

1. E20 Fuel

Topic: Economy



In News: Bengaluru is among the 15 cities across India that will get E20 fuel through outlets run by Indian Oil Corporation in the first phase.

More on the Topic

- E20 fuel is a 20 percent blend of ethanol and 80 percent of fossil-based fuel.
- Ethanol is a biofuel and a common by-product of biomass left by agricultural feedstock such as corn, sugarcane, hemp, potato, etc.
- It is produced mainly from molasses, a byproduct of sugar manufacture.
- Ethanol is basically alcohol of 99%-plus purity, which can be used for blending with petrol.

Government's Efforts towards E20 Fuel:

- The Government aims to achieve a complete **20% blending of ethanol by 2025**, and HPCL and other oil marketing companies are setting up **2G-3G ethanol plants that will facilitate the progress.**
- Ethanol Blending programme has been a key focus areas of the Government to achieve Aatmanirbharta in the field of energy.
- Due to the sustained efforts of the Government, **Ethanol production capacity has seen a six times increase since 2013-14.**

- **It has increased India's energy security** and also resulted in a host of other benefits including reduction of 318 Lakh Metric Tonnes of CO2 emissions and foreign exchange savings of around Rs 54,000 crore.
- **The National Policy on Bio-fuels** has set a target of 20% blending of biofuels, both for bio-diesel and bio-ethanol.
- Union Budget 2022-23 announced **an additional differential excise duty** on unblended fuel.

Significance of E20 Fuel:

- It will help in reducing emissions of carbon dioxide, hydrocarbons, etc.
- It will help **reduce the oil import bill**, thereby saving foreign exchange and boosting energy security.
- It would extend support to the agricultural sector as well as provide additional income to farmers.

Source: Indian Express

2. 30 years of Indo Russian Friendship Treaty

Topic: International Relations



In News: The 'Treaty of Peace, Friendship and Cooperation Between the Government of India and the Government of Union of Soviet Socialist Republics' was signed fifty years ago on August 9, 1971.

More on the Topic:

- 1971 agreement expired because one of the signatories – USSR- had ceased to exist (dissolved in 1991).
- **Highlights of Indo Russian Relations:**
- Since the signing of the "Declaration on the India-Russia Strategic Partnership" in October 2000 (during the visit of President Vladimir Putin to India) India-Russia ties have acquired a qualitatively new character with enhanced levels of cooperation taking place



in almost all areas of the bilateral relationship including political, security, trade and economy, defense, science and technology and culture.

Political Relations:

- The two Governments have also established two Inter-Governmental Commissions - one on Trade, Economic, Scientific, Technological and Cultural Cooperation, co-chaired by the External Affairs Minister and the Russian Deputy Prime Minister and another on Military Technical Cooperation co-chaired by the two Defence Ministers, both of which meet annually.
- Commercial relations:
- Bilateral trade has been growing steadily. It was \$13.2 billion in FY 2021-22.

Technology, Military and Defence Relations:

- Russia and India are cooperating on projects such as the Moon mission Chandrayan 2, and the Human Space Flight Project. On 20th April 2011, the jointly developed Indian-Russian Student Satellite “**Youthsat**”.
- Russia has been a long standing partner of India in **nuclear energy and recognizes India as a country with advanced nuclear technology** and an impeccable non-proliferation record.
- **The BrahMos missile system** is an example of this type of cooperation.
- Joint development of the **Fifth Generation Fighter Aircraft and the Multi Transport Aircraft**, as well as the licensed production in India of **SU-30 aircraft and T-90 tanks**, are other examples of flagship cooperation programs presently underway in this area.

