TNPSC BITS

- ❖ Union Minister and BJP MP Piyush Goyal was reappointed as the Leader of the House in Rajya Sabha.

- ❖ South Korean rapper Psy's 'Gangnam Style' song became the first-ever video to cross one billion views of YouTube in 2012.

TAMIL NADU

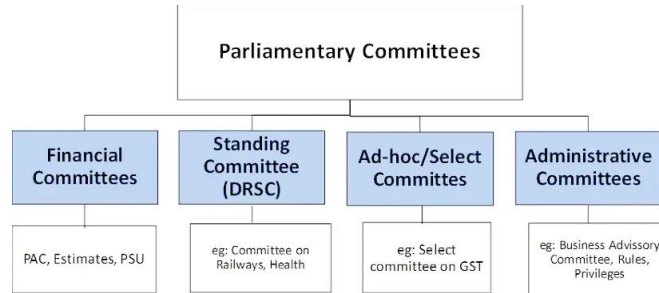## India's first rocket engine factory

- ❖ Agnikul Cosmos has inaugurated India's first-ever factory to manufacture 3D-printed rocket engines in Chennai.

- ❖ It will be used to produce engines for its own in-house rockets.

- ❖ The manufacturing facility has a capacity to make two rocket engines per week and thereby one launch vehicle every month,

- ❖ It builds the number of engines required to launch Agnibaan.

- ❖ It is a customizable, 2-stage launch vehicle.

- ❖ It is capable of taking up to 100 kg payload to orbits around 700 km high (low Earth orbits)

❖ Also, it enables plug-and-play configuration.

NATIONAL

Tenure of House committees

❖ A first ever comprehensive study of the Rajya Sabha Secretariat, a panel, has presented its recommendations to the chairman.

❖ This panel is headed by former General Secretary and adviser P.P.K. Ramacharyulu and made recommendation.

❖ Parliamentary committees are appointed or elected by the House or nominated by the Speaker/Chairman.

❖ They work under the direction of the Speaker/Chairman.

Recommendations

❖ Increase in tenure of Parliamentary Standing Committees from 1 year to 2 years to ensure stability and continuity.

❖ Field visits should also be increased from the present two visits for a maximum of 10 days in a year to three visits and 15 days.

❖ Merging existing committees on Industry and Commerce into one.

❖ Setting up a new committee on tourism and culture.

❖ Examine the issue of enabling virtual meetings of Departmental related Standing Committees, given the technological advances and legislatures in other countries.

BBBP extension

❖ The Ministry of Women and Child Development extended Beti Bachao Beti Padhao (BBBP) Scheme to all Districts.

❖ The ministry now targeted improvement in the Sex Ratio at Birth by 2 points every year.

❖ It aims improvement in the percentage of institutional deliveries at 95% or above.

- It also aims for increasing girls' participation in sports by identifying talent and linking them with appropriate authorities under 'Khelo India'.

- It aims at strengthen One-Stop Centres, set up to help women facing violence, including domestic violence and trafficking.

- BBBP was launched in January 2015.

- It aims to address sex selective abortion and the declining child sex ratio which was at 918 girls for every 1,000 boys in 2011.

- The programme is being implemented across 405 districts in the country.

