

May - 20

TNPSC BITS

- ❖ The seventh edition of the Indo-U.S. joint counter terrorism exercise Tarkash was held between the National Security Guard (NSG) and the U.S. Special Operations Forces (SOF) in Kolkata.
- ❖ TATA AIG announced the launch of India's first Satellite In-Orbit Third-Party Liability Insurance policy.
- ❖ HDFC Bank launched its first virtual credit card -PIXEL, with Visa's network.
- ❖ Alice Munro of Canada, the Nobel Prize-winning author known for her mastery of the short story, has died recently.
 - She was awarded the Nobel Prize in Literature in 2013 and the International Booker Prize for her body of work in 2009.
- ❖ A Japanese consortium recently unveiled the world's first high-speed 6G prototype device.
 - It can transmit data at a whopping 100 gigabits per second (Gbps), covering more than 300 feet.

NATIONAL

Igla-s air defense systems

Igla-S portable anti-aircraft missile system

Designed to engage all types of aircraft and helicopters, as well as small airborne targets such as cruise missiles, at any time of day in visible conditions on collision and pursuit courses against background and artificial thermal interference.

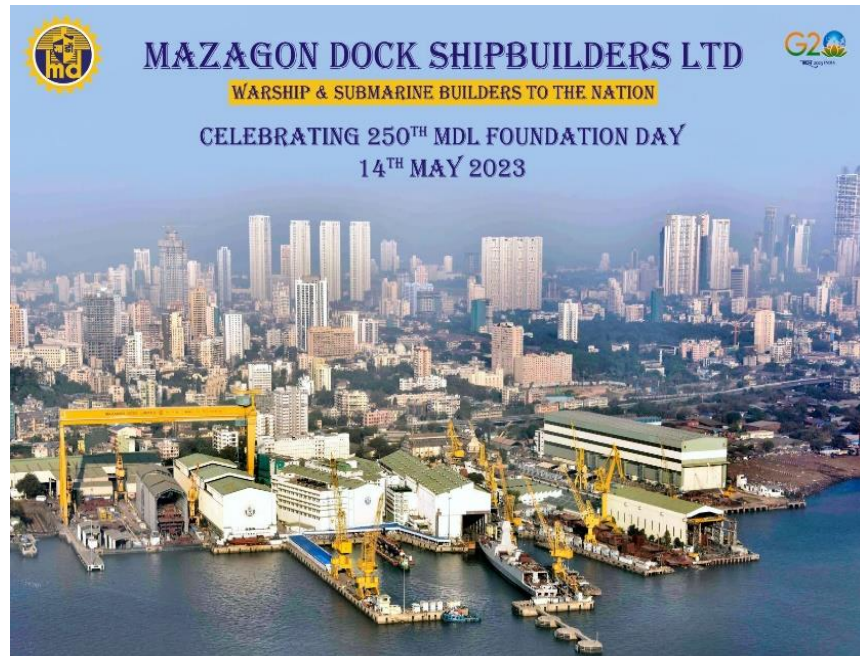


- 500 to 6,000 m
Firing range
- 10 to 3,500 m
target altitude
- no more than 12 s.
mobile-to-combat position
transition time
- no more than 5 s.
ready to start time
from activation
- Target speed:
 - up to 400 m/s
on collision courses
 - up to 320 m/s
on catch-up courses
- Homing head type:
 - tracking ● passive ● thermal ● bispectral

- ❖ The Indian Army is all set to begin receiving another set of Russian Igla-S very short-range air defence systems (VSHORAD) soon.
- ❖ It is a man-portable air defence system (MANPADS) developed by Russia.
- ❖ It is a hand-held defence system that can be operated by an individual or crew.

- ❖ It is designed to bring down low-flying aircraft and can also identify and neutralise air targets such as cruise missiles and drones.
- ❖ It has a range of 500 metres to 6 kilometres and attack targets up to an altitude of 3.5 kilometres.
- ❖ The Army is also set to receive the first of two Israeli Hermes-900 Medium Altitude Long Endurance Unmanned Aerial Vehicles (UAV).

