



NOVEMBER, 2022



** Useful for **

CSE, ESE, PSUs, State Services Exams, SSC and Banking Exams

1st NOVEMBER, 2022

International Atomic Energy Agency (IAEA)

• **Context:** Russian officials including President Vladimir Putin have made accusations that Ukraine is preparing to use a so-called dirty bomb, an explosive laced with radioactive materials.

Key Highlights

- Experts from the United Nations' International Atomic Energy Agency (IAEA) started inspection at two sites where Russia has made unfounded claims that Ukraine is manufacturing "dirty bombs."
- Russia's U.N. ambassador Vassily Nebenzia alleged in a letter to Security Council members said that Ukraine's nuclear research facility and mining company "received direct orders from (President Volodymyr) Zelenskyy's regime to develop such a dirty bomb."
- The IAEA has said that both sites being investigated "are under IAEA safeguards and have been visited regularly by IAEA inspectors" whose mission is to detect undeclared nuclear activities, as well as materials related to the development of dirty bombs.
- Western nations have rejected the unsubstantiated claim out of hand, calling it "transparently false."
- Ukrainian authorities dismissed it as an attempt to distract attention from Moscow's own alleged plans to detonate a dirty bomb in order to justify its own escalation of hostilities.

About IAEA

- The International Atomic Energy Agency is the world's central intergovernmental forum for scientific and technical co-operation in the nuclear field.
- It works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security and the United Nations' Sustainable Development Goals.
- It came into force on 29 July 1957.

- It has headquarters in Vienna, Austria.
- It reports to both the General assembly and the Security Council.

Yotta D1: North India's First Hyper-Scale Data Center

• **Context:** Hiranandani Group has launched North India's first hyperscale data center, Yotta D1 in Uttar Pradesh, inaugurated by Chief Minister Yogi Adityanath.

Key Highlights

- North India's first hyper-scale data center Yotta D1 is built at the cost of Rs 5,000 crore and spread over an area of 3,00,000 square feet at the upcoming Data Centre Park in Greater Noida.
- Memorandums of Understanding worth Rs 39,000 crore were also signed between the Yogi Government and Hiranandani Group to be spent on projects in the next five years on the occasion.
- The data centre will increase the data storage capacity of the country, which until now stood at two percent only despite the fact that 1.5 billion mobile phones and 650 million internet users in the world are from India using 20 percent of data. Yet for storage of data, we had to look for centers abroad.

About Hyper-Scale Data Center

- A hyperscale data center is a facility which houses critical computer and network infrastructure.
- These facilities allow companies like Amazon, Google, and Microsoft to draw on their processing power to deliver key services to customers worldwide.
- According to International Data Corporation, for a data center to be hyperscale, it must exceed at least 5000 servers with around 10,000 square feet of physical space. A typical hyperscale data center can use almost the same amount of electricity as a small town.

Greenfield Electronic Manufacturing Cluster (EMC)

• **Context:** Greenfield Electronics Manufacturing Cluster (EMC) with the project cost of Rs 492.85 crores to be set up in Ranjangaon Phase III, near Pune in Maharashtra.

Key Highlights

- As part of its objective to strengthen the electronics manufacturing ecosystem in India, the Ministry of Electronics and IT has approved the greenfield Electronics Manufacturing Cluster (EMC) to be set up in Ranjangaon Phase III, near Pune in Maharashtra.
- The approval for the EMC was given to Maharashtra Industrial Development Corporation (MIDC) and the State government's State Industrial Agency.
- Making this announcement, the Minister of State for Electronics & Information Technology and Skill Development & Entrepreneurship, Rajeev Chandrasekhar also announced that the Ministry of Electronics and IT plans to give a boost to the 1000 Crore Semicon India Future Design programme to support Semiconductor Design Startups in the state.
- He informed that C-DAC, Pune shall be the nodal office for this purpose.

2nd NOVEMBER, 2022

Common Income Tax Return Form

 Context: Central Board of Direct Taxes (CBDT) has released draft Common Income Tax Return Form for public consultation.

