NEWS TODAY

SUPREME COURT (SC) CONSTITUTION BENCH QUESTIONS UTILITY OF ADVANCE MEDICAL DIRECTIVE (AMD) OR LIVING WILL

- Hearing the **petition seeking modification of its guidelines for Living Will,** laid down in Common Cause v Union of India (2018), **SC stated:**
  - **AMD** can be **applied only in narrow area** where patients become so terminally ill that they are **not in a position** to say that **treatment must stop.**
    - AMD or Living Will is a **legal document** that specifies **type of medical care** that an **individual does or does not want** in the event they are **unable to communicate their wishes.**
  - **Guidelines lack utility** as in India a person is **anyway free to refuse invasive treatment** and **accept death.**
  - **Legislature** is much **more endowed** with **skills** and **sources of knowledge** to enact a relevant law.
- In 2018, SC **upheld legality of passive euthanasia** and laid down **procedure for living wills** in India.
  - **Euthanasia** is practice of ending life of a patient to limit the patient's suffering.
  - It can be **active** (killing a patient by active means) or **passive** (intentionally letting a patient die by withholding artificial life support such as a ventilator or feeding tube).
- Accordingly, **AMD** can be effectuated under **three cases** (refer image).

01 When a person is suffering from a terminal condition

02 When a person is in a persistently unconscious condition

03 When the person is suffering from an end-stage condition

- **Important judgements/reports related to Euthanasia**
  - **P. Rathinam Case (1994):** struck down section 309 of Indian Penal Code (attempt to suicide) as unconstitutional.
  - **Gian Kaur case (1996):** both assisted suicide and euthanasia were unlawful.
  - **Aruna Shanbaug Case (2011):** SC allowed passive euthanasia for the first time.
  - **Law Commission's 241st** report on Passive Euthanasia (2012) also recognized individual autonomy and the need for euthanasia in certain cases.

PURANA QILA: ARCHAEOLOGICAL SURVEY OF INDIA (ASI) REOPENS TRENCHES EXCAVATED EARLIER TO FIND FIRST OCCUPANTS

- ASI undertook **excavations in 1969-73, 2013-14 and 2017-18.**
  - Identified as ancient settlement of Indraprastha (capital of Pandavas), **a continuous habitation of 2,500 years was established in earlier excavations.**
- **Findings from earlier excavation include:**
  - **Painted grey ware** from 900 BC, an **earthen pottery sequence** from Maurya to Shunga, Kushana, Gupta, Rajput, Delhi Sultanate, and Mughal periods.
  - **Artefacts** such as sickles, parers, terracotta toys, kiln-burnt bricks, beads, terracotta figurines, and seals.
- Purana Qila was **built by Mughal Emperor Humayun as a part of his new city of Dinpanah** in the 16th century.
  - Apart from archaeology, **textual sources such as Ain-i-Akbari of Abul Fazal** (16th century), mention that fort was built at site of Indraprastha.
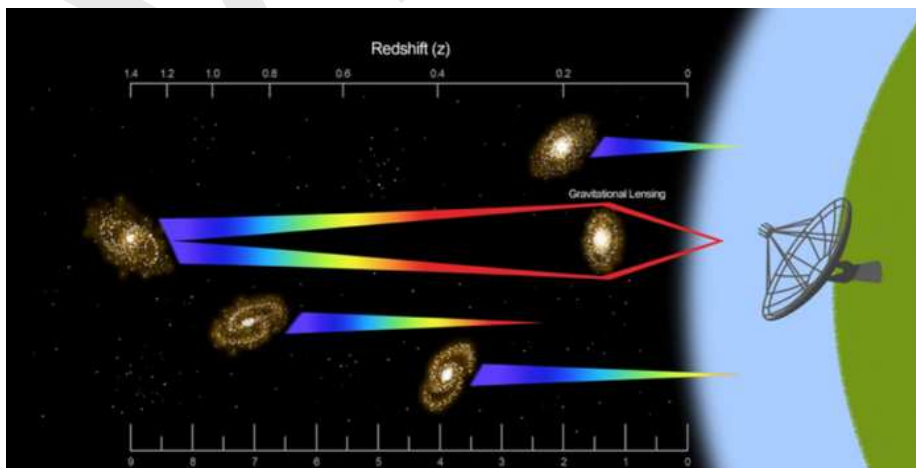- **Architectural features of Purana Qila Complex**

