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Evaluation of India-UK Bilateral Relationship Amid Challenges Faced by **Rishi Sunak**

India Focusing Towards
Gender Justice.

Expectations from the
COP-27 Conference and
India's Vision for the
Survival of Earth.

Lack of Better Monitoring
and Accountability in
India's Critical Infrastructure.

Police Reforms in India.

Permission to use
GM Mustard: Possibilities
and Challenges

In the Era of Jobless Growth,
Rising Inflation Possess a
Challenge to the Livelihood
of Common Man

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8. Perfect-7 Magazine contains prelims and mains exam focused mock questions through which students can make their preparation more precise.

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Message



Vinay Kumar Singh

Founder
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Current Affairs has an important role in the examinations conducted by Union Public Service Commission and State Public Service Commissions. It is necessary for the candidate to have knowledge of relevant information on issues of national and international importance. Perfect 7 Magazine is being presented fortnightly to the students to fulfill this requirement. Preparation of civil services exam is only completed when candidates have holistic knowledge and analysis of the dynamic nature of the current affairs. 'Perfect7' keeps this vision and approach and understands the multidimensional need of students at the content level, so this magazine has presented the current affairs with relevant issues of general studies. Keeping in mind the needs of mains exam, current articles on 7 burning issues, Ethics Case Studies, Biographies of important personalities, coverage of most useful topics of various sections of General Studies and the most important current affairs issues are being covered for Preliminary Examination in which emphasis is being given on national, international, environment, ecology, art and culture, science and technology, economic issues.

Brain boosters with 7 themes based graphics are being presented in a concise form to enhance the conceptual understanding of the students. Apart from this, updated information on Global Initiatives, Global Institutions, Structure of Organizations, Functioning, Important Reports, and Indices will be included in this magazine, which is asked prominently in the Civil Services Examination. To give emphasis on facts and analysis, keeping in view the trends of new nature of questions in Preliminary and Main Examination of Civil Services, an inclusive magazine is being provided to the students so that they can give the right direction to their preparation by understanding the new requirements of Civil Services Examination. Columns have been included in the format of the magazine keeping in mind the factual needs of the candidates, mental development, developing writing technique etc. Along with this, we have been introducing new segments according to the changing needs of the candidates and these initiatives will continue in future also. Hope this issue will prove useful for all of you. Your suggestions are always welcome.

Best wishes.

Social Issues

India Focusing Towards Gender Justice

Context:

The Board of Control for Cricket in India (BCCI), recently took a historical step towards Gender Justice in India. It announced its equal pay policy for Indian women cricketers, saying that from now on its centrally sponsored women and men cricket players would get equal match fees.

Introduction:

- Earlier female cricketers used to earn Rs 4 lakhs for test matches and Rs 1 lakhs for ODIs and T20 matches. As per the new 'pay equity policy' of BCCI, women cricket players will now get Rs 15 lakhs for test matches, Rs 6 lakhs for ODI, and Rs 3 lakhs for T20I.
- Although, this change is limited to match-wise fees only and there will be no change in the retainership payment system, which is another mode of payment in cricket. Here women cricketers are paid annually, apart from the match fees, depending upon the grade to which they belong.
- This annual payment for female cricketers is Rs 50 lakhs for Grade A cricketers, Rs 30 lakhs for Grade B cricketers, and Rs 10 lakhs for Grade C cricketers. While on the other hand, male players get paid between Rs 1 crore to Rs 7 crore, depending on the Grade they belong. The Grade for them starts with A plus.
- India, however, is not the first nation that has implemented such initiatives in favour of female cricketers. Countries like New Zealand, Australia, and the United States had made several initiatives, as well, toward achieving gender parity in sports. Also, In India, the Table Tennis Federation of India had announced equal prize money for all men and women players in all the national zonal tournaments, including the national championship across all age groups.

Historical perspective concerning gender parity:

- Women have undertaken a long journey from being equivalent to men in the society, to being in the repressive and depressed state in the medieval times and fighting to be at equivalent position in the society, in the modern and the current world.
- In the earlier Vedic period, the condition of women was good. There are evidences of them participating in

Sabha and Samiti, with several political, educational, and social rights. The decline in women's condition can be seen, with the development of factors like polygamy, etc. The women here are compared with alcohol and dice.

- Further, the introduction of varna system made supremacy of certain varna men more than others which added on to the deterioration of women's condition in society. As dowry became an institution during Gupta Period, the status of women was effected immensely.
- Medieval period marked the advent of evil practices in the society. Child marriage, the sati system, and the parda system were created in order to safeguard children from the atrocities committed by Foreign invaders. Women had limited options. They were only permitted to wander in the public under the assistance of male members, and were enclosed to the kitchens. This worsened as untouchability spread throughout society.
- This began to change, however, as the social reformers during the British rule, like Raja Ram Mohan Roy, Ishwar Chandra Vidyasagar, Jyothiba Phule, etc. began agitating for the emancipation of women. Sati was abolished thanks to Raja Ram Mohan Roy's efforts. Further, the Widow Remarriage Act was passed due to the efforts of Vidyasagar. Later on, Mahatma Gandhi, Nehru fought for the rights of women. The status of women in social, economic, and political life started to improve in the society as a result of the active efforts by many reformers which included women, too.

The Issues faced by women in the current world:

- Gender is a social construct. It is not biological, rather a construct created by the society that imposes particular roles and duties that are specific to certain sex. Gradually developed, these roles often restrict the development of a human being, whether male or a female. They however have affected the development of women more specifically. Although, there have been various efforts to consolidate the position of women in the society, there are still major issues that remains, like:

1. The literacy gap between male and female:

- India has a literacy rate of 84.7% for men and

70.3% for women. Male and female literacy rates continue to differ significantly. The number of girls quitting school has increased especially during the pandemic due to several economical and social reasons. Further, there is gap in primary schooling and secondary education.

2. Stereotyping and moral policing:

- The recent case of Mahsa Amini, where a 22 year old girl of Iran was beaten to death by the morality police for not wearing her hijab properly is not something new that the world has witnessed. Several rules have been imposed on women for their conduct, behaviour and dressing sense.
- Further, women are often stereotyped because of their morphology and anatomy. They are often considered a less stronger gender that is suited for certain roles only.

3. Representation:

- Whether it is social, political, or cultural representation, the women representation in all of them still sticks out like a sore thumb. For instance, women entered sports much later than men due to societal structure and are considered of less entertainment value than men.
- Similarly, in legislation too, the representation of women is comparatively less. India ranks 148 out of 193 nations in terms of the proportion of elected female parliamentarians, as per the reports of Inter-Parliamentary Union (IPU) and UN Women.

4. Safety concerns:

- Despite ongoing efforts in the area of safety, women in India continue to face threats due to variety of actions, including feticides, domestic violence, rape, trafficking, forced prostitution, honour killings, sexual harassment at the workplace, etc.

Initiatives for consolidation of women's position:

Internationally:

- On July 2, 2010, the UN General Assembly created a single UN organisation with the mission of expediting the realisation of gender equality and women's empowerment.
- The new UN Entity for Gender Equality and the Empowerment of Women, or UN Women was created by merging UN Development Fund for Women (UNIFEM), the Division for the Advancement of

Women (DAW), the Office of the Special Adviser on Gender Issues, and the UN International Research and Training Institute for the Advancement of Women.

- **Sustainable Development Goals:** Women play a significant role in SDGs with several targets specifically recognizing women's equality and empowerment as both the objective, and as part of the solution.
- Goal 5, to Achieve gender equality and empower all women and girls" is known as the stand-alone gender goal apart from other goals.
- **The Global Gender Gap Report:** This report by World Economic Forum (WEF), ranks countries on the basis of their performance in four key dimensions namely, economic participation and opportunity, Educational attainment, Health and Survival, and political empowerment.

Initiatives by India:

- **Gender budgeting:** Originally adopted in Australia in the mid 1980s, and India included it in its budget since 2005–2006. It is not an accounting exercise, but continuous process of keeping a gender perspective when formulating policies and programmes; ensuring that they are implemented.
- **Beti Bachao Beti Padhao (BBBP):** It ensures the protection, survival and education of the girl child.
- **Mahila Shakti Kendra (MSK):** It aims to empower rural women with opportunities for skill development and employment.
- **Pradhan Mantri Kaushal Vikas Yojana (PMKVY):** A scheme that aims to enable a large number of Indian youth including women to take up industry-relevant skill training in securing a better livelihood.
- **Female Entrepreneurship:** To promote female entrepreneurship, programmes like Stand-Up India and Mahila e-Haat (online marketing platform to support women entrepreneurs/ SHGs/NGOs), Entrepreneurship and Skill Development Programme (ESSDP) had been taken up. Pradhan Mantri Mudra Yojana (PMMY) provides access to institutional finance to micro/small business.
- **Rashtriya Mahila Kosh (RMK):** An apex micro-finance organization that provides micro-credit at concessional terms to poor women for various livelihood and income generating activities.
- **Political Participation:** The government has

reserved 33% of the seats in Panchayati Raj Institutions for women to encourage their mainstream participation of political leadership at the grass root level. Capacity Building of Panchayat Stakeholders including Elected Women Representatives (EWRs) of Ministry of Panchayati Raj is conducted with a view to empower women to participate effectively in the governance processes.

- Article 42: Special provision for women at work place.
- Article 51A(e): Renunciation of practices derogatory to women

Conclusion:

Gender discrimination is an issue that was prevalent in the world since the time immemorial. It finds its roots in the development of a patriarchal society where the father was the head of the family with unlimited rights and many other factors that came gradually. However, now that world is more aware of the significance of gender parity, the need to ensure gender equality should not be restricted to mere government policies and initiatives. It should be instilled in the mind-set of every individual, so that everyone could contribute their part in creating a safe haven for women and girls so that they can thrive, survive, and grow to their best potential.

Some constitutional provisions in India that strive for gender justice:

- Article 14: Equality before law
- Article 15(1): No discrimination by the state on the grounds only of religion, race, caste, sex, place of birth, or any of them.
- Article 15(3): Special provisions for women and children.
- Article 16: Equality in the matters of employment
- Article 39(a): Securing adequate means of livelihood for men and women equally
- Article 39(d): Equal pay for equal work



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International

Evaluation of India-UK Bilateral Relationship Amid Challenges Faced by Rishi Sunak

Indian-origin and British Conservative Party leader Rishi Sunak has become the Prime Minister of Britain, and there is a special enthusiasm and sense of achievement among the Indian diaspora, including India. But at the same time, people also want to know whether Britain, which is facing a major economic crisis, energy inflation, the after-effects of the Russia-Ukraine war, and the Covid pandemic, will strengthen bilateral relations with countries like India with a new zeal? Whether the proposed Free Trade Agreement between India and Britain will become a reality under the leadership of Prime Minister Rishi Sunak, and whether Britain will consider concerns related to India's commercial interests or not? There are several questions from which the credibility of India-UK relations will be seen during the tenure of Rishi Sunak. What will be the immigration policy of Britain for expatriate citizens, especially for the Indian diaspora, this will further assess whether Britain will go ahead with the economic protectionist policy or will work on the principle of mutual benefit. Given the way Britain is surrounded with problems, it can be clearly said that the new leadership of Britain will work prioritising the British national and economic interests. It would be appropriate to mention here the current challenges of Britain, especially the economic challenges.

- **The UK's current challenges are:** Rising inflation in Britain: Inflation reached a 40-year high during the tenure of former British Prime Ministers Boris Johnson and Liz Truss. This has led to a steady increase in the cost of living, so the cost of living has increased in Britain. Britain's retail inflation rate stood at 10.1 percent in September. It was at 9.9 percent in August but then Prime Minister Liz Truss failed to contain inflation. The new Prime Minister Rishi Sunak has a big challenge to reduce inflation and reduce the cost of living for the common man.
- **Rising interest rate:** The UK's central bank - the Bank of England - has the option of announcing a steep hike in interest rates to control inflation that has reached a 40-year high. But this will increase the burden on borrowers, including home buyers.
- **Britain's GDP growth is estimated to decrease:** Britain's GDP growth has been estimated at 3.3 percent for 2022, 0.2 percent for 2023, and 1 percent for 2024. It may increase or decrease over time. As per estimates, inflation in the UK could reach 13 per

cent in 2022. The value of the British pound has also reached almost equal to the dollar.

- **The slowdown in the Manufacturing and Services Sectors:** The UK economy is going through a slowdown. The S&P Global Composite Purchasing Managers Index fell to 47.2, the lowest level since March 2021. Former Prime Minister Liz Truss's decision to cut taxes not only affected the pound in the bond market and there was an increase in interest rates, too. Manufacturing PMI also declined to 45.8 from 48.4, the lowest level since June 2020. Further, the services PMI has come down from 50 to 47.5. If the PMI is less than 50, it indicates contraction, while a figure above 50 indicates growth. Manufacturers have seen a sharp drop in new orders and all this indicates that the current slowdown in the UK economy will not go anytime soon.

Apart from the reasons aforementioned, Britain is also grappling with economic problems arising from the Corona pandemic, the Russia-Ukraine war, and Brexit in 2020. The new Prime Minister Rishi Sunak will have to find a solution to all these economic problems.

Background of India-UK bilateral relations:

After 2000, Britain decided to strengthen relations with India realizing its (India) importance in the global economy and politics. In 2004, the two countries became strategic partners and they also signed the Strategic Partnership Agreement. In 2010, the two countries enhanced their ties to the status of Enhanced Strategic Partnership. Since 2014, the two countries have talked about an emphasis on cyber security, counter-terrorism, and maritime security. They also signed a Memorandum of Understanding on Ease of Doing Business and Intellectual Property Rights.

Trade and Economic Relations between India and Britain:

- The UK has been an important and active member of organizations like the European Union, the G-20, and the G-7, APEC. From this perspective, it has been deemed necessary for India's economic and strategic interests. At present (2022) bilateral trade in goods and services between India and the UK is worth \$31.34 billion. Bilateral trade between the two countries is growing at an annual rate of more than 17 percent. Trade between the two countries stood at

\$15 billion in 2016-2017, which doubled in 2022. It is noteworthy that among the G20 member countries, UK's investment in India has been the highest. India was the third largest investor in the UK in 2016-17 and India was second in international job creation in the UK market.

- A free trade agreement is to be concluded between India and Britain as well and it is believed that Britain will conclude a free trade agreement with India after Britain exited the European Union. There are discussions regarding increasing the annual bilateral trade of the two countries to 100 billion through a free trade agreement. India is already the UK's 11th largest export market outside the European Union and accounts for £7.5 billion of current investments in the UK. The UK ranks 15th among India's 25 largest trading partners.
- India and the UK decided to set up 3 new bilateral business working groups in the year 2019 which will be run in association with the UK India Business Council, Confederation of Indian Industry, and FICCI. The main objective of these working groups is to tackle the barriers to trade in specific areas of the food and beverage sector, health care, and data services. These working groups will also play an important role in tackling the barriers to the business of life sciences and digital services. Both nations have emphasized the need to identify and resolve non-tariff barriers to mutual trade through the Joint Economic and Trade Committee meeting.

New areas of cooperation between India and Britain:

- The two nations have signed a memorandum of understanding for the development of clean energy. Further, they announced the creation of the India-UK Clean Energy Research and Development Center in 2016 with a special emphasis on the development of solar energy. Both countries have decided to work collectively to promote renewable energy. The UK has become a part of the International Solar Alliance led by India. India and the UK have also launched the Global Green Grid. Along with this, an agreement has also been made for the development of green hydrogen.
- Bilateral cooperation in the field of science and technology is the fastest-growing area of cooperation between India and UK. Apart from research and development in clean energy, a Joint Strategic Group

for Research on Antimicrobial Resistance has been formed, where a joint investment of £13 million has been proposed.

- The UK has also agreed to support India's Skill India mission through the financial assistance of £12 million. It has been supporting India's infrastructural development at financial and other levels.
- Both countries have also tried to strengthen educational ties through Newton Bhabha Fund and Scholarship Scheme.
- Britain has also expressed its intention to cooperate and support in cooperating for India's Smart City Mission. It has proposed to provide financial support to develop Kerala's Kochi as a smart city.
- A civil nuclear cooperation agreement has also been signed between India and Britain. The UK supports India's bid for membership in the Nuclear Suppliers Group. Both nations have also mutually agreed on the peaceful use of outer space. Apart from this, both the countries have made a common view on cyber security, and WTO, reforms in the United Nations, support for India's claim for permanent membership in the Security Council. They have raised a collective voice to promote peace and stability in troubled areas like Afghanistan, Syria, Yemen.

Cooperation in defence and counter terrorism between India and Britain:

- Both India and Britain have suffered the effects of terrorism. Both nation constituted a Joint Working Group on Combating Terrorism in 2002. As both countries have been victims of terrorism, they have developed a commitment to combat terrorism at a collective level. While London witnessed terrorist attacks in 2005, there were terrorist attacks at Mumbai in 2008. Consequently, both the countries talked about tackling global terrorism. Following this, the two countries jointly blamed Lashkar-e-Taiba for the Mumbai terror attacks and the Haqqani network for the 2008 suicide attacks on the Indian embassy in Kabul, for the first time in 2015.
- The two countries have also mutually agreed to take effective steps towards curbing the terror financing. In the Commonwealth Summit in the year 2018, the Indian Prime Minister has talked about cooperating with Britain in the action against terrorist organizations. The thirteenth meeting of the India-UK Joint Working Group on Counter-Terrorism was held in London in November 2019 and the two nations

talked about tackling terrorism in all its forms at the collective level, and recognised a common need to deal with radicalism and extremism. They have also expressed their commitment to effectively work towards inhibiting the internet usage by terrorists.

- In May 2019, Britain, along with the US and France, made a resolution in the United Nations to declare Pakistani terrorist organization Jaish-e-Mohammed as a global terrorist organization and Masood Azhar as a global terrorist. Apart from this, India and the UK are members of the Financial Action Task Force and in January 2018, Britain, along with the US, Germany and France, made a proposal to include Pakistan in the grey list of the Financial Action Task Force so that terror financing can be dealt with in a meaningful way. Apart from this, India and Britain have participated in the 'No Money for Terror' ministerial conference, too. Its third ministerial conference is being organized by India for the first time in 2022. India has also tried to take Britain into confidence to deal with the growing radicalism and Khalistan-oriented extremism in the British Sikh community. Britain has also sought cooperation from India for its homeland security.
- In the year 2015, both the countries signed an agreement for cooperation in the areas of strategic importance to give impetus to the defence relationship. Defence Consultative Group meetings between the two countries are organized annually at the level of the Defence Secretary. Under this,

special attention is given to defence intelligence. Some important joint military exercises between the two countries are also strengthening the defence ties. Invincible Warrior Exercises, Konkan (between the Indian Navy and British Navy), and Indradhanush (between the Air Force) Exercises are conducted between the two nations.

India UK and the Indian Pacific Region Security:

- Britain was seen in support of a free and open Indo-Pacific region, recently. It has shown interest in strengthening its ocean ties with the Quad Group, that formed to protect the Indo-Pacific region. Britain has strong ties with the US, India, Australia, while Britain has a strategic partnership with Japan. UK, while assessing its naval power, is finding it beneficial to join the Quad. Nevertheless, the Britain is part of China's One Belt One Road initiative. Among the four members of the Quad Group, except India, USA and Japan, only Australia has shown interest in the OBOR of China. Perhaps this is the reason why it took show long for making Australia a part of the Malabar joint exercise.
- The Western Indian Ocean is considered an essential area for the interests of both the Indian and British navies. The Joint Statement on a Free and Open Indo-Pacific Region was issued by the Prime Ministers of India and the UK in April 2018, which also reflects the UK's commitment towards Maritime Domain Awareness.



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6 **Environment** Expectations from the CoP 27 Conference and India's Vision for the Survival of Earth

The attitudes and actions of developed and developing countries on climate change and their efforts to combat global warming have shown how sensitive countries around the world are to climate management. The irony, however, is that even though the developed and developing countries are aware that the natural disasters caused by climate change and global warming will destroy the life of the individual, the economy of the nations, and the pace of development, still the nations are not able to make consensus as to when, how and to what level they will tackle climate change and global warming. Now that the CoP-27 has started from November 6 in Sharm el-Sheikh in Egypt, where environmentalists and countries from all over the world started a dialogue on the remaining hopes of the earth, it is natural to raise a question that, since the first CoP summit held in 1995 to the organization of CoP-27 conference of 2022, what we got from the environmental policy makers around the world.

In the CoP-27 being held in Egypt, India has started asking developed countries that whether they have any blueprint to give the necessary green finance and green technology to deal with climate change and global warming. At the CoP-21 held in Paris in 2015, the countries decided to create a Green Climate Fund with an amount of \$100 billion, through which financial assistance would be given to enable developing countries to meet the challenges of climate change. At the same time, it was considered necessary that technology should also be transferred to the developing countries, and small island countries as they do not have major technologies that will aid them to deal with major natural disasters and with the effect of rising sea level. Although, a long debate over this has taken place in many CoP summits, but no special results were drawn from it. The development craze compelled the earth to make several sacrifices and led the earth on the path of destruction. It remains to be seen whether the CoP-27, which is being held in Sharm el-Sheikh from November 7 to 18, leaves any morality for the nations who have written scripts for environmental destruction.

Mountains around the world are cracking today, earthquakes and landslides threaten mountain ecosystems, and people are afraid to go to the mountains. Earthquakes and volcanic eruptions are creating new troubles in the countries around the Pacific Ocean (also

known as the Pacific Ring of Fire). Fossil fuels continue to burn while several countries feel that the renewable energy development programs by a handful of countries will save the planet and they do not have to take any responsibility. A similar thing happened in 2013 when it was agreed to set up an International Loss and Damage Mechanism (Warsaw Fund) to help small island countries deal with climate change, but so far no satisfactory level of capital has been invested.

Expectations from CoP-27:

- One of the most pressing issues of CoP-27 today is the development of a robust strategy to address the negative impact of climate change on agriculture and food systems. The whole world today is grappling with food insecurity and starvation. In such a situation, research work for the development of climate-resilient crops needs to be started at the level of a global partnership and in this regard, bilateral agreements of two countries can prove to be part of a big solution.
- Second, as the challenges of climate change and global warming have induced increased migration, displacement and climate refugees today, a concrete strategy for it at the global level has become the need of the hour. Indonesia was forced to shift its capital to another safe place due to rising sea levels. Many countries of the world have resorted to artificial rain systems due to climate imbalance.
- Third, the world has to come forward to deal with the negative impact of climate change on marine biodiversity because there is a strong emphasis on the development of the ocean economy and blue economy today and the existence of the earth is unimaginable without maintaining the sustainability of the ocean. The way marine pollution and the amount of plastic in the ocean is increasing, concerns about marine pollution is natural. This has also been expressed recently in the Living Planet report. The countries of the world will have to work on the Crisis Management Plan to prevent over-exploitation of marine resources, and policies regarding marine ships for regulating their transportation of oil and to reduce the incidents of oil spills in the sea.
- Along with this, today there is a need to work on a global regulation strategy to curb the emissions

of the transport sector. For this it is necessary to promote the rational use of electric vehicles with renewables. Merely making treaties and conventions and non-implementation of their provisions puts up the question mark on the very credibility of the system. Therefore, today there is a need for sincere efforts.

Strong Side and Vision of India in CoP-27:

- India's stand and point of view has been made clear by the Environment Minister of India with the commencement of the CoP-27 event. In the conference, India has emphasised that India is not part of the problem, but part of the solution. In the context of India's global environmental leadership, the Indian Environment Minister has said in the conference that Prime Minister of India, Narendra Modi has presented a simple solution to the complex problem of climate change. In this, the LiFE Mission, strategy to promote renewable energy, the activism of the International Solar Alliance are prominent. Along with this, the concept of 'Panchamrita' by the India also shows a practical way to deal with climate change.

LiFE Mission Proposed by India:

- The Prime Minister of India, Narendra Modi gave the mantra of life to the world at CoP-26 in Glasgow in 2021 and since then the mission has been widely supported by global leaders. India has also appealed in CoP-27 to take this mission forward. India has pioneered Mission LiFE as a global mass movement that harnesses the power of individual and collective action, around the world to address the climate crisis. It aims to revive the vital balance between human and nature, promoting a shift from indiscriminate and wrongful consumption to conscious consumption to protect and conserve the environment. Mission LiFE is designed for the period from 2022 to 2027 with the objective of mobilizing at least one billion Indians and other global citizens to take individual and collective action to protect and conserve the environment. The target is to make at least 80 percent of villages and urban local bodies eco-friendly across India by the year 2028.

India's concept of Panchamrita:

- The Indian Prime Minister, while addressing the CoP-26 Climate Summit, talked about 'Panchamrit'

i.e. five nectar elements to tackle the challenge of climate change. In a broader sense, this perception is also a message from India's vision of global climate justice as the environmental leader of developing nations. The essence of how India, a major emerging market economy in Asia, approaches the issue of climate change management, is illustrated in the notion of Panchamrita. The concept of Lifestyle for Environment was also given by the Indian Prime Minister Modi which is associated with the urge to develop a sustainable consumption system. At the same time, the first point of 'Panchamrit' is that India will reach its non-fossil energy capacity to 500 GW by the year 2030. Second, India will meet 50 percent of its energy needs from renewable energy by 2030. Third, India will reduce total projected carbon emissions by one billion tonnes from now to 2030. Fourth, by 2030, India will reduce the carbon intensity of its economy to less than 45 percent. Fifth and most importantly, by the year 2070, India will achieve the target of Net Zero. USA and European Union have set a target of achieving net zero by 2050 and China by 2060, India's goal of becoming a carbon-neutral country by 2070, through assessing its potential and its future energy needs, reflects its realistic thinking and judgment. The vision to play an active role in the management of natural disasters on a global scale has developed as a goal in India's foreign policy with the main objectives of sustainable development, safeguarding and helping the global economies, and to bring the developed and developing countries on a common forum to deal with the natural disasters.

- India emphasizes combating climate change by developed and developing countries following the principle of Common but Differentiated Responsibility and Respective Capability (CBDR-RC) and has been projecting it as one of the biggest vision for Global Climate Justice.

India's thinking on the concept of Climate Justice:

- Climate justice means that not every individual, community, and country is facing the negative effects of climate change equally. It is having the most devastating effect on the disadvantaged communities and poor underdeveloped countries. Several UN reports have pointed out that climate change is causing severe economic damage to third world countries, that include, socio-cultural tensions, food

insecurity, crimes, riots, labor force losses, tourism and traditions. The issue of climate change has now become an issue of socio-cultural economic justice.

- India has clearly stated at the Glasgow Summit of CoP-26, as well as at several other international forums in the past, that “it considers the principle of Common but differentiated responsibility and respective capabilities, also known as the CBDR Principle, as a crucial part of its vision for global climate justice.” This principle gives India’s foreign policy the courage to put three things on the global stage: First, the power of collectivism and its use in tackling global climate and environmental challenges. Second, legitimizing differentiated responsibilities. For instance, when it comes to reduction in greenhouse gas emissions or strong climate actions, it is not justified to have equal responsibilities for developed and developing countries. With this approach, the relevance of India’s polluter pay principle i.e. the polluter should pay himself, proves worthy. If the most emissions are made by developed

countries including China, USA, European Union countries, then giving more responsibility or accountability to the developing countries to cut emissions will not be fair at all. Third, environmental responsibilities should be based on a country’s ability to deal with climate change. Would it be appropriate to compare the ability of countries like Kiribati, Maldives, and Kenya to deal with climate change anywhere with the developed nations like USA, France, and Germany? Do these countries have the technology of Early Tsunami Warning System? Do these countries have the financial capacity to afford such technology? If not, is it okay to forcibly impose harsh climate obligations on underdeveloped, small island countries, and developing countries?

