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Performance Grading Index for Districts

The Department of School Education and Literacy (DoSE&L), Ministry of Education released the Performance Grading Index for Districts for the reference years 2018-19 and 2019-20.

- The Performance Grading Index for Districts (PGI-D) assesses the **performance of school education system at the District level** by creating an index for comprehensive analysis.
- Based on the success of the State PGI (also released by the DoSE&L), the PGI for District has been designed.
- Through an online portal, the districts will fill the data.
- The PGI-D will reflect the relative performance of all the districts in a uniform scale, which encourages them to perform better.
- **Calculation** - The PGI-D structure comprises of total weightage of 600 points across 83 indicators.
- These 83 indicators are grouped under 6 categories viz.,
    1. Outcomes,
    2. Effective Classroom Transaction,
    3. Infrastructure Facilities & Student's Entitlements,
    4. School Safety & Child Protection,
    5. Digital Learning and
    6. Governance Process
- These categories are further divided into 12 domains.
- **Grades**- PGI-D grades the districts into 10 grades viz.,
    1. Highest achievable Grade is Daksh, which is for Districts scoring more than 90% of the total points in that category or overall.
    2. The lowest grade in PGI-D is called Akanshi-3, which is for scores upto 10% of the total points.
- 'Utkarsh' category is for districts with score between 81-90%, followed by 'Ati-Uttam' (71-80%), 'Uttam' (61-70%), 'Prachesta-I' (51-60%), 'Prachesta-II' (41-50%) and 'Pracheshta III' (31-40%).
- **Objective** - Ultimate objective of PGI-D is to **help the districts to priorities areas for intervention** in school education and thus improve to reach the highest grade.
- It will help the state education departments to identify gaps at the district level and improve their performance in a decentralized manner.

Reference

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Partners in the Blue Pacific Initiative

The US and its allies - Australia, New Zealand, Japan and the United Kingdom - have launched a new initiative called 'Partners in the Blue Pacific' for "effective and efficient cooperation" with the region's small island nations.

- Amid China's aggressive push to increase its Pacific sphere of influence, the US and its allies have launched the Partners in the Blue Pacific (PBP) initiative.
- This initiative is a **five-nation "informal mechanism"** to support Pacific islands and to boost diplomatic, economic ties in the region.
- The PBP was launched an inclusive, informal mechanism to support Pacific priorities more effectively and efficiently.
- This initiative speaks of enhancing "prosperity, resilience, and security" in the Pacific through closer cooperation.
- Through the PBP, these counties - together and individually - will direct more resources here to counter China's aggressive outreach.
- With these principles at its core, the Partners in the Blue Pacific aims to:
    1. Deliver results for the Pacific more effectively and efficiently
    2. Bolster Pacific regionalism
    3. Expand opportunities for cooperation between the Pacific and the world
- At every stage, the PBP will be led and guided by the Pacific Islands.
- The areas where PBP aims to enhance cooperation include "climate crisis, connectivity and transportation, maritime security and protection, health, prosperity, and education".

Actions Taken to Counter China

- Away from the Pacific, the G7 announced a plan - Partnership for Global Infrastructure and Investment (PGII) - to rival China's Belt and Road Initiative.
- The PGII will raise $600 billion to fund development projects in low and middle-income countries.
- Before launching the PBP, the US and its partners started the Indo-Pacific Economic Framework for Prosperity (IPEF), a trade-boosting play in the region with 13 nations as partners.

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Estradiol to Treat Psoriasis

Researchers have found that the female hormone estradiol suppresses psoriasis, a skin condition that causes rashes and leads to itchiness.

- The presence of this hormone in women is the reason why compared to men, women have a significantly lower incidence of severe psoriasis.

- The protective role of the hormone has provided a basis for its **therapeutic potential**.
- The Estradiol suppresses psoriatic inflammation by regulating neutrophil and macrophage cells

Estradiol

- Estradiol or oestradiol is a form of the female sex hormone estrogen.
- Also called 17-beta-estradiol, estradiol is an estrogen steroid hormone.
- **Production** - The ovaries, breasts, and adrenal glands make estradiol.
- During pregnancy, the placenta also makes estradiol.
- **Functions** - Estradiol helps with the growth and development of female sex organs, including the uterus, fallopian tubes, vagina and breasts.
- It is involved in the regulation of the oestrous and menstrual female reproductive cycles.
- Estradiol helps to control the way fat is distributed in the female body.
- It's also essential for bone and joint health in females.
- **Also in males** - Males also have estradiol in their bodies. Their levels of estradiol are lower than the levels in females.
- In males, the adrenal glands and testes make estradiol.
- Estradiol has been shown in vitro to prevent destruction of sperm cells, but its clinical importance in sexual function and development in men is likely less significant than in women.

