

### INTERNATIONAL MARITIME ORGANISATION (IMO): INDIA RE-ELECTED TO IMO COUNCIL WITH HIGHEST TALLY

#### Why in News?

- India was re-elected to the International Maritime Organisation (IMO) Council with the highest tally at elections held at its Assembly in London for the 2024-25 biennium.
- India's re-election reflects the government's commitment to enhancing India's diverse contributions to global maritime operations.

#### What is the International Maritime Organisation (IMO)?

- The IMO is a **specialised agency of the United Nations** responsible for regulating shipping.
- It was established following agreement at a UN conference held in Geneva in **1948** and came into existence 10 years later, meeting for the first time in 1958.
- **Headquartered in London**, United Kingdom, IMO currently has **175 Member States** and three Associate Members.
  - **India joined the IMO in 1959** and the IMO currently lists India as among the 10 states with the largest interest in international seaborne trade.
- **The IMO's primary purpose** is to develop and maintain a comprehensive regulatory framework for shipping and its mandate includes -
  - Maritime safety,
  - Environmental concerns,
  - Legal matters,
  - Technical co-operation,
  - Maritime security and
  - The efficiency of shipping.
- In other words, **its role is to create a level playing-field** so that ship operators do not have to compromise on safety, security, and environmental performance in order to address financial difficulties.

## Significance of Shipping Industry and Role Played by IMO:

- **Shipping is a truly international industry**, and it can only operate effectively if the regulations and standards are themselves agreed, adopted and implemented on an international basis.
    - **IMO is the forum at which this process takes place.**
  - **Shipping is the most efficient and cost-effective** method of international transportation, facilitating **over 80% of global trade** and helping to create prosperity among nations and peoples all over the world.
  - **IMO measures cover all aspects of international shipping** - including ship design, construction, etc. - to ensure that this vital sector remains **safe, environmentally sound, energy efficient and secure.**
  - Through IMO, the **Member States, civil society and the shipping industry** are already working together to ensure a continued and strengthened contribution towards a green economy and growth in a sustainable manner.
  - IMO is actively working towards the 2030 Agenda for Sustainable Development and the associated SDGs.
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## WHAT IS DOPAMINE?

A new study shows that dopamine release in the human brain plays a crucial role in encoding both reward and punishment prediction errors.



### About Dopamine:

- It is a **neurotransmitter.**
- It is a chemical messenger that **helps in the transmission of signals in the brain** and other vital areas.
- It is found in **humans as well as animals**, including both vertebrates and invertebrates.
- It plays a role as a “reward center” and in many **body functions, including memory, movement, motivation, mood, attention, and more.**

- Dopamine is **released** when your brain is expecting a reward. When you come to associate a certain activity with pleasure, mere anticipation may be enough to raise dopamine levels.
- **Dysfunction of the dopamine system has been implicated in different nervous system diseases.**
- **High or low dopamine levels are associated with diseases including Parkinson's disease, restless legs syndrome, and attention deficit hyperactivity disorder (ADHD).**

## Where is dopamine produced?

- **Neurons** in the region at the base of the brain produce dopamine in a two-step process.
- First, the **amino acid tyrosine is converted** into another amino acid, called **L-dopa**.
- Then **L-dopa undergoes** another change as enzymes turn it into dopamine.
- **In other parts** of the body, dopamine acts as a type of hormone called catecholamine. Catecholamines are **made in the adrenal glands**- small hormone production factories that sit on top of the kidneys.
- There are **three main catecholamines: Dopamine, Epinephrine (adrenaline), and Norepinephrine.**
- These hormones get **released into the bloodstream** when the body is **physically or mentally stressed**. They cause biochemical changes that **activate the so-called fight-or-flight response**. That's the body's natural reaction to real or perceived stress.

## What are neurotransmitters?

- Neurotransmitters are **chemical messengers that your body can't function without**.
- Their job is to **carry chemical signals ("messages") from one neuron (nerve cell) to the next target cell**.
- The next target cell **can be another nerve cell, a muscle cell, or a gland**.

## WHAT IS THE NATIONAL HUMAN RIGHTS COMMISSION (NHRC)?

The Central Government recently appointed seven people, including a former Delhi police commissioner, as ‘special monitors’ of the National Human Rights Commission (NHRC).