- India is working towards providing all possible help and empowering small island countries under the vision of Global Climate Justice. In this direction, the Forum for India Pacific Islands Cooperation (FIPC) organization has been formed by India itself.



NEW BATCH - FACE TO FACE

सामान्य अध्ययन

हिंदी माध्यम

मेंस बैच

1st DECEMBER
8 AM & 5:30 PM

प्रीमियम बैच

19th DECEMBER
11:30 AM

GENERAL STUDIES

English Medium

PREMIUM BATCH

19th DECEMBER | 8 AM

SP MARG, CIVIL LINES, PRAYAGRAJ

0532-2260189, 8853467068

6 Governance

Lack of Better Monitoring and Accountability in India's Critical Infrastructure

Context:

Recently more than 100 people died due to a suspension bridge collapse in Morbi, Gujarat. There have been many accidents in India over the years due to infrastructure collapse or mismanagement; This situation puts a question on the management of infrastructure and the status of governance.

Introduction:

Recently a sad incident happened in Morbi, Gujarat. More than 100 people died due to the collapse of a suspension bridge here. The bridge was built in the 19th century and it was recently reopened after six months of repairs. The main cause of the accident is believed to be the increased weight and point load during repair from capacity, possibly replacing the original wooden deck with an aluminum deck. However, the collapse of the bridge is unusual according to structural engineers. It should be noted that the bridge was owned by Morbi Municipality and was maintained and operated by a trust owned by a private company, Orewa. India has been witnessing a continuous decline in the quality of infrastructure for some time now. At present, the Government of India is striving to make a 5 trillion dollar economy; In such a situation, the degradation of infrastructure can become a big problem.

Key reasons for the infrastructure deficit in India:

At present, the Government of India is focusing a lot on infrastructure development, but there are many reasons which have hindered the development and quality of infrastructure. Their description is as follows-

- **Lack of capital:** There are several social problems like poverty, malnutrition, and illiteracy in India, and a huge amount of capital is spent on addressing these issues. The government continues to be in deficit due to which the ability of the government, to invest capital in infrastructure creation is affected.
- **Problems with the Private Sector:** It takes long to make profit in the infrastructure sector. For example, in the construction of any road, although the cost is invested immediately but recovering the capital from it takes almost 20-25 years. This profit apathy keeps the private sector away from infrastructure creation.
- **Corruption:** Corruption is often done to make more profit in infrastructure construction. Roads, railways, or bridges are constructed using inferior-quality materials which yield under overload conditions. The infrastructure builders do not pay much attention to

the factor of safety because of the profit being made.

- **Crony Capitalism:** Crony capitalism is also a major reason for the low quality of infrastructure. Bidding secrecy, and commission issues are rampant.
- **Increasing population of India:** Due to the increasing population of India, there has been huge pressure on the roads, railway tracks, bridges, etc.
- **Not taking care of environmental rules and factors of safety:** Companies are least bothered about the environmental rules with an intention to make more profit, for example, recently twin towers in Noida have been demolished due to the construction of building more than the prescribed limit. There were no adequate security arrangement for the workers.
- **Lack of accountability:** After the failure of the infrastructure created by the PPP model, the government blames the private sector and vice versa. This does not ensure accountability.

In addition, cost escalation due to the non-completion of infrastructure projects on time, and lack of real-time monitoring are the problems that affect infrastructure development and its quality in India.

Recent Initiatives Related to Infrastructure Development:

Infrastructure development is necessary for achieving the target of a US \$ 5 trillion GDP. Recently various schemes have been started for infrastructure development in India-

- PM Gati Shakti is a National Master Plan aimed at coordinated planning and execution of infrastructure projects in India to reduce logistic costs.
- This digital platform will bring together 16 Ministries and Departments of the Government of India including Railways and Roadways.
- It is a project for the development of 'composite infrastructure in the country at an estimated cost of Rs 100 lakh crore.
- Existing infrastructure schemes under various ministries including Bharatmala, Udaan Yojana, Inland Waterways, etc. will be included in this scheme.
- The master plan will also include economic areas such as pharmaceutical clusters, textile clusters, defense corridors, industrial corridors, electronic parks, fishing clusters, and agri zones.
- It will leverage technology extensively including spatial planning tools with ISRO imagery developed by BiSAG-N.

National Infrastructure Pipeline (NIP)

- The National Infrastructure Pipeline (NIP) was launched with an estimated infrastructure investment of around ₹111 lakh crore (US\$1.5 trillion) during 2020-2025 to provide world-class infrastructure across the country.
- Started with 6,835 projects, it has expanded to over 9,000 projects covering 34 infrastructure sub-sectors.
- During the fiscal year 2020 to 2025, sectors such as energy (24%), roads (19%), urban (16%), and railways (13%) accounted for nearly 70% of the estimated capital expenditure in infrastructure in India.

National Monetization Pipeline (NMP):

- The National Monetization Pipeline Plan has been developed in consultation with the infrastructure ministries based on the mandate for 'Asset Monetization' under the Union Budget 2021-22. The NMP estimates that from FY 2022 to FY 2025, there is a total monetization potential of Rs 6.0 lakh crore through core assets of the central government over four years. This amount will be spent on infrastructure construction.

How to improve the infrastructure sector in India:

Governance-level reforms:

- It is imperative to curb corruption, crony capitalism, corruption in the pile testing report, etc.
- The government should set up a body like the GST Council for infrastructure to be built on a PPP basis, which works for infrastructure enhancement. This council should be responsible for real-time monitoring and the success or failure of infrastructure.

Promote Efficiency:

- Considering the duration of construction of mega projects, timely monitoring and progress improvement are imperative.
- Private entities have their mechanisms to ensure the timely completion of projects, whose good practices can be adopted by the government.

Delays in the project have to be stopped:

- Sometimes semi-constructed buildings collapse during rain. Therefore, the time for the construction of infrastructure should be determined scientifically.
- To take into account the extent of debt financing in infrastructure projects and cost inflation. The delay gap in the project has to be reduced.

Availability of data:

- A pre-requisite for successful monitoring is the timely availability of high-quality data.
- They should define who is responsible for correcting and refining the data and the methods they should use to correct it.
- It is equally important for states to report data on time.

Compensation:

- If an incident like Morbi occurs even after implementing all safety standards, immediate help and compensation should be provided to the victims.



Other facts

About Morbi:

- Morbi was given district status in 2013.
- Morbi is famous for its ceramic industry which accounts for about 70 percent of India's ceramics.
- The city of Morbi is situated on the Machhu River, 35 km from the sea and 60 km from Rajkot.
- Machhu is a small river that originates in the Madla Hills and flows 130 km in the Rann of Kutch.

What is suspension bridge?

- The bridge built over Morbi was a suspension bridge. A suspension bridge is a type of bridge in which the deck is suspended from the suspension cables on vertical suspenders. India's longest single-lane suspension bridge is the 725 m Dobra-Chanti suspension bridge over Tehri Lake which is operational since 2020.

Conclusion:

Rapid infrastructure creation is necessary but if it lacks efficiency and load-bearing capacity, then that acceleration is of no use. Untimely death due to accidents is weakening the human resource of India. Therefore, the government, along with the private sector and civil society, should create a system that ensures the efficiency, and capacity of infrastructure construction and spreads awareness among people for the efficient use of bridges, roads, and railways.



National

Police Reforms in India

Context:

Recently, Prime Minister Shri Narendra Modi addressed the 'Chintan Shivir' of the Home Ministers of the states through video conferencing. In this Chintan Shivir, the Prime Minister presented the idea of "One Nation, One Police Uniform".

Introduction:

Police in India is governed by the state government. It is an important part of the criminal justice system and has an significant role in the management of law and order. Police reforms are required to bring good governance at this stage of India's journey of democratic development. In the Chintan Shivir, the Prime Minister presented the idea of "One Nation, One Police Uniform" for police reforms. This idea envisages to bring police uniformity to the country.

Challenges before Police in India

Colonial Mindset: Police system in India was established during the colonial period. The function of the police in the colonial period was to fulfill imperialist interests, but even after accepting democracy in India, the police is often seen in the role of the controller rather than the role of public servant.

Insensitivity: It is often alleged that the police is insensitive towards the public. Instead of understanding the problems of the public, the police nurture the interests of the empowered party. Along with this, the public also considers the police corrupt, incompetent, biased, and unresponsive.

Lack of force: According to the United Nations, there should be 222 police per one lakh people, but in India, this number was 137 as of 2016. Of these about 86% were constables.

Influence of Political Executive: The Second Administrative Reforms Report 2007 pointed out that in India there is control over the police by the political executive which affects the accountability of the police and interferes with their operational independence.

Lack of infrastructure: The policemen lack strong communication support and modern weapons. In the prison report for the year 2015-16, it was reported that there was a shortage of weapons in the State Police Forces and the Bureau of Police Research and Development also mentioned a 30% shortfall in the required vehicles with the State Police Forces.

Change in the trends of crime: In the old times, when crimes like dacoity, theft, and murder used to happen, now the nature of crime has changed into data theft, and

cyber hacking. For this, the police force needs to be very technically sound.

Police Reform Efforts in India

The government has constituted committees from time to time for police reforms, including National Police Commission (1977-81), Ribeiro Committee (1998), Padmanabhaiya Committee (2000), Malimath Committee (2003), Second Administrative Reforms Commission (2007), etc.

Guidelines of the Supreme Court on Police Reforms:

In *Prakash Singh Vs Union of India*, the Supreme Court gave comprehensive guidelines for police reforms, which are described as follows:

- State Security Commission should be set up in every state to evaluate the working, performance of the police and to prevent undue interference of the state government in the matter of police.
- A Police Establishment Board should be set up in each State to determine the postings, transfers, and promotions of officers below the rank of Deputy Superintendent of Police and to make suggestions to the State Government in this regard.
- Establishment of Police Complaints Authorities at the State and District levels to investigate the misbehavior and allegations against the policemen.
- The DGP and other Chief Police Officers (District Superintendents) in the state forces should be ensured a minimum tenure of two years so that political and unnecessary transfers can be avoided.
- It should be ensured that the DGP of the State Police is appointed from among the three senior-most officers who are empaneled for promotion by the Federal Public Service Commission based on length of service, good record, and experience.
- Law and order and crime investigation police should be separated.

Model Police Act, 2006

For police reform, the central government passed the Police Model Act, of 2006: The main features of which are as follows:

- **Organization and Recruitment:** Each state will have a police service headed by a DGP. Direct recruitments on subordinate ranks (i.e. below Deputy SP) will be done by the State-Level Police Recruitment Board. Recruitment for the post of officers will be done through the Federal Public Service Commission or the State Police Service Commission.
- **Responsibilities:** Responsibilities of the Police Service include the following:

- » Enforcing the law without partiality,
 - » To protect life, liberty, and human rights,
 - » To protect law and order
 - » Preventing other activities that threaten internal security,
 - » To protect public property,
 - » Prevention and investigation of crime,
 - » Helping in natural and man-made disasters,
 - » Intelligence gathering.
- **Accountability:** The superintendence of the police service will be done by the state government. The state government will formulate policy in this regard, determine the criteria for good policing and ensure professional policing.
 - **Police Accountability Commissions:** Police Accountability Commissions should also be constituted by the states to hear complaints of police misconduct.
 - **Conditions of Service:** The State Government shall ensure that the average duty of a police officer does not exceed 8 hours (in exceptional cases, 12 hours). Adequate insurance coverage will also be provided to the police personnel in case of injury, disability, or death during duty hours.
 - **Police Welfare Board:** Police Welfare Board should also be constituted for taking welfare measures for police, such as medical facilities, group housing, and legal aid.

Some other improvements:

Initiatives like Dial-112, are being run by the states to improve the capability of the police. Along with this, the availability of modern vehicles, and weapons is being ensured. Certificates like STF Tiger are being given to the best-performing police personnel. Along with this, a separate department is constituted for cyber security and training for technology upgradation. Initiatives like Janmatri Suraksha in Kerala, and Meera Paibi (Women with Torch) in Assam are playing a better role in increasing police reach to the public, strengthening their interaction, and reducing trust deficit.

Measures suggested by the Prime Minister for police reforms:

- **Smart Technology:** The Prime Minister said that whether it is cybercrime or the use of drone technology in smuggling weapons and drugs, we have to keep working on new technology. The Prime Minister has emphasized “improving law and order with the help of smart technology.
- **One Nation, One Police Uniform:** The Prime Minister asked to consider one uniform for the police of the states. This will ensure quality products not only because of their versatility, but will also give

law enforcement a common identity, although states may have their numbers or insignia. This will be an important step for inter-state police coordination to deal with the increasing inter-state crimes in the present times.

- **Tourism Police:** The Prime Minister emphasized the need to think about developing specialized capabilities for policing related to tourism. He said that tourists are the biggest and fastest messengers of any place’s prestige.
- **Infrastructure:** The Prime Minister requested to seriously study the suggestions that came out of the conferences of Director Generals of Police. The Prime Minister asked the police force to assess their vehicles in light of the new scrappage policy. “Police vehicles should never be out of date, as it is related to their efficiency,” he said. The main objectives of police reforms are described as follows:
 - » The infrastructure of the police department such as vehicles, weapons, technical up-gradation, and the forensic team should be strengthened so that they successfully dispose of the ever-changing crime.
 - » Unnecessary political control over the police department should be reduced so that the police force can be accountable to the public by operating autonomously.
 - » The trust crisis that has persisted between the public and the police should be reduced. Community policing (Kerala Janmatri Suraksha) is playing an important role in this context.
 - » The Second Administrative Reforms Commission had remarked that the promotion opportunities for constables are very rare and the working conditions are very poor which needs improvement.
 - » There should be an independent complaints authority to investigate cases of police misconduct.
 - » The police, by converting from colonial ideology to democratic ideology should understand that it is not a controller but a servant.

Other facts

- In 1791, Lord Cornwallis first established the Police Department to establish law and order in India.
- The modern form of the Indian Police came from the Indian Police Act of 1861.
- About 3% of the budget of the central and state governments is spent on the police.

Conclusion:

Police is an essential part of the state. It not only works to investigate crimes, enforce laws and maintain law and order situation in the state but also manages the internal security. Police reforms are essential to ensure that this power is used for legitimate purposes. All the states will have to work in this direction.

Technology

Permission To Use GM Mustard: Possibilities And Challenges

Context:

The environmental release of Dhara Mustard Hybrid-11 (DMH-11), a genetically modified variety of mustard, has been authorized by India's top regulatory body for genetically modified plants and food items, the Genetic Engineering Appraisal Committee (GEAC). It would be the first genetically modified food crop available to Indian farmers if approved for commercial production. Also, the Union Ministry of Environment, Forest and Climate Change's Genetic Engineering Appraisal Committee (GEAC) recently approved the manufacturing of genetically modified (GM) mustard seeds before they were released for commercial use.

About DMH-11:

- Researchers from The Centre for Genetic Manipulation of Crop Plants at the University of Delhi created the hybrid mustard variety known as DMH-11. Although there are many mustard varieties in India, because it is a self-pollinating plant, it is difficult for plant breeders to cross different mustard kinds and introduce desired features.
- This hybrid was created by inserting genes from the soil bacteria barnase and barstar, which would not have occurred spontaneously. Varuna's barnase causes a temporary sterility, preventing it from naturally self-pollinating. Heera's barstar prevents the impact of barnase, enabling the production of seeds. The outcome is DMH-11, which not only has a higher yield but is also fertile (where 11 denotes the number of generations after which advantageous features appear). Because DMH-11 employs alien DNA from a different species, it is a transgenic crop.

Are hybrid mustard cultivars preferable?

- According to three years' worth of experiments by the Indian Council of Agricultural Research (ICAR), DMH-11 outperformed zonal checks, or regional varieties that are thought to be the best in particular agro-climatic zones, by 37% and had 28% greater yields than its parent variety Varuna.
- Better hybrids, according to scientists, are required to satisfy India's soaring edible oil import bill. During the winter months of Rabi, mustard (*Brassica juncea*) is mostly grown on 6-7 million hectares across Rajasthan, Haryana, Punjab, and Madhya Pradesh. Around 55–60% of India's domestic edible oil needs are met by imports. According to the National Academy of Agricultural Sciences, about 13.3 million tonnes of edible oil was imported in 2020–21 at a cost

of Rs. 1,17,000 crore.

- This is mainly because of the poor productivity, which has remained stable for more than 20 years and ranges between 1 and 1.3 tonnes/hectare. On the other hand, in China, Europe, and Canada, hybrid mustard and rapeseed seeds predominate. So, according to supporters, increasing the number of mustard hybrids is the only way to increase India's output.

Why is its cultivation being opposed by some stakeholders?

- Besides the impact on human health there are concerns about the capability of transgenic plants to escape and potentially introduce the engineered genes into wild populations; susceptibility of non-target organisms (such as insects which are not pests) to the gene products; loss of biodiversity; and increased use of chemicals in agriculture.
- There are two primary arguments against transgenic mustards. One is the introduction of genes that are not native to the species, and another is the use of the bar gene, which confers tolerance to the herbicide glufosinate-ammonium, in the creation of mustard hybrids.
- The decision is also opposed by groups like the RSS-affiliated Swadeshi Jagran Manch for economic reasons such as the risk of losing out on exports of agri food products. They note that since India has not allowed GM in food crops so far, the country's non-GM tag on exports helps it in getting orders from European nations, where transgenic food is banned.

Is it safe to consume GM mustard?

- It is on the basis of multiple safety-related studies that the regulator has said that GM mustard is as safe for consumption similar to the conventionally-grown mustard varieties in India. Referring to various safety trials, done by top public sector scientific institutions, in the past, the environment ministry had also released a detailed FAQ allaying citizens' concerns over cultivation and consumption of transgenic mustard.
- It noted how the regulatory authorities thoroughly assessed the dossier provided by the gene developers and evaluated critically the safety data on toxicity and allergenicity in humans and animals, and found that the introduced proteins do not have any toxicity.
- It also underlined that there is no evidence that the transgenes could be transferred to humans or animals through consumption of such foods.
- Currently, Bt cotton is the only transgenic crop which

is being commercially cultivated in India.

- Though it's a non-food crop, government has said that there is no evidence to suggest any adverse impact of this variety on the soil or on the overall biodiversity of the areas where it has been cultivated for nearly two decades now.

Are transgenic oilseeds consumed in other countries?

- Transgenic rapeseeds (sister crop of mustards) have been released and grown in Canada since 1996, the US since 2002 and Australia since 2007.
- Canada has, in fact, been exporting such seeds to many countries.
- But no harmful effects on human health have been shown as a result of consumption of such foods by the general population in the countries where they have been approved.
- Since different GM organisms include different genes inserted in different ways, individual GM foods and their safety should be assessed on a case-by-case basis instead of a general conclusion about all GM foods.

What are GM Crops, and what are they used for?

- The genetic material from another organism is often inserted into the genes of plants to give them new traits, such as enhanced yield, tolerance to a herbicide, resistance to disease or drought, or higher nutritional value. These plants are the source of GM crops.
- Golden rice is most likely the GM rice strain with the best reputation. In order to produce a grain that is loaded with Vitamin A, golden rice includes the insertion of genes from a plant—both daffodils and maize have been used—and a soil bacteria. Only one GM crop, Bt cotton, has previously been certified for commercial production in India, but GEAC has now accepted GM Mustard.

Advantages:

- **Increased Yield:** Plants grown from genetically modified seeds have a significantly higher yield. This implies that a farmer may now produce noticeably more crops on the same piece of land.
- **Developed for Particular Conditions or Climates:** Genetically modified seeds can also be produced for particular circumstances or climates. For instance, to ensure a good crop's development in areas with minimal water, drought-resistant seeds might be utilized.

Disadvantages:

- **Cost of Seed Manipulation:** Only a small number of businesses are in charge of producing and marketing modified seeds. There aren't many options accessible to individuals purchasing seeds due to the near

monopoly.

- **Environmental Concern:** They may reduce the variety of species. For instance, plants that are resistant to insects may hurt insects that are not the intended target, eradicating that particular bug species.
- **Ethical Concern:** By combining different species, GM crops violate the inherent values of natural creatures.
- Concerns about plants containing animal DNA have also been raised.

Regulation of genetically modified organisms (GMOs) in India:

The "Rules for the manufacture, use, import, export & storage of hazardous microorganisms, genetically engineered organisms or cells, 1989" (referred to as the "Rules, 1989"), which were notified under the Environment (Protection) Act, 1986, govern the use of genetically modified organisms (GMOs) and their by-products in India.

The Department of Biotechnology, the State Governments, and six competent bodies work together to execute these regulations on behalf of the Ministry of Environment, Forestry, and Climate Change.

A number of guidelines on contained research, biologics, restricted field trials, food safety evaluation, environmental risk evaluation, etc. support the Rules of 1989.

New genome engineering technologies like gene drives and gene editing are implied by the Rules, 1989's definition of genetic engineering.

The Genetic Engineering Appraisal Committee (GEAC):

About:

The Ministry of Environment, Forests, and Climate Change has control over the Genetic Engineering Appraisal Committee (GEAC) (MoEF&CC).

The Special Secretary/Additional Secretary of MoEF&CC and a representative from the Department of Biotechnology co-chair the GEAC (DBT).

Conclusion:

The future of sustainable development lies on GM crops. It offers a significant deal of promise to address the problems of world hunger and malnutrition. By improving output and decreasing dependency on chemical herbicides and insecticides, it can aid in the preservation and protection of the environment. However, the unforeseen consequences for the ecosystem and human health are a cause for worry. A significant topic of discussion in India is the economic viability of farmers in emerging nations. A robust regulatory environment is required in India for the commercialisation of GM crops. If not, years of study into GM crops will be useless.

6 Economy

In the Era of Jobless Growth, Rising Inflation Possess a Challenge to the Livelihood of Common Man

The challenges for more than 70% struggling population of India have worsened after serious shocks of COVID-Pandemic, geo-political crisis in Europe and economic turmoil in various countries.

This situation has become more complex despite positive calculation/projections by IMF and World Bank for India's GDP growth trajectory.

The World Bank has estimated that India will grow 6.5% in current fiscal year (FY22-23).

However, the estimate for the current year was revised downwards by 1% point since June due to persistent pressure.

The decline is concerning but what is more serious grievance for Indian socio-economic atmosphere is the rising setbacks on inflation and unemployment front for India.

Stagflation:

The unemployment rate in India has been hovering around 7% or 8% up from 5% year ago according to CMIE (Centre for monitoring Indian Economy). Accordingly the Labour force Participation has dropped to just 40% from 46% (6 years ago). As per World Bank between 2010 to 2020, number of working women in India dropped to 19% from 26%. The situations become worse due to decline in purchasing power of common man because of rising inflation. The Consumer Price Index (CPI) and wholesale Price Index (WPI) are at their 22 month high. Headline Inflation (CPI) at 7.41% for September marks the 9th consecutive month (or 3 quarters) remaining above the upper threshold of RBI's target of 4+/-2 percent, and three years of staying above 4%. This has been calculated according to National Statistical office. The above situations are behaving against the Phillips Curve Rule.

Phillips curve is a graphic representation of the economic relationship between the rate of unemployment and the rate of inflation. It suggests that higher inflation is associated with lower unemployment and vice versa.

This inverse relationship have been questioned in India due to diverging phenomenon of Stagflation.

Stagflation is an economic cycle characterised by slow growth, a high unemployment rate and high inflation. Despite the growing GDP trajectory the other two phenomenons are making the situation more challenging for people, government and as well as for all other relevant stakeholders.

This has occurred due to various structural, geo-political and other serious socio-economic changes in India and other countries.

Causes for partial stagflation in India:

Indian economy was revived out of the COVID-19 pandemic at large but decade old problems like jobless growth and low purchasing capacity have become more serious due to following challenges:

- » India's Economic growth has largely been services led in contrast to other developed countries' trajectory of growth. The large share of population (44.85 million) was deprived of employed opportunities at big scale due to:
 - Less job opportunities in labour intensive sector and industrial sector.
 - A leap from the primary to the tertiary sector was not able to generate sufficient jobs after globalisation economic boom in 1990s decade.
 - India's poor graduate education system and inadequate skill imparting structure created a wide share of educated unemployed persons in India.
 - As according to CMIE report that analysed the data between January and April 2022. The Level of unemployment among graduates was 17.8% compared to about 11% in 2017.
 - According to CMIE, manufacturing sector employed 51 million Indians in 2016-17, which came down to 27.6 million in 2020-21.
 - Manufacturing sector in India has been capital intensive rather than employment intensive.

Reasons for Uncontrollable Inflation:

- Supply side bottlenecks in production process (Cost push inflation)
- Rise in prices of imported commodities also triggered the imported inflation.
- The relief packages allocated by National and state governments have triggered the demand-pull inflation.
- Bottlenecks in market supply chain, less financial literacy among citizens and structural issues-red-tapism, less investment environment, resulted in an increase increment in structural inflation.

Socio-economic Challenges:

- India's largest share of population comprises the lower and middle class that has no savings or little savings. This makes them more vulnerable to stagflation.
- They starve for food, clothing and other basic things which undermine their right to a dignified life.
- The weak structural transformation and persistence of informality compels the masses, especially the rural

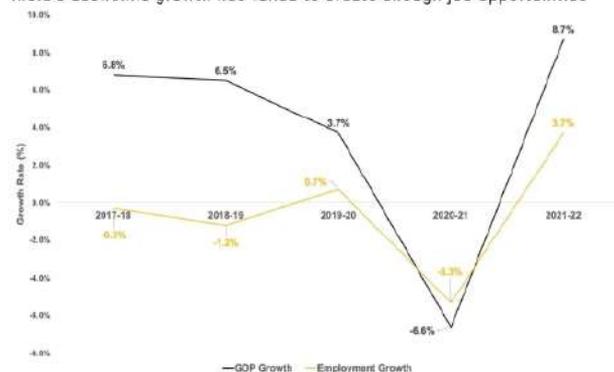
families, to pursue multiple livelihoods. But lack of capital generation capacity reduces their potential to generate livelihood on their own.

Decline in India's growth elasticity of employment:

- It is a measure of how output expansion generates jobs. In India a 10% growth in GDP is associated with only 1% rise in employment.
- There is Rupee-dollar negative convertibility due to US economic turmoil and geopolitical crisis in Ukraine- Russia region. This is further hampering the economic situation in country.