Qila-e-Kuhna mosque	• Built by **Sher Shah.** It reflects a **transitional stage** between architecture of Lodhis and Mughals.
Sher Mandal	• **Built by Sher Shah,** an octagonal structure built **in red sandstone** and decorated with **white and black marble** inlay. • **Humayun made it into a library and died after falling** from the steps of this structure.
Other structures	• A **Baoli** for managing water supply and a **hammam** (bathhouse) is present. • **Lal Darwaza and Khairul Manazil** are considered part of this complex. • **Three majestic Gateways:** Bada Darwaja, Humayun Darwaza, and Talaqi Darwaza. • **Wide moat** linked to river Yamuna.

UPDATED DRAFT AMENDMENTS TO IT (INTERMEDIARY GUIDELINES AND DIGITAL MEDIA ETHICS CODE) RULES (IT RULES), 2021

- IT Rules, 2021 were **framed by Ministry of Electronics and Information Technology** (MeitY), exercising power under Information Technology Act, 2000, **to:**
  - ➤ **Protect constitutional rights of citizens** under Article 14, 19 and 21 by pushing for open, safe and trusted, and accountable internet.
  - ➤ **Regulate online intermediaries** (e.g. social media) who facilitate flow of data on internet.
- Updated Draft amendments **have provision for content takedowns by empowering state agencies to instruct intermediaries** to take down content deemed inaccurate or unfit.
  - ➤ E.g. online platforms will **remove fake content flagged by fact-checking unit** at Press Information Bureau (PIB).
- **Earlier, Meity released draft amendments to include regulations for online gaming platforms with provisions like**
  - ➤ **Including online gaming companies** offering one or more online games **as an intermediary.**
    - ■ Also, online gaming intermediary **will observe some additional due diligence.** E.g. Registration of games with the self-regulatory body; risk of financial loss, Know-your-customer procedure etc.
  - ➤ **A Self-regulatory body to certify games** and ensure that online games operating in India follow rules and regulation.
  - ➤ A **mandatory know-your-customer (KYC) verification** for online games.
  - ➤ **Appointment of a compliance officer, nodal officer** and **grievance officer.**

RADIO SIGNAL DETECTED IN DISTANT GALAXY USING GIANT METREWAVE RADIO TELESCOPE (GMRT)

- **Astronomers** from McGill University (Canada) and Indian Institute of Science (IISc), Bengaluru **used data from GMRT** to detect a radio signal **originating from atomic hydrogen** in an extremely **distant galaxy at redshift z=1.29.**
  - ➤ Redshift represents **signal's wavelength change depending on the object's location and movement.**
  - ➤ **A greater value of z** indicates **a farther object.**
- **Atomic hydrogen** is the basic **fuel required for star formation in a galaxy.**
  - ➤ When **hot ionised gas from surrounding medium** of a galaxy falls onto universe, gas **cools and forms atomic hydrogen.**
  - ➤ This then **becomes molecular hydrogen** and eventually **leads to formation of stars.**
- **Detection was made** possible by **gravitational lensing phenomenon.**
  - ➤ In gravitational lensing, **light emitted by source is bent due to presence of another massive body** between target galaxy and observer, effectively **resulting in magnification of signal.**
- **About GMRT**
  - ➤ It is an instrument **for studying astrophysical phenomena,** ranging from **nearby Solar system to edge of observable Universe,** at low radio frequencies.
  - ➤ It is **operated by National Centre of Radio Astrophysics** (NCRA), which is part of Tata Institute of Fundamental Research.