### About National Human Rights Commission (NHRC):

- It is a **statutory body** established in 1993, under the **Protection of Human Rights Act, 1993**.
- It is the **watchdog of human rights** in the country.
- It was established **in conformity with the Paris Principles (1991)**, adopted at the first international workshop on national institutions **for the protection of human rights**.
- **Objectives:**
  - To **strengthen the institutional arrangements** through which human rights issues could be addressed in their entirety in a more focused manner.
  - To **look into allegations of excesses, independently of the government**, in a manner that would underline the government’s commitment to protect human rights.
- **Composition:**
  - It includes a **Chairperson and eight other members**.
  - The **Chairperson of NHRC is the retired Chief Justice of India**.
  - Out of the eight members, **four are full-time members**, whereas the other **four are deemed members**.
  - The **Chairperson and members are appointed by the President on the recommendations of a six-member committee** consisting of –
    - **Prime Minister** as its head
    - **Speaker of the Lok Sabha**
    - **Deputy Chairman of the Rajya Sabha**
    - **Leaders of the Opposition in both the Houses of Parliament**
    - **Union Home Minister**

- **Term:** The Chairperson and members are appointed for a **term of 3 years or till the age of 70 years**, whichever is earlier.
  - The chairperson and members are **eligible for reappointment**.
  - **Functions of the NHRC:**
    - **Inquire, on its own initiative or on a petition** presented to it by a victim or any person on his behalf, **into a complaint of violation of human rights**, or abetment or **negligence in the prevention** of such violation, by a public servant;
    - **Intervene in** any proceeding involving any **allegation of violation of human rights pending before a court** with the approval of such court;
    - **Visit any jail or any other institution** under the control of the State Government, **where persons are detained** or lodged for purposes of treatment, reformation or protection **to study the living condition of the inmates and make recommendations** thereon;
    - **Spread human rights literacy** among various sections of society;
    - **Study treaties** and other international instruments **on human rights and make recommendations** for their effective implementation;
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## WHAT IS VOICE OVER 5G (VO5G)?

Reports indicate Reliance Jio, India's largest mobile carrier, has been testing Voice over New Radio (VoNR) behind the scenes.



### About Voice over 5G:

- It is also known as **Voice over New Radio (VoNR)**.
  - This standard allows voice calls over 5G networks instead of the current standard that uses 4G.
  - In simple terms, Vo5G takes all the improvements of 5G – speed, capacity, responsiveness – and applies them squarely to voice.
  - It aims to have all that infrastructure and interoperability ready well in advance.

- To use Vo5G, you **need three things**: a phone that supports Vo5G, a carrier that offers Vo5G, and a 5G signal in your area.

## How is VoNR better than VoLTE?

- VoNR brings clear advances over VoLTE with 5G's substantially **higher bandwidth and lower latency** compared to 4G LTE.
- **Enhanced call quality**: It utilizes more advanced audio codecs that provide superior clarity and fidelity based on 5G's increased data capacity.
- **Faster connection times**: It promises faster call connection times, ensuring a seamless and prompt user experience.
- **Improved reliability**: Vo5G aims to eliminate the notorious call drop issues, particularly during transitions between 5G and 4G.
- Lower packet loss contributes to better reliability, minimising the occurrence of voice cutouts during calls.

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## GLOBAL INITIATIVE OF ACADEMIC NETWORKS (GIAN)

### Why in the News?

- Eight years after its inception, the Ministry of Education is gearing up to restart the fourth phase of the Global Initiative of Academic Networks (GIAN).