Psoriasis

- Psoriasis is a common, long-term (chronic) skin disease with no cure.
- This skin disease causes a rash with itchy, scaly patches, most commonly on the knees, elbows, trunk and scalp.
- It can be painful, interfere with sleep and make it hard to concentrate.
- The condition tends to go through cycles, flaring for a few weeks or months, then subsiding for a while.
- **Causes** - Psoriasis is a skin disorder that causes skin cells to multiply up to 10 times faster than normal.
- This makes the skin build up into bumpy red patches covered with white scales.
- Psoriasis cannot be passed from person to person. It does sometimes happen in members of the same family.
- **Common triggers** in people with a genetic predisposition to psoriasis include infections, cuts or burns, and certain medications.
- **Treatments** are available to help manage symptoms. ome slow the growth of new skin cells, and others relieve itching and dry skin.
- These include Light therapy (PUVA), Methotrexate, Retinoids, Cyclosporine, enzyme inhibitor medication apremilast (Otezla), aryl hydrocarbon receptor (AHR) agonist.Tapinarof (Vtama), etc
- New lifestyle habits and coping strategies can be tried to help people with psoriasis to live a better.

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NASA CAPSTONE

NASA, Rocket Lab and Advanced Space are standing down from the planned launch of the CAPSTONE mission.

- The Cislunar Autonomous Positioning System Technology Operations and Navigation Experiment (CAPSTONE) is a NASA mission.
- As part of CAPSTONE, a microwave oven-sized CubeSat weighing just 25 kg will serve as the first spacecraft to test a unique, elliptical lunar orbit as part of the CAPSTONE.
- As a pathfinder for Gateway, the CAPSTONE will help reduce risk for future spacecraft by validating innovative navigation technologies and verifying the dynamics of this halo-shaped orbit.
- [Gateway is a Moon-orbiting outpost that is part of NASA's crucial Artemis program.]
- **Near rectilinear halo orbit** (NRHO) is very elongated and its location is at a precise balance point in the gravities of the Earth and the moon.
- This offers **stability for long-term missions** like Gateway and this will require minimal energy to maintain.
- The orbit will also establish a location that is an ideal staging area for missions to the Moon and beyond.
- On its near pass, the orbit will bring CAPSTONE within 1,600 km of one lunar pole and within 60,000 km at its peak every 7 days.
- This means that less propulsion capability will be required for spacecrafts flying to and from the Moon's surface than other circular orbits.
- **NASA's Lunar Reconnaissance Orbiter** (LRO), which has been circling the moon since 2009, will serve as CAPSTONE's reference point.
- This information will then be used to evaluate CAPSTONE's autonomous navigation software, called Cislnar Autonomous Positioning System (CAPS).
- If successful, the software will allow future spacecrafts to determine their location without having to rely exclusively on Earth-based tracking.
- If this capability becomes viable, future space missions could potentially perform without support from the ground.
- This will allow Earth-based antennae to prioritise valuable science data over routine operational tracking.

Mission Objectives

- Verify the characteristics of a cis-lunar near rectilinear halo orbit for future spacecraft
- Demonstrate entering and maintaining this unique orbit that provides a highly-efficient path to the Moon's surface and back
- Demonstrate spacecraft-to-spacecraft navigation services that allow future spacecraft to determine their location relative to the Moon without relying exclusively on tracking from Earth
- Lay a foundation for commercial support of future lunar operations
- Gain experience with small dedicated launches of CubeSats beyond low-Earth orbit, to the Moon, and beyond

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Baal Swaraj Portal

The National Commission for the Protection of Child Rights (NCPCR) has launched a "CiSS application" under the Baal Swaraj portal to help in the rehabilitation process of Children in Street Situations (CiSS).

- Baal Swaraj is a portal launched by the National Commission for the Protection of Child Rights (**NCPCR**).
- The Baal Swaraj portal has developed as part of its role of a monitoring authority under Section 109 of the **Juvenile Justice Act, 2015.**
- It was developed to address the growing problem of Children being affected by COVID-19.
- This portal has been launched for
    1. Online tracking and
    2. Digital real-time monitoring mechanism of children who have lost both parents/either of the parents during COVID-19 and are in need of care and protection.
- The initiative is taken under the direction of the Supreme Court of India.

Components	**Purpose**
COVID care link	Caters to the children who have lost either or both parents due to COVID-19 or post March 2020.
Children in Street Situations (CiSS) App	Used for receiving data of children in street situations from all the states and union territories, tracking their rescue and rehabilitation process.

- This app is a first-of-its-kind initiative in India to **help children in street situations**.
- **Working** - It will track children affected by COVID-19 right from the production of children before the Child Welfare Committee (CWC) to the restore the children to their parent/ guardian/ relative and its subsequent follow-up.
- The data will be filled in the portal by the District officers and State officers for each child.

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