

1. YUVIKA Programme

Why in News?

- The Indian Space Research Organisation (ISRO) has launched the "Young Scientist Programme 2020" for school children, named YUva Vigyani Karyakram (YUVIKA).

Highlights:

- The YUVIKA Programme was started in 2019 to increase the interest of students in space activities. It was launched by ISRO in tune with the Central government's vision of "Jai Vigyan, Jai Anusandhan".
- Through the programme, the students can meet scientists at the different ISRO centres, visit their labs and also participate in lectures and practical classes.
- Three students from each State and Union Territory will be selected and five additional seats will be reserved for Overseas Citizen of India (OCI) students.
- The YUVIKA programme will be held for two weeks at any one of the ISRO/DOS centres located at Ahmedabad, Bangalore, Shillong and Thiruvananthapuram. It is expected that programmes like YUVIKA might produce good number of scientist in coming years and would lead to national intergartion and nation building.

The Criteria for Selection Includes:

- Performance in the Class 8 examination Prizes in school events like elocution, debate, essay writing
- Winning in District/State/National/International level sports activities
- Being Scouts and Guides/NCC/NSS member Studying in a Rural School

2. Big Data to fight novel Coronavirus

Why in News?

- Chinese mobile operators and Technology Firms are supporting the tracking and prevention of pneumonia caused by the novel coronavirus with the help of Big Data.

Highlights:

- Telecom giant China Unicom has set up a group-wide team of more than 100 big data technicians and experts to provide data analysis and intelligent applications to the government using Algorithm Models.
- It provides big data analysis reports on epidemic-related population flow to 31 provincial traffic and Health Departments.

- GeTui, a smart data provider, has studied the number of people travelling from Wuhan, the hardest-hit city of the epidemic outbreak in central China, and released their distribution density in a heat map.
- The Travelers from Wuhan were distributed across a wide range of rural areas, especially in Henan, Hunan and Sichuan provinces, according to the heat map.
- Yonyou, a software and cloud services company, has updated its cloud service platform, using the Internet of Things and big data technologies to connect the supply and demand of medical resources between medical enterprises and hospitals at the center of the epidemic.
- The platform had released the demand for medical supplies of 30 hospitals, involving protective clothing, masks, goggles, surgical gowns and shoe covers.
- One can use the Baidu Map application to check the population density in business districts, hospitals and transportation hubs, in order to avoid crowded places, which is key to preventing and controlling the epidemic.
- Epidemic information and protection knowledge collected with big data has been shared with nearly 80 million users every day through Toutiao, a popular news feed mobile app in China.

Big Data:

- Big data is a field that treats ways to Analyze, systematically extract information from, or otherwise deal with data sets that are too large or complex to be dealt with by traditional data-processing application software.

3. Blue Dot Network (BDN)

Context:

- Recently, there are rising apprehensions worldwide that India might join the US-led Blue Dot Network (BDN).

About BDN (2019):

- It is a Indo-Pacific Business Forum in Bangkok, Thailand. It will be led by the **US** along with **Japan and Australia**.
- It is a Multi-Stakeholder Initiative to bring together governments, the private sector and civil society to promote High-Quality, trusted standards for Global Infrastructure Development.

- It will serve as a globally recognised evaluation and certification system for roads, ports and bridges with a focus on the Indo-Pacific region.
- The projects would be graded on **debt, environmental standards, labour standards** etc.
- It applies to projects in **any citizen-centric country** where citizens would like to evaluate such projects.
- It seems to be planned as a direct counter to China's **Belt and Road Initiative (BRI)**.
- It **would not offer** public funds or loans for projects, unlike BRI. India has not joined China's BRI.

About BRI (2013):

- It is an ambitious project that focuses on connectivity and cooperation among multiple countries spread across the continents of **Asia, Africa, and Europe**.
- It involves building networks of Roadways, Railways, Maritime Ports, Power Grids, Oil and gas pipelines, and associated infrastructure projects.
- The **Silk Road Economic Belt** is land-based and is expected to connect China with Central Asia, Eastern Europe, and Western Europe.
- The **21st Century Maritime Silk Road** is sea-based and is expected to connect China's southern coast to the Mediterranean, Africa, South-East Asia, and Central Asia.

4. Ujh Multipurpose Project

Why in News?

- Recently, Ujh Multipurpose Project has planned to fast track utilization of India's rights under Indus Waters Treaty.



About Ujh Multipurpose Project:

- The project will utilize the waters of Eastern Rivers allotted to India as per the Indus Water Treaty.
- It is planned to be constructed in Kathua District of Jammu & Kashmir on the **River Ujh**. Ujh is a tributary of the **Ravi river**.

Indus Waters Treaty:

- The Treaty signed between India and Pakistan in 1960. The River basin is shared by India and Pakistan.
- The waters of rivers, Ravi, Sutlej and Beas (Eastern Rivers) shall be available for the **unrestricted** use of India.
- Whereas the water of Indus, Jhelum and Chenab (Western rivers) were allocated to Pakistan.
- It gives India, the right to generate hydroelectricity through **run of the river** (RoR) projects on the Western Rivers which, subject to specific criteria for design and operation is Unrestricted.
- India is also allowed to use **20%** of water from western rivers for irrigation, power Generation and Transport Purposes.
- The uniqueness of the treaty is involving a third party since it was brokered by the **World Bank**.
- **Permanent Indus Commission:** It was set up as a bilateral commission to implement and manage the Treaty. It solves disputes arising over water sharing.