Key Highlights:

- At present, taxpayers are required to furnish their Income-tax Returns in ITR-1 to ITR-7 depending upon the type of person and nature of income.
- Finance Ministry said that the proposed draft ITR takes a relook at the return filing system in tandem with international best practices.

- It proposes to introduce a common ITR by merging all the existing returns of income except ITR-7.
- The current ITR-1 and ITR-4 will continue and this will give an option to such taxpayers to file the return either in the existing form (ITR-1 or ITR-4), or the proposed common ITR, at their convenience.

Invest Karnataka 2022

• **Context:** PM Narendra Modi recently addressed Global Investors Meet 'Invest Karnataka 2022' virtually. He has said that with bold reforms, big infrastructure, and the best talent we are moving towards the vision of a New India.

Key Highlights:

- The prime focus of the government is to eliminate the Policy Level crisis with a rational approach. Government has freed the investors from red tapism and given them a red carpet of opportunities.
- The Prime Minister said, despite a fragmented world, India is shining as a bright spot world over due to a strong democratic framework. He said, not only reforms, but the progress of New India in the infrastructure sector is unmatchable. Mr. Modi said, instead of limiting the potential of the youth, the Government is giving them an ecosystem to further explore new opportunities.
- The Prime Minister said, Government has encouraged investments in sectors that were earlier closed to private investments such as defence, drones, space, and geo-spatial mapping. He said, last year India got a record FDI of approximately 84 billion dollars and this has been possible through the various reforms aimed at enhancing the Ease of Doing Business.
- PM Narendra Modi said, India is the destination where culture and technology both work together, from a victorious past to a vibrant present. He said, through competitive and cooperative federalism all Indian States have developed robust investment policies and manufacturing infrastructure.

3rd NOVEMBER, 2022

India's First Floating Financial Literacy Camp

• **Context:** Recently, India Post payment Bank (IPPB) conducted India's First Floating Financial Literacy Camp.

Key Highlights

- Under the initiative called 'NiveshakDidi', IPPB is conducting the camp to promote Financial Literacy 'By the women, for the women', in Srinagar, J&K.
- IPPB launched it, in collaboration with Investor Education and Protection Fund Authority (IEPFA) under the aegis of the Ministry of Corporate Affairs (MCA).
- The session covered topics ranging from banking and financial products, importance of joining the mainstream financial services offered by regulated entities & protection against various types of risks involved with investments and measures of fraud prevention.
- "NiveshakDidi" initiative is implemented based on the concept of "by the women, for the women". This concept believes that women in rural regions are more comfortable sharing their queries to other women.
- As part of this initiative, three 'NiveshakDidi' representatives from Kashmir Valley were given certificates during the recent IEPFA Conference held in Srinagar.

Performance Grading Index (PGI) 2020-21

 Context: The Department of School Education and Literacy, Ministry of Education recently released the Performance Grading Index (PGI) for States/UTs for 2020-2021.

Key Highlights

- A total of 7 States and UTs-, Kerala, Punjab, Chandigarh, Maharashtra, Gujarat, Rajasthan, and Andhra Pradesh have attained Level II (score 901-950) in 2020-21 as compared to none in 2017-18 and 4 in 2019-20.
- Gujarat, Rajasthan and Andhra Pradesh are the new entrants to the highest achieved level of any State so far.
- The report highlighted that the most significant performer in 2020-21 is Ladakh, a newly formed union territory, which attained Level 4 in 2020-21, jumping from Level 10 in 2019-20.
- It is a unique index for evidence-based comprehensive analysis of school education systems across State/UTs.
- It classified the States/UTs into ten grades viz., highest achievable Grade is Level 1, which is for State/UT scoring more than 950 points out of a total of 1000 points.
- The PGI structure comprises 70 indicators grouped into 2 categories- Outcomes, Governance Management (GM). These categories are further divided into 5 domains, viz., Learning Outcomes (LO), Access (A), Infrastructure & Facilities (IF), Equity (E) & Governance Process (GP).
- The lowest grade is Level 10 which is for scores below 551.
- The ultimate aim of PGI is to propel States & UTs towards undertaking multi-pronged interventions that will bring about the much-desired optimal education outcomes covering all dimensions.
- The PGI is expected to help States and UTs to pinpoint the gaps and accordingly prioritize areas for intervention to ensure that the school education system is robust at every level.
- The Indian Education System is one of the largest in the world with about 14.9 lakh schools, 95 lakh teachers, and nearly 26.5 crore students from varied socio-economic backgrounds.