Jobless Growth

India's economic growth has failed to create enough job opportunities



Source: CME, Bloomberg

Created by | ForumIAS®

Negative Consequences of Economic Setbacks

- Ranging from socio-economic and political impacts, these serious setbacks are, deteriorating India's developmental mission mode's action efficiency. However impact on common man is more dominating it impacts the whole socioeconomic organisation in a way. The large section of youth is unemployed and decline in LFP (Labour force Participation) Rate is exhibiting the decreasing morale of human resource of country which is an alarming situation for the country. What is more worrisome is that the rate of unemployment among the youth (20-24 yrs) is much higher than the overall unemployment rate. Rising prices of goods and services and declining purchasing power of citizens due to unemployment, less savings and credit accessibility are further stressing the situation. Another issue that is concerning is the cyclic impact of unemployment rate increment and inflation rise. In the absence of meaningful livelihood opportunities, society will be the susceptible to social unrest. This has been very evident by the protest erupted in June and August over Agnipath Scheme,

Railway Recruitment in Bihar. Despite all these concerns, Indian government is taking all suitable measures with other appropriate agencies to tackle the situation.

- The Union government with RBI is working on plan to execute the inflation targeting accordingly. This has been yielding satisfactory results as Indian Banking system is one of the strongest regulator among the other Banking regulators of world.
- The central government has announced plans to hire a million people by the end of 2023 to fill vacancies in government departments.
- New Education Policy 2020 is equipped with 21st century key skills that will aid in filling the skill based gap.
- Major focus has shifted on boosting the start-up environment via mudra like schemes. That has potential to fill the gap created by immature industrial sector and also generate the demand at local level via disbursing the economic gains through bottom to top approach.
- The SHGs and digital fintech companies can also be the game changer in this serious challenging atmosphere.
- The focus should also be placed on tackling the inefficiencies in the government setups which includes corruption, maladministration, red tapism etc.
- That will ensure optimum utilisation of resources and creation of more jobs. Further, this will address the structural problems like cartelisation, hoarding and Black market.
- The expansion of Social Security Net apart from 1 million jobs can tackle the sudden impact of setbacks. This includes enhancing days under MGNREGA, introducing an urban MGNREGA.

Conclusion:

Jobless growth remains the single biggest challenge to Indian economy and serious setback in forms of uncontrollable inflation is making the wide sections of society target of economic injustice and inequality.

These will in-turn further trigger the socio-economic gap in the society and ultimately blur the democratic vision of India.

Therefore Indian government has to take all essential steps till the end of decade with all the appropriate agencies for making a nation that is self reliant and developed.

NATIONAL

1 EWS Quota

Why in News:

The Supreme Court, in *Janhit Abhiyan vs Union of India* case, has upheld the constitutional validity of the 103rd Constitution Amendment, which introduced a 10% EWS reservation in admission to educational institutions and government jobs.

About 103rd Constitution Amendment Act:

- The 103rd Constitution Amendment act, 2019 provides 10% reservation to EWS other than backward classes, SCs and STs in higher educational institutions and government jobs.
- This reservation has been provided by adding Article 15(6) and 16(6) in the Constitution which deals with the fundamental rights to equality.'
- The amendment empowers the state governments to provide reservations on the basis of economic backwardness among upper castes determined by criteria such as the size of land owned, annual income, etc.
- The EWS reservation was given based on the recommendations of a commission headed by Major General (Retd) SR Sinho.

Main issues:

1. Whether the 103rd Constitution Amendment violates the basic structure for providing reservation solely on the basis of economic criteria.
2. Whether the amendment violates the basic structure for excluding the poor among the SC/ST/OBC categories from EWS Quota.
3. Whether the amendment violates the basic structure for breaching the 50% ceiling limit (*Indra Sawhney* case).

Judgement:

- According to the majority view, the amendment does not violate the basic structure on any of the above issues.
- As per the majority views of Justice Dinesh Maheshwari, Bela M Trivedi and JB Pardiwala, reservation structured singularly on economic

criteria does not violate the basic structure of the Constitution. They have also held that breach of 50% ceiling limit by EWS reservation does not violate the basic structure as limit is flexible.

- Reservation is an instrument of affirmative action by State so as to ensure all inclusive approach. It is an instrument not only for inclusion of socially and educationally backward classes but economic weaker section also.
- The impugned amendment has to be treated as an affirmative action by the Parliament for the benefit of EWS class. It cannot be said to be unreasonable classification. Treating EWS as separate class would be a reasonable classification. The amendment creates a separate class of EWS. The exclusion of SEBCs cannot be said as discriminatory or violative of the Constitution.

Dissent:

- In their dissenting judgment, Chief Justice of India UU Lalit and Justice S Ravindra Bhat said that reservation on economic criteria is per se not violative of the basic structure. However, by excluding the SC/ST/OBC poor from economically backward classes (on the basis that they have received benefits), the 103rd Amendment practices constitutionally prohibited forms of discrimination. Court has held that 16(1) and (4) are facets of same equality principle. The characterization of excluding the poor of SEBCs is incorrect.

Conclusion:

The Supreme Court of India in *Indra Sawhney* case ruled that backward classes of citizens can be identified on the basis of caste and not just on an economic basis. Reservations could not exceed 50 percent ceiling limit anything above which it judged would violate equal access as guaranteed by the Constitution. Thus new judgement can again lead to legal discussion on reservation.

2 Doctrine of Pleasure

Why in News:

A recent tweet, by the office of the Kerala Governor, said that the statements of individual Ministers that lower the dignity of the office of the Governor can invite action including withdrawal of pleasure.

‘Article 164’ of the Constitution says, that the Chief Minister shall be appointed by the Governor and other Ministers shall be appointed by the Governor on the Chief Minister’s advice, adding that the Ministers shall hold office till the pleasure of the Governor.

About ‘Doctrine of Pleasure’:

- The ‘Doctrine of Pleasure’ under the Indian Constitution is also based on the same policy considerations as it existed under the ‘Common Law’ in England. Though, the Doctrine of Pleasure is accepted in India as it has developed in England, however, it is not completely accepted in India. This Doctrine of Pleasure is embodied in Article 310(1) of the Indian Constitution as well.
- ‘Except as expressly provided by this Constitution, every person who is a member of a defence service or of a civil service of the Union or an all-India service or holds any post connected with defence or any civil post under the Union holds office during the pleasure of the President, and every person who is a member of a civil service of a State or holds any civil post under a State holds office during the pleasure of the Governor of the State.’
- This is the general rule which operates “except as expressly provided by the Constitution.” This means that the Doctrine is subject to constitutional limitations. Therefore, when there is a specific provision in the Constitution giving to servant tenure different from that provided in Article 310, then that

servant would be excluded from the operation of the pleasure doctrine.

Whether doctrine of pleasure would also be applied on individual minister:

- Constitutional law expert and former Secretary General of the Lok Sabha, Mr PDT Achary, said that a Governor can take such a decision only on the advice of the Chief Minister. The Governor can withdraw the pleasure only on the advice of the Chief Minister. Pleasure after all, is not a personal or individual matter. It is constitutional pleasure. That means, when the Government in office has majority in the legislature, the Governor has pleasure and when the Government loses its majority, the pleasure comes to an end. So that is how the pleasure operates. It is not that the Governor can just withdraw his pleasure. When there is a Government in office which has majority in the house, the Governor’s pleasure is supposed to continue, and at no stage, till the Government loses its majority in the house can the Governor withdraw that pleasure. Therefore governor cannot withdraw his pleasure upon an individual minister until the chief minister and his cabinet recommend this.

Conclusion:

The constitution specifically conferred the power to the governor for his discretionary act. But in the pleasure situation, there is no any provision that gave power to the governor to act at his/her discretion. Thus, the Doctrine of Pleasure would not come under the authority of the governor and therefore such a claim cannot be implanted.

3 UDISE Report

Why in News:

The Ministry of Education has released a detailed report on the Unified District Information System for Education Plus (UDISE+) 2021-22 on school education in India.

About UDISE+ System:

- UDISE system of online data collection from

schools was developed by the Department of School Education & Literacy in the year 2018-19.

- It was developed to overcome the issues related to the erstwhile practice of manual data filling in paper format. It collects data on parameters like school, infrastructure, teachers, enrolments, results, etc which is utilized for planning, optimizing, and

- implementing education-related programs.
- In UDISE+ system, improvements have been made particularly in the areas related to data capture, data mapping and data verification.
- In 2021-22 UDISE+, additional data have been collected for the first time on indicators such as digital library, peer learning, hard spot identification, number of books available in school library, etc.

Key Findings of UDISE+ 2021-22

Enrolments:

- In 2021-22, total students enrolled in school education from primary to higher secondary school stood at 25.57 crores, registering an increase of 19.36 lakh enrolments.
- Gross Enrolment Ratio (GER) has improved in 2021-22 at primary, upper primary and higher secondary levels of school education as compared to 2020-21.
- GER at higher secondary levels has improved to 57.6% in 2021-22 as compare to 53.8% in 2020-21.
- Total enrolment of Children with Special Needs (CWSN) has shown an improvement of 3.45% in 2021-22 over 2020-21.

Teachers & School Specific findings:

- In 2021-22, the Pupil Teacher Ratio (PTR) stood at 26 for primary, 19 for upper primary, 18 for secondary and 27 for higher secondary, showing an improvement since 2018-19.
- 95.07 lakh teachers are engaged in school education during 2021-22. Out of this, more than 5% are female teachers.
- The total number of schools in 2021-22 stood at 14.89 lakhs as compared to 15.09 lakhs in 2020-21.

- The decline is mainly due to the closure of private and other management schools and the grouping of schools by various states.

Category Specific findings:

- In 2021-22, total Scheduled caste enrolment increased to 4.82 crores, compared to 4.78 crores in 2020-21.
- Similarly, the total Scheduled Tribe (ST) students have gone up from 2.49 crores to 2.5 crores.
- Total Other Backward Caste (OBC) students have increased from 11.35 crores to 11.49 crores during 2020-21 and 2021-22.

Gender Parity Index (GPI):

- In 2021-22, over 12.29 crore girls are enrolled in primary and higher secondary, an increase of 8.19 lakh from 2020-21.
- GPI of GER shows the representation of females in school education is in line with the representation of girls in a population of the corresponding age group. The GPI was found to be favourable.

Amenities:

- Only 27% of schools have special toilets for CSWN, out of which more than 49% have ramps with handrails.
- Around 77% of schools have playground facilities, showing an increase of 3.4% from 2018-19.
- Only 44.85% of schools have computer facilities and nearly 34% had internet connectivity.
- Around 27.7% of schools have kitchen gardens, showing an increase of 32% from 2018-19.

4

Delayed Projects in Road Transport Sector

Why in News:

Recently a report for the transport sector was released by the government. According to this report, the road transport and highways sector has the highest number of delayed projects.

This report is based on the inspection of the Infrastructure and Project Monitoring Division (IPMD). IPMD is mandated to monitor central sector infrastructure projects costing Rs 150 crore and above, based on the information provided by the project implementing agencies on Online Computerized Monitoring System (OCMS).

IPMD comes under the Ministry of Statistics and Program Implementation.

Main points:

- India has the world's second largest road network, with a total road length of 6.4 million km (national and state highways and urban and rural roads). Bharatmala Project (construction of 66,100 km of economic corridors, border and coastal roads and expressways), Sagarmala Project etc. were started by the Government of India to promote it, but despite

this many projects in the transport and highways sector are delayed.

- Of these, the road transport and highways sector has the highest number of delayed projects. Out of 835 projects in this sector, 262 projects are running late. The total original cost of implementation of 835 projects when approved was ₹ 4,94,300.45 crore. This was later estimated to be ₹ 5,26,481.88 crore, meaning a cost overrun of 6.5%.

Reason for delay in projects:

- It is challenging to mobilize equipment and raw material for construction of projects in hilly and remote areas.
- Implementation of projects depends on fast tracking of land acquisition clearances and other clearances from the Ministry of Environment, Forest and Climate Change and their approval takes a long time.
- Corruption in road construction, lack of transparency.
- Poor performance of concessionaires due to economic slowdown.
- Cash flow problems and law and order issues.
- Projects were also put on hold due to NCLT proceedings against the developers.
- Delay in payment to contractors.
- Meteorological problems.

Impact of delayed projects

- Cost overruns
- Slow pace of development

5

Election in Himachal Pradesh and Gujarat

Why in News:

Assembly elections are being held in Himachal Pradesh and Gujarat. The voters of Himachal Pradesh will elect 68 members for the Himachal Pradesh Legislative Assembly. Whereas the people of Gujarat will elect 182 members for the 15th Gujarat Legislative Assembly. The counting of votes and results declaration will be done on 8 December 2022.

Process Of election:

- The Election Commission of India prepares a timetable for the election. A particular day is fixed for polling in a particular constituency.
- Electronic voting machines (EVM) are used to cast votes; the machine shows the names of the candidate and the party symbols

- Increase in road accidents, disrupted transport operations etc.

Steps taken to resolve pending projects:

- Implementing an exit policy that allows private developers to withdraw their entire equity and exit from operational build-operate-transfer (BOT) projects as early as two years.
- To provide reasonable compensation to the concessionaires for stalled NH projects in BOT mode.

Way Forward:

Timely completion of any project depends upon availability of approvals, right of way, prompt funding etc. Strong transport infrastructure is essential for economic development. A strong road network will be a key pillar in India's rapid economic recovery and the government's budgetary commitment to strengthen road infrastructure will be accompanied by attractive private investment opportunities in the region. The government should rethink its PPP model (including its HAM model) to attract more private sector investment in new asset development. Timely redressal of disputes by setting up a regulator is also important before undertaking such a large scale project due to potential arbitration issues.

- Once the polling is over, all the EVMs are sealed and taken to a centralized place where all the EVMs are kept, and later on, votes are counted and the result is declared.

Components Of Election Machinery In India:

Independent Election Commission:

- Election commission conducts election in the country.
- The Election Commission is an autonomous and constitutional body under Article 324. It enjoys the same freedom as the judges of the Supreme Court of India.
- The Chief Election Commission of India (CEC) is appointed by the President of India, but after his appointment, the Chief Election Commissioner is

not answerable to the President or the government.

or Assembly Constituency concerned.

Chief Electoral Officer (CEO):

- The Election Commission of India, in consultation with the administration of that State Government/ Union Territory, nominates an officer of the Government of the State/Union Territory as the Chief Electoral Officer.
- The Chief Electoral Officer (CEO) oversees the election work related to the Assembly and Parliament elections.
- As per Section 13A of the Representation of the People Act, 1950, the Chief Electoral Officer of a State/Union Territory is authorized to supervise the election work in the State/Union Territory. It is under the overall superintendence, direction and control of the Election Commission.

Electoral Registration Officer (ERO):

- The Election Registration Officer is responsible for the preparation of electoral rolls for the Parliamentary/Assembly Constituency.

Presiding Officer:

- The Presiding Officer with the help of the polling officers conducts the election at the polling station.

Observer:

- Under Section 20B of the Representation of the People Act 1951, the Election Commission of India designates government officials as observers (general observers and election expenditure observers) for parliamentary and assembly constituencies.

District Election Officer (DEO):

- As per Section 13AA of the Representation of the People Act 1950, the District Election Officer supervises the election work of the district under the superintendence, direction and control of the Chief Electoral Officer.

Conclusion:

The election system in India is the biggest task which is conducted every five years and is a smooth functioning process due to the effort of the election commission of India. In conclusion, we can say that India is the second biggest democracy, and it also has the biggest election system in India. It is an empowerment that should be used wisely as it is the instrument that makes the state accountable to its people, while on the other hand, it empowers the people of India to keep a check on the state.

Returning Officer (RO):

- According to Section 21 of the Representation of the People Act, 1951, the Returning Officer of a Parliamentary or Assembly Constituency is responsible for holding elections in the Parliamentary

6

Performance Grading Index (PGI) 2020-21

Context:

- The Department of School Education and Literacy, Ministry of Education released the Performance Grading Index (PGI) for States/UTs for 2020-21, a unique index for evidence based comprehensive analysis of school education system across States/UTs.

education system in the country and to help States/UTs to pinpoint the gaps and accordingly prioritize areas for intervention to ensure that the school education system is robust at every level.

- PGI was first published in 2019 with reference period as 2017-18. The 2020-21 is the fourth edition in this series.

About PGI

- PGI is a tool to provide insights into the Indian School Education system.
- Publishing agency- Department of School Education and Literacy (DoSE&L), Ministry of Education.
- Purpose- to support evidence based policymaking and highlight course correction to ensure quality

Source of data:

- i. Unified District Information System for Education Plus (UDISE+) 2020-21,
 - ii. National Achievement Survey (NAS) 2017,
 - iii. MDM Portal and data provided by MIS Co-ordinator of the respective States/UTs.
- **Methodology-** PGI structure has 1000 points across

70 indicators, divided into two categories- Outcomes & Governance Management. The two categories are further divided into five domains:

- **Grading system-** PGI divides States/UTs into 10 grades, highest achievable is Level 1 to the States/UTs scoring more than 950 points and the lowest is Level 10, to those scoring below 551.

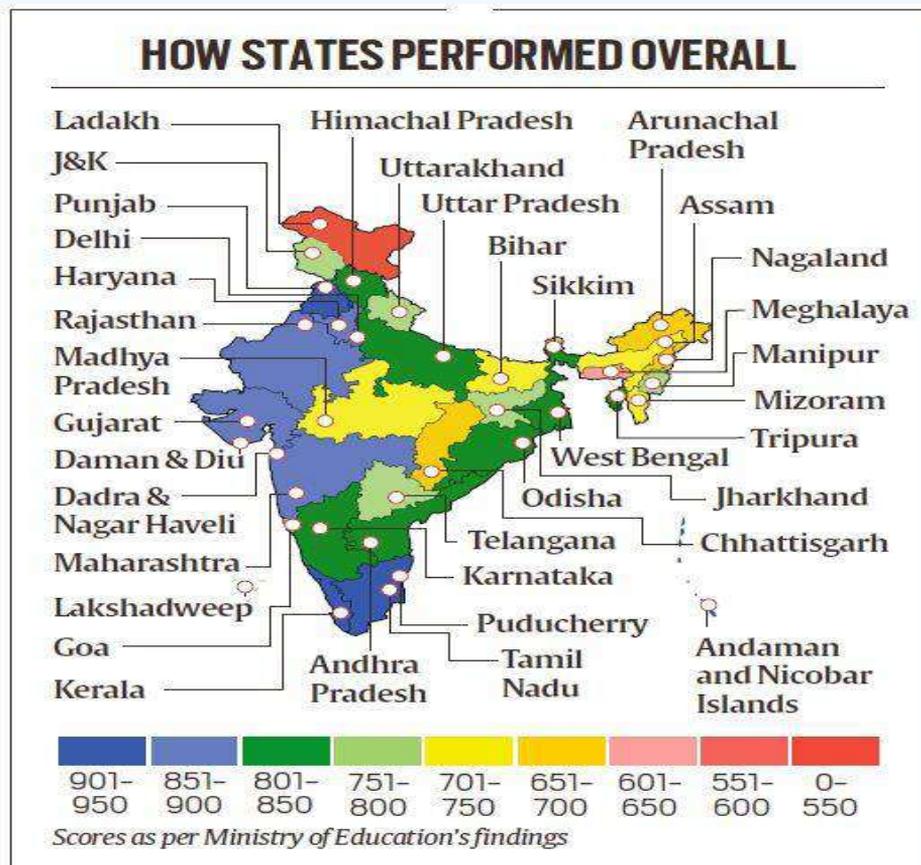
Key Findings of the Report:

- 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 economic backgrounds.
- A total of 7 States/UTs, viz., Kerala, Punjab, Chandigarh, Maharashtra, Gujarat, Rajasthan, and Andhra Pradesh have attained Level 2 (score 901-950) in 2020-21.
- Gujarat, Rajasthan, and Andhra Pradesh are the new entrants to highest achieved level of any state so far.
- Newly formed UT viz., Ladakh, has made significant improvement from Level 8 to Level 4 in 2020-21 (improved its score by 299 points).

- None of the States/UTs has so far attained the highest level (L1).
- The inter-state disparity in school education has reduced significantly over the last four years. The disparity was 51 percent in 2017-18 which is reduced to 39 percent as per the report for 2020-21.

Conclusion:

- PGI scores and grades achieved by States/UTs in 2020-21 bear a testimony to the efficacy of the PGI system. This will reflect the relative performance of all the States/UTs in a uniform scale which encourages them to perform better and to adopt best practice followed by performers.



7 Representation of People Act 1951

Why in News:

Recently, a MLA was disqualified from membership in the Uttar Pradesh Assembly after his conviction in a 2019 hate speech case.

He was convicted under Sections 153(a) (promoting enmity between two groups), Section 505 (statement conducing to public mischief) of the Indian Penal Code, and Section 125 of the Representation of People Act 1951.

Why was the member disqualified?

- The Representation of the People Act says that anyone sentenced to imprisonment of two years or more shall be disqualified “from the date of such conviction” and remain disqualified for another six years after serving time in jail.
- The Speaker can start the disqualification proceedings either suo-moto or after receiving an application on this.

Representation of the People Act, 1951:

- The Representation of the People Act, 1951 is an act of the Parliament of India to provide for the conduct of election of the each House of the Parliament and to the House or Houses of the Legislature of each State

Other Provisions, of Representation of the People Act, 1951:

- The qualifications and disqualifications for membership in these houses,
- The corrupt practices and other offences at or in connection with such elections and the decision of doubts and disputes arising out of or in connection with such elections.

Offences pertaining to elections defined in the RPA 1951:

- Promoting hatred and enmity
- Breach of official duty and providing support to any candidate
- Booth capturing and removing ballot papers
- Engaging in the sale of liquor within 2 days before the conclusion of polling
- Announcing public meetings within 48 hours before voting and also causing disturbances

Supreme Court Rulings and RPA:

Lily Thomas vs Union of India 2013:

- The Supreme court of India, in its judgement in 2013 while disposing the Lily Thomas vs Union of India, ruled that any MP, MLA, or MLC who is convicted of a crime and sentenced to a minimum of two years in jail loses their membership in the house immediately.
- In this case, the Supreme Court declared Section 8(4) of the Representation of the People Act 1951 invalid, which gave convicted legislators three months to appeal to a higher court and gain a stay on their conviction and sentence.

Association for Democratic Reforms (ADR) vs. Union of India in 2002:

- Mandated the disclosure of information relating to criminal antecedents, educational qualification, and personal assets of a candidate contesting elections.



Conclusion:

- The criminalization of politics and corruption hit the roots of democracy. There should be wide publicity of the candidates with criminal records, who are contesting in an election and the political parties that give them support.
- There is a need to bring greater transparency in the campaign financing of political parties. The political parties must be brought under the Right to Information Act to improve their transparency and accountability.
- The Parliament should enact a law dealing with the increased criminalization of politics. Further, separate courts dealing with sitting legislators would be crucial for the decriminalization of politics.

1 United Nations Security Council's Counter-Terrorism Committee

Why in News:

Recently, India hosted the United Nations Security Council's Counter-Terrorism Committee (CTC) meeting, in Mumbai and Delhi.

What is UNSC-CTC?

- It is a Committee of the United Nations Security Council (UNSC).
- It was established by Security Council resolution 1373, that was adopted unanimously on 28th September 2001, in the wake of the 9/11 terror attacks in the US.

Membership:

- The Committee comprises all 15 Security Council members.
- Five permanent members: China, France, Russian Federation, the United Kingdom, and the United States.
- Ten non-permanent members are elected for two-year terms by the General Assembly.

Objective and mandates:

The Committee was tasked with monitoring implementation of resolution 1373.

Resolution 1373, requested countries to implement various measures that were aimed at enhancing their legal and institutional ability to counter terrorist activities at home and around the world. This includes:

- Taking steps to criminalize the financing of terrorism.
- Deny all forms of financial support for terrorist groups.
- Freezing any funds related to persons involved in acts of terrorism.
- Suppress the provision of safe havens.
- Inhibit sustenance or support for terrorists and share information with other governments on any groups

practicing or planning terrorist acts.

Terrorism:

- Terrorism is the systematic use of violence for intimidating populations or governments for political, religious, or ideological goals.
- As per the POTA 2002 (Prevention of Terrorism Act), Terrorist activity is one that intends to threaten the unity, security, or sovereignty of the country or strike terror in the mind of people.

Initiatives taken to tackle terrorism:

At the National level:

- The National Investigation Agency, a specialized agency to deal with terrorist offences was set up and has been functioning since January 2009.
- The National Intelligence Grid (NATGRID) has been constituted to create an appropriate database for security-related information.

At the Global level:

- The Financial Action Task Force (FATF) which is a global money laundering and terrorist financing watchdog, aims to prevent illegal activities and the harm they cause to society.
- The United Nations Office of Counter-Terrorism (UNOCT) leads and coordinates an all-of-UN approach to prevent counter-terrorism and violent extremism.

Conclusion:

The Indian experience with 26/11 has shown that the global community has often been vocal about countering terrorism but has been short on cooperative action. Therefore, India needs to take lead in this direction and will have to keep pressing the point that terrorism remains the gravest threat to humanity.

2 Impact of Brazil's election on BRICS and IBSA

Why in News:

In the recent Presidential election, former Brazilian President Luiz Inacio Lula da Silva on October 30 defeated incumbent Jair Bolsonaro which marked the end of the country's most right-wing government in

decades. Mr. Lula secured 50.8% of votes compared with 49.2% for Mr. Bolsonaro. This will be his 3rd term as the President of Brazil.

BRICS & IBSA:

- **BRICS** is the acronym for an association of five major emerging economies- Brazil, Russia, India, China and South Africa. It constitutes 41% of the world's population, contributing 24% of World's GDP.
- **IBSA** is a grouping consisting of three largest democracies and major economies from three different continents- India, Brazil and South Africa. It came into existence in 2003. After 2011, IBSA was largely overshadowed by the BRICS grouping.
- It was during Lula's time previously that IBSA grouping was formed. The objective was to strengthen South-South Cooperation. This will further be consolidated with Lula as the President.
- Lula was also the leader ahead of Brazil during BRIC's inception in 2009, which afterwards became an important political platform during his presidency.
- This could also ensure the continuation of Brazil's solid bilateral relations with China. It also symbolises further approximation with Russia as well as with India.
- BRICS is expected to represent an important political vector for Brazilian Foreign Policy in the future.
- During Lula's term, BRICS will move back to its original role of being a counterweight to excessive US dominance.

Impact of Brazil's election on Groups

Brazil has been seen as a responsible regional power in Latin America who holds multilateral values in order to solve international issues. BRICS & IBSA, therefore are important political platforms for Brazil as they facilitate-

- The possibility of reforming international monetary and financial institutions.
- The country's advocacy for multilateralism and plurality at international affairs.
- The country's discourse against western hegemony
- South-South Cooperation
- Lula's victory in the election could represent reinvigoration of Brazil's political ties with BRICS and IBSA.

Conclusion:

BRICS and IBSA will continue to play a vital role in international order, not only in terms of strengthening traditional multilateral diplomacy, but also as a means to solidify South-South Cooperation among India, Brazil and South Africa as well as with China.

3

Netanyahu got Majority in Israel Election

Why in News:

Former Israeli Prime Minister Benjamin Netanyahu and his right-wing Likud party secured a majority with 32 seats in Israel's 120-seat parliament, the Knesset.

Israel Electoral System:

- Out of the total 120 seats in the Knesset, 61 seats are required for a majority. The members are elected by closed list, proportional representation in a single nationwide constituency. In the Israeli-occupied territories, only the settlers have the right to vote.