IN THE WORKS

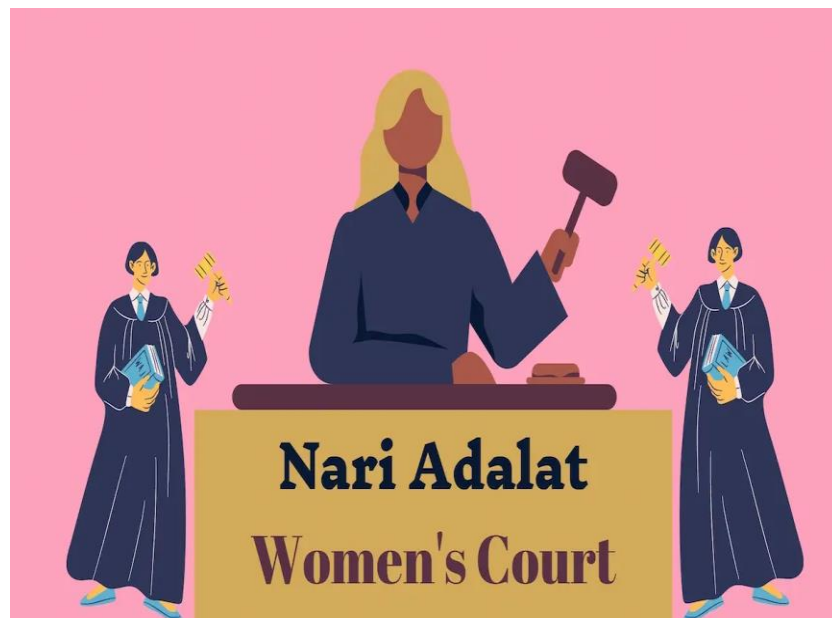- Additional 300 One-Stop Centres to be set up; existing centres to be upgraded
- Govt to introduce free day-care créche facilities through Palna
- Half-Way Homes to be set up under Anti-
- Trafficking Units, where a group of victims, ready for reintegration, can live and work out of
- Hubs for empowerment of women to be set up at Central, states and districts levels to merge and monitor schemes
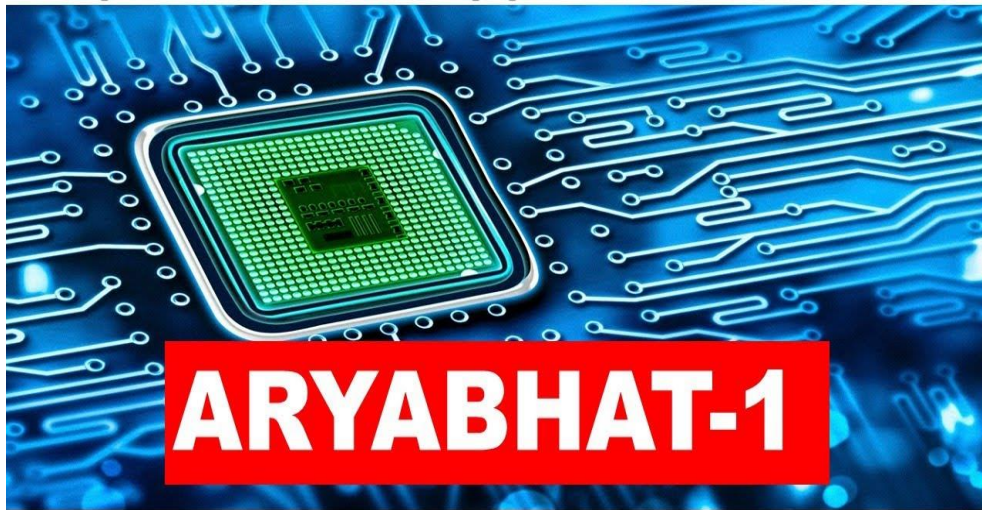
Nari Adalat

Nari Adalat — Women's Court

- The Women and Child Development (WCD) Ministry introduced a new component called 'Nari Adalat'.

- It aims to providing women with an alternate grievance redress mechanism to resolve cases of petty nature at gram panchayat-level.

- It redresses harassment, subversion, curtailment of rights or entitlements cases.

❖ It will be implemented in a phased manner.

SCIENCE AND TECHNOLOGY

ARYABHAT-1

❖ The Indian Institute of Science of Bengaluru researchers recently developed a prototype of an analog chipset called "ARYABHAT-1".

❖ ARYABHAT-1stands for "Analog Reconfigurable Technology and Bias-scalable Hardware for AI Tasks".

❖ These chipsets may operate faster.

❖ It will use less power as compared to digital processors used in different electronic gadgets.