India's First Overhauser Magnetometer

• **Context:** Indian scientists have developed an indigenous Overhauser Magnetometer, one of the most accurate magnetometers extensively used by all magnetic observatories around the world.

Key Highlights

- Overhauser Magnetometer will make way for reducing the cost of sampling and sensing experiments essential for geomagnetic sampling.
- OVH magnetometers are known for their higher accuracy, higher sensitivity, and efficient power consumption and hence find applications in all magnetic observatories worldwide as well as in international space programs. It has so far been imported for such purposes in India.
- In order to reduce dependence on imports, the Indian Institute of Geomagnetism (IIG), an autonomous research institution under DST, Government of India, has developed these magnetometers as part of its technology development program.
- A team from IIG's instrumentation division used various spectroscopic tools and theoretical simulations to understand the working of the OVH sensor.
- They further performed various control experiments, such as varying the sensor composition and examined the sensor's performance. This helped them to optimize the sensor parameters and its associated electronics, which finally led to a very efficient and stable OVH sensor.
- Experiments with the sensor installed at the Alibag Magnetic Observatory (MO) for geomagnetic sampling found that the sensor reproduced the geomagnetic diurnal variations accurately and precisely showed the signatures of various space weather events such as geomagnetic storms, sudden impulses, etc.
- The performance of this indigenously made magnetometer is at par with a commercial OVH sensor that is currently installed at the magnetic observatories of IIG.
- The sensor is currently being tested for its long-term stability.

4th NOVEMBER, 2022

CVC's Complaint Management System

• **Context:** Prime Minister Narendra Modi recently launched the new Complaint Management System portal of the Central Vigilance Commission (CVC).

Key Highlights

- PM Modi said that Vigilance Awareness Week began with the birth anniversary of Sardar Patel. The entire life of Sardar Patel was dedicated to honesty, transparency and the building of a public service system based on these values. He remarked that the campaign revolving around awareness and alertness is based on these principles.
- The Prime Minister pointed out two key reasons for corruption and hindering people's progress i.e., lack of amenities and unnecessary pressure from the government.
- The portal is envisioned to provide end-to-end information to the citizens through regular updates on the status of their complaints. He will also release a series of pictorial booklets on "Ethics and Good Practices"; Compilation of best practices on "Preventive Vigilance" and a Special issue "VIGEYE-VANI" on public procurement.

India's Unemployment Rate

 Context: The data from the Centre for Monitoring Indian Economy shows the unemployment rate in India stood at 7.77% in October compared to a fouryear low of 6.43% in September.

Key Highlights

 As per the CMIE, rural unemployment rate stood at 8.04% in October as against 5.84% in September while the urban unemployment fell to 7.21% compared to 7.7% in September. Further, the rise in the unemployment rate in October was accompanied by a small fall in the labour participation rate (LPR) from 39.3% in September to 39% in October.

Current Affairs | Week-1 01st November - 07th November

- Six out of the 25 states showed an unemployment rate in double figures. These included Haryana at 31.8 per cent, Rajasthan 30.7 per cent, Jammu and Kashmir at 22.4 per cent, Jharkhand at 16.5 per cent, Bihar at 14.5 per cent and Tripura at 10.5 per cent.
- Madhya Pradesh recorded the lowest unemployment rate at 0.9 per cent, followed by Chhattisgarh at 0.9 per cent, Odisha at 1.1 per cent and Guirat at 1.7 per cent.