Election Results 2022:

- Results released by Election Commission reported that 99% of the votes counted which gave 32 seats for Likud Party, 18 for ultra-Orthodox parties and 14 for a far-right alliance called Religious Zionism. The right wing bloc won a total of 64 seats, while the caretaker Prime Minister Yair Lapid's Centrist block won 51 seats.

Central Issues in Israel's election:

- The high cost of living and soaring process with an overall inflation rate of 52. Percent is one of the primary issues for Israeli voters. This has been aggravated by the COVID-19 and the Russia-Ukraine war.
- Another issue if government's proposal for kashrut reform and other aspects especially integral to haredi communities. Kashrut is a set of Jewish dietary laws, reforms of which would lower the food inflation.
- Domestic security and long-standing conflict between Israelis and Palestinians are other electoral issues.
- Israel's maritime border deals with Lebanon have also been at the forefront of these elections.

Impact on India:

- With Netanyahu as the head of Israel state, the I2U2 quadrilateral will get further boost. I2U2 is a crucial multilateral economic forum with geopolitical implications, consisting of India, Israel, the United

States and United Arab Emirates.

- It will further enhance the convergence of mutual interests between India and Israel in defence, trade, education, tourism or Diaspora relations.
- The like-mindedness of the heads of both the states (India & Israel) will result into exploration of newer areas for collaboration such as emerging technologies, while strengthening the existing

partnership in sectors like defence.

Conclusion:

Netanyahu is the longest serving Prime Minister in Israel's history. With Netanyahu in majority, there will be an end to the unprecedented period of political deadlock in Israel.

4

Meeting of the SCO Council of Heads

Why in News:

The 21st meeting of the Shanghai Cooperation Organisation, SCO Council of Government was held in virtual format on November 2, 2022. China hosted the meeting for the Heads of Government of the Shanghai Cooperation Organization (SCO). India was represented in this meeting by External Affairs Minister Dr. S. Jaishankar.

Shanghai Cooperation Organization:

- The SCO is an Eurasian political, economic, and security forum established in 2001. Its goal is to maintain peace, security and stability in the region. It is a permanent international intergovernmental organization and seen as a countermeasure to the North Atlantic Treaty Organization (NATO).
- Government Heads in SCO, meet annually to focus on the organization's business and economic agenda and to approve the SCO's annual budget.
- Current members: Kazakhstan, China, Kyrgyzstan, Russia, Tajikistan, Uzbekistan, India, and Pakistan.
- India and Pakistan became its members in 2017.

Importance of the meeting:

- The heads of delegations of SCO member countries exchanged views on key issues of global and regional development. The SCO member states discussed priority steps to enhance mutual trade, economic, cultural and humanitarian cooperation.
- The meeting was followed by a joint communiqué naming all countries, except India, who reaffirmed their support for the BRI, "Works to promote the alignment of the 'Belt and Road' construction with the creation of the Eurasian Economic Union".

What is Belt and Road Initiative (BRI):

- The Belt and Road Initiative (BRI) is an ambitious

project focused on connectivity and cooperation between several countries spread across the continents of Asia, Africa and Europe. BRI is spread over 150 countries (claimed by China).

India's position in the meeting:

- India's total trade with SCO members is only USD 141 billion, which has the potential to grow manifold.
- Hinting at China's BRI, India said that connectivity projects should respect the sovereignty and territorial integrity of member states and should respect international law.
- India underlined the need for better connectivity in the SCO region built on the centrality of the interests of Central Asian states, which would unlock the region's economic potential, which could enable the Chabahar Port and the International North South Transport Corridor (INSTC).
- The external affair minister emphasized on India's strong recovery on the economic front after the pandemic.
- India also drew attention to its commitment to fighting the challenge of climate change and the achievements made in this direction.
- India will take over the presidency of SCO in 2023.

Way Forward:

The SCO underscores India's strong cultural and historical linkages with the region. Through this, India can reduce drug trafficking and the proliferation of small arms, as well as provide an opportunity to pursue the "Connect Central Asian Policy". It will also help India to check the ever-increasing influence of China in Eurasia.

5 Black Sea Grain Initiative

Context:

Russia re-joined the Black Sea Grain Initiative on November 2, after allegedly suspending the deal two days before, on October 29.

What is the Black Sea Grain Initiative?

- It was an agreement signed on July 27 of this year in Istanbul after being mediated by the UN and Turkey.
- The agreement was intended to provide a safe maritime humanitarian corridor for exports of goods (particularly food grains), from three of Ukraine's important ports, namely Chornomorsk, Odesa, and Yuzhny/Pivdennyi,.
- It was initially set forth for a period of 120 days, however it had the option to extend or terminate in November.

Features:

- The main goal of this initiative was to control market volatility by assuring a sufficient supply of grains and preventing an increase in food prices.
- The initiative originally comprised two sides:
 1. It ensures the secure passage of ships carrying grain and vegetable oil from Ukrainian ports to Turkey and from there, to developing nations primarily in Africa and the Middle East;
 2. It ensures Russia's ability to conduct unhindered food and fertiliser trade. The shared objective is to provide a steady supply of staple goods for the developing world, which is heavily dependent on grain and fertiliser exports from the Ukraine and Russia.
- The initiative put forth a Joint Coordination Centre (JCC), comprising senior representatives from Russia, Ukraine, Turkey, and United Nations, where all the commercial ships are required to register for proper monitoring, inspection, and safe passage.
- Following this, they are permitted, through a designated corridor, to continue sailing to Ukrainian

ports for loading.

- All ships are subject to the national authority and responsibility of Ukraine once they enter Ukrainian territorial waters.
- Further, the JCC would assist the crew or undertake an inspection against security assurances in the event of non-compliance or suspicious activity, at the request of a party



Ukraine: The breadbasket of many countries:

- Ukraine is the fifth-largest exporter of wheat in the world, as per the Food and Agriculture Organization (FAO) of the United Nations. Between 2016–17 and 2020–21, it had a 10% market share worldwide.
- As per the World Bank, one advantage of Ukrainian agriculture is the availability of black “chernozem” soil, which is rich in the organic matter known as humus.
- Ukraine's access to deep sea ports in the Black Sea permits a direct approach to Russia and European Union along with the grain importers of the Middle East and North Africa.

6 Dr. S. Jaishankar's Visit to Russia

Why in News:

External Affairs Minister Jaishankar meets Russian Deputy Prime Minister Denis Manturov and Russian Foreign Minister Sergei Lavrov Sese during his two-day visit to Moscow that concluded on November 8, 2022. This is the fifth meeting between the leaders of the two countries since the start of the conflict in Ukraine.

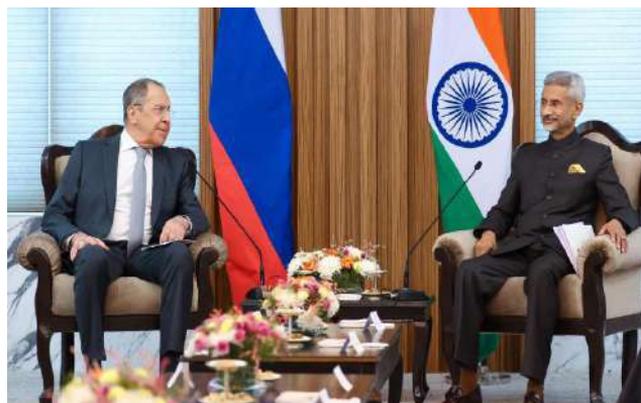
India Russia relations:

- The relations between India and Russia are very old. Russia has been India's most reliable partner since the country gained independence in 1947. India has "substantial time-tested relations" with Russia. India and Russia are strategic partners.
- Since the signing of the "India-Russia Strategic Partnership Declaration" in October 2000, India-Russia relations have grown into cooperation in almost all areas of bilateral relations, including political, security, defence, trade and economy, science and technology, and culture. A qualitatively redesigned pattern has been observed with the levels raised.
- Trade between India and Russia grew by 130 percent to nearly \$17 billion by September 2022 and the target of reaching \$30 billion in bilateral trade will be achieved soon.

Main Points:

- The Foreign Ministers of both the countries exchanged views on the international situation from special perspectives and vantage points.
- India is "in favor of peace" in the Russo-Ukraine war and the only way to resolve this crisis is through diplomacy and dialogue. India has not yet officially condemned the Russian invasion of Ukraine.
- As far as specific initiatives related to issues like food grains and fertilizer shipments are concerned, India will help as far as possible.
- India strongly advocates a return to dialogue and diplomacy and is unequivocally in favor of peace, international respect and support for the United Nations Charter.
- However India is facing trade imbalance with Russia and he urged Moscow to resolve the issue.
- India will join the Russian format of talks on Afghanistan to hold talks with the Taliban.

- Jaishankar visit is seen as a turning point where Delhi is being considered as a potential negotiator between Russia and Ukraine.
- Along with cross-border terrorism, other issues related to the Indo-Pacific strategic construction have also been discussed. As far as the Indo-Pacific is concerned, both the countries have stakes in its progress and prosperity.
- On the issue of importing Russian oil, Jaishankar said that buying oil from Moscow is beneficial for India and he wants to continue it.
- The two sides discussed the operation of the International North-South Transport Corridor as well as the Chennai-Vladivostok Eastern Maritime Corridor. They also discussed setting up the next phase of the Kudankolam nuclear plant.



Way Forward:

During the rapid changes that the international community is going through, it is important to regularly coordinate our assessments and further plans to promote the achievement of all the objectives set by Russian President Vladimir. Describing India's relations with Russia as "extraordinarily" stable, Jaishankar underlined that it now aims to forge a mutually beneficial and long-term engagement in the backdrop of growing economic cooperation. The two countries are looking at ways to expand bilateral ties that would make it "more durable, more sustainable, more balanced". It is important to focus on expanding trade, investment and connectivity between the two sides.

7

Xi Jinping: China's next Mao Zedong

Why in News:

In the 20th Communist Party (CPC) meeting held in Beijing, it has become clear that Chinese President Xi Jinping is ready to take a third term president ship. Xi Jinping is nurturing Chinese nationalism. They have undeclared control over the institutions of the country. Jinping's opponents are being punished in the corruption case. Actually, this whole era is developing in the form of personality cult of Xi Jinping. The Politburo of the Communist Party officially gave him the title of rénmin língxiù, or People's Leader. So far only Mao has got this title.

About Mao Zedong:

- Mao, the leader who is called the greatest hero of communism in the modern world. When Communist China was founded in 1949, Mao ensured that the People's Liberation Army of China would be controlled by the party, not the government. In this way Mao unified political and military power. Since then, the General Secretary of the Communist Party of China is the chairman of the Central Military Commission. Mao is called the father of revolution.
- The policy of The Great Leap Forward, initiated by Mao from 1958 to 1962, aimed at the rapid industrialization of China and the transformation of an agro-based economy into an industrial economy through collective agriculture.
- Mao carried out the 'Cultural Revolution' in China through the Red Army and created a pro-communist group.

Xi Jinping on Mao's Path:

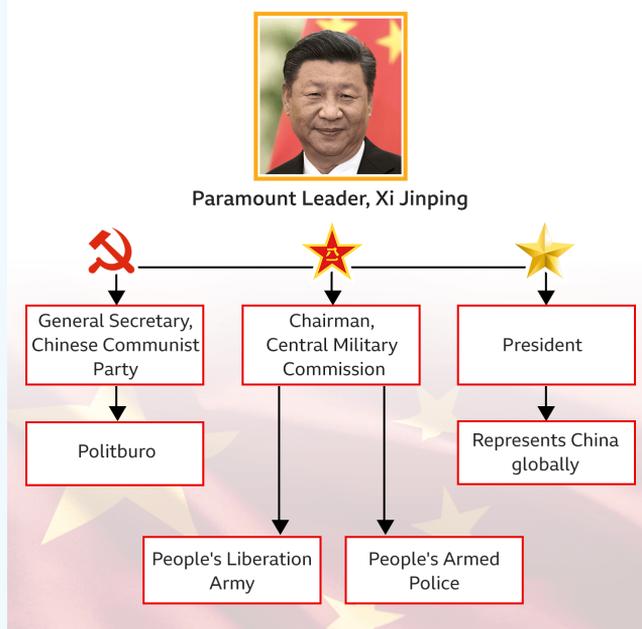
- Xi Jinping took over military power as soon as he took power in 2012 and then became the chairman of the Central Military Commission. He has been the President of China since 2013.
- To strengthen the economic condition of the country, the pace of industrialization accelerated.
- He nurtured the spirit of Chinese nationalism. Just as Mao betrayed India by instigating border disputes with India, Jinping instigated border disputes with neighboring countries. China today has border disputes with countries like India, Philippines, Vietnam, Japan, Bhutan, Indonesia, Malaysia. Jinping's eyes are now on Taiwan.

- He emphasized the policy of repression. The Uighur Muslim opposition in Xinjiang province was completely crushed. He also did not care for international criticism.
- China relaxed the single child policy in 2015 to deal with the problem of aging population and in 2021 this country implemented the third child policy.
- He has worked vigorously to remove corruption despite criticism. In 10 years, 44 lakh people were punished in corruption cases. It also includes 2 lakh members of the Communist Party. His anti-corruption campaign is to crush opponents and political rivals.

Conclusion:

The economic and political activities happening in China directly affect India because a strong government can further increase the tension with India, which can directly affect India on the economic, political and peace aspect. That's why India does not want that there should be a very dominant leader in China, India also wants that we should solve all our issues with China on a bilateral platform, it will be more possible only when there is a weak leader and government in China.

China's leadership



1 Emissions Gap Report 2022

Why in News:

The United Nations Environment Programme (UNEP) released a report titled 'Emissions Gap Report 2022: The Closing Window — Climate Crisis Calls for Rapid Transformation of Societies'.

This is the 13th edition of the UNEP Emissions Gap Report. It assesses the gap between anticipated emissions in 2030 and levels that are consistent with the 1.5°C and 2°C targets of the Paris Agreement. Every year, the report features ways to bridge the gap.

Findings of the Report:

- The top 7 emitters that include, China, the United States of America, the EU27, India, Indonesia, Brazil, and the Russian Federation plus international transport accounted for 55% of global GHG emissions in 2020.
- For these countries GHG emissions rebounded in 2021, exceeding pre-pandemic 2019 levels.
- Collectively, G20 members are responsible for 75% of global GHG (Greenhouse Gas Emission) emissions.
- India remains far below the world's average Greenhouse Gas Emission
- The world is falling short of the goals outlined in the Paris Climate Agreement adopted in 2015, with no credible pathway to 1.5°C in place.
- The Paris Agreement defined a global warming limit of 2°C above pre-industrial levels (preferably 1.5°C), which if exceeded, can result in extreme weather events such as extreme heat waves, droughts, water stress, etc.

Initiatives to Reduce Emissions in India:

- Electric Vehicles (EVs)
- Ethanol blending in petrol by 20 percent by 2025
- Inclusion of agroforestry and private forestry

- Solarization of agricultural pumps
- Clean cooking (by shifting to liquefied petroleum gas (LPG))
- Rooftop solar PV.
- Bharat Stage-IV (BS-IV) to Bharat Stage-VI (BS-VI) emission norms.
- UJALA scheme.
- International Solar Alliance.
- National Action Plan on Climate Change (NAPCC).
- India updated its NDCs

United Nations Environment Programme (UNEP):

- It is a leading global environmental authority established on 5th June 1972.
- It sets the global environmental agenda, promotes sustainable development within the United Nations system, and serves as an authoritative advocate for global environment protection.
- Headquarters: Nairobi, Kenya.

Conclusion:

The world, in the next eight years, needs to reduce greenhouse gases to levels that set the path of mitigating climate change in the right direction. Reversing the increase in the carbon intensity of global steel production requires alternative technologies in heavy industry. The unconditional and conditional NDCs (nationally determined contributions) are expected to reduce global emissions by 5% and 10%, respectively by 2030, compared to existing policies. These percentages must reach 30% and 45% to limit global warming to 2 °C or 1.5 °C. the world should focus on these priorities to counter global climate change.

2 Allmania multiflora: Second Species of the Allmania Genus

Why in News:

Recently, a weak-looking plant on the granite hills of Palakkad has been identified by researchers as a new species of the genus Allmania. Field surveys, genetic analysis, and molecular and morphological studies established it as separate from Allmania nodiflora, which

was previously thought to be the only Allmania species.

Introduction:

The first species of the Allmania genus, Allmania nodiflora was published in 1753 as Celosia nodiflora

under the genus *Celosia*. *Allmania nodiflora* was named after a specimen discovered in Ceylon (Sri Lanka) in 1834. *Allmania multiflora* is an annual herb. This is the second species of this genus. The discovery came after 188 years after botanists first described the species.

What is *Allmania Multiflora*?

- It belongs to a family of flowering plants called *Amaranthaceae*, commonly known as the amaranth family. It belongs to the genus *Allmania*. *Allmania multiflora* was given this name because of the large number of flowers within one inflorescence.

Features of *Allmania Multiflora*:

- It is found to reach a maximum height of about 60 cm at altitudes between 1,000 to 1,250 m.
- Herbs are erect with branches emerging from the base.
- The top of the stem is green, the colour of the base ranges from red to purple.
- Species have short tepals and gynoecium and small grooves.
- The herb flowers and fruits from May to September.
- Its native range extends from the Indian subcontinent to China and western and central Malaysia.

3 Indian Black Honey Bee

Context:

A new species of the honeybee was discovered in the Western Ghats. The finding was published in the September issue of a journal named 'Etomon'.

About:

- The new honey bee species was named, *Apis karinjodian* and it is endemic to the Western Ghats.
- The common name given to this bee species is the Indian black honeybee.
- The new finding has increased the species of honeybees in the world to 11.
- The research has shown that the nation has three kinds of cavity-nesting honey bees, including *Apis indica*, *Apis cerana*, and *Apis karinjodian*—the last of which is darker in appearance—giving apiculture in the nation a new direction.
- *Apis karinjodian* evolved from *Apis cerana* morphotypes that adapted to the hot, humid climate of the Western Ghats.

Status in IUCN :

- Given its small population, researchers have assessed it as critically endangered, applying the IUCN Red List criteria.

Importance of the Protection:

These species have been facing many threats.

- Its population is very small.
- It may be mistakenly used as a vegetable by the local people along with amaranth.
- Due to its original habitat, granite hills being located close to human settlements, today it is facing various types of threats like fire, grazing, quarrying, pollution, etc.

Way Forward:

- *Allmania multiflora* is currently only known from a few locations. This species is quite special from both a botanical and conservation point of view. Therefore, by making people aware of its importance, measures should be taken for its conservation.

- The ability of the Indian black honeybee to produce larger amounts of honey with a thicker consistency opens up new opportunities for improving honey output in India.

Apiculture in India:

- India is the sixth major natural honey exporting country.
- Natural honey exports in India during 2019–20 were 59,536.75 MT, or Rs 633.82 crore. The USA, Saudi Arabia, Canada, and Qatar were the top export destinations.
- According to a report by IMARC, the Indian apiculture market is anticipated to grow at a CAGR of over 12% by 2024, reaching a value of Rs 33,128 million.

Sweet Revolution:

Sweet revolution is an ambitious initiative of the Government of India, which is aimed at promoting

apiculture, popularly known as ‘beekeeping’, for accelerating the production of quality honey and other related products.

- To give boost to Sweet Revolution, the government launched, under the Ministry of Agriculture and Farmers Welfare, the National Beekeeping and Honey Mission in 2020.
- Recently, the Khadi and Village Industries Commission (KVIC) has launched the country’s first Mobile Honey Processing Van at Village in Uttar Pradesh in pursuance of Sweet Revolution.

Conclusion:

- Beekeeping is a low-investment, highly skilled business model where technology use has become a

4 India’s first Slender Loris Habi-

Why in News:

Tamil Nadu government has notified the country’s first Kadavur slender loris sanctuary covering 11,806 hectares in the Karur and Dindigul districts of the State.

About the slender loris:

- Slender lorises are small nocturnal mammals and are arboreal, as they spend most of their life on trees. IUCN has listed them as Endangered, whereas in the Wildlife (Protection) Act of India, 1972 they are listed under Schedule I, which accords them the highest level of legal protection. WWF-India is working to protect the habitats of the Slender Loris through its wider conservation work in the Western Ghats - Nilgiris Landscape.
- Slender loris act as a biological predator to agricultural crops pests and benefit farmers. The survival of the species depend on its habitat improvement, conservation efforts, and mitigation of threats.
- The species is significant and has a wide range of ecological roles to play in the terrestrial ecosystem, said Tamil Nadu Department of Environment, Climate Change and Forest.

Threat:

- According to biologists, poaching activity has led to the steady decline of the species in Tamil Nadu. Native people have always believed that all parts of the slender loris have either some medicinal or magical power. In addition, they are illegally

key enabler for socioeconomic development.

- Honey is regarded as a naturally healthy commodity, demand for high-quality honey has increased throughout time. Royal jelly, beeswax, pollens, and other apiculture products are also widely employed in a variety of industries, including pharmaceuticals, food, beverage, beauty products, and others.
- Beekeeping on a larger scale will enhance crop yield and pollination while doubling farmers’ income, creating jobs, ensuring food security, and bee conservation.

smuggled due to growing exotic pet trade. Other threats include habitat loss, electrocution on live wires, and road accidents. Along the western region of Tamil Nadu, there is a vigorous clampdown on illegal poaching of slender lorises.

About Kadavur slender loris sanctuary:

- The Kadavur slender loris sanctuary will cover Vedasandur, Dindigul East and Natham taluks in Dindigul district and Kadavur taluk in Karur district. The government notified ‘Kadavur slender loris sanctuary’ under Section 26 (A)(1)(b) of Wildlife (Protection) Act, 1972.

Wildlife Protection Act of 1972:

- The Wildlife Protection Act of 1972 provides for the protection of listed species of flora and fauna and creates a network of ecologically important protected areas. The law has 66 sections and VI schedules, divided into eight chapters. The Wildlife Protection Act of 1972 empowers the central and state governments to designate any area as a nature reserve, national park or closed area. There is a complete ban on carrying out commercial activities in these protected areas.

Conclusion:

Under the Tamil Nadu Afforestation Project (TAP) programme, about 5,450 hectares of area have been under afforestation in the Kadavur Reserve Forest.

Conservation has improved in recent years. This has helped in the management of the forest to a great extent. The wildlife population in the forest has increased in recent years. Indian bison, spotted deer, mouse deer, slender loris, jackal, mongoose, black-colored hare,

wild boar, porcupine, monitor lizard, pangolin, monkey, python, etc. are found in the forests.

5 Terai Elephant Reserve

Why in News:

Uttar Pradesh is all set to get a new elephant reserve soon, as the Union ministry of Forest, Environment and Climate Change (MoFECC) has given its nod to the Terai Elephant Reserve (TER), which will be spread over a 3,049 sq km area, including Dudhwa Tiger Reserve (DTR) and Pilibhit Tiger Reserve (PTR).

Introduction:

It will be the second elephant reserve in UP and India's 33rd. Centre approved three elephant reserves (ER) in the country this year, including TER, on the occasion of the 30th foundation year of project elephant, initiated in 1992. The other two reserves are Lemru ER in Chhattisgarh and Agasthyamalai ER in Tamil Nadu.

Key points of the Terai elephant reserve:

- TER will be developed in the joint forest areas of Dudhwa and Pilibhit tiger reserves, covering the conservation of four wild species that include the tiger, Asian elephant, swamp deer, and one-horned rhinoceros in the entire landscape. This landscape covers Kishanpur and Katarniaghat wildlife sanctuaries as well.
- After being notified by the state government, both the tiger reserves in UP will start receiving funds for the project tiger as well as for the project elephant. This will assist in enhancing the focus on species conservation. It is worth noting that tiger conservation is based on the concept of the protected area, while elephant conservation envisages landscape-related ecology.
- About 10 years ago, Dudhwa tiger reserve only had four-five resident elephants in Katarniaghat wildlife sanctuary, but due to trans-border migration of wild elephants from Nepal, this reserve now has over 150 wild elephants. These migratory elephants stayed back in Dudhwa due to its conducive environment, abundant food, drinking water, and safe shelter.

- The tiger reserve conservation plans and TER plans would supplement each other in terms of wildlife protection and conservation, grassland and drinking water management, maintenance and renovation of wild corridors, training and skill development of the forest personnel, mitigation of man-animal conflict, as there would be no financial constraints. Moreover, it will ensure welfare of local communities living in proximity of the two reserves..
- TER would empower forest officials of the two tiger reserves for granting compensation to villagers for damage done by elephants to crops and houses without depending on the state government for fund allocation. This aspect might help in encouraging local communities to become wildlife friends and conservationists.

About project elephant

- Project Elephant was launched in 1992 by the Government of India, Ministry of Environment and Forests, to provide financial and technical support to wildlife management efforts by states for their free-ranging populations of wild Asian Elephants.

Conclusion

- The Asian Elephant has been given the highest level of protection in India by its inclusion in Schedule 1 of the Indian Wildlife (Protection) Act 1972. They are also included in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Despite these conservation measures, the survival of the Asian Elephant continues to be threatened by fragmentation and degradation of natural habitat, poaching for ivory, and human-elephant conflict. Elephants are closely associated with religious and cultural heritage and play an important role in the country's history. Thus protection of elephants is very essential for both society and ecology.

6 2022 Likely to be Fifth or Sixth Warmest Year on Record: World Meteorological Organization

Context:

As per a news assessment by the World Meteorological Organization (WMO), Global Mean Temperatures for 2022 are currently estimated to be about 1.15 degree Celsius higher than pre-industrial times.

The assessment for 2022 is a part of the provisional State of Global Climate Report published by WMO every year.

Highlights of the Assessment:

- The acknowledge danger mark for temperature rise is considered to be 1.5 degree Celsius from pre-industrial level, which is the average for the period 1850-1900.
- This assessment is based on temperature data from January to September 2022.
- Based on the data, WMO reported that 2022 was likely to be 5th or 6th warmest year on record since 1850.
- Till date, 2016 has been recorded to be the warmest year with global mean temperatures at 1.28 degrees Celsius higher than pre-industrial times.
- According to an estimate in May 2022, WMO said that there was 50 percent chance that the global temperatures would temporarily touch the 1.5 degrees Celsius mark within the next five years (by 2026).

Cause-Effect Relations of warming:

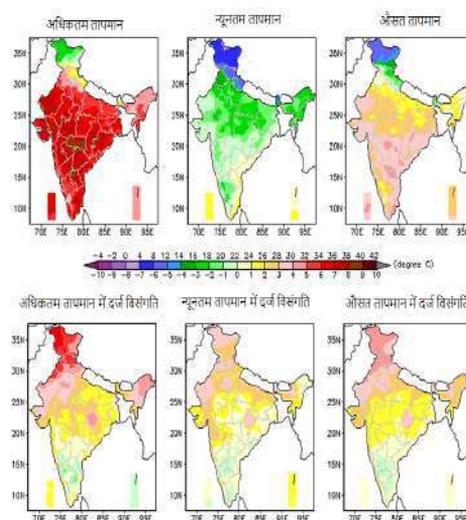
- The warming in 2022 so far has happened despite the presence of a prolonged La Nina (a cooling of sea-surface waters in the equatorial Pacific Ocean) which tends to temporarily cool down the earth a bit.
- The report pointed out that the concentrations of three main greenhouse gases, Carbon dioxide (CO₂), Methane (CH₄) and Nitrous oxide (NO₂) were all a record highs in 2021. The trend has continued in 2022 as well.
- The emissions of methane, which is 25 times more potent than carbon dioxide is causing global warming, at the fastest pace ever.
- In 2021, at the climate change conference in Glasgow, countries had pledged to cut global methane emissions by at least 30 percent by the year 2030.
- Due to the continuous warming, the extent of the

Arctic ice sheet dropped to a record low in February 2022.

