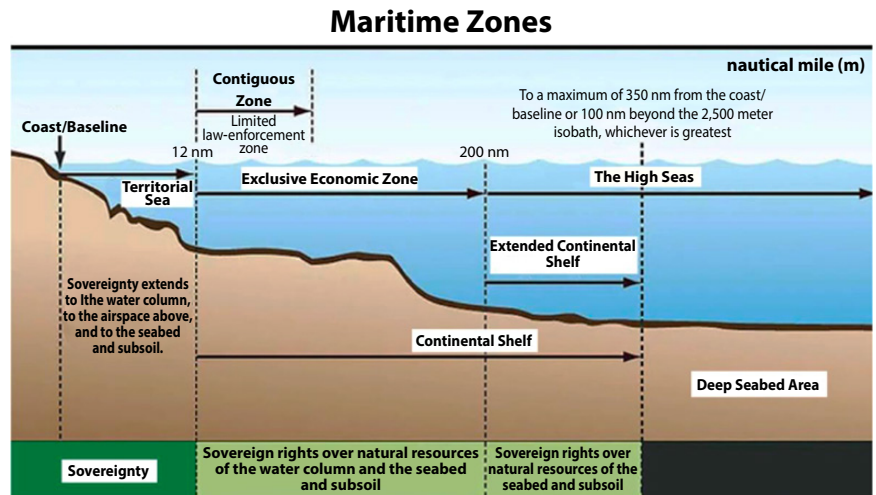# NEWS TODAY

UN ADOPTS WORLD'S FIRST INTERNATIONAL TREATY TO PROTECT THE HIGH SEAS

- **Adopted by** the **Intergovernmental Conference on Marine Biodiversity of Areas Beyond National Jurisdiction** (BBNJ), "high seas" treaty aims at **taking stewardship of ocean** on behalf of present and future generations.
  - It has been **adopted under** the framework of **United Nations Convention on Laws of the Sea (UNCLOS).**
  - **It is legally binding** in nature. It will only enter into force once **60 countries have ratified** it.
- **Key highlights of the treaty**
  - **Strengthening resilience** and contains provisions **based on polluter-pays principle** as well as mechanisms for disputes.
  - Parties must **assess potential environmental impacts** of any planned activities **beyond their jurisdictions.**

Maritime Zones

- Offers guidance, including through an **integrated approach to ocean management** that builds ecosystem resilience **to tackle** adverse effects of **climate change** and **ocean acidification.**
- **Recognize rights and traditional knowledge of indigenous peoples and local communities,** freedom of scientific research, and need for the fair and equitable sharing of benefits.
- It **aims to establish large-scale marine protected areas in international waters,** which protect marine biodiversity in high seas.
- It also **calls for setting up of a Conference of Parties to oversee and enforce compliance** with treaty's terms.
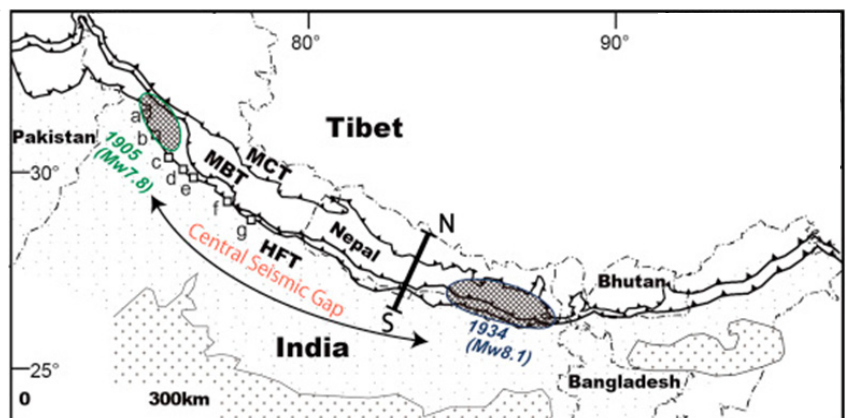
JAMMU AND KASHMIR AND LADAKH HIT BY SEVERAL MILD-INTENSITY EARTHQUAKES WITHIN 24 HOURS

- **Geology of the Himalayas,** determined largely by the **ongoing collision of Indian tectonic plate with Eurasian plate,** makes the region particularly **vulnerable to earthquakes.**
  - **Indian plate is diving under** (subduction) the **Eurasian plate** in north-northeast direction.
- **Geology of the Himalayas** on its southern side **is characterised by three major tectonic units:**
  - **Main Central Thrust** (MCT)
  - **Main Boundary Thrust** (MBT)
  - **Himalayan Frontal Thrust** (HFT) or **Main Frontal Thrust** (MFT).