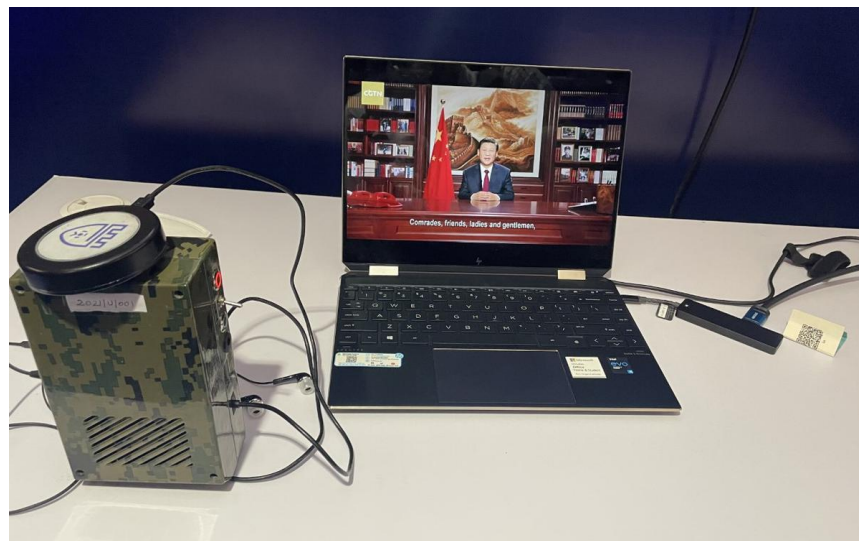❖ Such chipsets can be beneficial for applications based on Artificial Intelligence.

IS4OM

❖ The "ISRO System for Safe & Sustainable Operation" (IS4OM) at ISRO Control Centre, in Bengaluru inaugurated recently.

❖ S4OM is a facility that is conceived with a holistic approach towards ensuring safety and sustainability.

❖ S4OM will bring a prompt, accurate and efficient information on on-orbit collision, fragmentation, atmospheric re-entry risk, space based strategic information, hazardous asteroids and space weather forecast.

AI Mandarin translation

❖ Using this, Indian soldiers patrolling on the Line of Actual Control (LAC) will be able to understand Mandarin and reply back instantly.

❖ It is a 600gm Artificial Intelligence-based device developed by an Indian start-up.

❖ It is an offline handheld language translation system which works based on AI.

- ❖ It is bidirectional with a range of 5-10 feet.
- ❖ And it converts Mandarin to English.

India's First Unique Blood Group

Blood Group	Gives to these groups	Receives from these groups
O⁻	All	O- only
O⁺	AB+, A+, B+, O+	O- and O+
A⁻	AB-, AB+, A+, A-	O- and A-
A⁺	AB+ and A+	O-, O+, A-, A+
B⁻	B-, B+, AB-, AB+	O- and B-
B⁺	B+ and AB+	O-, O+, B-, B+
AB⁻	AB- and AB+	O-, A-, B-, AB-
AB⁺	AB+ only	All

- ❖ A man from Gujarat who is a heart patient has been identified with EMM negative blood group.
- ❖ It is India's first and world's tenth case of unique blood group.
- ❖ It cannot be categorized into the existing groups of 'A', 'B', 'O' or 'AB'.
- ❖ There are four types of blood groups in the human body.
- ❖ It further consists of 42 types of systems, like A, B, O, Rh and Duffy.
- ❖ There are also 375 types of antigens in which EMM is high.
- ❖ However, there are only 10 such people in the world who do not have EMM high-frequency antigen in their blood.
- ❖ It makes them different from normal humans.
- ❖ People with such rarest blood groups can neither donate their blood to anyone, nor can they acquire it from anyone.

ENVIRONMENT

First carbon-neutral airport

- ❖ Leh airport is being built as a carbon-neutral airport.
- ❖ This is the first of its kind in India.

❖ A "Geothermal system" in hybridization with Solar PV Plant will be provided in the new airport Terminal Building for heating and cooling purposes.

❖ This system works by exchanging heat between the air and the ground as its heat pumps are used for space heating and cooling, as well as water heating.

IMPORTANT DAYS

Tamil Nadu Day- June 18

❖ Tamil Nadu Day is celebrated to commemorate the formation of the state.

❖ Tamil Nadu was created on 1 November 1956 with the name Madras State.

❖ A resolution was passed unanimously in the Madras State Legislative Assembly by the Annadurai government seeking to rename the state as Tamil Nadu.

❖ On 18 July 1967, Madras State was officially renamed to Tamil Nadu.

❖ In 2019, the Government of Tamil Nadu announced that 1st November of every year will be celebrated as Tamil Nadu Day to mark the formation of the state.

❖ In July 2022, Government of Tamil Nadu announced that 18 July of every year will be celebrated as Tamil Nadu Day.

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