Gross Enrollment Ratio (GER)

• Context: Ministry of Education has said, GER in higher secondary made significant improvement from 53.8 percent to 57.6 percent in 2021-22. This was disclosed in a report on school education of India, released by the Ministry.

Key Highlights:

- The Gross Enrollment Ratio (GER) at primary, upper primary and higher secondary levels of school education, has improved in 2021-22 as compared to last year.
- In 2021-22, total number of students enrolled in school education from primary to higher secondary stood at 25.57 crore as compared to 25.38 crore enrolment in the previous year. It registered an increase of 19.36 lakh enrolments. The enrolment of Children with Special Needs showed an improvement of 3.45 percent.
- The Ministry also said, over 95 lakh teachers are engaged in school education during 2021-22 out of which more than 51 percent are female teachers. It said, in 2021-22, the Pupil Teacher Ratio stood at 26 for primary, 19 for upper primary, 18 for secondary and 27 for higher secondary, showing an improvement since 2018-19.
- In 2021-22, over 12.29 crore girls enrolled in primary to higher secondary showing an increase of 8.19 lakh as compared to previous year.

- The report also said, the total number of schools in 2021-22 stood at 14.89 lakhs as compared to 15.09 lakhs in 2020-21.
- The decline in total schools is mainly due to closure of private and other management schools and clustering of schools by various States.

5th NOVEMBER, 2022

Central Bank Digital Currency (CBDC)

• Context: India's first Digital Rupee pilot project launched by Reserve Bank of India (RBI).

Key Highlights

- The first pilot in the Digital Rupee Wholesale segment started on November 1, 2022.
- RBI also announced that the first pilot in the Digital Rupee- Retail segment is planned for launch within a month in select locations in closed user groups comprising customers and merchants.
- The nine banks identified for participation are State • Bank of India, Bank of Baroda, Union Bank of India, HDFC Bank, ICICI Bank, Kotak Mahindra Bank, Yes Bank, IDFC First Bank and HSBC, the RBI said in a release.

About Central Bank Digital Currency (CBDC)

- A Central Bank Digital Currency (CBDC) or Digital Rupee is a digital form of currency notes issued by a central bank.
- Digital currency or rupee is an electronic form of money, that can be used in contactless transactions.
- Presenting Union Budget 2022, Finance Minister Nirmala Sitharaman announced that the Reserve Bank of India (RBI) would be rolling out its digital currency soon.
- CBDC can be classified into two types:
 - Retail (CBDC-R): Retail CBDC would be potentially available for use by all.
 - Wholesale (CBDC-W): It is designed for restricted access to select financial institutions.

Difference from cryptocurrency

- A cryptocurrency is a decentralized digital asset and a medium of exchange based on blockchain technology and do not have any intermediary like banks, financial institutions, or central authorities.
- On the Contrary, Central Bank Digital Currency (CBDC) issued by the Reserve Bank of India (RBI) will be a legal tender in a digital form.

Benefits of Digital Rupee

- Apart from reducing the transaction cost, having a digitized currency will make it easier for governments to access all transactions happening within the authorized networks thus subjecting every transaction to relevant laws within the country.
- Another benefit of digital currency digital currency is that they do not get torn, burnt or physically damaged. Neither can they be physically lost.
- Digital currency will fuel financial inclusion and bring in resiliency and efficiency to the payments space. CBDC and the central bank's Real time Gross Settlement (RTGS) will jointly augment the Delivery-Versus-Payment mechanism for secured and guaranteed payment and settlement of funds.
- CDBC interfacing with RTGS will complement the Central bank's vision of interoperability, transparency, accessibility and financial inclusivity.

Cordy Gold Nanoparticles (Cor-AuNPs)

 Context: A collaborative experiment by scientists from four Indian institutions has earned an international patent from Germany for developing Cordy Gold Nanoparticles (Cor-AuNPs), which can make drug delivery in the human body faster and surer.

