

April - 06

TNPSC BITS

- ❖ Dhanya Rajendran, co-founder and Editor-in-Chief of The News Minute, has been declared the winner of the Chameli Devi Jain Award for Outstanding Woman Media person for 2022.
- ❖ India's commercial capital Mumbai has been included in the World Tree City 2022 list, for the second consecutive year.
- ❖ World's third and India's second largest cricket stadium is going to be built in Jaipur.

NATIONAL

Space System Design Lab



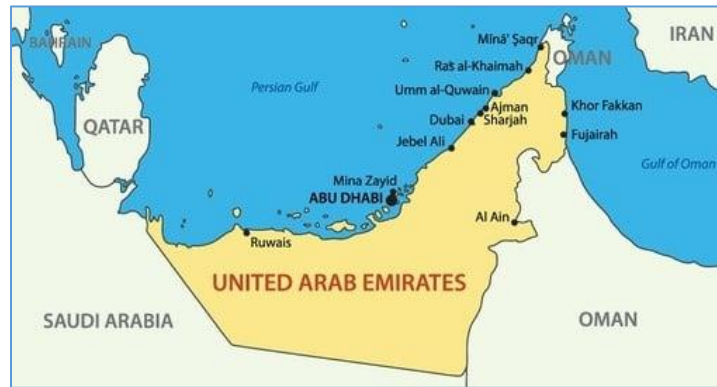
- ❖ The Space Systems Design Lab of the Indian National Space Promotion and Authorization Centre (IN-S PACe) was inaugurated in Ahmedabad recently.
- ❖ It aims to help space start-ups turn their innovative ideas into implementable models more quickly, and reduce research and development costs.

- ❖ It consists of high-end analysis and simulation software for mission simulation, modelling, visualising, optimising payload and spacecraft.

INTERNATIONAL

Siniyah Island

- ❖ Archaeologists have found the oldest pearling town in Siniyah Island, United Arab Emirates.
- ❖ It is believed that this is to be the oldest pearling town in this region.
- ❖ This city flourished during the period between the end of the sixth century and the middle of the eighth century AD.
- ❖ This island is located in the emirate of Umm al-Quwain in the Persian Gulf.



ECONOMY

Foreign Trade Policy 2023

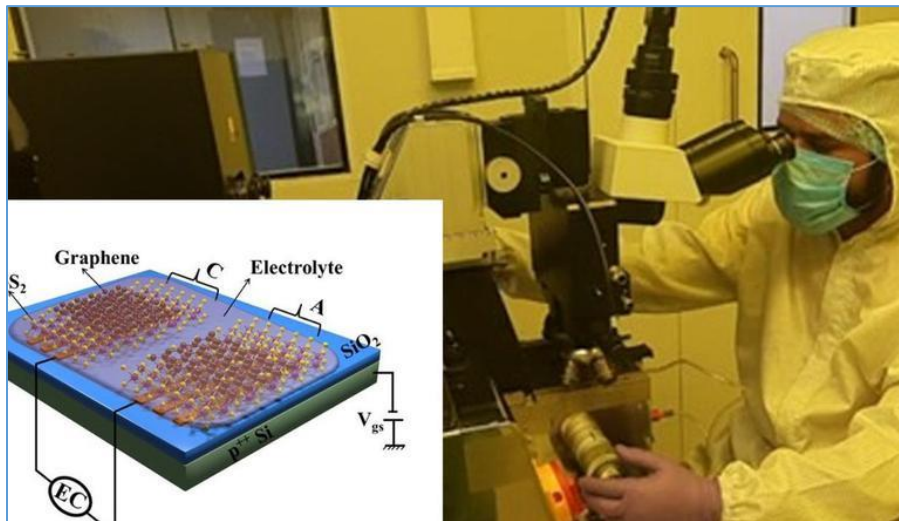
EXPORTS PROMOTION		
<ul style="list-style-type: none"> ▶ International trade settlement in rupee allowed ▶ Focus shifted from incentives to tax and duty remission ▶ Duty exemption schemes like export promotion capital goods (EPCG) to continue ▶ Merchanting trade to be facilitated to make India a trade hub ▶ Processing time cut to be reduced to 1 day 	<p>FOCUS ON DISTRICTS AND TOWNS</p> <ul style="list-style-type: none"> ▶ Faridabad, Moradabad, Mirzapur and Varanasi added to the existing list of 39 towns of excellence ▶ Enhanced capacity building, technology services ▶ Preparation of district export action plans (DEAP); 462 districts have DEAP 	<p>Expert take</p> <p>Export targets are optimistic given the global slowdown</p> <p>Digitisation Initiatives good</p> <p>No mention of cheap access to credit</p> <p>India needs to focus on Free Trade Agreements</p>
<p>E-COMMERCE AND MANUFACTURING GET A PUSH</p> <ul style="list-style-type: none"> ▶ Guidelines on e-commerce exports to be announced ▶ E-commerce exports at \$200-300 billion by 2030 ▶ Value limit of exports through courier doubled ▶ PM MITRA, EVs and green tech to get EPCG benefits 		

- ❖ The Union Commerce ministry announced the new Foreign Trade Policy 2023.