- **Highest and oldest of these is MCT,** which is a north-dipping fault and marks **tectonic contact between higher and lesser Himalayas.**
  - **Lesser and sub-Himalayas are separated by MBT,** and HFT constitutes southern-most and youngest thrust.
  - All these three faults **conjoin along basal detachment plane—**called decollément in geophysical language—called Main Himalayan Thrust (MHT).
- In the current era, **both MBT and HFT faults are considered more active** compared to MCT.
- There is **about 700 km stretch in Central Himalayas where MFT has shown no sign of any rupturing** for several centuries, which is **referred to as "Central seismic gap".**
  - Seismic gap regions are **high risk areas for large earthquakes** in the future.

INDIA OUTPERFORMS US, CHINA IN LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED) NET ZERO CERTIFICATIONS

- **LEED rating system** provides a framework for healthy, efficient, carbon and cost-saving green buildings.

  - It is a **globally recognized certification system** developed by **U.S. Green Building Council** and administered by **Green Business Certification Inc.**

  - It **achieves and recognizes building at four certification level** (Certified, Silver, Gold, Platinum).

  - **LEED India Programme** is administered **by Indian Green Building Council (IGBC).**

- A complement to LEED certification, **LEED Zero** recognises projects that have **reached net zero or net positive status in the categories of carbon, energy, water, or waste.**

  - India has **73 LEED Zero certified projects,** comprising **45% of the more than 150 total LEED Zero certifications.**

    - Nearly **one-third of all carbon emissions in India** come from **building and construction sector.**

  - **Haryana and Tamil Nadu are leading** states in certifications.

  - **India's DLF group** is the leader globally in total LEED Zero certifications.

- **Green Rating for Integrated Habitat Assessment (GRIHA) is India's own green building rating system** jointly developed by The Energy & Resources Institute (TERI) and Ministry of New and Renewable Energy.

  - GRIHA is a **five star rating system.** Rating is **valid for a period of 5 years.**

OTHER INITIATIVES FOR GREEN BUILDING IN INDIA

- IGBC Rating Systems
- Energy Conservation Building Code devised by Bureau of Energy Efficiency (BEE)
- BEE Rating System for commercial buildings

PHYSICISTS SPLIT PHONONS USING QUANTUM MECHANICS

- Scientists have successfully **split phonons, demonstrating their quantum properties** and ability to manipulate and control quantum states.

  - Phonons are **quasiparticles that represent collective vibrations of atoms** or molecules in a solid material.

  - Achievement **may lead to development of sound-based versions of quantum computers** or extremely **sensitive measuring devices** in future.

- Presently, linear optical **quantum computing uses photons,** particles of light, **as qubits** (basic units of information for quantum computers).

  - **Both photons and phonons are of central interest** to quantum computing research. However, studying phonons is challenging due to their **susceptibility to noise and issues with scalability and detection.**

Photons	Phonons
• **Photons are tiny packets of energy for light** or electromagnetic waves.	• Phonons are **packets of energy for sound waves.**
• Photons **can travel through empty space.**	• Phonons **need a medium such as air or water.**
• Photons **generally don't interact at all** if they have different wavelengths.	• **Phonons of different wavelengths can interact and mix** when they bump into each other, **producing a different wavelength.**

INDIA GIFTS INS KIRPAN TO VIETNAM, FOCUSES ON ENHANCING DEFENCE RELATIONS, SECURITY

- INS Kirpan is a **Khukri class missile corvette** that can perform a **wide variety of roles,** including **coastal and offshore patrol, coastal security, surface warfare,** anti-piracy etc.

- Defence cooperation is a **part of Defence Diplomacy** and is an **ideal tool to advance national foreign policy objectives** by building bridges of friendship, preventing conflicts, building mutual trust and capacities on a global basis.

- **Significance of Defence cooperation in meeting foreign policy goals**

  - **Enhancement of security** in immediate neighbourhood and Indian Ocean Region (IOR).

