

ABOUT CURRENT CONNECT

It gives us immense pleasure to present an innovative approach to master current affairs. Current is a passing wind and diverse issues happen at the same time. It is to an extent chaotic. Newspapers, magazines and various other sources report the chaos per se. With our experience of current affairs we have tried to give “the current” a medium to travel. It is the syllabus of the UPSC with their components that are the medium through which the “Current is Passed” to the readers. Ever since the new syllabus of the UPSC came into existence, current has been gaining significance both at prelims as well as mains examination. This book is meant to cover current affairs and related questions arising from those events. We have not only covered the current events for their factual contents but also presented it in such a way that any question asked from that topic gets covered. Moreover, topics are also “peppered” with the relevant facts/key concepts that are related to the theme. We have also given questions for practice both, subjective and objective, so that candidates are oriented to the examination mode. It is a collection covering myriad source yet in a manageable size. To use this book we recommend you to master the components of general studies (GS) syllabus as broken into rows and columns (provided in the beginning after preface). Each cell comprising of the portion of GS becomes the connect for the current and every news subsequently covered guides the reader to the address of the syllabus. It is logical to expect that same issue may be connected to more than one topic of the syllabus. Further, the news also has some additional vistas opened for the readers by adding a box with a title “PEPPER IT WITH” where we expect the students to build further around the theme.

We are also trying to reach the remotest part of the country with our spirit and zeal of “Mains Answer Writing”, which has been admired by students, CSE rankholders and other scholars. Continuing in line with the effort, we have started with programs like 7 Question (7Q) Challenge, Shell Points, Stock Points, Content Enrichment Booklet etc.

When it comes to evaluation, we are altogether at a different level. We are also reaching every nook and corner with this expertise for the aspirants of CSE. Now you can write a Mains Answer and get it evaluated from our Expert Team and can get Feedback. [Drop a mail at evaluation@ksgindia.com](mailto:evaluation@ksgindia.com) for registering yourself in our race to perfection. Don't wait, it's your golden chance to crack this exam and fulfill your passionate dream.

Team KSG

Contents

POLITY

Internet Shutdowns in India	5
Bail Reforms in India	8
Digital Free Speech	11
Party Symbol and Election Commission of India (ECI)	14
OBC Sub-Categorization	16
Election of the the President and Vice President of India	18
National Emblem of India	21

SOCIAL ISSUES SOCIAL ISSUES, GOVERNMENT SCHEMES, REPORT

NFSA Ranking	24
India's first ever Animal Health Summit	26
Rise in unvaccinated children in India	29
Extension of Beti Bachao Beti Padhao programme	31
Urban Planning	34
Consumer Protection	36
Road Safety	39
Performance Grading Index for Districts for school system	41
Black Fever	43

ECONOMY

Gig Workforce in India: NITI Aayog	45
RBI's System for trade in rupees	47
Digitisation of Primary Agricultural Credit Societies	50
Startup Ranking 2021	52
Financial Services Institutions Bureau	53
Cryptocurrencies	54
India's Defence Exports	56
Depreciation of Indian rupee	58

INTERNATIONAL RELATIONS

India-EU Trade and Investment Agreements	61
Partnership for Global Infrastructure and Investment (PGII)	63

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

Partners in the Blue Pacific' initiative.....	64
CAATSA: India and USA.....	66
I2U2 summit.....	68
G20 Foreign Ministers Meeting	70
India-Australia collaboration.....	71
The African Union at 20	72

ENVIRONMENT

U.N. Oceans Conference.....	75
IPBES Report	77
Forest (Conservation) Rules, 2022.....	79
Green Grids Initiative (GGI).....	81
Tropical Ozone Hole	83
India Forum for Nature-Based Solutions.....	84
Rajasthan's Menar Bird Village to Become Wetland	85

SCIENCE & TECHNOLOGY

ISRO POEM Platform	89
TiHAN	90
ScNa and Renewable Energy	92
Varroa Mite.....	94
Marburg Virus and Nairobi Fly Infection.....	95

SECURITY

Y- 3023 Dunagiri	96
------------------------	----

ART & CULTURE

Sannati: Ancient Buddhist site	97
Monument of National Importance.....	98

MISCELLANEOUS

The platform of Platforms (POP) under eNAM	99
Open Acreage Licensing Programme.....	99
'Statue of Peace' of Swami Ramanujacharya	100
Concept Clearing Assignment	102
PT Oriented Questions.....	103

CURRENT CONNECT- JULY - 22)