MDL Shipyard 250th Anniversary



- ❖ Mazagon Dock Shipbuilders Ltd (MDL) of Mumbai celebrated the completion of 250 years.
- ❖ During the event, it launched a prototype indigenous midget submarine named 'Arowana', and commissioned the Solar Electric Hybrid boat.
- ❖ It was beginning as a small dry dock in 1774.
- ❖ In 1960, the Government of India took over the yard to further its warship development programme and incorporated it as a PSU.

THE Young University rankings 2024

- ❖ Mahatma Gandhi University in Kottayam has retained its first position among Indian universities in the Times Young University Rankings 2024.
- ❖ These rankings list universities worldwide that are 50 years old or younger.
- ❖ The 2024 ranking includes 673 universities from around the world.

- ❖ MGU is occupying the 81st position.
- ❖ Anna University and Bharathiar University from Tamil Nadu, along with the Indian Institute of Technology, Patna, are placed second to fourth in the Indian ranking.

THE World University Rankings 2024 Young

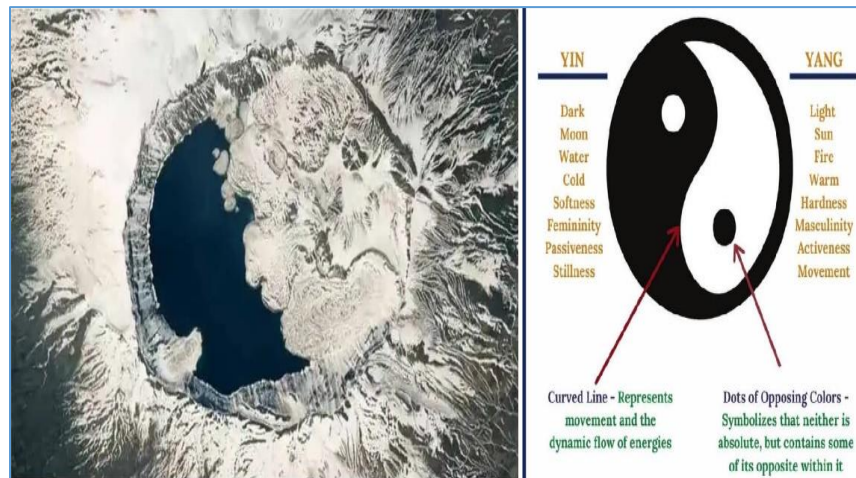
www.thewur.com
#THEYoungUni
#THEunirankings

Top 10

Rank 2024	Rank 2023	Institution	Country/region
1	1	Nanyang Technological University, Singapore	Singapore
2	3	Paris Sciences et Lettres – PSL Research University Paris	France
3	2	The Hong Kong University of Science and Technology	Hong Kong
4	6	City University of Hong Kong	Hong Kong
5	12	Université Paris-Saclay	France
6	8	Institut Polytechnique de Paris	France
7	4	Hong Kong Polytechnic University	Hong Kong
8	15	Sorbonne University	France
9	14	Pohang University of Science and Technology (POSTECH)	South Korea
10	13	Maastricht University	Netherlands

INTERNATIONAL

Mount Nemrut volcano



- ❖ NASA captured a rare image of an unusual crater or caldera which gets created on the Mount Nemrut volcano in Turkey.

- ❖ The image captured showed how the entire area gets split into two halves - a solidified lava region and a lake.
- ❖ This is seeming like a yin-yang symbol from Chinese philosophy.