  - **Improving combined ability** to respond to natural disasters and mitigating turbulence in neighbouring countries.

  - **Strengthening India's linkages and building 'Bridges of Friendship'** with countries in its neighbourhood as also with key global powers.

  - **Capacity enhancement of own armed forces** through exposure to technology, organisations, doctrines, concepts etc. of other nations.

  - **Boost to domestic defence industry.**

- Currently, **India has defence cooperation agreements with over 53 countries** including:

  - **Neighbours:** helping in capacity building, material support, or training facilities.

  - **South East Asian Countries** including Indonesia, Singapore, Vietnam, Philippines, Malaysia etc.

  - **West Asia** through joint training exercises, training of personnel and maritime cooperation etc.

  - **Others** like USA, Russia, Israel etc.

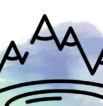# QUALITY CONTROL ORDERS (QCOS) FOR 24 FOOTWEAR PRODUCTS FROM JULY 1

- **Bureau of Indian Standards (BIS) license will be mandatory for manufacturing,** importing or selling of products under these QCOs.
  - ➤ **For small-scale and micro-scale industries,** implementation date would **be 1st January 2024 and 1st July 2024 respectively.**
- QCOs are **issued by various Ministries/Departments of Government of India in exercise of powers conferred under Bureau of Indian Standards (BIS) Act, 2016.**
  - ➤ Through QCOs, **notified products will conform** to the requirements of **relevant Indian standard.**
- **Other initiatives launched by BIS**
  - ➤ **Public Call Facility:** A virtual interaction platform to make process of standardisation more inclusive, open on all working days to invite viewpoints, feedback, suggestions, etc., from all the stakeholders.
  - ➤ **Manak Rath:** An online exchange forum for mentors and students of Standards Clubs, established in different schools and colleges.
- **About BIS**
  - ➤ BIS is **National Standard Body of India.** It functions **under Ministry of Consumer Affairs, Food & Public Distribution.**
  - ➤ It is responsible for **development of activities of standardization,** marking and quality certification of goods etc.
  - ➤ It got **statutory backing** with BIS Act 2016.
- **Other certification marks by BIS**

ISI	• Used for **standard industrial products** in India. • It is **mandatory for some products** like electronics and voluntary for others. • **Certified by BIS.**
BIS Hallmark	• Hallmarking system for the **sale of precious metal like gold and silver jewellery** which certify the purity of the metal. • It verifies that jewelry **conforms to the standards set by BIS.**
ECO Mark	• **For** labelling of **environment friendly products.** • It **covers various product categories** like **Soaps and Detergents,** Paints, Food Items, Lubricating Oils, **Batteries, Electrical and Electronic Goods,** Food Additives, **Aerosols and Propellants,** Plastic Products etc.
CRS (Compulsory Registration Scheme)	• **Manufacturers of products under Compulsory Registration Order** (CRO) notified by Ministry of Electronics and Information Technology (MeitY) or Ministry of New and Renewable Energy (MNRE) **are required to apply for registration from BIS.**

ALSO IN NEWS

Asia Pacific Plant Protection Commission (APPPC)	• APPPC unanimously **elected India as chair of Standing Committee on Integrated Pest Management (IPM)** for biennium 2023-24. • **APPPC** convened **for the first time in 1956.** • It administers Regional Plant Protection Agreement for Asia and the Pacific, approved in 1956 by the **Food and Agriculture Organization (FAO)** Council. • **A total of 25 countries** (including India) **are members** and APPPC **meets at least once every two years.** • **Objectives are:** promoting development of regional plant protection systems, Assistance to develop effective plant protection regimes, Setting standards for phytosanitary measures etc.

National Internet Exchange of India (NIXI)	• **NIXI celebrated its 20th Foundation Day.**
	• It is a **not-for-profit organization** (section 8 company) under **Ministry of Electronics and IT (MeitY).**
	• It **acts as a neutral meeting point of Internet service providers** (ISPs) with primary objective of **facilitating exchange of domestic internet traffic** between peering ISP members.
	• **Four services under NIXI are**
	  ➤ **Setting IXPs,** towards building Internet Exchange Points,
	  ➤ **.IN Registry** towards building the .in domain digital identity,
	  ➤ **Indian Registry for Internet Names and Numbers** (IRINN) towards IPv4 and IPv6 addresses adoption
	  ➤ **Data Centre services** under NIXI-CSC towards data storage services.