Key Highlights

 These nanoparticles, derived from the synthesis of the extracts of Cordycepsmilitaris and gold salts, could make drug delivery in the human body faster and safer.

- Cordycepsmilitaris is a high value parasitic fungus.
 Gold salts are ionic chemical compounds of gold generally used in medicine.
- Wild Cordyceps mushrooms are found in the eastern Himalayan belt.
- Biosynthesisednanogold particles indicate a new application of nanoparticles in the development of therapeutic drugs which can be delivered as ointments, tablets, capsules, and in other forms.

EVs Safety Tests

 Context: The Ministry of Heavy Industries (MHI) recently announced a list of safety tests that will be mandatory for electric vehicles (EV) manufacturers from April 2023 to receive subsidies under various EV promotion schemes.

Key Highlights

- According to the government, certain tests which are done internationally will be made mandatory from April 1st, 2023.
- These tests will enhance human safety of the battery used in these vehicles by requiring checks at three levels – the battery pack, battery management system (BMS) and the cell, as per a circular from the ministry.
- The new provisions include six tests at the cell level, 10 tests at the BMS level and five tests at the battery pack level.
- This comes at a time when many have raised questions around safety standards of EVs sold in India following a spate of incidents of these vehicles spontaneously bursting into flames, leading to the loss of multiple lives.
- PLI stands for the production-linked incentives scheme announced by the governments that promotes local manufacturing of technologyintensive products through target-based payouts.

- MHI will be implementing a PLI scheme for the automotive industry as well as for advanced-chemistry cells (ACC) that find uses in electric vehicles as well as other consumer products.
- FAME II (Faster Adoption and Manufacturing of Electric and hybrid vehicles) scheme distributes subsidies to buyers of EVs to promote their adoption.

6th NOVEMBER, 2022

United Nations Office on Drugs and Crime (UNODC) Report

 Context: Recently released report by UNODC stated that the land under poppy cultivation in Afghanistan in 2021 (October and November are the sowing season) increased by 32 per cent over the previous year.

Key Highlights

- The UNODC report says the 2022 harvest of 6,200 tonnes, 10 per cent less than in 2021, could be converted into 350-380 tonnes of export-quality heroin.
- Eighty per cent of the world's opiates come from Afghanistan.
- The income of farmers from opium sales more than tripled from \$425 million in 2021 to \$1.4 billion in 2022.
- According to the report 29 per cent of the Afghan agricultural sector's total value in 2022, higher by 20 percentage points over the previous year.
- The opiate economy, including local consumption and export, was valued at 9-14% per cent of the country's GDP.
- A ban on cultivation imposed by the Taliban in April exempted the standing crop and harvest, and sent the price of opium shooting; however to what extent the ban is being enforced is not yet clear.

WEF's 'Twin Transition' Approach

• **Context:** World Economic forum recently proposed a term "twin transition".

Key Highlights

- A twin transition approach recognizes that there is a huge and largely untapped opportunity for technology and data to drive sustainability goals.
- Rather than treating digital and sustainability in isolation, a twin transition strategy combines these critical functions to unlock huge benefits in terms of efficiency and productivity.
- The twin transition can make a positive impact by 'greening' technology, data assets and infrastructures while accelerating sustainability across the organization.
- By optimizing digital assets and infrastructures to reduce environmental impact, organizations can harness the power of digital to make a positive impact on the environment.
- Digitization has a key role to play in supporting sustainable growth during this decisive decade for action on climate change. Indeed, digital solutions could reduce global emissions by 20%, according to the World Economic Forum.
- By adopting a 'twin transition' approach, leaders can bring the digital and sustainability agendas together to future-proof their organizations.

Black Sea Grain Deal

 Context: Russia, after pulling out, took a U-turn and rejoined an agreement allowing the shipment of Ukrainian grain through the Black Sea.

Key Highlights

• Russia has blamed Ukraine and Britain for the suspension of Black Sea Grain Deal.