- Sea level has risen about 10mm in 2020-2022. It has doubled since 1993.
- Marine heat waves have become more frequent over the 20th and 21st century.

About WMO:

- WMO, a specialized agency of the United Nations, is responsible for promoting international cooperation on atmospheric science, climatology, hydrology and geophysics.
- It is having 193 member states and territories and headquartered in Geneva, Switzerland.
- It facilitates “free and unrestricted” exchange of data, information, and research between the respective meteorological and hydrological institutions of its members.
- WMO’s annual report is Status of the World Climate.



Conclusion:

Warming of the earth is a global phenomenon which requires global efforts. Reports by WMO will further guide the deliberations at the upcoming COP-27 Climate Change Conference at Sharm el-Shaikh, Egypt.

7 Zero Tolerance for Greenwashing: UN Chief

Context:

In a first official acknowledgment of greenwashing, UN Secretary General Antonio Guterres warned companies and other non-state entities pursuing net-zero goals to not indulge in “greenwashing” and mend their ways within a year.

What is Greenwashing?

- Also called “Green sheen”, Greenwashing is the practice of indulging into a range of activities by the companies or even countries that present misleading or dubious claims about their climate action.
- The term was first used by Jay Westerveld, an American environmentalist in 1986.
- The entities involved in greenwashing make unsubstantiated claim to deceive consumers into believing that the products of their companies are environmental-friendly.

Greenwashing Practices:

- Developed countries are often accused of greenwashing their financial investments made in developing countries, or the bilateral aid.
- The Volkswagen scandal was a case of greenwashing, where the German company was found to have been cheating in emissions testing of its supposedly green diesel emissions.
- Several other MNCs including Coca Cola have faced accusations of greenwashing.

Impact of Greenwashing:

- Greenwashing presents a false picture of the progress being made on the climate change front, pushing the world towards disaster, while at the same time, rewarding entities for irresponsible behaviour.

Why Greenwashing is fairly widespread?

- **Regulation-** There is a lack of regulation and standardisation in most of these aspects. Many organizations lack integrity and robustness, but their services are still availed by corporations because it makes them look good.
- **Monitoring-** The processes and products that can potentially cut emissions are so many that it is practically impossible to monitor and verify all of them.

- **Methodologies-** The processes, methodologies and institutions to measure, report, create standards, verify claims and grant certifications are yet to set up.

Greenwashing and Carbon Credits:

- **Carbon Credit:** It is a credit for greenhouse emissions reduced from the atmosphere by any such project, which can be used by states, industry, or private individuals to compensate for the emissions they generate. It was conceptualised under the Kyoto Protocol under the Paris Agreement.
- There is an increasing trend of buying cheap carbon credits to fulfil net-zero targets. These cheap credits often lack integrity and do not often represent actual reductions in emissions.



Way Forward:

An expert group formed by the UN Secretary General in 2021 suggested remedial actions to address the issue which included creation of regulatory structures and standards among others. The Greenwashing needs to be checked in order to highlight the genuine efforts and pave way to facilitate urgent climate action.

1 BeiDou Satellite System

Why in News:

China has outlined the programme to further expand the global reach of its home grown BeiDou satellite navigation system, billed as its alternative to the U.S global positioning system (GPS).

About BeiDou satellite navigation system:

- It is a Chinese Satellite Navigation System.
- The system uses a network of satellites and can provide positional accuracies of under ten metres (GPS provides positioning accuracies of under 2.2 metres).
- China initiated BeiDou with aims to integrate its application in different sectors, including fishery, agriculture, special care, mass-market applications, forestry and public security.
- BeiDou offers services including accurate positioning, navigation and timing as well as short message communication.

Number of satellites in the system:

- It consists of about 27 satellites in medium Earth orbit, 5 in geostationary orbit and 3 in inclined geosynchronous orbits.

Importance for China:

- Provide help to many BRI partners in the navigation and communication. It is now used by many of the countries in the world, thus increase the stature of china.
- As ties between US and China deteriorated, it had become more important for China to have its own navigation system that the US does not have control

over.

- It is of foremost importance in allowing China's military to employ BeiDou-guided conventional strike weapons.

Other countries working to building their own navigation systems:

- The GPS is owned by the US government and operated by the US Air Force.
- Russia has its navigation system called GLONASS.
- The European Union (EU) has Galileo.
- India's navigation system is called Navigation with Indian Constellation (NavIC).

About the NavIC:

- The Indian Regional Navigation Satellite System, with an operational name of NavIC, is an autonomous regional satellite navigation system that provides accurate real-time positioning and timing services. It covers India and a region extending 1,500 km around it, with plans for further extension, timing services. The BeiDou navigation satellite system was completed in three steps:
 - » BDS-1 which provided services in China,
 - » BDS- 2 provide services to the Asia-Pacific region
 - » BDS-3 which provides services worldwide.

Conclusion:

Thus China is challenging the authority of GPS systems around the world.

2 PRAgeD Mission

Why in the News:

Hyderabad-based Centre for DNA Fingerprinting and Diagnostics (CDFD) has launched an inter-disciplinary approach to decode the genetic mutation that causes Paediatric Rare Genetic Disorder (PRAgeD).

About PRAgeD Mission:

- The PRAgeD mission is a pan-India initiative funded by the Department of Biotechnology (DBT).

- The PRAgeD mission is the first 'Mission on Paediatric Rare Genetic Disorders (PRAgeD), a nationwide screening program in collaboration with 20 other institutions, to decode unknown genetic mutations causing such diseases.
- CDFD will set up its own Diagnostic Centres of DBT under the Unique Methods of Management of Inherited Disorders (UMMID) program, in addition to the Paediatric Departments of Medical Colleges and will collaborate with others.

- Therefore, the vision of PRaGeD is to create awareness, obtain a genetic diagnosis, discover and characterize novel genes, provide counselling and develop novel therapies for paediatric rare genetic diseases in India.

Rare genetic diseases:

- Rare genetic diseases are a global public health concern, affecting 350 million people worldwide and nearly 70 million Indians.
- An estimated 70 million people in the country suffer from around 7,000 identified rare genetic disorders and this number could be higher, as rural areas are not properly covered. They are common in South Asia and tend to be underestimated.
- There is no single approved drug to treat about 95% of rare genetic diseases, about 30% of children suffer and many may not survive until the age of five.

About CDFD:

- The Centre for DNA Fingerprinting and Diagnostics (CDFD) is an autonomous organization funded by the Department of Biotechnology (DBT), Ministry

- of Science and Technology, Government of India.
- CDFD also receives funding from other agencies for specific collaborative projects.
- In addition, the DNA fingerprinting and diagnostic services provided by the centre support some of its activities.
- The centre is equipped with world-class state-of-the-art equipment and computing infrastructure to facilitate research and development in the frontier areas of modern biology.

Way Forward:

- The mission is complicated and challenging as it seeks to identify rare genetic disease caused by gene mutations in the early stages of pregnancy and try to uncover unknown disorders. About 5,600 families have been identified for screening for this program over a five-year period and once a genetic mutation is detected in the children, parents will receive counselling, while scientists look at animals and cells to understand it.

3

India's First Indigenously Developed OVH Magnetometer

Why in News:

The Indian Institute of Geomagnetism (IIG), an autonomous research institute under DST, Government of India, has developed the magnetometer as part of its technology development programme. The Overhauser Magnetometer developed by Indian scientists is one of the best magnetometers widely used by all the magnetic observatories across the world.

About OVH Magnetometer:

- A magnetometer is a scientific instrument used to measure the strength and direction of a magnetic field. OVH magnetometers are known for their high accuracy, high sensitivity and efficient power consumption.
- OVH is an important tool for the detection and calibration of magnetic anomalies due to ferromagnetic objects in the environment, to conduct magnetic field surveys and obtain continuous geomagnetic field measurements.

Fabrication of OVH Magnetometer:

- Various spectroscopic tools and theoretical simulations were used to understand the working process of the OVH sensor. For this various control experiments were done like changing the sensor structure and checking the performance of the sensor etc. This helped to optimize the sensor parameters and its associated electronics which eventually led to the creation of a very efficient and stable OVH sensor.
- In experiments conducted with the sensor installed at Alibaag Magnetic Observatory (MO) for Geomagnetic Sampling, it was found that this sensor accurately reproduced 'Geomagnetic Diurnal Variation' and various space weather events such as, geomagnetic storms, sudden show signs of impulsivity etc. The performance of this indigenously manufactured magnetometer is similar to that of a commercial OVH sensor which is currently installed in the magnetic observatories of IIG.

Advantages of OVH Magnetometer:

- This will pave the way for reducing the cost of

sampling and sensing experiments required for geomagnetic sampling.

- The sensor installed at Alibaug Magnetic Observatory (MO) could eliminate India's dependence on commercial OVH magnetometers for taking geomagnetic field measurements.
- The OVH magnetometer has found applications in magnetic observatories around the world as well as for international space programs. India imports it for such purposes. But this will reduce the dependence on imports.
- This instrument is commonly used to track geomagnetic storms and signals from the Sun that will help to protect satellite-based communications,

power grids and airline communication lines on Earth.

Way Forward:

The sensor is currently being tested for its long-term stability. The group is further excited to adapt its sensors for the outer space environment to support the current Indian space research programme. The understanding of this project, especially the underlying mechanisms of dynamic nuclear polarization (DNP) will also potentially help in developing a sensitive magnetic resonance imaging (MRI) tool.

4 Smiling Sun

Why in News:

NASA's Solar Dynamics Observatory captured a smiling image of the sun recently. The image has dark patches on the sun's surface resembling eyes and a smile. NASA explained that the patches are called coronal holes, which can be seen in ultraviolet light but are typically invisible to our eyes.

What are coronal holes?

- These are regions on the surface of the Sun from where the strong solar wind blows into space. Since there is less solar material here, they have a lower temperature and thus appear much darker than their surroundings. Here, the magnetic field is open to interplanetary space, sending solar material into a high-speed stream of the solar wind. Coronal holes can last from a few weeks to months.

Information Provided by Coronal holes:

- These 'coronal holes' are important for understanding the space environment around the earth through which our technology and astronauts travel. NASA said in 2016 that coronal holes covering six-eight per cent of the total solar surface" were spotted. While it is unclear what causes coronal holes, they correlate to areas on the sun where magnetic fields soar up and away, without looping back down to the surface as they do elsewhere. Scientists study these fast solar wind streams because they sometimes

interact with earth's magnetic field, creating what is called a geomagnetic storm. These storms can expose satellites to radiation and interfere with communications signals.

What happens during a Geomagnetic Storm?

- Geomagnetic storms are related to Earth's magnetosphere (the space around a planet that is affected by its magnetic field). When a high-speed solar storm hits Earth, under certain circumstances it can allow energetic solar wind particles to hit the atmosphere at the poles. Such geomagnetic storms cause a great disturbance in the magnetosphere because there is a very efficient exchange of energy from the solar wind to the space environment around Earth. In cases of a strong solar wind reaching the earth, the resulting geomagnetic storm can cause changes in the ionosphere, part of the earth's upper atmosphere. Radio and GPS signals travel through this layer of the atmosphere, so communications can get disrupted.

Conclusion:

The Solar Dynamics Observatory has been studying how the Sun's magnetic field is formed and organised, as well as how magnetic energy held in the Sun is converted and released into the heliosphere and geospace in the form of the solar wind, energetic particles, and fluctuations in solar irradiance.

5 Agni Prime Missile

Why in News:

India has successfully test-fired an indigenous developed new generation medium-range ballistic missile, Agni Prime, from the Odisha coast. It is the latest and a sixth variant of the Agni series missiles (under IGMDP - Integrated Guided Missile Development Program).

Key features of Agni Prime Missile:

- It is a two-stage canisterised solid-propellant missile with dual redundant navigation and guidance system. It has an operational range between 1,000 km to 2,000 km. It is launched by DRDO.
- It weighs 50 per cent less than the Agni 3 missile and has new guidance and propulsion systems.
- In addition, since it is canisterised, it can be launched from rail or road, stored for longer periods, and can be transported as per operational requirements.
- It's the first 'declared' MIRV missile in India's missile arsenal.

About Agni Series of Missiles:

- They are the mainstay of India's nuclear launch capability.
- They are long-range, nuclear weapons capable of surface-to-surface ballistic missiles.
- The first missile of the series, Agni-I was developed under the Integrated Guided Missile Development Program and tested in 1989.
- After its success, the Agni series of missiles got separated from IGMDP seeing its strategic significance.

6 Fungal Priority Pathogens List

Why in News:

World Health Organization (WHO) in its recently published report highlighted 19 fungi that represent the greatest threat to public health. The list known as Fungal priority pathogens list (FPPL) is the first global effort to systematically prioritize fungal pathogens, considering the unmet research and development (R&D) needs and the perceived public health importance. The major group of microbes that causes diseases to humans are Viruses, Prions, Bacteria, Fungi, Protozoa, and Helminths (worms).

About Integrated Guided Missile Development Program:

- It was conceived by Dr. A.P.J. Abdul Kalam to enable India attain self-sufficiency in the field of missile technology. Initially, 5 missiles were developed under this program but right now Agni missiles are out of this programme.
- **Agni:** Ballistic missiles with different ranges,
- **Trishul:** Short-range low-level surface to air missile.
- **Nag:** 3rd generation anti-tank missile.
- **Akash:** Medium-range surface-to-air missile.

What are ballistic missiles?

- A ballistic missile is a type of missile which uses projectile motion to deliver warheads to a target. These weapons are guided only during relatively brief periods—most of the flight is unpowered. In contrast, cruise missiles are jet-propelled at subsonic speeds throughout their flights.

Conclusion:

The government is also working on a mega defence project to make the airspace over almost all its major cities, including Delhi and Mumbai, virtually impregnable. In its missile armoury, India currently has Agni-1 with a 700 km range, Agni-2 with a 2,000-km range, Agni-3 with range of 2500 km, Agni-4 with range of more than 3,500-km and Agni -5 with a strike range of 5,000 km, can carry a nuclear warhead. Very few countries, including the US, China, Russia, France and North Korea, have such intercontinental ballistic missiles.

What is Fungus:

Fungi are multicellular organisms consisting of eukaryotic cells. There are more than 100,000 varieties of fungi. They have no mechanisms for locomotion. Fungi get nutrients by absorption and range in size from microscopic to bigger ones like mushrooms. They usually act as decomposers by obtain their energy from the chemical breakdown of dead organisms as well as from animal and plant waste products. Fungi are one of the categories in the 5 kingdom classification. The other 4 are Protista (the single-celled eukaryotes), Plants;

Animals and the prokaryotes (Monera).

Reasons for Rise of fungal infection:

1. Due to global warming and the increase of international travel and trade, the incidence and geographic range of fungal diseases are expanding worldwide. During the COVID-19 pandemic, the reported incidence of invasive fungal infections increased significantly among hospitalized patients.
2. As the fungi that cause common infections (such as candida oral and vaginal thrush) become increasingly resistant to treatment, risks for the development of more invasive forms of infections in the general population are also growing.
3. Resistance to antifungal medicines is partly driven by inappropriate antifungal use across the One Health spectrum. For example, injudicious use of antifungals in agriculture was linked to the rising rates of azole-resistant *Aspergillus fumigatus* infections.
4. Despite the growing concern, fungal infections receive very little attention and resources, leading to a scarcity of quality data on fungal disease distribution and antifungal resistance patterns. As a result, the exact burden of fungal diseases and antifungal resistance, are unknown, and the response is therefore undermined. The invasive forms of these fungal infections often affect severely ill patients and

those with significant underlying immune system related conditions.

5. Cases of invasive fungal disease (IFD) are rising as the at-risk population continues to expand. This is due to many factors, including advancements in modern medicine and accessibility to therapies and interventions that impair the immune system, such as chemotherapy and immunotherapy for cancer, and solid organ transplantation.

Conclusion

As per WHO, Fungal pathogens are a major threat to public health as they are becoming increasingly common and resistant to treatment. Currently, only four classes of systemic antifungal medicines (azoles, echinocandins, pyrimidines and polyenes) are used in clinical practice, and only a few others are under development. Although existing antifungal medicines are effective, they are associated with a plethora of adverse effects. Most fungal pathogens lack rapid and sensitive diagnostics and those that exist are not widely available or affordable globally. Thus it is need to come with positive approach to handle fungal infection.

7 A New Technique for LCD Manufacturing

Why in News:

Recently, a team of scientists from the Centre for Nano and Soft Matter Sciences (CENS) Bengaluru has developed a new easy technique for manufacturing liquid crystal displays. An essential requirement of liquid crystal devices (LCDs) is achieving unidirectional planar alignment of the component liquid crystals (LCs) over large areas.

The New Technology:

The team of scientists has conceptualized and implemented a new way of employing 2D materials to overcome the shortcomings of existing methods. Using h-BN nanoflakes as the specific material they employed a process called solution-processed deposition technique and found it to be effective in achieving LC alignment over a very large area. They have found the resulting crystals to be quite robust with no evidence of decay in the LC orientation over several months.

However, the conventional polymer rubbing method

produces quality LC alignments. This has inevitable and unwanted drawbacks such as the generation of electrostatic charge and dust particles that interfere with display operation and even damage the display's electronic components. While electrostatic charges increase the failure rate, dust can cause defects that severely affect device performance. Other problems include the need for a multistep process and high temperature treatment for the coating. This has increased the demand to replace this friction method with new non-contact techniques.

Importance:

This method, which demonstrates a non-conventional and contact-free route to achieve unidirectional alignment of LCs, is very simple, scalable, flexible for optimization and cost-effective, which can reduce the cost of such devices.

1 Asian Infrastructure Investment Bank (AIIB)

Why in News:

The seventh Annual Meeting of AIIB was hosted by AIIB virtually on Oct 26-27, 2022. The Board of Governors of the Asian Infrastructure Investment Bank (AIIB) announced that its eighth Annual Meeting will be held in Sharm el-Sheikh, Egypt, on Sept. 25-26, 2023.

Theme:

The theme of the 2022 AIIB Annual Meeting was “Sustainable Infrastructure Toward a Connected World”, which aims to reaffirm infrastructure’s crucial role in supporting recovery, growth, and connectivity. The theme also reiterates with AIIB’s commitment toward sustainable and resilient infrastructure investments in a crisis- and climate-challenged world.

About the meeting:

The Annual Meeting of the Board of Governors of the Asian Infrastructure Investment Bank (AIIB) is the flagship event of AIIB. It provides an opportunity to report on the Bank’s work and receive guidance from shareholders on AIIB’s strategic direction and activities. It also gathers and facilitates discussions among senior official delegates from AIIB Members, as well as partners, business leaders, civil society organizations and experts from a range of fields.

About AIIB:

The Asian Infrastructure Investment Bank (AIIB) is a multilateral development bank established in January 2016, that aims to improve economic and social outcomes in Asia. The bank currently has 105 members, including 14 prospective members from around the world. The bank started operation after the agreement entered into force on 25 December 2015, and ratifications were received from 10 member states holding a total number of 50% of the initial subscriptions of the Authorized Capital Stock. Headquarter of the bank is Beijing in china.

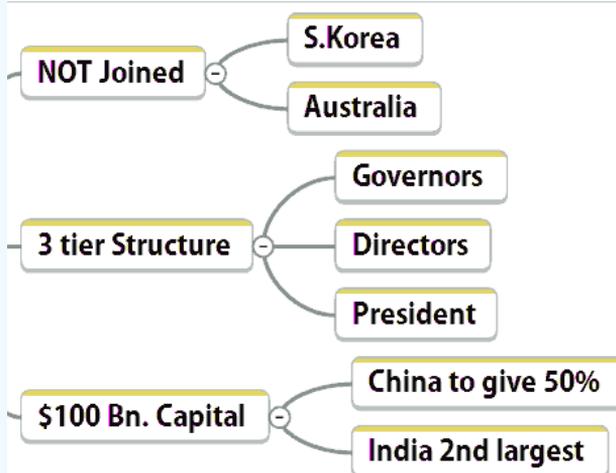
Governance Body:

- The bank’s governance structure is composed of the Board of Governors as the top-level and highest decision-making body. The board comprises 1 governor for each member state of the bank and in principle meets once a year. The board of directors, composed of 12 governors, each representing one or

more member is responsible for daily operations and tasks delegated to it by the board of governors. Nine of those members are from within the Asia-Pacific region and three representing members outside the region. The AIIB has approved five projects in India. These are:

- Bangalore Metro Rail Project (USD 335 million),
- Transmission System Strengthening Project,
- Gujarat Rural Roads (MMGSY) Project (providing USD329 million through a 13 -year loan to provide all -weather connectivity to 4,000 villages in the 33 districts of Gujarat state),
- India Infrastructure Fund
- Andhra Pradesh 24×7 – Power For All project.

AIIB HQ: Beijing; China + 21 Members



Conclusion:

The AIIB is still in its evolutionary phase that must be nurtured with democratic principles, avoiding single-country dominance like that of USA in IMF and World Bank. India as an emerging economy can play a vital role in shaping the foundation of AIIB for the cause of poor people spread across developing countries. India is the largest beneficiary of AIIB financing for infrastructure projects.

2 Increase in Forex Reserve

Why in News:

After falling for two consecutive quarters, the country's foreign exchange reserves surged by \$6.56 billion. It was the biggest weekly gain in more than one year. The foreign currency assets, major components of overall reserves, rose by \$ 5.77 billion to \$ 470.84 billion in the weekly report. The expert said that appreciation happened due to the decline of the dollar against many major currencies.

Components of Forex Reserve:

- The Reserve Bank of India Act and the Foreign Exchange Management Act, 1999 set the legal provisions for governing foreign exchange reserves. Reserve Bank of India accumulates foreign currency reserves by purchasing them from authorized dealers in open market operations. Foreign exchange reserves of India act as a cushion against rupee volatility once global interest rates start rising.

The Foreign Exchange Reserves of India consist of below four categories:

- Foreign Currency Assets (this is a major component of Forex reserve)
- Gold
- Special Drawing Rights (SDRs)
- Reserve Tranche Position

The change in FCA is mainly due to changes in the purchase and sale of foreign exchange by the RBI, proceeds from deployment of foreign exchange reserves, external aid receipts from the central government, and revaluation of assets.

What factors affect foreign exchange reserves?

- Overview of Exchange Rates.
- Determinants of Exchange Rates.

3 Central Bank Digital Currency (CBDC)

Why in News:

The Reserve Bank of India (RBI) launched India's first digital rupee pilot project for the wholesale segment. Digital rupee (e₹), also known as Central Bank Digital Currency (CBDC), is a digital form of currency notes issued by RBI.

- Differentials in Inflation.
- Differentials in Interest Rates.
- Current Account Deficits.
- Public Debt.
- Terms of Trade.
- Strong Economic Performance.

Importance of Growing Foreign Exchange Reserves:

- Rising forex reserves ease the government's and RBI's management in India's external and internal financial issues
- It acts as a cushion in the event of a Balance of Payments (BoP) crisis on the economic front.
- The rising reserves will help strengthen the rupee against the dollar.
- The reserves will provide markets and investors with a level of confidence that a country can meet its external obligations of forex assets.

Recent trends of Forex Reserve:

- The country's Forex exchange reserve has depleted by over 110 billion dollars in the last 14 months. The decline in reserve was mainly due to a change in valuation arising from the appreciation of the dollar.

Conclusion:

According to the International Monetary Fund, Forex Reserves are held to support a variety of objectives, including sustaining and preserving the trust in monetary and exchange rate policy, as well as sustaining the ability to intervene in support of the national or union currency. It will also reduce external vulnerability by keeping foreign currency liquidity available to absorb shocks during times of crisis or when borrowing is limited.

About Central Bank Digital Currency:

- CBDC is the legal tender issued by a central bank in digital form. It is same as a fiat currency and is exchangeable one-to-one with the fiat currency. Only its form is different. CBDC is a digital or virtual currency but it is not comparable to the private virtual currencies that have mushroomed

over the last decade. Private virtual currencies sit at substantial odds to the historical concept of money. They are not commodities or claims on commodities as they have no intrinsic value.

Need of a CBDC:

- CBDCs have some clear advantages over other digital payments systems, payments using CBDCs are final and thus reduce settlement risk in the financial system.
- CBDCs would potentially enable a more real-time and cost-effective globalization of payment systems. It is conceivable for an Indian importer to pay its American exporter on a real time basis in digital Dollars, without the need of an intermediary. This transaction would be final, as if cash dollars are handed over, and would not even require that the US Federal Reserve system is open for settlement. Time zone difference would no longer matter in currency settlements – there would be no ‘Herstatt’ risk. Although to realize benefits of global settlements, it is important that both the countries in a currency transaction have CBDCs in place.
- India’s high currency to GDP ratio holds out another

benefit of CBDCs. To the extent large cash usage can be replaced by CBDCs, the cost of printing, transporting, storing and distributing currency can be reduced.

- CBDCs are desirable not just for the benefits they create in payments systems, but also might be necessary to protect the general public in an environment of volatile private Virtual Currencies.

Global landscape:

- The Bahamas is the first country to launch its nationwide CBDC Sand Dollar.
- China became the first major economy in the world to operate the digital currency e-CNY in April 2020.

Way Forward:

Supported by state-of-the-art payment systems of India that are affordable, accessible, convenient, efficient, safe and secure, the Digital Rupee (e₹) system will further bolster India’s digital economy, make the monetary and payment systems more efficient and contribute to furthering financial inclusion.

4

Predatory Chinese Lending Apps on Centre’s Radar

Why in News:

The Ministry of Home Affairs has sought urgent strict action by law enforcement agencies against predatory Chinese lending apps. These apps are found to be indulged in harsh recovery practices, harassment, and blackmail which have led to multiple incidents of suicides. The Home Ministry issued a communication, flagging its serious impact on national security, economy and citizen safety caused by such apps.

Predatory nature of apps:

- These illegal lending apps may not be Regulated Entities (RE) by the Reserve Bank of India. They use bulk SMS, digital advertisement chat messengers and mobile app stores on a massive scale.
- They provide short-term loans (micro-credits) at exorbitant interest rates with processing or hidden charges, especially to vulnerable and low-income group people.
- The borrower has to provide mandatory access to contacts, location, and phone storage to avail loans.

The lenders misuse these confidential personal data using morphed images and other abusive practices by recovery agents violating RBI’s Fair Practices Code.

- Such apps came up during COVID-19 pandemic as many people were facing financial hardship.