### About Global Initiative of Academic Networks (GIAN):

- Global Initiative of Academic Networks (GIAN) in Higher Education was launched in **2015**. It is a program of Ministry of Education.
- **Aim**: Tapping the talent pool of scientists and entrepreneurs internationally to encourage their engagement with the institutes of Higher Education in India.
  - This will help augment India's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence.
- **Objectives**:



- To improve the quality of higher education through international collaboration.
  - To increase the touch of reputed international faculty to Indian academic institutes.
  - To bring in International academic excellence in India's higher education institutions.
  - To augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence.
- **Nodal Agency: IIT Kharagpur**

### Significance of GIAN Programme:

- The Central government has spent at least **₹126 crore** in payment to support foreign faculty's travel and honorarium since the inception of GIAN.
- Since the beginning of the scheme in 2015-16, **1,612 foreign faculty members have visited the country to deliver courses from 59 countries.**
- As many as 692 (39%) of 1,772 courses were delivered in **Indian Institute of Technology (IIT)** campuses, while the second largest cohort of lectures, 436 (24.6%), took place in the **National Institute of Technology (NITs).**
- Up to 41.4% (668) of academicians who visited India belonged to the U.S. The rest consisted of experts from the U.K. (143), Germany (93), Canada (89), etc. **Up to 72,000 Indian students directly benefitted.**

### WHAT IS AAROGYA MAITRI AID CUBE?

The world's first portable hospital, 'Aarogya Maitri Aid Cube', was unveiled recently in Gurugram.



#### About Aarogya Maitri Aid Cube:

- It is the world's first portable hospital.

- Designed indigenously under **Project BHISHM (Bharat Health Initiative for Sahyog Hita and Maitri)**, the modular trauma management and aid system is **made up of 72 detachable mini-cubes, each being a specialized station for emergency response** and humanitarian efforts.
- It **contains medical equipment and supplies** such as a mini-ICU, an operation theatre, cooking station, food, water, a power generator, blood test equipment, an X-ray machine, and more.
- The cubes are **capable of handling patients with severe injuries up to 25 major burns, long limb fractures, chest injuries, spinal injuries** and approximately 10 head injuries.
- It can **treat as many as 200 patients**.
- These cubes are **light and portable**, and can be **rapidly deployed anywhere**, from airdrops to ground transportation.
- **Design:**
  - It consists of **72 cubes** that can be **combined to form a specialized cage** capable of **accommodating 36 mini-cubes**. The mini-cubes are **packed with everything essential for the survival of 100 individuals** for duration of **48 hours**.
  - There are **two master cubes designed to be interconnected**, allowing them to **accommodate a maximum of 200 survivors**. The total weight of every master cube with 36 cubes is less than 750 kilos.
  - It **relies on the Rubik's Cube concept** and each of the cubes is designed to weigh less than 20 kilos to make it easy to carry up manually.
  - The structure will **also contain a tablet-based application which can operate all 72 cubes**.

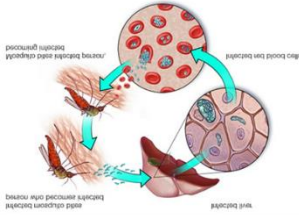
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## [WORLD MALARIA REPORT 2023: IN 2022, 66% OF MALARIA CASES IN SOUTHEAST ASIA WERE FROM INDIA](#)

- The World Health Organisation (WHO) published a report titled 'World Malaria Report 2023'.



## About Malaria:



- Malaria is a disease caused by the **Plasmodium parasite**.
- The parasite can be spread to humans through the bites of infected mosquitoes.
  - The plasmodium parasite is spread by **female Anopheles mosquitoes**, which are known as "night-biting" mosquitoes because they most commonly bite between dusk and dawn.

## About World Malaria Report 2023:

- Each year, WHO's World malaria report provides a comprehensive and up-to-date assessment of trends in malaria control and elimination across the globe.

## What does the Report say About India?

- According to the World Malaria Report, **India accounted for 66% of malaria cases in the World Health Organization's South-East Asia region in 2022.**
- India and Indonesia accounted for about 94% of all malaria deaths in the region last year, the World Health Organization said.
- The report said that nearly 46% of all cases in the region were caused by Plasmodium vivax, a protozoal parasite and a human pathogen.

## Steps Taken by Government of India to Control Malaria:

- Since 2000, India cut malaria cases by more than half and the number of malaria deaths by more than 66%.
- In 2016, India introduced its first **National Framework for Malaria Elimination** (2016-2030).
  - It has a vision of a **malaria-free country by 2027 and elimination by 2030.**
- In 2019, the Government of India increased funding by more than 25% for the National Vector Borne Disease Control Programme and increased support as a donor to the Global Fund to Fight AIDS, Tuberculosis and Malaria.