- According to Russia, Ukraine launched a massive drone attack on the Black Sea Fleet in Sevastopol, Crimea.
- Without providing evidence, Russia also accused British troops of being involved in the attack. It also accused the UK of blowing up gas pipelines last month.
- Ukraine has denied the claims of the attack and President Volodymyr Zelensky called the Russian move "rather predictable".

About Black Sea Grain Initiative

- The deal was brokered by the United Nations (UN) and Turkey in July 2022.
- The deal was to provide for a safe maritime humanitarian corridor for Ukrainian exports (particularly for food grains) from three of its key ports, namely, Chornomorsk, Odessa and Yuzhny/ Pivdennyi in the Black Sea.
- The UN-led Initiative was aimed at stabilizing and subsequently lowering global food prices and moving precious grain from one of the world's breadbaskets to the tables of those in need.
- Ukraine is among the largest exporters of wheat, maize, rapeseed, sunflower seeds and sunflower oil, globally.
- The first vessel left Ukraine's port of Odessa on August 1 carrying more than 26,000 metric tons of corn.
- Since Russia and Ukraine signed the Initiative in Turkey, more than 9 million tonnes of corn, wheat, sunflower products, barley, rapeseed and soya have been exported.
- Joint Coordination Centre (JCC):
 - The deal put in place a Joint Coordination Centre (JCC), comprising senior representatives from Russia, Turkey, Ukraine and the UN for oversight and coordination.

 All commercial ships are required to register directly with the JCC to ensure appropriate monitoring, inspection and safe passage.

7th NOVEMBER, 2022

COP-27

• **Context:** The United Nations Climate Change Conference (COP27) opened at Sharm el-Sheikh, Egypt, with the key aim of ensuring full implementation of the Paris Agreement.

Key Highlights:

- COP27 begin near the end of a year that has seen devastating floods and unprecedented heat waves, severe droughts and formidable storms, all unequivocal signs of the unfolding climate emergency. At the same time, millions of people throughout the world are confronting the impacts of simultaneous crises in energy, food, water and cost of living, aggravated by severe geopolitical conflicts and tensions.
- COP27 is also taking place against the backdrop of inadequate ambition to curb greenhouse gas emissions. According to the UN's Intergovernmental Panel on Climate Change, CO2 emissions need to be cut 45% by 2030, compared to 2010 levels to meet the central Paris Agreement goal of limiting temperature rise to 1.5 degrees Celsius by the end of this century. This is crucial to avoid the worst impacts of climate change, including more frequent and severe droughts, heatwaves and rainfall.
- A report published by UN Climate Change ahead of COP27 shows that whilst countries are bending the curve of global greenhouse gas emissions downward, efforts remain insufficient to limit global temperature rise to 1.5 degrees Celsius by the end of the century. Since COP26 in Glasgow, only 29 out of 194 countries came forward with tightened national plans.

Sugar Export Rules

• **Context:** The government has allowed the export of sugar up to 60 Lakh Metric Tonnes during the sugar season 2022-23.

Key Highlights:

- The measure is aimed at balancing the price stability of sugar in the country and the financial positions of sugar mills.
- The Centre has prioritized the availability of about 275 LMT of sugar for domestic consumption, about 50 LMT of sugar for diversion to ethanol production, and to have a closing balance of about 60 LMT of sugar as on September this year. In a statement, the Commerce and Industry Ministry said the balance quantity of sugar will be allowed for exports.
- The government has also asked sugar mills to export speedily to make early payments to farmers. In the sugar export policy for sugar season 2022-23, it has announced sugar mill wise export quota for all sugar mills in the country.
- Further, to expedite the sugar exports and to ensure flexibility to sugar mills in the execution of the export quota, mills may decide to surrender the quota partially or fully within 60 days of the date of issue of the order or they can swap the export quota with the domestic quota within 60 days.
- The sugar export policy is an indication of the focus of the government on ensuring price stability in the sugar sector in the interest of domestic consumers. By restricting sugar exports, domestic prices will remain under control and no major inflationary trends will arise in the domestic market.