- ❖ The government reiterated sector-specific targets to achieve the goal of \$1 trillion merchandise exports and \$1 trillion services exports by 2030.
- ❖ Under the new policy, Faridabad, Moradabad, Mirzapur and Varanasi have been declared as towns of export excellence for apparels, handicrafts, handmade carpet and dari, and handloom and handicraft categories, respectively.
- ❖ These are in addition to the existing 39 towns under the category.
- ❖ Under the new policy, the dairy sector has been exempted from maintaining average export obligation.
- ❖ It will encourage e-commerce exports, which is expected to grow to \$200-300 billion by 2023.
- ❖ Under this, Designated zone with warehousing facility will be created.
- ❖ It also aims at streamlining the SCOMET policy, which covers special chemicals, organisms, materials, equipment and technologies.

SCIENCE AND TECHNOLOGY

Ultra-Micro Supercapacitors



- ❖ Researchers at the IISc-Bengaluru have developed a new type of supercapacitor as it is smaller or 'ultra-micro'.
- ❖ It is capable of storing larger amounts of energy.
- ❖ So, it is easier to use in smaller electronic devices, eliminating the need for batteries, while ensuring that the device stays charged for a longer time.
- ❖ Over time, the batteries lose their ability to store charge and therefore have a limited shelf-life.

- ❖ But the Capacitors, can store an electrical charge for much longer, by their design.
- ❖ Supercapacitors combines the best of both batteries and capacitors.
- ❖ They can store and release large amounts of energy, and are therefore highly sought-after for next-generation electronic devices

Mice with cells from 2 males

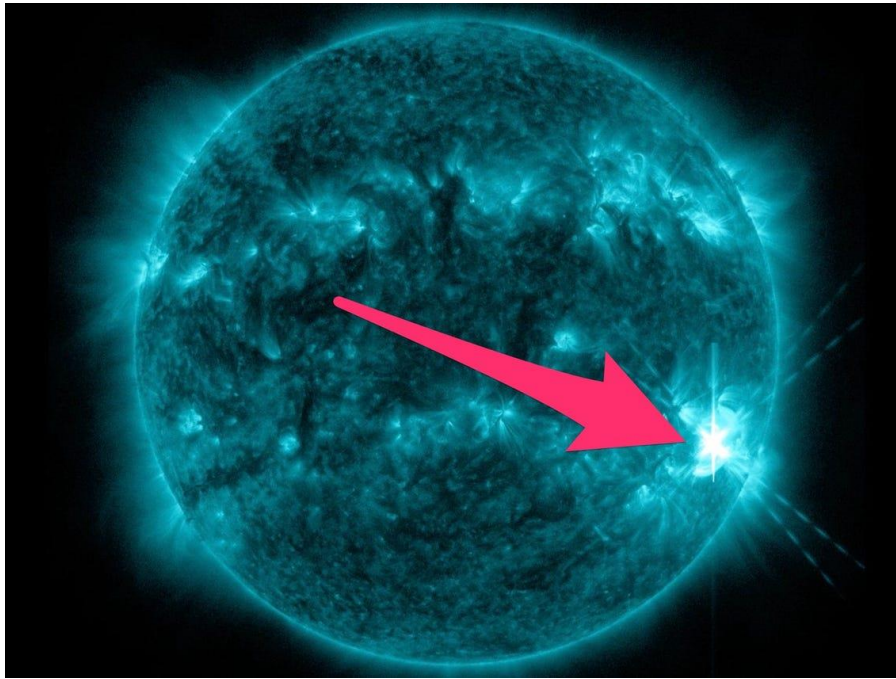
- ❖ For the first time, scientists have created baby mice from two males.
- ❖ They took skin cells from the tails of male mice and transformed them into “induced pluripotent stem cells”.
- ❖ Then, they converted male mouse stem cells into female cells and produced functional egg cells.
- ❖ Finally, they fertilized those eggs and implanted the embryos into female mice.
- ❖ About 1% of the embryos – 7 out of 630 – grew into live mouse pups.
- ❖ So, the applicability of this technique to humans is very uncertain.



