria, Thailand, Uganda, and Uzbekistan were inducted as partner countries.
- Collectively, these nations represent approximately 49.5% of the global population, around 40% of the global GDP, and about 26% of global trade.
- Summits:
- 1st BRIC Summit (2009): Yekaterinburg, Russia
- Most Recent:
 - o 16th Summit 2024: Kazan, Russia.
 - o 15th Summit (2023): Johannesburg, South Africa.
- Chairship: Rotates annually among Brazil, Russia, India, China, And South Africa.
 - o 2025: Brazil

UPSC PYQ (2025)

Consider the following statements with regard to BRICS:

- I. The 16th BRICS Summit was held under the Chairship of Russia in Kazan.
- II. Indonesia has become a full member of BRICS.
- III. The theme of the 16th BRICS Summit was Strengthening Multiculturalism for Just Global Development and Security.

Which of the statements given above is/are correct?

- (a) I and II
- (b) II and III
- (c) I and III
- (d) I only

Answer: A

Source: <u>TheHindu</u>



INS Arnala

Context

The Indian Navy is set to commission 'Arnala' at the Naval Dockyard in Visakhapatnam.

About INS Arnala

- Class: 1st ship of the Anti-Submarine Warfare –
 Shallow Water Craft (ASW-SWC) class.
- Built by: Garden Reach Shipbuilders & Engineers (GRSE), Kolkata in collaboration with L&T Shipbuilders under a Public-Private Partnership (PPP).
 - Over 80% indigenous systems are used.
- Propulsion: Diesel engine + waterjet propulsion largest Indian warship using this system.
- Capabilities:
 - o Subsurface surveillance
 - Search & rescue missions
 - Low-intensity maritime operations
- Name Origin: Named after Arnala Fort near Vasai, Maharashtra built by the Marathas in 1737 under Chimaji Appa.

Source: The Hindu







Australian Child born through Surrogacy got Exit Visa

Context

Exit visa was granted to a 6-year-old Australian child born through surrogacy in India in 2019 finally granted by intervention of **Delhi High Court** and coordination between the **Ministry of Health & Family Welfare (MoHFW)** and **Ministry of Home Affairs (MHA)**.

More in News

- Exit visa delayed due to confusion over whether the surrogacy was legal for foreigners under new laws.
- The court emphasized that laws in force at the time of birth (2019) should apply, not those enacted later (2022).

What is an Exit Visa?

- An exit visa is a formal permission granted to a foreigner residing in a country without a valid visa to leave that country.
- It is issued in exceptional situations, such as:
 - Overstay without valid immigration documents.
 - Foreign nationals (including OCI cardholders) who do not have valid entry stamps or legal entry documentation.

Types of Surrogacy

- Altruistic Surrogacy (Allowed in India): The surrogate mother does not receive any monetary compensation, except for medical expenses and insurance coverage.
 - O Done **voluntarily**, often by a close relative or family member.
 - Aimed at helping childless Indian couples.
- Commercial Surrogacy (X Banned in compensated beyond medical expenses.
 - Often exploited poor women, leading to ethical and legal concerns.
 - Was banned due to misuse and exploitation.

Surrogacy (Regulation) Act, 2021 – Key Provisions

- Surrogacy is when a woman carries and gives birth to a child for an intending couple, and hands over the child post-birth.
- Regulation:
 - Commercial surrogacy is banned.
 - Altruistic surrogacy is permitted under specific medical necessity.
 - Surrogacy is **not allowed** for purposes like **sale**, **prostitution**, or **exploitation**.
 - Only allowed for **medical indications** and **diseases specified** in regulations.
- Eligibility Criteria:
 - For Surrogate Mother:
 - Must be a willing, married woman, aged 25–35 years.
 - Must have at least one biological child of her own.
 - Cannot act as a surrogate more than once in her lifetime.
 - Needs a certificate of medical and psychological fitness.
 - o For Intending Couple: Must obtain:
 - A **Certificate of Essentiality** (medical justification).
 - A **Certificate of Eligibility** (age, marital status, childlessness).
 - Indian widow or divorcee woman (35–45 years) is also allowed surrogacy if other conditions are met.
- Rights of the Surrogate Child:



- Treated as the biological child of the intending couple.
- Entitled to all rights and privileges available to a natural-born child.
- Prohibition of Abortion: Surrogate mother cannot be forced to abort except under conditions specified by law.