ARTIFICIAL INTELLIGENCE (AI) CAN HELP FIGHT WILDFIRES: WORLD ECONOMIC FORUM (WEF)

- A recent report by WEF highlighted that **its FireAId initiative was helpful in managing wildfire** in several regions of Turkey.
  - ➤ In 2021, **average annual global cost of wildfires was around \$50 billion and released an estimated 6,450 megatonnes of CO2** into atmosphere.
- Launched in January 2022, **FireAId project** (using AI system) **aims to allow better prediction of wildfires** and more **efficient use of resources** during firefighting operations.
  - ➤ FireAId predictions **reduced both response time and risk to firefighters.**
- AI was used to develop a **digital twin for fire management,** which helped firefighters in **testing hypotheses of intervention measures and observing their outcomes in simulations.**
  - ➤ A digital twin is a **virtual representation of an object or system,** is updated from real-time data, and **uses simulation, machine learning and reasoning to help decision-making.**
- **AI and machine learning role in combating wildfires**
  - ➤ **Refinements in AI,** real-time maps for **wildfire prediction and risk mapping.**
  - ➤ **Sensors** with inbuilt AI can collect **acoustic information or operate as smoke detectors for alerting authorities.**
  - ➤ **Digital simulations** can better plan **efficient responses** based on predicted outcomes.
  - ➤ UAVs can provide **live images and help firefighters plan their response.**

BACKING SRI LANKA, INDIA SENDS FINANCING ASSURANCES TO INTERNATIONAL MONETARY FUND (IMF)

- **Facing its worst economic crisis** since independence, **financing assurances from creditors is critical for Sri Lanka** to get the **$2.9 billion loan from IMF** to put its economy on track.
  - ➤ It is facing multiple challenges such as **shortage of dollars, runaway inflation and a steep recession.**
  - ➤ **India, Japan, and China** are Sri Lanka's **three largest bilateral lenders.**
- **IMF was established** (in 1944) to provide **emergency financing to countries hit by crises** and help them to stabilize their economies.
  - ➤ Unlike development banks, **IMF does not lend for specific projects.** It also **provides precautionary financing** to help prevent crises.
- **Crises can occur** due to **domestic or/and external factors** and can take many different forms such as **Balance of Payment issue, illiquid or insolvent financial institutions,** excessive deficits and debt etc.
- **Lending instruments of IMF include**
  - ➤ **General Resources Account** on non-concessional terms (market-based interest rates).
  - ➤ Concessional financial support (currently at zero interest rates) through **Poverty Reduction and Growth Trust,** which is better **tailored to needs of low-income countries.**
  - ➤ **Resilience and Sustainability Trust** to help low-income and vulnerable middle-income countries.

ALSO IN NEWS

UNSC (United Nations Security Council) Sanctions Committee	• **ISIL and Al Qaida Sanctions Committee** of the UNSC has placed Lashkar-e-Taiba's (LeT) Makki on its sanctions list.
	• UNSC Sanctions Committee is subsidiary organ of UNSC to support or implement UNSC decisions.
	  ➤ **UN Charter authorizes UNSC** to use a variety of measures **to enforce its decisions.**
	    ■ E.g. The **ISIL and Al Qaida Sanctions Committee** was established pursuant to UNSC resolutions **1267** (1999), **1989** (2011) and **2253** (2015).
	  ➤ It can also use **Panels/Groups of Experts** or other mechanisms **to monitor implementation** of the sanctions.

Bhopal Declaration	• It was **released after Think20 (T20) meeting,** official engagement **group of G20 which brings together leading think tanks and research centers** worldwide.
	• **Key highlights of Bhopal Declaration**
	  ➤ Appeal to all stakeholders to **focus more on inclusive development care** for welfare of every section of society in comparison to GDP.
	  ➤ Encourage model of **development led by women.**
	  ➤ **Bridge the gap between North and South.**
	  ➤ **Promoting traditional medicine systems** like AYUSH.