ENVIRONMENT

Eco-Friendly Water Treatment Solution



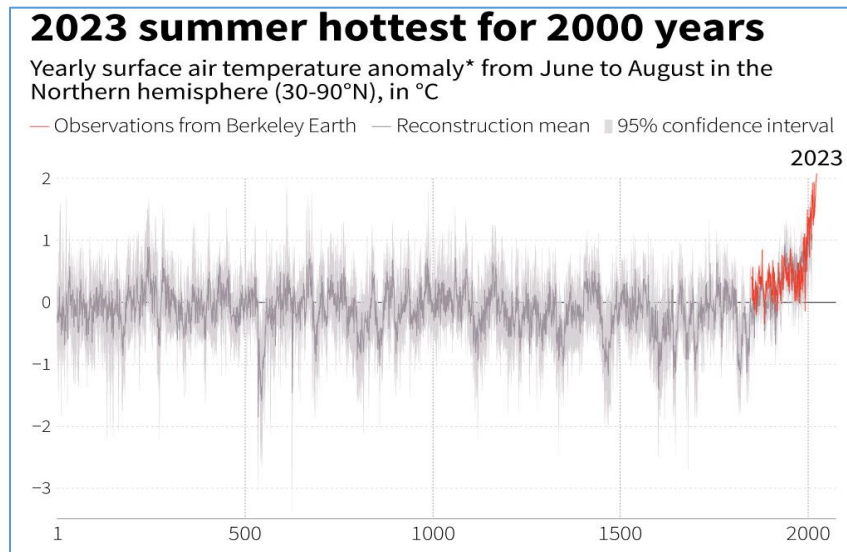
- ❖ Indian Institute of Petroleum & Energy (IIPE), Visakhapatnam, in association with other research institutions, have found an effective eco-friendly solution 'Surface Modification Technique of Membrane'.
- ❖ It aims to resolve the problems associated with water treatment at various levels, particularly for muddy river water.
- ❖ This technique is eco-friendly and it utilises non-toxic gases.
- ❖ It reduces the need for harsh chemicals or solvents in surface modification processes, minimising environmental impact
- ❖ Muddy water reduces oxygen levels, blocks sunlight and carries pollutants, leading to habitat degradation, species displacement and waterborne diseases.

Hottest year in 2,000 Years

- ❖ The summer of 2023 was hotter than any other in the Northern Hemisphere for the past two millennia.
- ❖ Scientists previously determined that 2023 was the hottest year since 1850, when global modern temperature records began.



- ❖ The extreme warmth of last summer not only smashed modern records but also exceeded the warmest summer prior to the instrumental record - in the year 246 - by more than half a degree Celsius.
- ❖ It was almost 4C warmer than the coldest summer (in 536).
- ❖ European Union's Copernicus Climate Change Service were saying the year of 2023 was "very likely" to have been the warmest in some 100,000 years.
- ❖ More than 150,000 deaths in 43 countries linked to heatwaves for each year between 1990 and 2019.