Institutional Framework

- National Assisted Reproductive Technology & Surrogacy Board (headed by Union Health Minister):
 - Advises on policy.
 - o Monitors implementation.
 - O Sets standards for clinics.
 - o Regulates infrastructure and manpower.
- State ART and Surrogacy Boards:
 - Established in each State/UT with legislature.
 - Responsible for local oversight and regulation.

Surrogacy (Regulation) Rules, 2022

- In March 2023, an amendment prohibited the use of donor gametes, mandating both gametes (sperm and egg) to come from the intending couple.
- In October 2023, the Supreme Court in Arun Muthuvel vs. Union of India allowed surrogacy using a donor egg for a woman with Mayer-Rokitansky-Kuster-Hauser (MRKH) Syndrome, stating the restriction was prima facie contrary to the objective of the Act.

2024 Amendment to Surrogacy Rules

- The **2024 amendment** allowed **use of donor gametes** in surrogacy under medical necessity.
- The benefit is permitted only when the **District Medical Board certifies** that either partner suffers from a **medical condition** requiring use of a donor gamete.

Source: IndianExpress





Editorial Summary

Water management in India needs a new course

Context

As freshwater and marine ecosystems face increasing stress, integrated and holistic water governance is the need of the hour.

Recent Interventions for Water and Glaciers

- World Water Day 2025: Theme Glacier Preservation.
- March 21, 2025: Observed as the first-ever World Day for Glaciers.
- **UN World Water Development Report 2025**: Theme *Mountains and Glaciers Water Towers*.
- Decade of Ocean Science (2021–2030): Midway focus in 2025 on marine sustainability.
- Source to Sea (S2S) Approach:
 - Recognized since the 2012 Manila Declaration.
 - Promotes integrated water governance from upstream rivers to coastal oceans.
 - o Action Platform for S2S launched by SIWI; hosted by IUCN from 2025.

Importance of Water

- Water links glaciers, rivers, aquifers, and oceans as a single hydrological continuum.
- Vital for:
 - Sustaining agriculture and food security.
 - Providing drinking water to populations.
 - Maintaining ecological balance in freshwater and marine ecosystems.
 - Ensuring economic stability and disaster resilience.

Challenges in Present Time

- Climate change: Melting glaciers, altered precipitation, rising sea levels.
- Water stress: As per NITI Aayog (2018), 600 million Indians face water scarcity.
- Pollution: 311 polluted river stretches identified (CPCB, 2022).
 - Over **1.7 lakh tonnes of solid waste/day**, with poor treatment.
- Over-extraction of groundwater: Usage exceeds 100% in states like Punjab and Haryana.
 - o 25% of groundwater units at risk.
- Fragmented governance: Multiple agencies across local, state, national, and global levels act in silos.

Solutions and Way Forward

- Adopt the Source-to-Sea (S2S) Approach: Integrate upstream-downstream water management.
 - O Bridge freshwater and marine SDGs (6 & 14).
- Strengthen Policy Framework: Implement the draft National Water Policy (2019) with reforms.
 - o Ensure **nested governance systems** across tiers.
- Focus on Science-Policy Integration: Promote projects like nutrient management in Delhi and Indo-Gangetic basin studies.
- Enhance Waste Treatment: Scale up waste segregation and waterbody protection.
- Climate-Resilient Water Use: Encourage efficient irrigation and groundwater recharge.
 - Monitor glacier retreat to secure long-term water availability.

Source: The Hindu