Home Ministry’s advisory:

- The Ministry, in the investigation, found that this is an organized cybercrime executed using disposable emails, virtual numbers, mule accounts, shell companies, payment aggregators, API services (account validation, document verification), cloud hosting, cryptocurrency, etc.
- Ministry advised to involve domain experts during the investigation.
- The law enforcement agencies can avail the services of the National Cyber Crime Forensic Laboratory (NCFL), one of the verticals of the Indian Cyber Crime Coordination Centre (I4C), CIS Division for technical assistance on loan app analysis, malware

analysis and crypto transaction tracing.

National Cyber Crime Forensic Laboratory (NCFL):

- NCFL was setup by Cyber and Information Security Division of Home Ministry in 2022 at the Central Forensic Science Laboratory (CFSL) under Cyber Crime Prevention against women and child scheme.
- It has four specialized Hi-tech units to address issues of digital forensics.

Indian Cyber Crime Coordination Centre (I4C):

- The scheme to set up I4C was approved in 2018 under the Cyber and Information Security (CIS)

Division, to deal with cybercrimes in a coordinated manner.

- The I4C will deal with cyber security investigations, prioritise the development of response tools and bring private companies to contain the menace.
- It will act as a nodal point in the fight against cybercrime.

Conclusion:

India needs to develop capabilities in all domains in order to deal holistically with these kinds of threats. Further, Law Enforcement agencies are required to act strictly and coordinate with RBI to deal with the issue.

5 India, GCC FTA in Pipeline

Why in News:

Terms of Reference for a free trade agreement (FTA) are being finalized and negotiations for the same are expected to be launched between India and the Gulf Cooperation Council (GCC) member countries. This FTA will be aimed at boosting economic ties between the regions.

About Gulf Cooperation Council (GCC):

- GCC is a political and economic alliance consisting of six countries in the Arabian Peninsula viz. Kuwait, Bahrain, Oman, the United Arab Emirates, Saudi Arabia, and Qatar.
- GCC was established in the year 1981 to promote cultural, security, economic and social cooperation among the member countries. It meets annually to discuss regional affairs.
- All the members of the GCC are monarchies. Qatar, Kuwait, and Bahrain are constitutional monarchies whereas Saudi Arabia and Oman are absolute monarchies. The United Arab Emirates is a federal monarchy.

Significance of GCC for India:

- **Trade and Investments-** The share of GCC in India's total export and import was 10.4% and 18% respectively in 2020-21. The GCC region is expanding beyond the energy sector into fields such as tourism, construction, and finance. GCC is a major import-dependent region that can be harnessed by India by exporting food items, clothing, and other

goods.

- **Energy Security-** India predominantly imports crude oil and natural gas from GCC and exports pearls, precious and semi-precious stones, metals etc. GCC accounts for almost half of World's oil reserves. At present, GCC exports around 34 percent of India's crude oil.
- **Indian Diaspora-** Out of about 32 million non-resident Indians (NRIs), nearly 50 percent are estimated to be working in Gulf countries. As per a report by RBI, remittances sent from GCC region account for 30 percent of the total remittances received by India from foreign land.
- **Strategic Importance-** The Persian Gulf is an important sea lane for global trade. India shares the view of a stable and secure region with GCC.
- India already had a Free Trade Pact with the UAE, which was signed in May 2022.

Free Trade Agreement (FTA):

- FTA is a pact between two or more nations in order to reduce trade barriers of trade among them.
- Under this, goods and services are bought and sold across international borders with minimal or no government tariffs, subsidies or prohibitions to inhibit their exchange.

Significance of FTA with GCC:

- Boost at already existing trade relations- Duty concessions under FTA will help in tapping the

market of GCC countries.

- **Boost to Remittances-** According to a November 2021 report from World Bank, India received USD 87 billion in foreign remittances in 2021, of which a sizeable portion came from the GCC nations.
- It will give boost to India's ambition of increasing its share in global trade and will help promote Indian brands as global champion.

Way Forward:

The GCC as a collective entity has tremendous significance for India. It offers tremendous potential for cooperation in trade, investment, energy, manpower, etc. An early finalization of FTA will be a win-win for both parties.

6

Decentralize MGNREGS for Better Implementation

Why in News:

An internal study commissioned by the Ministry of Rural Development has argued for decentralization of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), allowing for more “flexibility” at the ground level.

About MGNREGA:

- Launched under NREG Act 2005, it guarantees 100 days of employment in each financial year to the adult members of any rural household willing to do work related to the unskilled manual job.
- It provisions legalise the Right to Work.
- It is a demand-driven scheme which provides for unemployment allowance for any rural adult when he/she demands for work and the state fails to provide it within 15 days.
- The Panchayati Raj Institution has a significant role in planning and execution. Decentralised nature of MGNREG Act has mandated Gram Sabha to recommend works to be undertaken under the scheme.

Finding of the Study:

- **Fund Management-** Fund Management has been centralised instead of paying the Gram Sabhas in advance, which has enabled them to decide the kind of work to be undertaken.
- **Delay in fund disbursement-** The study highlighted the frequent delay in fund disbursement. The delay leads to delay in material component for the project, affecting the output.

- **Low Wages-** The study highlighted low wages under MGNREGS workers, which were far lower than market rate in many states, defeating the purpose of acting as a safety net. For example, the minimum wage for a farm labourer in Gujarat is Rs.324.20 but the MGNREGS wage is Rs.229. Also, the MGNREGS wage does not take into account the difficult terrain conditions in areas such as Nagaland.

Recommendations:

- The study advocated for greater diversity of permissible works instead of listing the types. Broad categories of work may be listed out and flexibility should be given at ground level to select the type of works as per the broad categories.
- The Gram Sabha should take into account the local conditions and community's requirement instead of chasing a set target.
- To eliminate the fund disbursement problem, the study suggested setting up of a “revolving fund” (an extra internal monetary pool) that can be utilised whenever there is delay in the Central funds.

Conclusion:

Decentralisation of MGNREGA would lead to effective implementation of the scheme at ground level. This will ensure the very objective of the scheme to act as a safety net against chronic poverty and unemployment.

7 Supreme Court Upheld Employee Pension Scheme of EPFO

Why in News:

The Supreme Court upheld, the Employee Pension (Amendment) Scheme 2014 of EPFO, as legal and valid while reading down its certain provisions.

About EPFO Employee Pension Scheme:

➤ It is social security scheme launched by government in 1995, which includes both new and existing EPF members. The overall management of this scheme is done by EPFO. The scheme has been made in pursuance of, inter-alia, Section 6A of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952

What was the amendment done to the employee pension scheme?

The pension coverage was extended in 2014 to employees drawing a salary of more than 15000 per month subject to,

1. Member contributing at the rate of 1.16 percent on salary exceeding Rs 15000 per month.
2. An employee should have exercised the option within six months from September 1, 2014.

Crux of the SC Decision:

- SC upheld the validity of the new pension scheme which was extended to employees with more than Rs 15000 salary.
- The requirement of an additional contribution of 1.16 percent was struck down.
- Employees who exercised the option under para 11(3) of the unamended scheme and who were in service as on September 1, 2014, will be governed by amended para 11(4) of the scheme; para 11(3) govern old pension scheme and para 11(4) govern new pension scheme.
- Employees in service who were not allowed to exercise the option under proviso to 11(3) of the pre-2014 amendment shall be entitled to exercise the option under amended para 11(4). They have been given a deadline of 4 months to exercise the option under Article 142 (Supreme Court's plenary powers to do complete justice);

- Employees who retired before September 1, 2014, without exercising the option under para 11(3) cannot avail the benefit of the judgment;
- Employees who retired before September 1, 2014, after exercising the option under para 11(3) will be governed by pre-amendment scheme;
- Ceiling of ₹15,000 for computing pension was upheld.

EPFO:

- Employees' Provident Fund Organisation (EPFO) was established by an act of Parliament of India, to provide social security to workers working in India. It came into force by Employee Provident Fund and Miscellaneous Provision Act, 1952. EPFO comes under the control of the Ministry of Labour and Employment, Government of India.



Conclusion:

After this decision, there is confusion regarding pension scheme and provident fund scheme. This issue should be resolved soon as well as cross-breeding of subsidies should not be allowed.

1 Goa Maritime Symposium-2022

Why in News:

The fourth edition of biennial Goa Maritime Symposium was conducted recently by the Indian Navy at Goa from 31 October to 1 November 2022.

Theme of GMS-2022: “Maritime Security Challenges in the Indian Ocean Region: Converting Common Maritime Priorities into Collaborative Mitigation Framework”.

About Goa Maritime Symposium (GMS):

- GMS is a forum of collaborative thinking, cooperation, and mutual understanding between India and key maritime nations of Indian Ocean Region (IOR).
- The GMS was conceptualised and instituted by the Indian Navy in 2016.
- It is conducted biennially by the Naval War College (NWC), Goa.
- GMS-22 saw the representation of navies and maritime agencies from 12 friendly foreign Indian Ocean Littoral countries, which included Bangladesh, Comoros, Indonesia, Madagascar, Maldives, Malaysia, Mauritius, Myanmar, Seychelles, Singapore, Sri Lanka, and Thailand, besides India.

India’s stand on Indian Ocean:

- India has consistently advocated for the concept of “Collective Responsibility” for maritime security in the Indian Ocean Region.
- India’s stand is guided by the vision of SAGAR

(Security and Growth for all in the Region). Through SAGAR, India seeks to deepen economic and security cooperation with its maritime neighbours and assisting them in building their maritime security capabilities.

About SAGAR:

- Security and Growth for All in the Region (SAGAR) was first announced by the Prime Minister in 2015. This is the manifestation of India’s policy of maritime cooperation in the Indian Ocean Region (IOR).
- The Vision of SAGAR can be defined from the perspectives of-
 1. Security
 2. Capacity Building
 3. Collective Action
 4. Sustainable Development
 5. Maritime Engagement

Conclusion:

With the Indian Ocean becoming the locus of importance of 21st-century strategic landscape, the Goa Maritime Symposium will play a constructive role in bringing together the littoral states. It will a significant role in evolving strategies, policies, and implementation on issues that are of common interest in the maritime domain.

2 Mangarh Dham Tour

Why in News:

Recently, the Indian Prime Minister participated in a public program – ‘Mangarh Dham ki Gaurav Gatha’ in Mangarh Hill, Banswara, Rajasthan, to pay tribute to the unsung tribal heroes and martyrs of the freedom struggle, saluting the tribal heroes and martyrs for their sacrifice.

About Mangarh:

- “Mangarh is the common heritage of the people of Rajasthan, Maharashtra, Madhya Pradesh, and Gujarat.” Mangarh Dham is also known for the massacre of tribals, six years before Jallianwala Bagh, and is sometimes referred to as “Adivasi Jallianwala”. Mangarh Dham is a reflection of the

tenacity, sacrifice, penance, and patriotism of the tribal heroes and heroes. Prime Minister Modi has declared this Dham, a national monument.

Importance of Mangarh Dham:

- The hills of Mangarh hold special significance for the Bhil community and other
- tribes of Rajasthan, Gujarat, and Madhya Pradesh.
- Symbolizes penance, sacrifice, bravery, and sacrifice of the tribal heroes.
- Govind Guru spent the last years of his life here, and his energy and teachings can still be felt in the soil of this land.

Work being done for the development of Mangarh Dham:

The development of Mangarh Dham can make it an awakening place of inspiration for the new generation. There are several initiatives taken up for the development of tribes in India, like;

- **Forest areas increasing in the country:** forest wealth is being
- Protected, as well as the tribal areas are integrated with Digital India.
- Eklavya Adivasi schools are being opened for providing opportunities for
- modern education to tribal youth along with traditional skills.
- To bring the past and history of tribal society to the

masses, today special museums dedicated to tribal freedom fighters are being built across the country.

Way Forward:

- The extent and role of tribal society in the country are vast and there is a need to work for this society with a dedicated spirit. The page of revolution is filled with the valor of the tribals. But unfortunately, this sacrifice of tribal society did not get the place it deserved in history. Today the country is filling that gap. India's past, history, present, and future are incomplete without tribal society.

3 Bats Expelled from Prehistoric Cave in Manipur for Tourism

Why in the News:

Khangkhui, locally called Khangkhui Mangsor, is a natural limestone cave about 15 km from Ukhrul, the headquarters of Ukhrul district. A zoological study that records new fauna in the state found that a colony of bats dating back to the Palaeolithic past has been evicted from Manipur's cave system to make it tourism-friendly.

History of the cave

- The excavations done by the archaeologists of Manipur revealed that the cave was home to Stone Age communities.
- The cave was also used by the local people as a shelter during World War II, after the Japanese army moved towards Manipur and adjoining Nagaland.

Study by researchers of Zoological Survey of India (ZSI):

- The cave was home to a large population of bats belonging to the Rhinolophidae and Hipposideridae families.
- These bats were killed from the Khangkhui cave after 2016-17 and were removed to make it "more tourist-friendly", cited the local guides.

Threats to the safety of bats:

- In some places, bats are eaten for their alleged medicinal properties or as a source of protein.

- People in Vallau village in Chandel district occasionally hunt bats in a nearby cave, although this practice is not prevalent in the entire state.

Security measures:

- Researchers say that recently, there has been an increasing level of awareness about wildlife conservation in some areas.
- Dalong village in Tamenglong district has been at the forefront in community-led conservation efforts.
- The forests in and around Dalong village have rich biodiversity and people have been preserving these forests as their heritage for generations.
- This should be one of the priorities of the state government and they should take action before it is too late.

Way Forward:

Bats across the world are at risk of enormous human pressures such as habitat destruction, overexploitation, and harassment etc. and the situation in India is no different from others. There is a need to spread awareness everywhere equally. It is important to spread information in remote areas where enforcement of wildlife laws is inherently difficult. This is indeed a big challenge but for this the government can involve community leaders, youth organizations and NGOs.

4 EMRS Cultural Fest

Context:

The National EMRS Cultural Fest was held in Bengaluru, Karnataka, from October 31 to November 2, 2022. It was organized by the National Education Society for Tribal Students, an independent institution under the Ministry of Tribal Affairs.

Key Points:

- The Ministry has been holding EMRS Cultural Fests and Sports meets every year, giving tribal students a national platform to showcase their hidden talents in various spheres.
- It recognizes the need to integrate tribal people with the mainstream and it seeks to help them access equal opportunities to develop in various fields.
- This three-day event was of immense significance as the event was organised after 2 years, because of outspread of Covid-19 it could not be held.
- The event was hosted by the Karnataka Residential Educational Institutions Society (KREIS) at the Art of Living International Centre. Minister of State for Tribal Affairs, Smt. Renuka Singh Saruta attended the occasion.
- In keeping with the spirit of 'Ek Bharat Shrestha Bharat', the event aided the tribal youth pursuing education in EMRSs to develop holistically while fostering sustained cultural connections and celebrating 'unity in diversity' via national integration.

Eklavya Model Residential School (EMRS):

- It is a Government of India scheme for model residential schools for Indian tribes (Scheduled Tribes) across India.
- It is one of the flagship interventions of the Ministry

5 M4 Armoured Vehicles

Context:

Bharat Forge Limited is set to provide an additional 30 M4 vehicles to the army while also exploring export opportunities. Earlier, the company provided Army with 60 of its M4 armoured vehicles, some of which have been deployed in eastern Ladakh since the stand-off.

About M4 vehicles:

- M4 is a state-of-the-art armoured personnel carrier

of Tribal Affairs, Government of India, and was introduced in 1997-98 to ensure quality education for tribal students in the remote tribal areas

- As per 2010 EMRS Guidelines, at least one EMRS must be established in every Integrated Tribal Development Agency (ITDA) and Integrated Tribal Development Project (ITDP) with a 50% ST population.
- The budget for 2018-19 stipulates that by 2022, there would be an Eklavya Model Residential School in every block with more than 50% ST population and at least 20,000 tribal members.

Initiatives for tribes and their development:

- The Ministry of Tribal Affairs is the nodal Ministry for overall policy, planning, and coordination of programmes for the development of Scheduled Tribes (STs).
- **The GOAL programme:** It is designed to provide mentorship to tribal youth through digital mode. The digitally enabled program envisages acting as a catalyst to explore the hidden talents of the tribal youth, for their personal development as well as for the all-around upliftment of their society.
- **Swasthya:** a first-of-its-kind e-portal, it provides all health and nutrition-related information of the tribal population of India in a single platform.

Way Forward:

For the past several decades, many works have been done by all the governments for the all-round development of tribal brothers and sisters, but there is still a need to do more active work so that unity in diversity can be realised.

Quick Reaction Fighting Vehicle (Heavy) that provides high levels of protection to the occupants against high kinetic energy threats, such as powerful mine bursts and grenades.

- Due to its design built on a flat-floor monocoque hull, it has ballistic and blast protection against TNT side blasts of up to 50 kg, roadside bombs, and IEDs.
- The vehicle has a payload of 2.3 tonnes and an operating range of about 800 km with a thrust speed

- of 140 km per hour.
- The automatic transmission-enabled vehicle can carry 10 soldiers including the driver and has a cooling and heating system, making it ideal for both deserts and high altitudes.
- It is 100% made in India while 95% of its parts and design are indigenous.
- Since the Chinese have deployed strong armour in the highlands, some of the M4 vehicles are now being integrated with the Israeli Spike anti-tank guided missile (ATGM).
- In addition to the ATGM, the Army is considering the option of upgrading the 7.62 mm gun on board to a 20 mm gun with an automatic turret.

Indigenisation of Defence Production in India:

The government has implemented a number of policy initiatives under the “Make in India” programme and taken several steps to encourage domestic design,

development, and production of defence equipment and reduce the import of defence equipment. This includes:

- Launch of Innovations for Defence Excellence (iDEX) scheme involving start-ups & Micro, Small, and Medium Enterprises (MSMEs)
- Simplification of Industrial licensing process with longer validity period; Liberalisation of Foreign Direct Investment (FDI) policy allowing 74% FDI under automatic route
- Establishment of two Defence Industrial Corridors, one each in Uttar Pradesh and Tamil Nadu
- Earmarking 68% of the Capital acquisition budget for domestic sources
- Issuance of 85 new defence industrial licenses to private Industries during last two years
- Establishment of a second plant of LCA ‘Tejas’ Division was at Bangalore in February 2021 to increase the production capacity of Light Combat Aircraft (LCA).

6 Twitter Acquisition and its effects

Context:

Elon Musk completed the \$44 billion deal to take Twitter Inc. private recently. The deal was announced in April and Musk assumed ownership of the crucial social media platform by firing key executives, including Indian CEO Parag Agarwal, right away.

Major changes that will be introduced:

- Twitter is the fifteenth most popular platform in the world.
- Musk has disclosed several significant changes to the platform, including the introduction of an \$8 charge for the coveted blue checkmark.
- Before Musk’s acquisition, a blue check mark next to an account’s name indicated that Twitter had confirmed that the person or organisation making the claim indeed belonged to it.
- The social media company has not yet specified how it intends to confirm users’ identities after collecting a charge from them and before awarding them with a blue check mark.
- Apart from the blue checkmark, subscribing to the service will also give users, half the ads and much better ones.
- Further, Musk intends to allow users to write long form contents and help them monetise the content as well.
- Also, there are plans to introduce pay-walled videos

where users have to pay for watching certain videos

The effects and consequences:

- Twitter is one of the most frequently utilised social media platforms in the world and forms a nexus of politics, society, and the executive branch. It also exerts a tremendous amount of power given the crucial role it plays in news transmission and the formation of worldwide public opinion.
- Making Twitter private may reduce the transparency and scrutiny that come with being a public listed company.
- A more robust and complex system of checks and balances, as well as much better openness and accountability, will be the need of the hour given the shroud of secrecy that comes with being a privately owned firm.
- Further, making severe changes, when the world is faced with several turmoil and trajectories, might prove disruptive.

Way Forward:

Making serious changes at a time when the world is facing many upheavals can prove to be disruptive. With war raging in Europe, the West faces a severe economic crisis, while ambitious China is actively pursuing its own path. In such a state of turmoil, the controversial issue

of hate speech and disinformation could affect Twitter's future plans. Therefore, protecting privacy keeping in

mind the freedom of expression is the need of the hour.

7 Global Tuberculosis Report 2022

Why in News:

The World Health Organization (WHO) recently released the World Tuberculosis Report 2022, which notes the impact of the COVID-19 pandemic on the diagnosis, treatment and disease burden of tuberculosis (TB) worldwide.

Key findings of the report:

- More than 10.6 million people became ill due to tuberculosis in 2021.
- 6 million people have lost their lives to tuberculosis. Among these, 187,000 are HIV patients.
- The burden of drug-resistant tuberculosis (DR-TB) has increased by 3 percent between 2020 and 2021.
- Due to challenges related to access to essential TB services, many people with tuberculosis have not been diagnosed and treated.
- Along with greater community transmission of TB infection, there has also been an increase in the number of TB deaths.
- The number of people treated for RR-TB and multi-drug resistant TB (MDR-TB) declined between 2019 and 2020.
- TB prevention treatment for HIV-positive people has exceeded the global target of 6 million between 2018 and 2022, reaching more than 10 million in just 4 years.
- With 28% cases, India was among the eight countries that accounted for more than two-thirds (or 68.3%) of the total TB patients count. The other countries were Indonesia (9.2% cases), China (7.4%), the Philippines (7%), Pakistan (5.8%), Nigeria (4.4%), Bangladesh (3.6%), and the Democratic Republic of the Congo (2.9%).
- In 2021, seven countries – India, Nigeria, South Africa, Uganda, the United Republic of Tanzania, Zambia, and Zimbabwe – had 82 per cent of those who started preventive TB treatment in the previous year.
- Global spending on essential TB services has declined from USD 6 billion in 2019 to USD 5.4

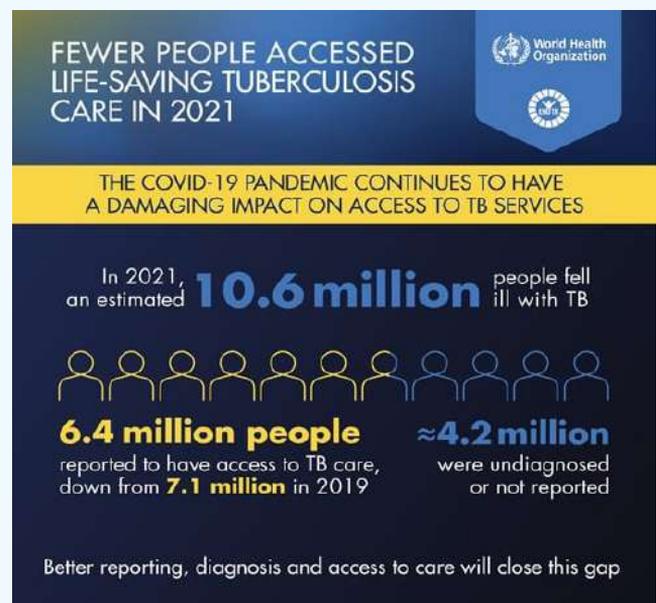
billion in 2021. This is less than 50 per cent of the global target of USD 13 billion annually by 2022.

Tuberculosis (TB):

1. Tuberculosis (TB) is an infectious disease caused by *Mycobacterium tuberculosis*.
2. TB commonly affects the lungs (pulmonary TB) but can also affect other parts (extra pulmonary TB).
3. Tuberculosis spreads from person to person through the air, when people who are infected with TB infection cough, sneeze, or otherwise transmit respiratory fluids through the air.
4. The most common risk factor associated with TB is HIV & other conditions that impair the immune system.

Conclusion:

The report reiterates its call for countries to put in place urgent measures to restore access to essential TB services. It further calls for increased investments and multi-sectoral action to address the broader determinants that influence TB epidemics and their socioeconomic impact as well as the need for new diagnostics, drugs, and vaccines.



NEWS OF NATIONAL AND INTERNATIONAL IMPORTANCE

1. International Drought Resilience Alliance (IDRA)

The International Drought Resilience Alliance has been launched at COP27. The IDRA was first announced by Spain in September 2022 at the 77th session of the United Nations General Assembly. Spain and Senegal are leading this coalition of 30 countries. It aims to shift drought management from emergency response to resilience to climate change impacts. The mission of the coalition is to provide the political impetus to make land resilience to drought and climate change a reality by 2030.



2. Belarcia Gracilis

A study has unearthed a nearly complete skeleton of an early reptile from the Middle Jurassic period in Scotland. The skeleton is that of *Bellarsia gracilis*, a primitive squamate. Squamates are a phylum of reptiles that includes over 10,000 living species descended from a shared common ancestor that lived 240 MYA. The fossil may improve our understanding of the anatomical changes that led to the establishment of the body plan of reptiles such as modern lizards.



3. Janaki Ammal

Recently, the 125th birth anniversary of Edavalath Kakkat Janaki Ammal, a pioneering botanist and the first Indian woman to be awarded a PhD in Botany, was celebrated. In 1925, Janaki Ammal earned a master's degree at the University of Michigan in the United States, doing research on plant cytology (which focuses on the structure and function of cells). He worked on several intergeneric and interspecific hybrids involving sugarcane and related grass species. She is believed to have been responsible for creating sugarcane hybrids that yielded sweeter sugar. His association with the Save the Silent Valley movement was well known. It was an operation to prevent flooding of a hydroelectric project in the Silent Valley forest in Palakkad district of Kerala.



4. Miyawaki Forest

Recently, the Prime Minister of India has inaugurated a 'Miyawaki' forest in Ekta Nagar, Gujarat. The forest has been developed using the techniques of Japanese botanist Akira Miyawaki, which aid in the creation of dense, native forests in a short period of time. Through the Miyawaki method, a forest can be developed in just two to three years, whereas with the traditional method, it takes at least 20 to 30 years. Plant growth is ten times faster with this method and the resulting forest is thirty times more dense.



5. Yotta D1

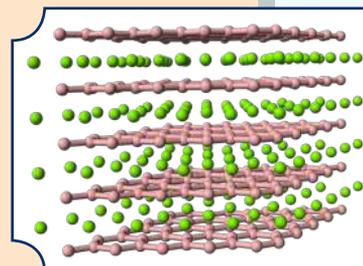
North India's first Hyperscale Data Center, Yotta D1 has been inaugurated by the Chief Minister of UP at the Data Center Park in Greater Noida. It is also the country's largest and UP's first data center. A data center is a physical facility that organizations use to house their critical applications and data.

Key components of a data center design include routers, switches, firewalls, storage systems, servers, and application-delivery controllers. There are 4 main types of Data Centers (DCs) – Enterprise DCs, Managed Services DCs, Colocation DCs and Cloud DCs.



6. Titanium Diboride (TiB₂)

IIT Gandhinagar and the Japan Advanced Institute of Science and Technology (JAIST) have invented a new anode material that enables lithium batteries to be recharged within minutes. The new two-dimensional (2D) anode material was developed using nanosheets derived from titanium diboride (TiB₂). It resembles a multi-stacked sandwich with metal atoms sandwiched between layers of boron. Titanium Diboride (TiB₂) is an extremely hard ceramic with excellent heat conductivity, oxidation stability and wear resistance.