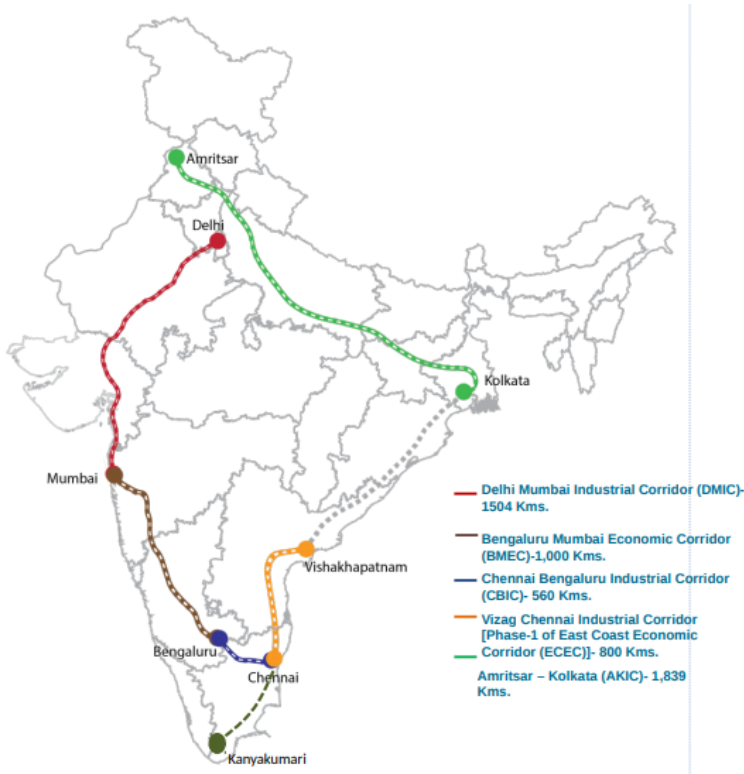
Multilateral Cooperation:

- Russia supports India’s bid for a permanent seat in UNSC.
- Active engagement at International/Multilateral Organizations and connectivity projects such as BRICS, SCO, INSTC (International North-South Transport Corridor) etc

Source: Hindu

3. Industrial corridor Project

Topic: Economy



In News: Prime Minister Narendra Modi laid the foundation stone of South India’s 1st Industrial Corridor Project to be implemented at Tumakuru which has been planned with holistic and integrated approach in line with the principles of PM-GatiShakti.

More on the Topic:

- It aims to address the issue of last mile multi-modal connectivity to the economic zone and is spread over 8500 Acre of land under the Chennai Bengaluru Industrial Corridor.
- The Government of India, through **the National Industrial Corridor Development and Implementation Trust (NICDIT)**, and the Government of Karnataka, through the **Karnataka Industrial Area Development Board (KIADB)**, have taken up the development of the Industrial Township at Vasanthanarsapura, spread across 8500 acres in three phases in Tumakuru district through the project **Special Purpose Vehicle (SPV)**.

Significance of the Project:

- The Multi Modal connectivity ecosystem **will ensure a seamless movement of raw material and finished goods.**

- The project will be a mixed-use development comprising of land uses like industrial, institutional, residential, commercial, green spaces etc. **making it a completely self-sustainable and resilient smart industrial city.**
- It will **facilitate investments, foster innovation, enhance skills development and build finest manufacturing ecosystem** for pitching India as a global investment destination.
- Target sectors are Food Products, Textile and Apparels, Electronics, Auto & Auto Components, Pharmaceuticals, Chemicals, Engineering, General Manufacturing etc.

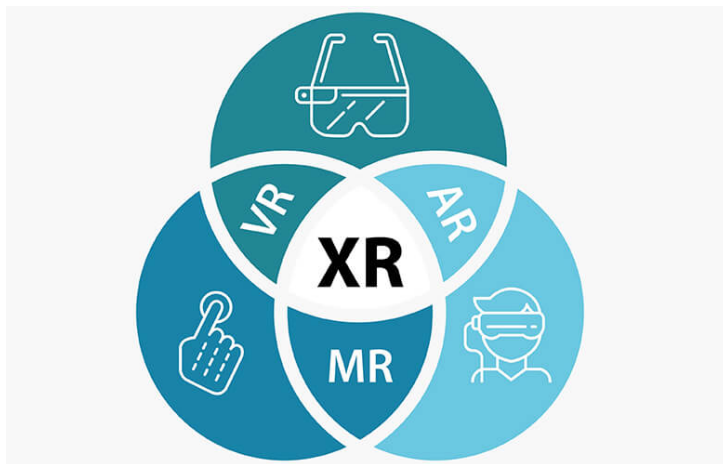
Need for Industrial Corridors?

- Industrial Corridors **will facilitate development of a well- planned and resource-efficient industrial base** served by world-class sustainable connectivity infrastructure.
- It will bring significant benefits in terms of innovation, manufacturing, job creation and resource security to the identified areas.
- The Industrial Corridors are likely **to lower the cost of logistics thereby increasing the efficiency of industrial production structure.**
- Such an efficiency **lowers the cost of production** which makes the Indian made products more competitive in international markets. It is favourable for export promotion.
- Development of Industrial Corridors **would attract investments for the development of Industries** which is likely to create more jobs in the market.

Source: PIB

4. Extended reality (XR)

Topic: Science and Technology



In News: An MoU was signed between ISRO and IIT Madras to collaborate on application of XR and other technologies in Indian Human Spaceflight Program (IHSP).