Ex Khaan Quest 2023	• **Indian Army will participate** in Ex Khaan Quest (in Mongolia), **a multinational peacekeeping joint exercise.**

Global Startup Ecosystems Report -2023 (GSER)	• GSER is a **comprehensive analysis** of the current **state of startup ecosystems worldwide.**
	  ➤ It is **released by Startup Genome,** a policy advisory and research organization.
	• **Key Findings**
	  ➤ **Silicon Valley remained the best spot for Startups** and second spot was shared between New York and London.
	  ➤ **Bengaluru ranked 20th.**
	  ➤ **Indian ecosystems continue to rise,** with Mumbai leading the way by moving up five places.

iGOT Karmayogi Platform	• **DAKSHTA** (Development of Attitude, Knowledge, Skill for Holistic Transformation in Administration) **For Young Professionals,** is now available **on iGOT Karmayogi Platform.**
	  ➤ DAKSHTA seeks to **build functional, domain and behavioural competencies.**
	• iGOT Karmayogi Platform is a **comprehensive online portal to guide government officials** in their **capacity building** journey.
	  ➤ **Portal combines 6 functional hubs** for online learning, competency management, career management, discussions, events and networking.

EUROPEAN STATE OF THE CLIMATE 2022, Report	• It was produced jointly **by World Meteorological Organization** and European Union's **Copernicus Climate Change Service.**
	• **Key Findings are:**
	  ➤ Europe is the **world's fastest-warming continent.**
	  ➤ Europe has been **warming twice as much as the global average** since the 1980s.
	  ➤ **Rates of surface ocean warming,** particularly in the eastern Mediterranean Sea, the Baltic and Black Seas, and the southern Arctic were **more than three times the global average.**

Kareri lake	• Kareri Lake (also known as Kumarwah Lake) is a **high altitude, shallow, fresh water lake** south of the **Dhauladhar range,** near Dharamsala in Kangra district, **Himachal Pradesh.** ➤ It is best known for **being a trekking destination.** It **remains frozen** from early December to March–April. • **Snow melting from the Dhauladhar range** serves as the **source of the lake and a stream,** Nyund is the outflow. • There is a **temple dedicated to Lord Shiva and Shakti** on a hilltop overlooking the lake.
Mesolithic Era Rock Painting	• A **Mesolithic Era painting** depicting a person tilling a piece of land was recently **discovered in Orvakallu Village of Guntur district (Andhra Pradesh).** ➤ Site **also hosts five naturally formed caves, of which two are embellished with depictions of rock paintings** of Mesolithic Age(roughly 5000 BC). • Mesolithic paintings normally depict **scenes from daily walks of life** like hunting, gathering, fishing etc. • **Human figures are often depicted** with distinct body proportions, and animals are rendered with recognizable features than the palaeolithic art. • They **use different colours** like Red and black obtained from natural sources.
Jagannath Temple	• **Jagannath Puri Rath Yatra to begin** today. • It was c**onstructed by Ananta Varman Chodaganga Deva** in 12th century at seashore Puri. • **Lord Jagannath, Devi Subhadra and elder brother Balabhadra** (holy trinity) are being worshipped in Puri. • **Main temple** is constructed, **in Kalinga architecture,** in such a way that **no shadow of temple falls on ground** at any time of the day. • **Idols of the holy trinity are carved out of wood** rather than stone or metal idols. • It is **also called as White Pagoda** and is considered as **one of the Char Dhams** (Dwarika, Badrinath & Rameswaram are other three).

Sahitya Akademi Award	• Ministry of Culture intends to change nomination process for Sahitya Akademi Award.
	• It is a **literary honour, conferred annually on writers of most outstanding books** of literary merit published in any of the major Indian languages.
	  ➤ Besides 22 languages enumerated in Constitution, **English and Rajasthani language are also recognised.**
	  ➤ Award includes **a casket containing an engraved copper-plaque, a shawl and an amount of Rs. 1,00,000/-.**
	• Sahitya Akademi **functions as an autonomous organisation.** It is registered as a society under Societies Registration Act, 1860.