Prelim Bits 22-06-2023 | UPSC Daily Current Affairs

Guinness World Record

PM Narendra Modi-led yoga session at United Nations headquarters, on the occasion of 9th International Yoga Day, created a Guinness World Record for participation of people of most nationalities in a yoga event.

- Guinness World Records originally known as the Guinness Book of Records documents record-breaking achievements of *all kinds*, listing world records both of *human achievements* and the *extremes of the natural world*.
- It is a reference book published every year in different languages around the world.
- It was formed on 1955 by Sir Hugh Beaver, Managing Director of the Guinness Brewery.
- He invited 2 researchers, twins Norris and Ross McWhirter, to start working on the book.
- It has become the primary international source for cataloguing and verification of a huge number of world records.
- It has sold over 150 million books globally in 40 languages.

> *A world record is defined as the best performance recorded in the world in any sphere of art or profession.*

- **Criteria** - A record must satisfy all of the following criteria to count.
  - It should be objectively measurable.
  - It should be breakable it cannot be something so unique that only one person can do it.
  - It should also be standardisable with a possibility to create a set of parameters and conditions that all challengers can follow.
  - It should be verifiable.
  - It should be based on only one variable.
  - It should be the best in the world.
  - For any new record, GWR sets a minimum standard that has to be met for the record to be broken.
- **Exceptions** - It states several types of records it will not accept for ethical reasons, such as those related to the *killing or harming of animals.*
- Environmentally unfriendly records (such as the releasing of sky lanterns and party balloons) are no longer accepted or monitored.
- In addition to records relating to tobacco or cannabis consumption or preparation are not accepted.

Reference

The Indian Express | pm-modi-yoga-guinness-world-record

BepiColombo Spacecraft

Recently, BepiColombo spacecraft flew close to Mercury to take pictures of the planet.

- **Launched on –** 2018.
- **Launch Vehicle** - Ariane 5.
- **Aim** – It will study and understand the composition, geophysics, atmosphere, magnetosphere and history of Mercury, the least explored planet in the inner Solar System.
- **Agency** – It is a joint mission between the European Space Agency (ESA) and the Japan Aerospace Exploration Agency (JAXA).
- The BepiColombo mission is based on two scientific spacecraft and one transfer module:
    - Mercury Planetary Orbiter (MPO)
    - Mercury Magnetospheric Orbiter (MMO)
    - Mercury Transfer Module (MTM)
- It will chart the planet's mineralogy and elemental composition, determine whether the interior of the planet is molten or not, and investigate the extent and origin of Mercury's magnetic field.
- It made its first flyby of Mercury on 2021 and sent back several images.

  These are the first Mercury missions for the ESA and Japan.

Other Mercury Missions	Countries	Launch
Mariner 10	NASA	1973
MESSENGER	NASA	2004

Reference

The Indian Express | bepicolombo-mercury-close-flyby

Global Gender Gap Report, 2023

WEF report says India climbs 8 places from 135 to 127 in global gender index.

- **Aim** - It *annually* benchmarks the current state and evolution of gender parity across 4 key dimensions.
    - Economic Participation and Opportunity,
    - Educational Attainment,
    - Health and Survival,

    - Political Empowerment.
- It benchmarks gender parity across 146 countries.
- **Released by** - World Economic Forum (WEF).
- **Adoption** - Adopted in 2006.
- It measures scores on a 0 to 100 scale and scores can be interpreted as the distance covered towards parity (i.e. the percentage of the gender gap that has been closed).
- **Global Scenario** - Overall, the Southern Asian region has achieved 63.4% gender parity.

- According to 2023 report no country has yet achieved full gender parity.
- **Iceland** is the most gender-equal country in the world for the 14th consecutive year and the only one to have closed more than 90% of its gender gap.

- **Scenario in India** - India had attained parity in enrolment across all levels of education.

- It had closed 64.3% of the *overall gender gap* but had reached only 36.7% parity in economic participation.
- There was an increase in parity in wages and income but the shares of women in senior and technical roles dropped slightly compare to 2022.
- On **political empowerment**, India has registered 25.3% parity, with women representing 15.1% of parliamentarians, the highest for the country since the inaugural report in 2006.
- In *sex rate at birth* it is increased by 1.9% points compared to the 2022, index.
- Neighbouring Countries that ranks behind of India is Pakistan and ahead of the India were Nepal, Srilanka, China, Bhutan and Bangladesh.

References

The Hindu | India-climbs-8-places- in-global-gender-index-says-wef-report

Times of India | India-moves-up-8-placesin-wef-global-gender-gap-report

Disposal of Medical Waste using Clay

Indian Institute of Technology-Guwahati (IIT-G) scientists proposes the use of compost natural clay to neutralise pathogens in waste.

- **Bio-medical waste** –It means any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or in research activities.
- **Top Producer - Canada** is the topmost producer of biomedical waste.
- *Biomedical Waste Management Rules 2016*, was notified by the Ministry of

Environment, Forest and Climate Change.
- It categorises the bio-medical waste generated from the health care facility into 4 categories based on the segregation pathway and colour code.
- Various types of bio medical waste are further assigned to each one of the categories, as Yellow Category, Red Category, White Category, Blue Category.
- **Issues** - The waste from hospitals and residences of COVID-19 patients was treated in the same way as municipal solid waste (MSW) during the pandemic.
- This could lead to the escape of infectious viral pathogen waste, potentially causing secondary infections in humans.
- **Clay -** *Bentonite and kaolin* clays in powder form can prevent the viral contamination from entering into the environment.
- **Newcastle disease virus (NDV)** - It was earlier observed that the removal efficiency of the NDV depended on the quality of bentonite and multilayer sorption of the virus on clay surfaces.
- NDV is an infectious and contagious viral infection that affects more than 250 different bird species worldwide.

References

Down to Earth | Clay-the-solution-for-safe-disposal-of-biomedical-waste

India Today | IIT-guwahati-researchers-discover-solution-for-safe-disposal-of-waste

NATO Plus

American Senator has said that the plans to introduce a bill to make India part of the NATO Plus grouping.

- It is a security arrangement that brings together the grouping of the North Atlantic Treaty Organization (NATO) and 5 countries - Australia, New Zealand, South Korea, Japan and Israel.
- It was formalized in 2019.
- **Aim** - To boost defence and intelligence ties.
- **Benefits if India is added**
  - It would facilitate seamless intelligence sharing between these countries and India.
  - It would access the latest military technology without much of a time lag.
  - It would enhance the ties between U.S. and India.

North Atlantic Treaty Organization (NATO)

- North Atlantic Treaty Organization, or NATO, is a 31-member alliance, with 29 European nations, and two American nations (United States and Canada).
- It was set up in 1949 by the US, Canada and several Western European nations to provide collective security against the Soviet Union.

- **Aim** - To protect peace and to guarantee the territorial integrity, political independence and security of the member states.
- It was the US's first peacetime military alliance outside the western hemisphere.
- **Headquarters** - Brussels, Belgium.
- Collective defence is laid out in *Article 5 of the North Atlantic Treaty* in which members of NATO are committed to mutual defence in response to an attack by any external party.
- India is *not a part* of NATO because it is a firmly non-aligned country and stakes its international reputation on remaining non-aligned.
- Membership is open to *any other European state* in a position to further the principles of this Treaty and to contribute to the security of the North Atlantic area.
- Finland has become the 31st member of the alliance.

Reference

The Hindustan Times | US-congressional-committee-recommends-nato-plus-with-india

The Hindu | Senate-to-introduce-bill-to-add-india-to-nato-plus-bloc

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