Sainya Ranakshetram 2.0 Hackathon	• **Indian Army conducted** the **second edition** of Hackathon. • Its **objective is to seek solutions to operational cyber challenges** and to **reduce development time for innovative solutions** in the field of Cyber Security.
New fleet of tanks to Ukraine	• **Germany** has pointed towards **fulfilling Ukraine's request** for a fleet **of modern Leopard 2** tanks. • **Other Modern Tanks:** Challenger 2 (UK), M1 ABRAMS (US), AMX 10-RC (France).

Greater Scaup	• It is a **rare species of duck** (locally known as Sadangman) that was **recently sighted in Loktak lake** (Manipur) after a **gap of over 90 years.**
	  ➤ Loktak lake is **famous for Keibul Lamjao National Park and Sangai, the dancing deer.**
	• Greater Scaup is a **migratory bird widely distributed across Arctic and Subarctic regions** where it mainly nests in coastal tundra habitats.
	  ➤ It **belongs to** the family of **Anatidae.**
	• IUCN status: **Least Concern.**

Giving to Amplify Earth Action (GAEA)	• **World Economic Forum launched** GAEA to help **unlock $3 trillion of financing needed** each year to reach net-zero, reverse nature loss and restore biodiversity by 2050. • Global initiative is **to fund and grow new and existing public, private and philanthropic** partnerships (PPPPs) and is supported by more than 45 partners (including India's HCL Technologies). • **Philanthropic financing** for climate mitigation **has risen in recent years,** but still represents less than 2% of total philanthropic giving. • **Advantage of philanthropic financing:** It is nimble, more tolerant of risks and is driven by values and long-term outcomes rather than quarterly returns.
Glasgow Financial Alliance for Net Zero (GFANZ)	• According to a report, **GFANZ members** are continuing to **finance expansion of coal, oil and fossil gas industries.** • GFANZ is **world's largest coalition of financial institutions** committed to **transitioning global economy to net-zero greenhouse gas emission.** • It aims to **coordinate efforts across all sectors** of the financial system to accelerate the transition to a net-zero global economy. • It was launched in 2021 by UN Special **Envoy on Climate Action and Finance and COP26 presidency,** in partnership with **UNFCCC Race to Zero campaign.** ➤ It has over **550 members from 50 jurisdictions.**
Doppler Weather Radars (DWRs)	• **India Meteorological Department (IMD)** will cover the entire India under a DWRs network by 2025. • A Doppler Radar is a specialized radar that **uses Doppler effect to produce velocity data about objects at a distance.** ➤ Doppler effect refers to **change in wave frequency during the relative motion** between a wave source and its observer. • DWRs are used to **locate precipitation, calculate its motion,** and estimate its type.

Places in news	**Japan (Capital: Tokyo)**
	• Japan and India began first ever joint fighter jet drill near Tokyo.
	• **Japan is** an island country lying **off east coast of Asia.** It stretches from **Sea of Okhotsk** (north) to **East China Sea** (south).
	• **Political Boundaries**
	  ➤ **Four main islands from north to south are Hokkaido, Honshu, Shikoku and Kyushu.**
	    ■ **Honshu is largest** in size followed by Hokkaido, Kyushu, and Shikoku.
	  ➤ **Maritime borders:** China, North Korea, South Korea, Philippines, Russia, Northern Mariana Islands (US), and Republic of China (Taiwan).
	• **Geographical features**
	  ➤ Located in **Circum-Pacific "ring of fire".**
	  ➤ **Highest mountain:** Mount Fuji.
	  ➤ **Longest river:** Shinano River.
	
	Yemen (Capital: Sana'a)
	• UN Yemen envoy highlighted the current absence of major fighting and its use to advance their talks towards peace.
	• Yemen is a **desert country** on the Southern tip of **Arabian Peninsula, with Red Sea and Bab-el-Mandeb** on its west while **Gulf of Aden, Arabian Sea, and Guardafui Channel on South.**
	• **Political Boundaries:** It shares its **land borders** with **Saudi Arabia and Oman.**
	  ➤ It shares maritime borders with **Djibouti, Eritrea and Somalia.**
	• **Geographical Features:**
	  ➤ **Highest Point:** Jabal an Nabi Shu'ayb.
	  ➤ It has **no perennial lakes and rivers.**