Prelim Bits 07-09-2022 | UPSC Daily Current Affairs

Floppy Disks

Decades after the floppy disks became obsolete and were phased out globally, Japan has announced that it will finally do away with floppy disks and other outdated technology in a bid to modernise its bureaucracy.

- A floppy disk is a removable disk storage device used to store electronic data, like computer data and programmes.
- It was **first developed by IBM** in 1967, as an **alternative to buying hard drives**, which were extremely expensive at the time.
- The floppy disk was popularly used between the 1970s and 1990s.
- It is only able to store about 800 KB of data, which is about 0.0008 GB.
- Early computers did not have CD-ROM drives or USB; floppy disks were the only way to install a new program on a computer or back up your information from a computer.
- The first floppy disks measured about 8 inches and were difficult to store as they got dirty very easily. Later, size was reduced to 3.5-5.5 inches.

Reference

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Precision Farming

- Precision farming or precision agriculture (PA) is a technologies system approach to re-organise the total system of agriculture towards
    1. Low-input agriculture,
    2. High-efficiency agriculture,
    3. Sustainable agriculture and
    4. Environment-friendly agriculture.
- PA is also known as satellite agriculture, as-needed farming and site-specific crop management (SSCM).
- Precision agriculture is an approach to farm management that **uses information technology** (IT) to ensure that crops and soil receive exactly what they need for optimum health and productivity.
- **Reasons to prefer precision farming**
    1. To increase agriculture productivity
    2. Prevents soil degradation
    3. Reduction of chemical application in crop production
    4. Efficient use of water resources
    5. Dissemination of modern farm practices to improve quality, quantity and reduced cost of production

6. Developing favourable attitude
7. Precision farming changing the socio-economic status of farmers.

In India, one major problem is the small field size. More than 58% of operational holdings in the country have size less than one hectare (ha).

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iNCOVACC

iNCOVACC nasal COVID-19 vaccine has been approved for primary immunisation in those 18 and above by the Central Drugs Standard Control Organisation (CDSCO).

- The iNCOVACC is India's **first nasal COVID-19 vaccine**. It has been developed by Bharat Biotech.
- It is a recombinant replication deficient adenovirus vectored vaccine with a pre-fusion stabilised spike protein.
- It is a ChAd36-SARS-CoV-S COVID-19 (Chimpanzee Adenovirus Vectored) **recombinant vaccine**.
- The iNCOVACC serves as an instrument for primary immunisation against Covid-19 in adults in the 18+ age group and it is meant for restricted use in emergencies only.
- For the time being, it can be administered only to the unimmunised.
- The vaccine is stable between 2 and 8 degrees Celsius for easy storage and distribution.

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WEST - An I-STEM Initiative

Recently, a new I-STEM (Indian Science Technology and Engineering facilities Map) initiative called Women in Engineering, Science, and Technology (WEST) was launched.

The I-STEM is a national web portal that is the gateway for researchers to locate the specific equipment/facilities they need for their R&D work and identify the one that is either located closest to them or available the soonest.

- The WEST programme will **cater to women with a STEM background** and empower them to contribute to the science, technology, and innovation ecosystem.
- Through the WEST initiative, I-STEM shall provide a separate platform to women researchers, scientists, and technologists for pursuing research in basic or applied sciences in areas of science and engineering.
- Women may join the WEST program and become stakeholders in various domains and pursue careers in R&D at various levels: **technicians, technologists, scientists, and entrepreneurs**.
- Opportunities range from operating scientific equipment and maintaining them, to designing and manufacturing them.
- **I-STEM initiatives for WEST**
    1. Launching a Dedicated Platform for introducing new initiatives taken by the I-STEM,
    2. Invite regularly scientifically-inclined younger women to get support through I-STEM,
    3. Arrange **Skilled Development Program** specially for Women in various R&D labs,
    4. Help bring women back into S&T domains after a career break.
    5. Invite R&D proposal for Technical guidance, Expert Advice, & help through Catalytic Grants in the form of providing R&D software's & provide access to **Webex Platform** at No cost,
    6. Opportunities to Speak about their expertise on Tools at Global platform in "**Talk to Expert Series**", Connecting with entire R&D infrastructure established in the country.
    7. Establish a Digital Consortium "**Connect Quickly**" for discussion/interaction about new ideas to resolve the regional issues, and
    8. The current support being provided to S&T startups by women entrepreneurs by I-STEM will be enhanced.
- **Implementation -** A dedicated team of women will ensure the successful implementation of the WEST initiative.
- **Related Links -** Indian Science, Technology and Engineering Facilities Map (I-STEM)

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SC on Right to Carry Hijab to Schools

While hearing the Karnataka High Court verdict on Hijab ban in educational institutions of the state, the Supreme Court of India questions the right to carry hijab to schools.

> *In March 2022, the Karnataka High Court upheld the restriction on Muslim women wearing a hijab in educational institutions stating that right to wear a hijab is not constitutionally protected.*

- Now, the Supreme Court observed that a person has a right to practise any religion, but it asked whether a student can exercise her private religious right to wear a hijab in a school which adheres to a dress code.
- It said that wearing of hijab may not be an essential religious practice, so whether this right can be carried to an educational institution that follows uniform prescribed by a secular State is questionable.
- The contention of a senior advocate is that dress code was not among the subjects on which

the state could formulate rules.
- In response to this contention, the court said, “If the state did not have the power to prescribe uniforms, anyone will wear anything. If there is no specific power, Article 161 will come in.”
- If there is no such power to prescribe uniforms, then the state’s executive power comes into play. Therefore, the High Court ordered that the Karnataka HC verdict should be followed.
- **Related Links** - Karnataka High Court’s Hijab Judgment

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