S. No.	1	2	3	4	5	6	7	8	9	10	11
GS – I	Culture-Art Forms, Literature and Architecture from ancient to modern times.	Indian history significant events, personalities, issues and the Freedom Struggle	Post independence issues, National boundary and disputes	Indian society features, issues, globalization and diversity	Women - issues and developments	Urbanization – problems and remedies	Distribution of Industries and resources – India and world	Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc			
GS – II	Indian constitution- Amendments, acts and bills.	Legislative, executive and judicial processes.	Constitutional, non-constitutional, judicial, quasi-judicial, administrative and other types of bodies.	Federal structure and local bodies. Their powers and functions.	Government policies and various governance issues like transparency, accountability and – governance	Committees and schemes.	Non-government issues, self-help groups and role of civil society	Vulnerable sections of our society and social sector issues and initiatives.	International Relation-India and other countries, various Indian and international agreements, effects of other countries on India and international institutions.		
GS – III	Various measures to boost Indian economy- planning, policies, management.	Government budgeting and issues related to budget.	Agriculture, animal husbandry and transport	Food security- measures to boost food security and food processing. Issues related to land- land reforms	Industries and infrastructure- their growth and investment model	Space and technology, IT space, robotics and computer	Disease, biotechnology and human welfare	Innovations, intellectual property, Awards, POI and other important aspects of S&T	Environment; government initiatives, various judgments, pollution, degradation and conservation efforts	Disaster & Disaster Management	Challenges to internal security, Various Security forces and agencies and their mandate. Cybersecurity, money laundering and its prevention.
GS – IV	Ethical issues related to family society, education, Corruption etc.	Ethics in public and private administration	Issues	Related laws and rules	Governance/e-Governance	Ethics in international issues	Person alities and their teachings	Other important topics			
Mis.											

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
 BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
 t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

POLITY

Internet Shutdowns in India

News Excerpt

The office of the United Nations High Commissioner for Human Rights (OCHCR) has published a report titled as **Internet shutdowns: Trends, causes, legal implications and impacts on a range of human rights**. The report highlighted that internet shutdowns impact people's safety & well-being, hampers information flow and harms the economy. This report raises questions about the frequency of Internet shutdown in India also.

GS CONNECT										
GS	1	2	3	4	5	6	7	8	9	10
I										
II										
III										
IV										
V										

Pre-Connect

- Internet has communications technology more universal and affordable.
- It aids in self-expression with the elements of decentralisation and anonymity.
- This makes internet one of the most powerful tools for political discourse in the 21st century.
- It is a key enabler of many fundamental rights, including freedom of speech and expression.

What are Internet Shutdowns?

- It is the instrument by which governments intentionally disrupt access to, and the use of, information and communications systems online.
- It can be in form of:
 - Restriction on complete internet connectivity
 - Limiting the access to social media and messaging services.
 - Limiting bandwidth of mobile service to 2G.
 - Blocking the use of virtual private networks.
 - Shutting down of entire telephone networks.
 - Limiting a particular mobile network.
- The first major internet shutdown that captured global attention took place in Egypt in 2011.
- Governments across the world have resorted to shutting down the internet citing multiple reasons such as:
 - Public safety
 - National Security
 - Counter Disinformation and check on fake news
 - Restrict sporadic violence and hostilities.

Shutdowns in India

- ✓ The first recorded internet shutdown in India took place in Jammu and Kashmir in 2012.
- ✓ According to New Delhi based NGO, Software Freedom Law Center, In the last decade India has witnessed near about 674 incidents of Internet shutdowns. Jammu and Kashmir had maximum while states like Karnataka, Andhra Pradesh, Tamil Nadu and Chhattisgarh had least shutdowns.
- ✓ This becomes more worrisome at a time when India has ushered into a new era of development by leveraging digital technologies. Government of India through its flagship project of Digital India is looking forward to utilize and develop capabilities for Industrial Revolution 4.0.
- ✓ The number of Internet users is expected to rise up to 900 million in 2025. This would happen because of the active adoption of the internet in rural areas. This will also increase the cost of Internet shutdowns.
- ✓ Internet restrictions also tend to adversely affect those from lower socio-economic backgrounds more as in comparison with broadband access, mobile users are at least 30 times more in India.

- ✓ According to the Department of Telecommunications (DoT) card service providers' losses runs in crores of rupees due to shutdowns.
- ✓ India's Internet restrictions also accounted for more than 70% of the total loss to the global economy in 2020.