More on the Topic:

- Extended reality (XR) is a **catch-all term for describe immersive, computer-generated experiences.**

- It includes **virtual reality (VR)**, which is when you strap on a headset and are transported into a digital world; **augmented reality (AR)**, which is when computer-generated images are overlaid onto the real world; and **mixed reality (MR)**, which is when digital objects are placed into the real world in such a way that they interact with their environment.
- With VR, you can visit new places or revisit ones that you know well without ever leaving your home.
- You can explore an underwater world or take a trip to Mars. You can even become your favorite character in a video game.
- **AR and MR offer similar opportunities for exploration and discovery, but with the added benefit of being able to see and interact with the real world around you at the same time.**

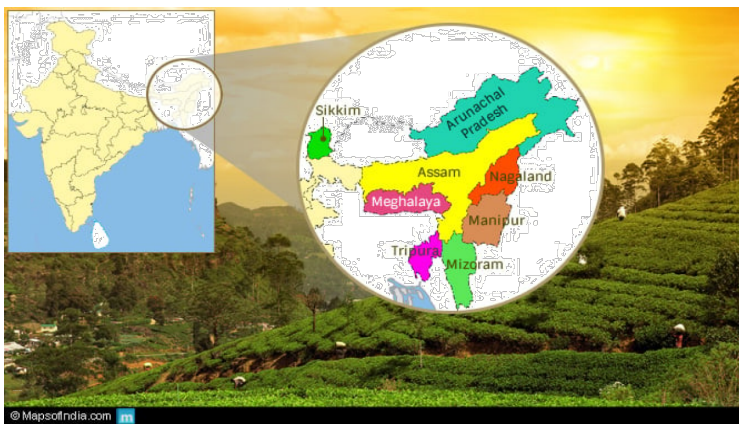
Application of XR:

- XR has the potential to revolutionise **the way we learn, work, play, and socialize.**
- It can be used for **training simulations, educational experiences, entertainment, and more.**
- For businesses, **XR can be used for marketing purposes, product demonstrations, customer service, and more.**
- And for individuals, **XR can provide new ways to connect with friends and family or simply escape from the everyday grind.**

Source: IE

5. The “Yuva Sangam” Registration Portal

Topic: e-Governance



In News: The “Yuva Sangam” registration portal was launched recently.

More on the Topic:

- The Yuva Sangam is an initiative to build close ties between **the youth of North East Region and rest of India under the spirit of Ek Bharat Shreshtha Bharat.**

- Yuva Sangam, the program will give an opportunity to see, know, understand India and do something for the country.
- This Wide Cultural Exchange Program will also give an opportunity to our youth to celebrate the ancient culture and natural diversity of India.
- Over the next few months, more than 20,000 students will travel across India and enhance their mutual understanding.

Source: Business Standard

6. Vivad se Vishwas Program

Topic: Government Programmes



In News: Government has introduced Vivad se Vishwas-2 to cut litigation costs, improve ease of doing business.

More on the Topic:

- This is the second version of the scheme. The first version, which was introduced in 2020, resulted in the resolution of more than 148,000 income tax cases, with recovery of about 54 percent of the amount under litigation.

About the Scheme:

- The Direct Tax 'Vivad se Vishwas' Act, 2020 was enacted on March 17, 2020, with the **objective to reduce pending income tax litigation, generate timely revenue for the government and to benefit taxpayers.**
- The scheme aims to end litigation and legacy disputes under the direct taxes category as ₹9.32 lakh crore worth of revenue is blocked in approximately 4.8 lakh appeals pending at various income tax appellate forums.



- The entities who opt for the scheme have to pay a requisite tax following which all litigation against them are closed by the tax department and penal proceedings dropped.

Source: Business Standard

7. Trade and Technology Council

Topic: International Relations



In News: India and the European Union has announced setting up of a new Trade and Technology Council (TTC).

More on the Topic:

- It is **expected to facilitate exchange of critical technologies** relating to an array of domains, including artificial intelligence, quantum computing, semiconductors and cybersecurity.
- The TTC with India is **the European Union's second such technology partnership** after the first one with the United States that was firmed up in June 2021.
- The TTC will be **co-chaired on the Indian side by the ministers for external affairs, commerce and industry, and communications, electronics and information technology.**
- Areas to be explored could be **clean energy, circular economy, waste management, plastic and litter in the ocean.**
- It will also foster cooperation between EU and Indian incubators, SMEs and start-ups.

Source: Business Standard