Powerful ‘X-class’ solar flare

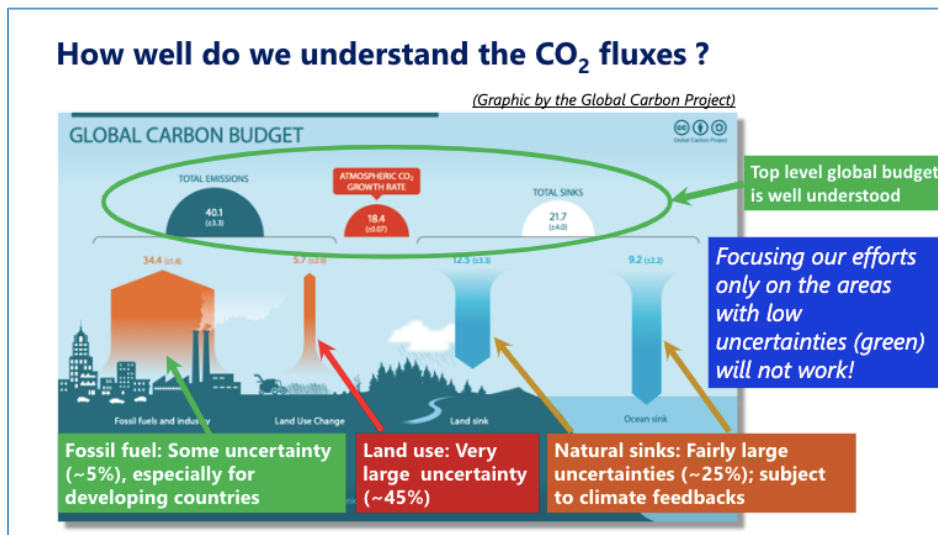
- ❖ The Sun sent out a powerful “X-class” solar flare that peaked at 8.03 AM March 29.
- ❖ The flare was classified as an X1.2 flare.
- ❖ The solar flare was detected by NASA’s Solar Dynamics Observatory.
- ❖ It came from a sunspot region on our solar system’s central star called AR3256.
- ❖ There are four classes of solar storms–B, C, M and X.
- ❖ A C-class storm is 10 times more powerful than a B-class storm and so on.
- ❖ Each class is therefore divided into nine subdivisions.

- ❖ The X-class denotes the strength of the flare.
- ❖ The number that comes after it signifies their strength at a finer scale.



ENVIRONMENT

Global Greenhouse Gas Monitoring Infrastructure



- ❖ The U.N.'s World Meteorological Organisation has come up with a new Global Greenhouse Gas Monitoring Infrastructure.

- ❖ It aims to provide better ways of measuring planet-warming pollution and help inform policy choices.
- ❖ It will integrate space-based and surface-based observing systems.
- ❖ The three major greenhouse gases are carbon dioxide, methane and nitrous oxide.
- ❖ Of those, CO₂ accounts for around 66% of the warming effect on the climate.
- ❖ The increase in CO₂ levels from 2020 to 2021 was higher than the average growth rate over the past decade

Spiranthes hachijoensis

- ❖ A new species of orchid with delicate, glass-like blooms has been discovered by Japanese scientists.
- ❖ It is named as the "Spiranthes hachijoensis".
- ❖ Despite its presence in Japan's parks and gardens, it took a decade to confirm that the plant was an unknown species.
- ❖ Spiranthes is a genus of orchids in the subfamily Orchidoideae, commonly known as ladies' tresses.
- ❖ It includes approximately 50 species widely distributed across the tropical and temperate regions of the Americas, Eurasia, and Australia.



IMPORTANT DAYS

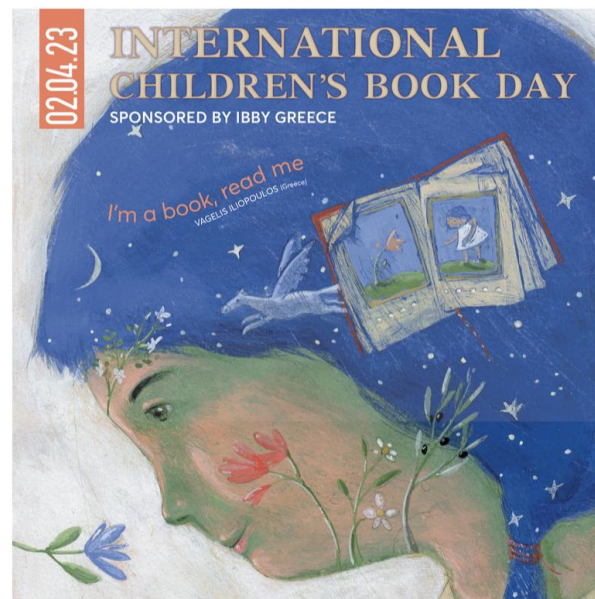
Odisha Foundation Day - April 01

- ❖ In 1936, it was the first state that was formed on a linguistic basis.

- ❖ Sir John Hubbak was the first governor of the state.
- ❖ Earlier, it was the part of Bihar.
- ❖ On April 1, 1936, the Odisha state became a separate province.
- ❖ The state was originally called Orissa.
- ❖ The parliament passed the Orissa Bill, and 96th Constitution amendment Act in March 2011 to rename it as Odisha.



International Children's Book Day - April 02



- ❖ Since 1967, this day celebrated to inspire a love of reading and to call attention to children's books.
- ❖ 2 April is the birthday of classic children's book author Hans Christian Andersen.

- ❖ Every year the host countries will change in rotation basis.
- ❖ Greece is the sponsor for International Children's Book Day 2023.

World Autism Awareness Day - April 02

- ❖ This day observed to emphasise the significance of supporting people with autism and to improve the quality of their life.
- ❖ This year is the Sixteen annual World Autism Awareness Day.
- ❖ Autism refers to a broad range of conditions that are characterized by different challenges by repetitive behaviour nonverbal and speech communication, and social skills.
- ❖ “Light It Up Blue” is the theme of this year event.