REPORTS AND INDICES

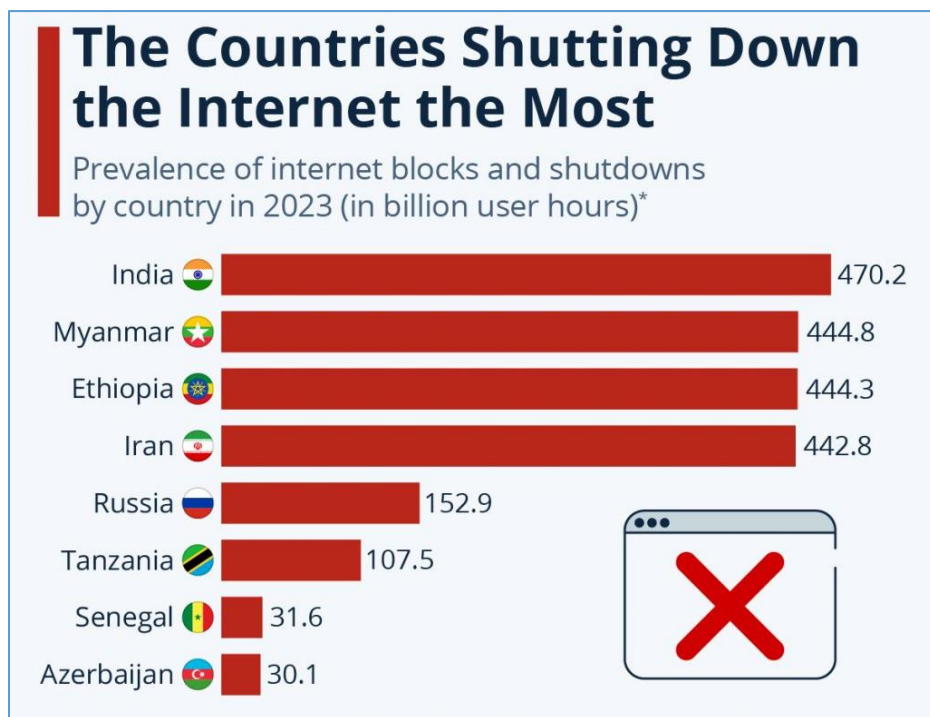
CWUR 2024 report

World Rank	Institution	Location	National Rank	Education Rank	Employability Rank	Faculty Rank	Research Rank	Score
410 Top 2%	Indian Institute of Management Ahmedabad	India	1	367	11	-	-	75.4
501 Top 2.4%	Indian Institute of Science	India	2	323	890	-	476	74.3
568 Top 2.8%	Indian Institute of Technology Bombay	India	3	-	330	-	560	73.7
582 Top 2.8%	Indian Institute of Technology Madras	India	4	-	187	-	614	73.5
606 Top 2.9%	Tata Institute of Fundamental Research	India	5	-	-	-	573	73.3
616 Top 3%	Indian Institute of Technology Delhi	India	6	-	155	-	685	73.2
622 Top 3%	Delhi University	India	7	532	168	-	675	73.2
704 Top 3.4%	Indian Institute of Technology Kharagpur	India	8	-	518	-	681	72.5

- ❖ 64 Indian universities and institutions were featured in the 2024 edition of the Global 2000 list.

- ❖ The Indian Institute of Management (IIM) Ahmedabad secured the top rank.
- ❖ This year, IIM Ahmedabad's position improved a bit and it secured 410th rank.
- ❖ Indian Institute of Science dropped 7 places and currently positioned itself at 501st position.
- ❖ Indian Institute of Technology Madras ranked at 582th rank globally and 4th in India.
- ❖ Anna University, Vellore Institute of Technology, Tamil Nadu Dr M.G.R. Medical University and NIT- Tiruchirappalli were featured in the list.

Internet shutdowns in 2023



- ❖ Of the 1,458 shutdowns Access Now has recorded globally since 2016, India has accounted for 773 (53%) of them.
- ❖ For sixth year in a row, India leads in global internet shutdowns with 116 internet shutdowns in 2023.
- ❖ This is accounting for 41% of the 283 globally.
- ❖ Of the 1,458 shutdowns Access Now has recorded since 2016, India has accounted for 773 (53%) of them.
- ❖ In 2023, the number of internet shutdowns rose by 41% from 201 in 2022 to 283 in 2023.
- ❖ In India, 64 shutdowns affected more than one district.

- ❖ This was driven by 47 shutdowns in Manipur and the statewide shutdown in Punjab.
- ❖ 13 states in India saw local or statewide internet shutdowns.
- ❖ The number of Indian states with more than five shutdowns increased from 3 in 2022 to 7 in 2023; 41% of all shutdowns in India lasted five or more days, up from 15% in 2022.
- ❖ In 2023, Myanmar followed India with 37 internet shutdowns followed by Iran with 34.
- ❖ In 2023, 39 countries saw internet shutdowns. Pakistan had 7 shutdowns while Iraq had 6.
- ❖ Twelve shutdowns in six countries, including India, were ordered to prevent cheating in exams.

MISCELLANEOUS

Ancient Baobab Trees



- ❖ Scientists have solved the mystery of the origins of ancient baobab trees.
- ❖ According to DNA studies, the iconic trees first arose in Madagascar 21 million years ago.
- ❖ Their seeds were later carried on ocean currents to Australia and also to mainland Africa, evolving into distinct species.



- ❖ Six of the world's eight baobab species are indigenous to Madagascar, where the distinctive trees with giant trunks have historically grown in huge forests.
- ❖ Baobab trees can live for 1,000 years and one hectare of land can support eight fully grown baobab trees.
- ❖ Madagascar is also the home of the world's rarest baobab, *Adansonia perrieri*.
- ❖ large-bodied animals such as giant lemurs or giant tortoises played a crucial role in spreading the seeds of baobab trees in their dung.
- ❖ But they became extinct about 500 years ago.
- ❖ Without these animals, baobab seeds are not spread as effectively.