7. Senna Spectabilis

A tree species, *Senna spectabilis*, has proliferated in between 800 hectares and 1,200 hectares of the buffer zone of the Mudumalai Tiger Reserve (MTR). The species is an exotic tree used as an ornamental species and as firewood. It is a type of large tree native to tropical America, known as an 'environmental weed', a 'garden slog' and a 'natural weed'. Listed in the Global Compendium of Weeds. The species has become highly invasive in the Sigur Plateau in both the core and buffer zones of the MTR. Mudumalai Tiger Reserve is located at the tri-junction of three states, Karnataka, Kerala and Tamil Nadu, in the Nilgiris district of the state of Tamil Nadu. It is part of the Nilgiri Biosphere Reserve.



8. "FIFA Football for Schools" Program in India

Recently, All India Football Federation (AIFF), Ministry of Education, Skill Development and Entrepreneurship, Fédération Internationale de Football Association (FIFA) entered into an agreement to widen football in various schools of the country through Football for Schools programme. signed the memorandum. It aims to empower learners (boys and girls) with valuable life skills and competencies. Empowering coach-educators with training to deliver sports and life-skills activities. To build the capacity of stakeholders (schools, member associations and public authorities) to deliver life skills training through football.



9. Hindu Heritage Month

Canada has officially celebrated November as its National Hindu Heritage Month for the first time. Virasat Month aims to celebrate and acknowledge the significant contribution of the 830,000 Hindu community of the country in various walks of life. Canada also marks heritage months for other religions, with April as Sikh Heritage Month, May as Canadian Jewish Heritage Month, and October as Canadian Islamic History Month.



10. Combined Military Training - 2022

Recently, the 11th edition of the annual Joint Military Training (JMT) between the Indian Air Force (IAF) and the Royal Singapore Air Force (RSAF) began at Air Force Station, Kalaikunda. Both the Air Forces have resumed this training after a gap of two years. RSAF is participating in JMT-2022 with F-16 aircraft while IAF is participating with Sukhoi-30 MKI, Jaguar, MiG-29 and LCA Tejas aircraft. It seeks to provide the participating crew an opportunity to share valuable operational knowledge, experience and best practices, while strengthening the professional bond between the two Air Forces.



11. Mother Language Survey of India (MTSI)

Recently, the Ministry of Home Affairs (MHA) completed the Mother Language Survey of India (MTSI) with field videography of 576 languages of the country. The Mother Language Survey of India is a project that “surveys mother tongues, which is repeated in 2 more census decades”. It also documents the linguistic characteristics of the selected languages. National Informatics Center (NIC) and National Film Development Corporation (NFDC) will preserve the linguistic data of the mother tongues surveyed by documenting them in audio-video files. According to an analysis of 2011 linguistic census data in 2018, more than 19,500 languages or dialects are spoken in India as mother tongue.



12. New Species of Crab

Recently, researchers have discovered a new species of estuarine crab in the mangroves of Parangipettai, near the mouth of the Vellar river in Cuddalore district (Tamil Nadu). This species has been named in honor of Annamalai University’s 100 years of service in education and research. The name has been changed to *Pseudohelis annamalai*. This is the first ever recorded appearance of this genus, *Pseudohelis*. So far, only two species – *Pseudohelis subquadrata* and *Pseudohelis latrellii* – have been confirmed within this genus.



13. Garuda VII Air Exercise

Recently, the Air Force of India and France conducted Exercise Garuda. The exercise includes four Rafale fighter jets and an A-330 multi-role tanker transport aircraft from the French side. In addition to the LCA and LCH, the IAF contingent includes Sukhoi-30 MKI, Rafale and Jaguar fighter aircraft, as well as Mi-17 helicopters. The bilateral air exercise has been operating since 2003. Air Exercise Garuda provides a unique opportunity to both the Air Forces to learn and imbibe each other's best practices during operations. This highlights the growing interoperability between the two air forces.



14. Indian Biological Data Center

Union Minister of State for Science and Technology Jitendra Singh recently dedicated the Indian Biological Data Center (IBDC) to the nation. The Indian Biological Data Center is India's first national repository for life science data. It will store all life science data generated from publicly funded research in the country. It will be operated with the help of Department of Biotechnology (DBT).

In the long term, IBDC aspires to become a major data repository for all life science data originating from India. It was set up at the Regional Biotechnology Center (RCB) in Faridabad, Haryana. It aims to provide IT platform for collection of biological data originating from India. Develop standard operating procedures for the storage and sharing of life science data based on the FAIR (Findable, Accessible, Interoperable and Reusable) principle.



15. Interest Free Banking in Pakistan

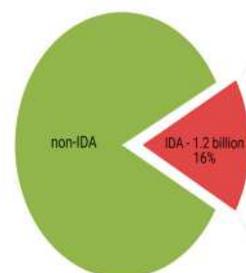
The government of Pakistan is planning to introduce an interest-free banking system in the country from 2027 under Islamic law. The concept of interest free banking system is derived from the Islamic form of banking. It works on the basis of ethical standards and prohibits Muslims from giving or receiving any kind of interest. It is considered an effective tool to achieve the economic objectives of Islam.



16. Link between PM 2.5 Pollutants and Anemia

A new study titled "Reducing the burden of anemia in Indian women of reproductive age with the goal of cleaner air" has found a link between PM 2.5 pollutants and the prevalence of anemia. According to the new study, PM 2.5 sources – sulfate and black carbon – are more associated with anemia than organics and dust. The largest sectoral contributor to these PM 2.5 sources is industry. It is followed by the unorganized sector, domestic sources, power sector, road dust, agricultural waste burning and transport sector. Long-term exposure to particulate matter may increase the prevalence of anemia through systemic inflammation in women of reproductive age (15–45 years). If India achieves its clean air targets, it can reduce the prevalence of anemia from 53 percent to 39.5 percent. India is currently one of the countries with the highest prevalence of anemia among women of reproductive age.

World population in 2016 - 7.4 billions



Current Affairs at a Glance

1. The theme “Vasudhaiva Kutumbakam” or “One Earth One Family One Future” of the G20 summit to be held in India, is taken from the ancient Sanskrit text of the Maha Upanishad.
2. IPPB Online organized India’s first floating financial literacy camp under Nivesh Didi at Dal Lake in Srinagar, J&K.
3. Cabinet Approves Nutrient Based Subsidy Rates for Phosphatic and Potash Fertilizers for Rabi Season 2022-23 from October 1, 2022 to March 31, 2023
4. Cabinet approves renaming of Greenfield Airport at Hollongi, Itanagar, the state capital of Arunachal Pradesh as “Donyi Polo Airport, Itanagar”
5. “Roadmap for Ethanol Blending in India 2020-25” has been placed in the public domain under which a target of 20 per cent ethanol blending in petrol has been set by 2025.
6. India hosted the 2nd Agriculture Ministerial Meeting of BIMSTEC under the chairmanship of the Union Minister of Agriculture and Farmers Welfare, Shri Narendra Singh Tomar.
7. The Unique Identification Authority of India (UIDAI) introduced the new AIML Chatbot “Aadhaar Mitra” to facilitate to access of Services by the citizens.
8. The 22nd Law Commission of India has been constituted, headed by Justice (Retd) Rituraj Awasthi. The tenure of the commission will be three years.
9. Shiv Thapa won his 6th Asian Championships medal in November 2022.
10. Kerala became the first state in India to launch uniform gold prices based on bank rate.
11. Uttarakhand Chief Minister Pushkar Singh Dhami inaugurated the “Lakhpati Didi” fair in Dehradun which aims to empower the women of the state.
12. The fifth Khelo India Youth Games 2022 will be held in Madhya Pradesh from 31 January to 11 February 2023.
13. India is ranked 31st in US News & World Report’s Best Countries 2022.
14. Defense Research and Development Organization (DRDO) successfully conducted the first flight test of Phase-II Ballistic Missile Defense (BMD) interceptor AD-1 missile.
15. Chief Election Commissioner Shri Rajiv Kumar along with Election Commissioner Shri Anoop Chandra Pandey presided over the 1st National Conference of PWD Icons for Accessible Elections organized by Election Commission of India.
16. Recently, the Indian Navy participated in the first edition of the India-Mozambique-Tanzania Trilateral Exercise (IMT TRILAT), a joint maritime exercise between the Indian, Mozambique and Tanzanian navies, in Dar es Salaam, Tanzania.
17. November 7 is observed as National Cancer Awareness Day. This day is important as it educates people about the serious risk of cancer.
18. Goa hosted a three-day long Civil Air Navigation Services Organization (CANSO) conference from 1st to 3rd November 2022.
19. In India, 7 states (Andhra Pradesh, Haryana, Chhattisgarh, Kerala, Karnataka, Punjab and Madhya Pradesh) and 2 union territories (Lakshadweep and Puducherry) celebrated their foundation day on 1 November.
20. First international day of biosphere reserve observed on 3 November 2022



PM Modi launched the new Complaint Management System portal of the Central Vigilance Commission (CVC).

To ensure a common and effective approach with the aim to eliminate corrupt and unethical practices in public administration and to bring about transparency, fair-play, objectivity, accountability and responsiveness to the aspirations of the citizen from administration.

Why in Broadcast

Vision

Mission

CVC's Annual Report:

The Annual Report of the CVC not only gives the details of the work done by it but also brings out the system failures which leads to corruption in various Departments/Organisations, system improvements, various preventive measures and cases in which the Commission's advises were ignored etc.

CVC

CVC Logo

Which Ministry/ Department Controls the CVC?

Functions and Powers of the CVC

To promote effective vigilance administration through the following tools :-

- ◆ **Preventive Vigilance:** To ensure that the scope for indulging in corrupt/unethical practices is eliminated or reduced to the minimum extent possible.
- ◆ **Punitive Vigilance:** Creation of a credible deterrence against corrupt practices through prompt enforcement of anti-corruption laws, rules and regulations
- ◆ **Participative Vigilance:** Raising awareness to inculcate ethical values and reduce society's tolerance towards corruption, through outreach activities and sensitization.

- ◆ The logo consists of a graphic representation of an eye enclosed within the letter "C".
- ◆ The eye represented in a pleasing blue colour is symbolic of the collective determination of the community to be vigilant against any erosion of rights through illegal and improper actions of public servants.
- ◆ Encased within the letter "C" the eye represents the Commission oversees the vigilance administration in all public organisations and helping in arriving at quick and logical decisions in all vigilance cases.
- ◆ The deliberate choice of the blue colour signifies an active, ever vigilant but positive and friendly Central Vigilance Commission.

- ◆ The CVC is not controlled by any Ministry/Department.
- ◆ It is an independent body which is only responsible for the Parliament.

- ◆ Give directions to the Delhi Special Police Establishment (DSPE) for superintendence insofar as it relates to the investigation of offences under the Prevention of Corruption Act, 1988
- ◆ To inquire or cause an inquiry or investigation to be made on a reference by the Central Government
- ◆ To inquire or cause an inquiry or investigation to be made into any complaint received against any official belonging to such category of officials specified in sub-section 2 of Section 8 of the CVC Act, 2003
- ◆ Review the progress of investigations conducted by the DSPE into offences alleged to have been committed under the Prevention of Corruption Act, 1988 or an offence under the Cr.PC
- ◆ Review the progress of the applications pending with the competent authorities for sanction of prosecution under the Prevention of Corruption Act, 1988
- ◆ Tender advice to the Central Government and its organisations on such matters as may be referred to it by them
- ◆ Exercise superintendence over the vigilance administrations of the various Central Government Ministries, Departments & Organisations of the Central Government.



To Implement self-sustainable and self-generating natural farming systems for freedom from purchased inputs with the aim to cut down on cost of cultivation, enhance farmers income and ensure resource conservation and safe and healthy soils, environment and food.

Vision

Mission

National Steering Committee

National Mission On Natural Farming Management And Knowledge Portal

Current Scenario of Natural Farming in India

- ◆ Many states have taken up initiatives for natural farming promotion.
- ◆ Andhra Pradesh, Gujarat, Himachal Pradesh, Odisha, Madhya Pradesh, Rajasthan, Uttar Pradesh and Tamil Nadu are among the leading states.
- ◆ As of now more than 10 lakh ha. area is covered under natural farming in India.
- ◆ Improve economics of farmers

Natural Farming Practices

Important practices, essential for adoption of natural farming includes:

- ◆ No external inputs,
- ◆ Local seeds (use of local varieties),
- ◆ On-farm produced microbial formulation for seed treatment,
- ◆ On-farm made microbial inoculants (Jivamrita) for soil enrichment,
- ◆ Mixed cropping,
- ◆ Managing diversity on farm through integration of trees
- ◆ Management of pests through diversity and local on-farm made botanical concoctions
- ◆ Integration of livestock, especially of native breed for cow dung and cow urine as essential inputs for several practices
- ◆ Water and moisture conservation.

Concept

- ◆ Natural Farming is a
 - Chemical-free farming system
 - Rooted in Indian tradition
 - Enriched with modern understanding of ecology, resource recycling and on-farm resource optimization.
- ◆ It is considered as agroecology based diversified farming system which integrates crops, trees and livestock with functional biodiversity.
- ◆ It is largely based on on-farm biomass recycling with major stress on
 - Biomass mulching,
 - Use of on-farm cow dung-urine formulations;
 - Maintaining soil aeration and
 - Exclusion of all synthetic chemical inputs.

Scenario

- ◆ Currently, the acceptance and adoption of natural farming systems are at early stages and gradually gaining acceptance among the farming community
- ◆ State of Andhra Pradesh, Karnataka, Himachal Pradesh, Gujarat, Uttar Pradesh and Kerala are among the leading states.

- ◆ To promote alternative system of farming for freedom from external purchased inputs, cost reduction and thereby increasing income of farmers
- ◆ To popularize integrated agriculture-animal husbandry models based on desi cow and local resources.
- ◆ To undertake activities for awareness creation, capacity building, promotion and demonstration of Natural Farming.
- ◆ To create standards, certification procedure and branding for Natural Farming products for national and international markets.

- ◆ At the national level, National Mission on Natural Farming steered through a NSC under the Chairmanship of Agriculture Minister.
- ◆ NSC will be the policy making body providing overall direction and guidance to Mission, monitor and review its progress and performance.
- ◆ NSC will be empowered to lay down and amend operational guidelines.



India will celebrate 8th 'Constitution Day' on 26th November, 2022. The Ministry of Social Justice and Empowerment on 19th November 2015 notified the decision of Government of India to celebrate the 26th day of November every year as 'Constitution Day' to promote Constitution values among citizens.

Why in Broadcast

Constituent Assembly Demanded

Composition of the Constituent Assembly

First meeting of Constituent Assembly

The Constituent Assembly had 389 members. Of it 296 were from British India and 93 were from Princely States.

- ◆ For the first time, M. N. Roy in 1934 demanded a Constituent Assembly for India.
- ◆ Indian National Congress officially demanded a Constituent Assembly for the first time in 1935.
- ◆ By "August offer" in 1940, British government finally accepted the demand in principle.
- ◆ Cripps Mission came to India in 1942 and offered full dominion status after the end of World War-II. Gandhi called the Cripps offer a "Postdated Cheque drawn on a falling Bank".
- ◆ Cabinet Mission came to India in 1946; it put forth a scheme for the Constituent Assembly.

Constitution's enforcement

- ◆ On 26th November 1949, Constitution of India was partially enforced.
- ◆ Articles 5, 6, 7, 8, 9, 60, 324, 366, 367, 379, 380, 388, 391, 392 and 393 came into force on 26th November 1949.
- ◆ On 26th January 1950 rest of the articles came into force.
- ◆ "Commencement of the Constitution" took place on 26 January 1950.

Constitution Day

Drafting Committee

- ◆ On 29th August, 1947 Constituent Assembly appointed the Drafting Committee. It's 7 members were:
 1. Dr B R Ambedkar (Chairman)
 2. N Gopalaswamy Ayyangar
 3. Alladi Krishnaswamy Ayyar
 4. Syed Mohammed Saadullah
 5. Dr K M Munshi
 6. N Madhava Rau (Replaced B L Mitter)
 7. T T Krishnamachari (Replaced D P Khaitan)
- ◆ On 21st February, 1948 the first draft of the Constitution of India was published.

Objective Resolution

- ◆ On December 13, 1946 Jawaharlal Nehru presented Objective Resolution in Constituent Assembly.
- ◆ It laid down the fundamental and philosophy of the constitutional structure.

Constituent Assembly's Committees

- ◆ Union Power Committee - Jawaharlal Nehru
- ◆ Union Constitution Committee - Jawaharlal Nehru
- ◆ Provincial Constitution Committee - Sardar Patel
- ◆ Drafting Committee - Dr B R Ambedkar
- ◆ Advisory Committee on Fundamental Rights, Minorities and Tribal and Excluded Areas - Sardar Patel
- ◆ Steering committee - Dr Rajendra Prasad
- ◆ Rules of Procedure committee - Dr Rajendra Prasad

Due to Indian Independence Act 1947:-

- ◆ The Constituent Assembly became of fully sovereign body.
- ◆ Now Constituent Assembly had to perform two task:-
 - > **Constitution making:-** It was chaired by Dr Rajendra Prasad. Later Dr Rajendra Prasad became the first President of India.
 - > **Provincial Legislature:-** It was chaired by G V Mavalankar. Later he became the first Speaker of Lok Sabha of India.



Foreign minister S Jaishankar has pitched the Chabahar port and International North South Transport Corridor via Iran as key enablers for growth of Central Asia while indirectly chiding the China Pakistan Economic Corridor for violating India's sovereignty.

Why in Broadcast

About INSTC

- ◆ The INSTC is the shortest multimodal transportation route linking the Indian Ocean and Persian Gulf via Iran to Russia and North Europe.
- ◆ It will encompass sea, road, and rail routes to offer connectivity.
- ◆ It was established on 12th September 2000 in St. Petersburg, by Iran, Russia and India for the purpose of promoting transportation cooperation among the Member States.
- ◆ The estimated capacity of the corridor is 20 to 30 million tonnes of goods per year.
- ◆ It will reduce time and cost by 30% to 40%.
- ◆ India aims to make Chabahar Port a transit hub under the International North-South Transport Corridor (INSTC) to reach out to CIS countries.
- ◆ Cabinet Mission came to India in 1946; it put forth a scheme for the Constituent Assembly.

International North South Transport Corridor (INSTC)

Member states of INSTC

- ◆ India, Iran, Russia, Turkey, Azerbaijan, Kazakhstan, Armenia, Belarus, Tajikistan, Kyrgyzstan, Oman, Ukraine, Syria.
- ◆ Observer member - Bulgaria

What are the potential export sectors in India that stand to benefit from INSTC?

- ◆ Agriculture and allied products (coffee, tea, spices, edible fruits, fish)
- ◆ Articles of apparel (not knitwear)
- ◆ Engineering – aircrafts and parts thereof
- ◆ Organic chemicals
- ◆ Rubber and articles
- ◆ Optical, photo, and medical instruments
- ◆ Project exports pertaining to petroleum, heavy engineering, and hydrocarbon sectors

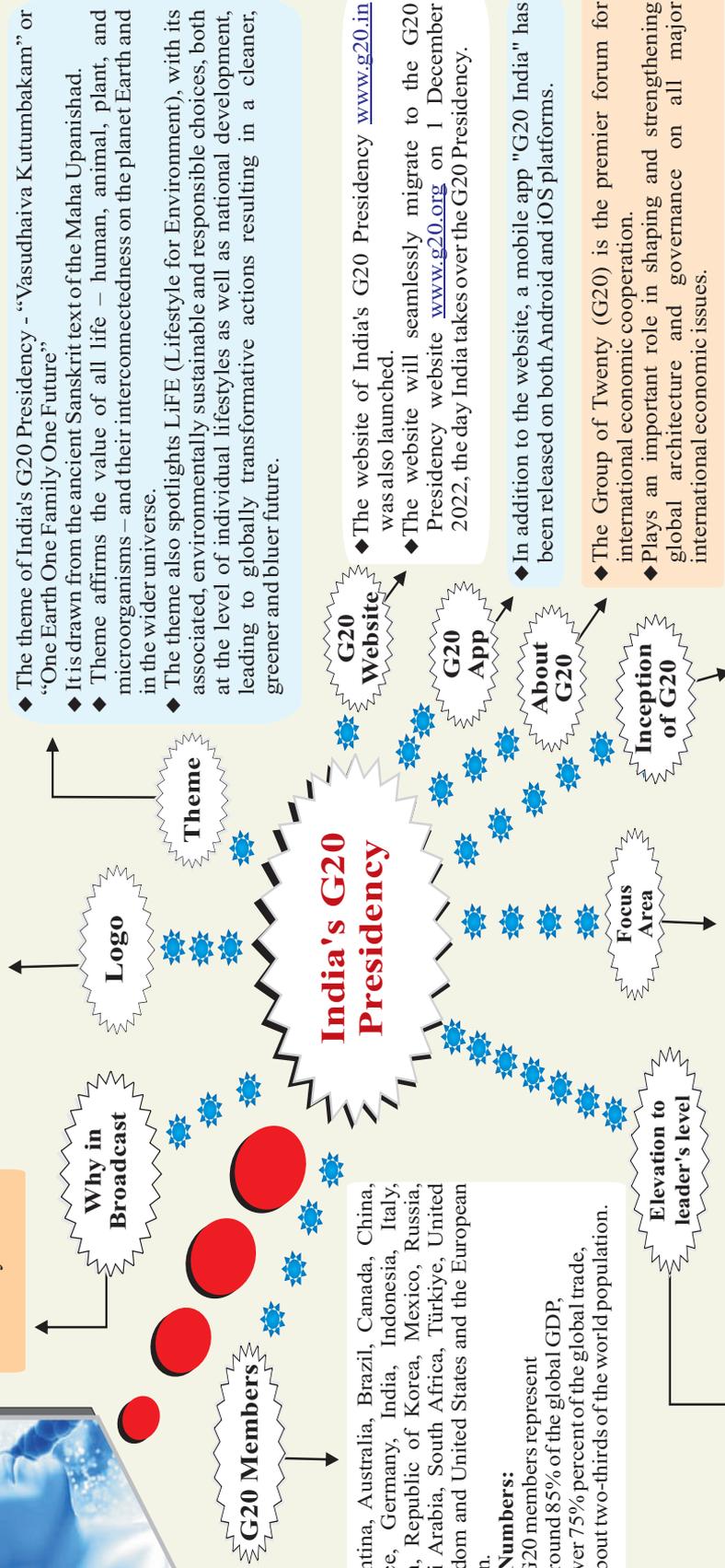
Potential transport and logistics gains from INSTC

- ◆ Short distances and faster deliveries lead to cost reduction
- ◆ Increased market access along with creation of new markets
- ◆ Facilitation of transit by helping develop regional transit and logistics hubs
- ◆ Creation of regional supply chains across Eurasia
- ◆ Increased trade volume between member nations
- ◆ Creation of backward and forward linkages
- ◆ Supply of energy as a commodity
- ◆ Synchronization of INSTC with Ashgabat Agreement and Organization of the Black Sea Economic Cooperation (BSEC)
- ◆ Potential materialization of FTAs in the region
- ◆ Possible synchronization with Baltic, Nordic, and Arctic corridors in the future



Prime Minister Shri Narendra Modi unveiled the Logo, Theme and Website of India's G20 Presidency.

- ◆ The G20 logo draws inspiration from the vibrant colours of India's national flag – saffron, white and green, and blue.
- ◆ It juxtaposes planet Earth with the lotus, India's national flower that reflects growth amid challenges.
- ◆ The Earth reflects India's pro-planet approach to life, one in perfect harmony with nature.
- ◆ Below the G20 logo is "Bharat", written in the Devanagari script.
- ◆ The logo was decided after an open competition for the logo design organized on MyGov portal.



- ◆ The G20 initially focused largely on broad macroeconomic issues.
- ◆ But it has since expanded its agenda to inter-alia include trade, climate change, sustainable development, health, agriculture, energy, environment, climate change, and anti-corruption.

- ◆ It was upgraded to the level of Heads of State/Government in the wake of the global economic and financial crisis of 2007, and, in 2009, was designated the "premier forum for international economic cooperation".
- ◆ The G20 Summit is held annually, under the leadership of a rotating Presidency.



The 12th and largest-ever defence exhibition - DefExpo 2022 - has marked the emergence of India's defence sector for investment on the global scale.

A defence sector worth USD 22 billion, with exports of Rs 35,000 crore by 2025.

Invest for Defence'

Theme of the expo - 'Path to Pride'

Why in Broadcast

Need of Aatmanirbharta in defence sector

- ◆ National security.
- ◆ Combat capacity.
- ◆ Dependency on foreign suppliers.
- ◆ Achieving targets on time.

Theme

Target

Investor outreach event

Multilateral meetings

India's Invitation

India's invitation to global players to become partners in an 'Aatmanirbhar Bharat', with the slogan 'Make in India, Make for the World'.

- ◆ The India-Africa Defence Dialogue
- ◆ The Indian Ocean Region plus Defence Ministers' Conclave

DefExpo 2022 Propels 'Aatmanirbharta'

MoUs Agreements & Product Launches

- ◆ Foundation stone of Air force station Deesa air base in Banaskantha, near the Indo-Pak border laid by PM.
- ◆ Mission Defence Space launched. It will empower our forces and form the basis of India's space diplomacy.
- ◆ Indian Air Force and Hindustan Aeronautics Limited (HAL) signed a contract for 70 HTT-40 trainer aircraft worth Rs 6,800 crore.

Seminars

Seminars formed a cornerstone for all stakeholders to connect and engage with each other.

- ◆ **Organiser:** US-India Business Council (UIBC) and Society of Indian Defence Manufacturers (SIDM)
- > **Topic:** New Frontiers in US-India Defence Cooperation: Next Generation Technology, Innovation & Make in India'
- ◆ **Organiser:** Defence Research & Development Organisation (DRDO)
- > **Topic:** Aatmanirbharta in Defence R&D - Synergistic Approach
- ◆ **Organiser:** FICCI and Headquarters-Integrated Defence Staff (HQ-IDS)
- > **Topic:** "Aatmanirbhar Bharat & Make in India: Roadmap for the Armed Forces"



First International Day for Biosphere Reserves observed on 3 November 2022

- ◆ Biosphere Reserve (BR) is an international designation given by UNESCO to indicative parts of natural and cultural landscapes.
- ◆ It covers large areas of terrestrial or coastal/marine ecosystems or a combination of both.
- ◆ They are sites for testing interdisciplinary approaches to understanding and managing changes and interactions between social and ecological systems.
- ◆ It also includes prevention of human-animal conflict and management of biodiversity.
- ◆ Biosphere reserves are designated by national governments and remain under the sovereign jurisdiction of the states in which they are located.

Why in Broadcast

About Biosphere Reserve

The three main areas of the Biosphere Reserve

- ◆ Core area.
- ◆ Buffer zone.
- ◆ Transition zone.

Conclusion

The land rights of tribals dependent on forest resources in the transition zones of biosphere reserves should be protected. Since the objective of the biosphere reserve concept was sustainable development, the term reserve should be replaced

International Day for Biosphere Reserves

World Network of Biosphere Reserves

- ◆ The World Network of Biosphere Reserves (WNBR) was formed in 1971 to promote biodiversity conservation, ecosystem restoration and living in harmony with nature.
- ◆ It represents a unique tool for international cooperation through knowledge sharing, exchange of experiences, capacity building and promotion of best practices.
- ◆ Now have 738 properties in 134 countries, including 12 in India, four in Sri Lanka and three in the Maldives.

Biosphere Reserves in India

Biosphere Reserves in South Asia

- ◆ India currently has 18 notified Biosphere Reserves spread over 60,000 sq km.
- ◆ The largest biosphere reserve is the Gulf of Kutch (Gujarat) and the smallest is Dibru-Saikhowa (Assam).

- ◆ More than 30 biosphere reserves have been established in South Asia.
- ◆ The first was the Huruulu Biosphere Reserve in Sri Lanka, which has 25,500 hectares of tropical dry evergreen forest.
- ◆ In India, the first Biosphere Reserve was designated by UNESCO in 2000, namely, the Blue Mountains of the Nilgiris spread over Tamil Nadu, Karnataka and Kerala.

MCQs based on Preliminary Exam

1. **Consider the following statements regarding Financial Stability Report (FSR):**
- FSR is one of the most crucial documents on the Indian Economy as it presents an assessment of the health of the financial system.
 - FSR assess the macro-financial risks in the Economy.
 - It is released by the Ministry of Finance, twice each year.
- Which of the above statement/s is/are correct?
- (a) 1 only (b) 1 and 3
(c) 1 and 2 (d) 1, 2 and 3
2. **Which of the following departments come under the ambit of Union Ministry of Finance?**
- Department of Economic Affairs
 - Department of Financial Services
 - Department of Investment and Public Asset Management
 - Department of Public Enterprises
- Select the correct answer from the code given below:
- (a) 1 and 2 (b) 1, 2 and 3
(c) 1, 2 and 4 (d) 1, 2, 3 and 4
3. **Consider the following statements regarding National Asset Reconstruction Company Ltd (NARCL):**
- National Asset Reconstruction Company Ltd (NARCL) also called as bad bank, is given legal recognition by the Corporate Affairs Ministry.
 - The Government of India has the maximum equity contribution to NARCL.
- Which of the above statement/s is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
4. **Consider the following statements regarding 'Last Ice Area', recently seen in news :**
- The 'Last Ice Area', is located in the Arctic's Ice north of Greenland.
 - The area has stooped melting of Ice and is strong enough to withstand the effects of global warming.
- Which of the above statement/s is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
5. **Consider the following statements regarding Heat Pumps, recently seen in news:**
- Heat pumps are used both to cool and warm a place.
 - Heat pumps work by creating heat and make the place warmer.
 - They are most efficient in moderate climatic conditions.
- Which of the above statement/s is/are correct?
- (a) 2 only (b) 1 and 2
(c) 1 and 3 (d) 2 and 3
6. **Buxwaha forest, recently seen in news is located in:**
- (a) Arunachal Pradesh (b) Jharkhand
(c) Uttarakhand (d) Madhya Pradesh
7. **Balukhand Wildlife Sanctuary, sometimes seen in the news, is located in:**
- (a) Bihar (b) Uttar Pradesh
(c) Odisha (d) Andhra Pradesh
8. **Consider the following statements regarding 'Re-wilding' of wild animals:**
- Re-wilding means reintroduction of the cub into the wild after a certain time when it appears that the cub is capable of surviving in the wild independently.
 - Wildlife Protection Act, 1972 does not provide any procedures or guidelines for the 're-wilding' of wild animals.
 - Bombay Natural History Society (BNHS) has been working towards successfully introducing the endangered gyps species into the wild.
- Which of the above statement/s is/are correct?
- (a) 1 and 2 (b) 1 and 3
(c) 1 only (d) 1, 2 and 3
9. **Consider the following statements regarding Sargasso Sea:**
- The Sargasso Sea is located entirely within the Pacific Ocean.
 - It is the only sea without a land boundary.
 - It is bounded by four ocean currents forming

an ocean gyre.

Which of the above statement/s is/are correct?

- (a) 2 and 3 (b) 3 only
 (c) 1 and 3 (d) 1, 2 and 3

10. Consider the following statements regarding Operation Olivia:

1. Operation Olivia has been started by the Ministry of Environment, Forest and Climate Change.
2. It helps to protect Olive Ridley Turtles as they congregate along the Odisha coast for breeding and nesting from November to December.

Which of the above statement/s is/are correct?

- (a) 1 only (b) 2 only
 (c) Both 1 and 2 (d) Neither 1 nor 2

11. Which of the following are the components of Deep Ocean Mission?

1. Developing Ocean Climate Change Advisory Services.
2. Explore and identify potential sources of hydrothermal minerals.
3. Preparing engineering design for offshore Ocean Thermal Energy Conversion (OTEC) powered desalination plants.
4. Searching for deep sea flora and fauna, and studying ways to sustainably utilise them.

Select the correct answer from the code given below:

- (a) 1, 2 and 3 (b) 1, 3 and 4
 (c) 1, 2 and 4 (d) 1, 2, 3 and 4

12. Consider the following statements regarding the recently launched NIPUN Bharat Mission:

1. The Mission has been launched under the aegis of 'Samagra Shiksha Scheme'.
2. It focus on providing access and retaining children in foundational years of schooling.

Which of the above statement/s is/are correct?

- (a) 1 only (b) 2 only
 (c) Both 1 and 2 (d) Neither 1 nor 2

13. Consider the following statements:

1. Reusable Launch Vehicle-Technology Demonstrator (RLV-TD) is India's first uncrewed flying testbed developed for ISRO's Reusable Launch Vehicle Technology Demonstration Programme.

2. GSLV Mark II uses an Indian cryogenic engine and is capable of launching 2500 kg payload into geostationary transfer orbit.

Which of the above statement/s is/are incorrect?

- (a) 1 only (b) 2 only
 (c) Both 1 and 2 (d) Neither 1 nor 2

14. Consider the following statements regarding Zoonotic Diseases:

1. Zoonotic diseases have impacted humankind since the beginning of its association with animals.
2. Out of all the human disease-causing pathogens identified so far, only around 10% are of animal origin.
3. Increased incidences of zoonotic diseases in recent times are a direct consequence of Large-scale deforestation and encroachment of pristine natural ecosystems.

Which of the above statement/s is/are correct?

- (a) 3 only (b) 1 and 2
 (c) 1 and 3 (d) 1, 2 and 3

15. EnVision mission is an orbital mission to Venus being developed by:

- (a) National Aeronautics and Space Administration (NASA)
 (b) European Space Agency (ESA)
 (c) Japan Aerospace Exploration Agency (JAXA)
 (d) Indian Space Research Organisation (ISRO)

16. Consider the following statements regarding 'Agni Prime' Missile:

1. It is a canisterised missile with range capability more than 5,000 kms.
2. It is a nuclear-capable ballistic missile.
3. It is an advanced version of Agni-1 missile along with high level of accuracy.

Which of the above statement/s is/are correct?

- (a) 3 only (b) 1 and 3
 (c) 2 and 3 (d) 1, 2 and 3

17. Rare Earth Elements, sometimes seen in news are used in:

1. Air pollution control
2. Illuminated screens on electronic devices
3. Defence equipments
4. Space shuttle components

Select the correct answer from the code given

below:

- (a) 1, 2 and 3 (b) 1, 3 and 4
 (c) 1 and 2 (d) 1, 2, 3 and 4

18. Consider the following statements:

1. Doppler radars are crucial for gauging the intensity of rainfall and the impact area in real-time.
2. Doppler radars can carryout weather surveillance only upto 50 to 100 Kms radius from its location.
3. India's east coast, which is frequently affected by cyclones formed in the Bay of Bengal, has more Doppler radars than West coast.

Which of the above statement/s is/are correct?

- (a) 1 only (b) 1 and 3
 (c) 1 and 2 (d) 1, 2 and 3

19. Ceres, Haumea and Eris sometimes seen in news are :

- (a) Cryptocurrencies
 (b) Near-Earth asteroids
 (c) Genetically modified organisms
 (d) Recognised Dwarf Planets

20. Nauka, a space laboratory was recently launched by :

- (a) Japan (b) India
 (c) Russia (d) China

21. Sustainable Development Goals (SDG) India Index evaluates progress of states and Union Territories (UTs) on which of the following parameters?

1. Gender 2. Education
 3. Economic growth 4. Climate change

Select the correct answer from the code given below:

- (a) 1, 2 and 3 (b) 1, 3 and 4
 (c) 2, 3 and 4 (d) 1, 2, 3 and 4

22. Rotterdam Convention, often seen in news, is related to :

- (a) Prohibition of the usage of biological weapons by the member countries
 (b) Promote shared responsibility among State Parties in the International trade of certain hazardous chemicals
 (c) Prevention of the proliferation of ballistic missiles

(d) None of the above

23. Currently India has Border Haats along the border/s of which of the following country/ies?

1. Bangladesh
2. Bhutan
3. Myanmar

Select the correct answer from the code given below:

- (a) 1 only (b) 1 and 2
 (c) 1 and 3 (d) 1, 2 and 3

24. Consider the following statements regarding Indo-Taiwan Relations:

1. India and Taiwan do not have formal diplomatic ties.
2. India has endorsed the "one-China" policy.

Which of the above statement/s is/are incorrect?

- (a) 1 only (b) 2 only
 (c) Both 1 and 2 (d) Neither 1 nor 2

25. Consider the following statements regarding Global Alliance for Vaccines and Immunisation (GAVI):

1. GAVI is an international organisation working towards creating equal access to new and underused vaccines for children living in the world's poorest countries.
2. GAVI has observer status at the World Health Assembly.

Which of the above statement/s is/are incorrect?

- (a) 1 only (b) 2 only
 (c) Both 1 and 2 (d) Neither 1 nor 2

26. Kafala system sometimes seen in news is related to:

- (a) Improved weather, climate and ocean forecast and services
 (b) IAEA safeguards to deter the spread of nuclear weapons
 (c) Standardised system of laws that apply to all Central Asian Countries
 (d) Monitor migrant labourers working in Gulf countries

27. Consider the following statements regarding Coalition for Disaster Resilient Infrastructure (CDRI):

1. It is an international coalition of countries, United Nations (UN) agencies, multilateral

era.

3. Nanostructured materials can have different magnetic properties compared to other forms or sizes of the same material.

Which of the above statement/s is/are correct?

- (a) 1 and 2 (b) 2 only
(c) 2 and 3 (d) 1, 2 and 3

36. Consider the following statements regarding Energy produced from Nuclear Fusion:

1. Energy produced from Nuclear Fusion is similar to the way energy is produced in the Sun.
2. Nuclear Fusion energy is of low carbon, safer than how nuclear energy is produced at present.
3. A kilogram of fusion fuel contains about 100 million times as much energy as a kilogram of coal, oil or gas.

Which of the above statement/s is/are correct?

- (a) 1 only (b) 1 and 2
(c) 1 and 3 (d) 1, 2 and 3

37. Consider the following statements regarding Indian Space Programme:

1. Aryabhata was the first Indian satellite and it carried scientific experiments to investigate X-ray astronomy and solar neutrons.
2. Mars Orbiter Mission was ISRO's first interplanetary mission.
3. Chandrayaan-1 was India's first mission to Moon.

Which of the above statement/s is/are correct?

- (a) 1 and 2 (b) 1 and 3
(c) 2 and 3 (d) 1, 2 and 3

38. Consider the following statements:

1. The process of copying genetic information from one strand of the DNA into RNA is termed as transcription.
2. Bacteria contain only mRNA (messenger RNA) and do not have any tRNA (transfer RNA).
3. RNAs are not needed to synthesize a protein in a cell.

Which of the above statement/s is/are correct?

- (a) 1 only
(b) 1 and 2
(c) 1 and 3

(d) 1, 2 and 3

39. Consider the following statements:

1. All power in a democracy ultimately belongs to the country's people.
2. Finance Commission (FC) is a constitutionally mandated body that balances revenue power with expenditure responsibilities.

Which of the above statement/s is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

40. Consider the following statements:

1. All Government bills automatically go to Parliamentary committees for examination.
2. Any member of the Parliament can oppose the introduction of a bill by stating that it initiates legislation outside the legislative competence of the Parliament.

Which of the above statement/s is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

41. Consider the following statements:

1. All India Service (AIS) officers are recruited by the Union Public Service Commission (UPSC) and their services are placed under various State Cadres.
2. It is incumbent upon the members of All India Services to serve both under the State and the Centre.

Which of the above statement/s is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

42. The Protection of language, script and culture of minorities is provided under which of the following rights?

- (a) Right to freedom
(b) Right to freedom of religion
(c) Cultural and educational rights
(d) Right against exploitation

43. Consider the following statements regarding National Commission for Women (NCW):

1. It has all the powers of a High court.
2. It can attend to cases of harassment of women and order appropriate punishments.
3. It can review the Constitutional and Legal

safeguards for women.

4. It facilitates redressal of grievances and advise the Government on all policy matters affecting women.

Which of the above statement/s is/are correct?

- (a) 1, 3 and 4
 (b) 2, 3 and 4
 (c) 3 and 4
 (d) 1, 2, 3 and 4

44. Consider the following statements regarding None Of The Above (NOTA) provision in EVMs in India:

1. It was introduced according to the directions of Supreme Court.
2. The right to say “none of the above” constituted a basic right of the voters.
3. ‘NOTA’ option enables the electors to exercise their right to reject without violation of the secrecy of their decision.

Which of the above statement/s is/are correct?

- (a) 1 and 2
 (b) 1 and 3
 (c) 2 and 3
 (d) 1, 2 and 3

45. Consider the following statements regarding the questions posed by members in the Lok Sabha during the Question Hour:

1. Generally, the first hour of a sitting of Lok Sabha is devoted to the Questions and this hour is called the Question Hour.
2. According to Rules of Procedure and Conduct of Business in Lok Sabha, Starred questions are to be replied orally in the House only by the Cabinet Ministers.
3. In Starred questions, members can also ask supplementary questions.

Which of the above statement/s is/are correct?

- (a) 1 only
 (b) 1 and 2
 (c) 1 and 3
 (d) 1, 2 and 3

46. Which of the following bodies is the designated authority to examine and act upon purported malpractices in local body elections?

- (a) The Election Commission of India (ECI)
 (b) Zila Parishad

- (c) District Planning Committee (DPC)
 (d) State Election Commission

47. Consider the following statements:

1. Article 44 of the Constitution says the ‘state shall endeavour’ ‘by suitable legislation’ to secure for citizens a uniform civil code throughout the territory of India.
2. The duty of the court is far greater in other directive principles than in Article 44.
3. The definition of ‘State’, under Article 12, also includes local or other authorities within the territory of India or under the control of the Government of India.

Which of the above statement/s is/are correct?

- (a) 2 only
 (b) 1 and 2
 (c) 2 and 3
 (d) 1, 2 and 3

48. Consider the following statements:

1. The concepts of faith, belief and worship as enshrined in the Preamble are the foundations of Articles 25 and 26 of the Constitution of India.
2. The Supreme Court under Article 142 of the Constitution can pass any order to carry out for doing complete justice being in the public interest, while upholding the Constitution of India.

Which of the above statement/s is/are incorrect?

- (a) 1 only
 (b) 2 only
 (c) Both 1 and 2
 (d) Neither 1 nor 2

49. Consider the following statements regarding the financial role of the Governor in a state:

1. He can make advances out of the Contingency Fund of the state to meet any unforeseen expenditure.
2. He constitutes a State Finance Commission after every five years to review the financial position of the panchayats and the municipalities.
3. He sees that the Annual Financial Statement of the state is laid before the state legislature.

Which of the above statement/s is/are correct?

- (a) 1 and 2

- (b) 1 and 3
- (c) 2 and 3
- (d) 1, 2 and 3

- (b) 2, 3 and 4
- (c) 1, 3 and 4
- (d) 1, 2, 3 and 4

50. Which of the following are generally the features of Parliamentary Government?

1. Separation of powers between the legislative and executive organs.
2. Membership of the ministers in the legislature
3. Dissolution of the lower House
4. Majority party rule

Select the correct answer from the code given below:

- (a) 1, 2 and 3

ANSWER

- 1. (c)
- 2. (d)
- 3. (a)
- 4. (a)
- 5. (c)
- 6. (d)
- 7. (c)
- 8. (b)
- 9. (a)
- 10. (b)
- 11. (d)
- 12. (c)
- 13. (d)
- 14. (c)
- 15. (b)
- 16. (c)
- 17. (d)

- 18. (b)
- 19. (d)
- 20. (c)
- 21. (d)
- 22. (b)
- 23. (a)
- 24. (b)
- 25. (d)
- 26. (d)
- 27. (c)
- 28. (b)
- 29. (d)
- 30. (d)
- 31. (b)
- 32. (c)
- 33. (c)
- 34. (c)

- 35. (c)
- 36. (b)
- 37. (d)
- 38. (a)
- 39. (c)
- 40. (b)
- 41. (b)
- 42. (c)
- 43. (c)
- 44. (d)
- 45. (c)
- 46. (d)
- 47. (c)
- 48. (d)
- 49. (d)
- 50. (b)

MCQs Based on Current Affairs

1. Consider the following statements regarding Shanghai Cooperation Organization (SCO):

1. It is a seven-member multilateral political-economic-security organization.
2. It was established in Shanghai, China in 2001 by the leaders of China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan.
3. In 2017, at the historic summit in Astana, India and Pakistan officially joined the SCO as full members.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer – B

2. Section 8 of the Representation of the People Act, 1951 was in news recently, it is related to which of the following?

- A. Voting through postal ballot
- B. Disqualification of MPs and MLAs
- C. ceiling on expenditure
- D. Election funding

Answer – B

3. Which of the following has released the Performance Grading Index (PGI)?

- A. RBI
- B. SEBI
- C. NITI Aayog
- D. none of the above

Answer – D

4. Consider the following statements about Employees' Provident Fund Organization (EPFO):

1. EPFO is a statutory organization under the Ministry of Labor and Employment, Government of India.
2. It was established with the passing of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952.
3. EPFO is responsible for regulating and managing provident funds in India as well as managing social

security agreements with other countries that have bilateral treaties with India.

Which of the above statement(s) is/are correct?

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3

Answer – B

5. He was an eminent freedom fighter, social reformer and revered tribal leader of the country, who fought valiantly against the exploitative system of the British colonial government, and became a legend in his lifetime, often referred to as 'Bhagwan'. He organized and led the tribal movement, giving a call to the tribals to "Ulgulan". Which of these

- A. Birsa Munda
- B. Kanhu Murmu
- C. Sidhu Murmu
- D. Alluri Sita Rama Raju

Answer – A

6. 10% Economically Weaker Section (EWS) quota was introduced under

- A. 101st Constitution (Amendment) Act
- B. 102nd Constitution (Amendment) Act
- C. 103rd Constitution (Amendment) Act
- D. 104th Constitution (Amendment) Act

Answer – C

7. Recently, which of the following has organized India's first temporary financial literacy camp with an initiative called 'Niveshak Didi' to promote financial literacy in India?

- A. RBI
- B. NITI Aayog
- C. SEBI
- D. IPPB

Answer – D

8. With reference to ‘Agenda 21’ consider the following statements:

1. It is a global action plan for sustainable development
2. It was launched in 2003 at the World Summit on Sustainable Development held in Johannesburg.

Which of the statements given above is/are correct?

- A. only 1
- B. 2 only
- C. Both 1 and 2
- D. neither 1 nor 2

Answer – A

9. Consider the following statements about Group of Twenty (G20):

1. The G20 was formed in 1999 against the backdrop of the financial crisis in East Asia and South East Asia in the late 1990s.
2. It aims to secure global financial stability by involving middle-income countries.
3. The G20 summit holds by a different member country each year.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer – D

10. Consider the following statements about Coalition for Disaster Resilient Infrastructure (CDRI):

1. It is an international forum supported by the New Development Bank.
2. It enables countries to support disaster-resilient infrastructure in India and globally, while facilitating capacity development.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. neither 1 nor 2

Answer – B

11. Related to delayed projects of road transport sector.

Consider the following statements:

1. Out of 835 projects in this sector, 262 projects are running late.
2. Implementation of projects depends on fast tracking of land acquisition, clearance from Ministry of Environment, Forest and Climate Change etc.
3. Ministry of Statistics and Program Implementation is not related to it.
4. IPMD is mandated to monitor Central Sector Projects costing Rs 150 crore and above.

Select the correct answer using the code given below :

- A. 1, 2 and 3
- B. only 3
- C. 1, 2 and 4
- D. 1 and 3

Answer - C

12. Consider the following statements regarding Xi Jinping:

1. The Politburo of the Communist Party officially gave Jinping the title of the People’s Leader of the People’s Republic of China.
2. Emphasis on the policy of repression to strengthen its hold on the power of China.
3. Since 2002, he is the chairman of the Military Commission.
4. Till now only Mao had got the title of People’s Leader in China.

Select the correct answer using the code given below :

- A. 1, 2 and 3
- B. 3 and 4
- C. 1, 2 and 4
- D. 3 only

Answer - C

Personality



Bhagwan Birsa Munda

Recently, birth anniversary of Bhagwan Birsa Munda was celebrated as second Janjatiya Gaurav Divas across India. Last year the Government of India announced 15th November, the Birth Anniversary of Bhagwan Birsa Munda as 'Janjatiya Gaurav Divas' to pay tribute to the sacrifices and contributions of tribal freedom fighters and for the preservation of cultural heritage and promotion of Indian values of valour, hospitality and national pride. Birsa Munda was born on November 15, 1875, to Sugana Munda and Karmi Hatu in Ulihatu, Bengal Presidency (Present-day Jharkhand). Due to poverty, Birsa Munda was sent to his maternal uncle's village Ayubhatu. Munda lived at Ayubhatu for two years and was surrounded by Christian missionaries. These missionaries attacked the ancient Munda order and wanted to convert people into Christianity.

At Ayubhatu, Birsa went to a missionary school and his teacher encouraged him to study further. He was advised by his teacher to enrol in German Mission School, but to get admitted, Munda was forced to convert to Christianity. He was renamed as Birsa David and later to Birsa Daud after the conversion. Birsa left the German Mission School after studying for a few years.

During 1886-1890 (the period of German and Roman Catholic Christian agitation), Birsa stayed at Chaibasa, but in the wake of freedom struggle, Munda's father withdrew him from school and left the place. The family also

renounced Christianity and reverted to their original tribal religious customs.

Birsa Munda was also a founder of a new religion called Birsaism. The religion believed in one God and encouraged them to revert to their original religious beliefs. People started referring to him as an religious healer and a preacher. People belonging to the tribe of Mundas, Oraons and Kharias moved together to visit the new prophet and to find a cure to their problems. People belonging to Oraon and Munda started converting to Birsaism. People started referring him Dharti Abba. Several contemporary and folk songs reveal his influence over the people of various tribes. Birsa Munda not only preached about new religion but also mobilised people and formed the Guerrilla Army to end British Raj. His slogan threatening the British Raj is still remembered today in the states of Odisha, Bihar, West Bengal and Madhya Pradesh. The slogan was 'Abua raj seter jana, maharani raj tundu jana' which means 'Let the kingdom of the queen be ended and our kingdom will be established'.

In 1895, Birsa asked his fellow tribesman to renounce Christianity and guided them to worship one God and showed them the path of purity, austerity and prohibited cow-slaughter. He further claimed himself to be a prophet and stated that reign of Queen Victoria was over and the Munda Raj has begun. Feudal system was introduced by the Britishers in the Adivasi forest. Under this system, migrants from other states were invited by the British to work over tribal lands and to pocket all the profits. This, in turn, deprived the owners of their proprietary rights over the land and were left with no means of livelihood. Thus, due to the agrarian breakdown and culture change, Birsa along with his tribe revolted.

The followers of Birsa Munda started a series of attack on several places loyal to the British (police station, shops, etc.). They also killed two police constables, razed the houses of local shopkeepers, attacked commissioners and deputy commissioners. The British in return set a reward of Rs. 500 on Birsa Munda and sent an army of 150 people to crush the rebellion. The forces gheraoed the Guerrilla Army at Dumbari Hills and killed hundreds of people. Birsa managed to escape but was later on arrested and sent to jail.

During his trial in the prison, Birsa Munda died on June 9, 1900. The movement faded out after his death. Eight years after his death in 1908, the colonial government introduced the Chotanagpur Tenancy Act (CNT). This Act prohibited the transfer of tribal lands to non-tribals and protected the proprietary rights of the owners.

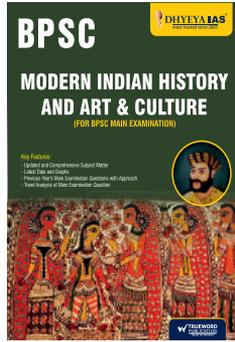


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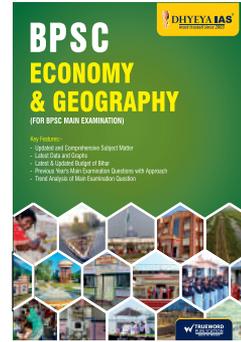
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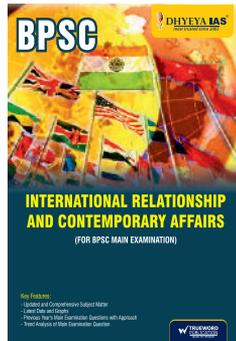
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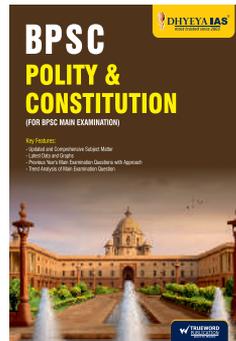
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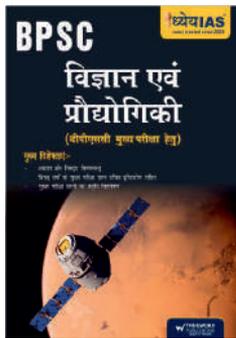
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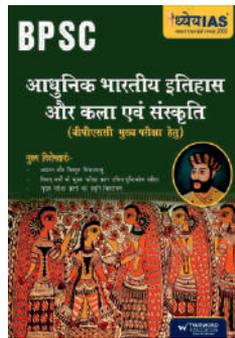
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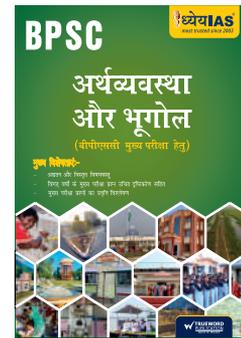
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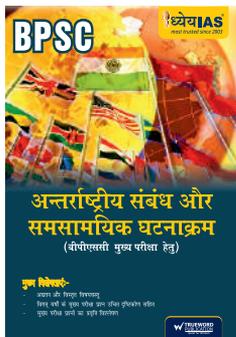
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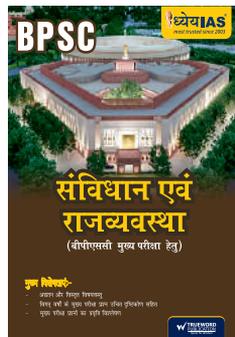
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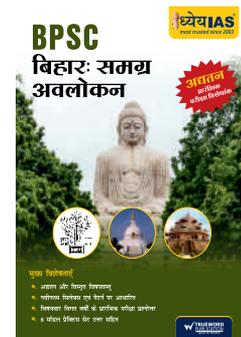
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