Internet Suspension Rules in India	
The Telegraph Act, 1885	
<ul style="list-style-type: none"> • It empowers the government to block the transmission of messages during a public emergency or for public safety • Only Union or State Home Secretary can pass the order. This order must contain reason for the proclamation. • Under Section 5(2) of the act this order to be sent to a review committee the day after it is issued which assess it within 5 days. • In case of unavoidable circumstances orders can be issued by Officer of rank of Joint Secretary or above authorized by the Centre or the state Home Secretary. • Composition of Review Committee <ul style="list-style-type: none"> • For Center- Cabinet Secretary and the Secretaries of the Departments of Legal Affairs and Telecommunications. • For States- Chief Secretary, Secretary, Legal Affairs, Secretary other than the Home Secretary. 	
IT (Amendment) 2008 Act	
<ul style="list-style-type: none"> • Section 69A of the IT (Amendment) Act, 2008 gives the government powers to block particular websites but not the Internet as a whole. 	
Code of Criminal Procedure	
<ul style="list-style-type: none"> • Section 144 of CrPC permits the District Magistrates to direct properties to be used in certain ways. This power has been utilized by magistrates to prevent or cease the internet services in certain areas. • Most of the internet shutdowns in India were done using this provision only. 	
Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017	
<ul style="list-style-type: none"> • Home Secretary of either Union or State issues the order, which were given to officers of the rank of Superintendent of Police and above, who in-turn forward it to Internet service provider of the said area. • This order in the next working day passed on to the review panel mentioned in The Telegraph Act, 1885 which assess it. • The act takes away the power of District Magistrates to suspend internet under section 144 of CrPC. However its compliance is questionable. • In case of emergency implementation of order, the order must be confirmed by home secretary after 24 hours of proclamation of order. In case if its doesn't than order stands to be void. • In 2020, rules were amended to limit Internet suspension orders to a maximum of 15 days. 	

Key Findings of Report

- ✓ Between 2016 and 2021, the #KeepItOn coalition reported 931 Internet shutdowns in 74 countries.
- ✓ Globally, all regions have experienced multiple shutdowns, but the majority occurred in Asia and Africa.
- ✓ Most of the shutdowns happened during the periods surrounding elections or during large-scale protests. In 2019 alone, 14 African countries disrupted access to the internet during electoral periods.
- ✓ Shutdown were also frequently reported when governments carried out armed operations thereby severely restricting reporting and human rights monitoring.
- ✓ Several States have disrupted communications during periods of school examinations, with the apparent aim of deterring potential cheating through use of digital devices.

The Courts insights

- Access to the Internet is recognised as a fundamental right under **Article 19(1)(a)** of the Constitution of India. Hence any shutdown is construed as violation of fundamental rights. This debate often ended up at the doors of Indian courts.

- In the case of **Ramlila Maidan Incident v. Home Secretary, Union of India & Ors. (2012)** Supreme court held that the use of CrPC section 144 in clamping down internet cannot be quandry, imaginary or a merely likely possibility. It should be based on a real threat to public peace and tranquility.
- In **Guarav Suresh bhai Vyas v. State of Gujarat (2015)** case Gujarat High Court defended the State Government's authority under Section 144 CrPC. It held that the state government is a competent authority under this provision and it depends upon their discretion to exercise the power under the said section.
- In **Anuradha Bhasin v. Union of India case (2020)** case supreme court held that Internet shutdowns forms a valid reasonable restriction under Article 19 and should only be enacted when there is a genuine threat to public safety or national security. It called for balancing tests to be carried out before such shutdowns.

Impact of Internet Shutdowns

Business and Industry



- New Business have adapted to online business model.
- Internet shutdowns halt their operations due to breakdown in communication channels.
- According to Indian Council for Research on International Economic Relations- Internet shutdown between 2012-2017 cost India 3.4 billion USD.
- With the expansion of digital economy, this loss is going to rise tremendously.
- It can create trouble for flow of remittances and be detrimental for startup-ecosystem.

Health Services



- Internet is an indispensable utility service for health care industry.
- Most of the patient information repositories, documentations and records are maintained on online servers. These become inaccessible during shutdowns.
- Tools such as online consultation paved way for deeper penetration of healthcare services.
- Covid-19 Pandemic vaccination was aided by Internet based applications.

Human Rights



- Internet shutdowns have been used as a tool to constrict the functioning of the democratic process
- States like China have used network disruptions to curb online access and dissemination of information.
- It causes a forceful disconnect from the rest of the world.

Education



- It limits access to knowledge and learning opportunities for students.
- During Covid-19 pandemic learning shifted from offline to online and it's a becoming a new normal.
- It creates hurdles in fulfilling administrative tasks related to education. For instance filling application form for admission.

Psychological Impact



- Forced internet shutdowns for a longer period of times in a connected world creates psychological problems.
- People suffers from anxiety and they lack accessibility to readress such situation.

Way Forward

Policy Intervention

- ✚ There is a need to develop a policy on internet shutdown which should be unambiguous and clearly grounded.
- ✚ There is need to make sure that any Internet shutdown is minimal in its impact, geographical scope and services
- ✚ Authorities should provide advance communication to the public with a clear explanation of the basis for the shutdown.
- ✚ There must be cost-benefit analysis before any shutdown is imposed.

PEPPER IT WITH

Access Now, SFLC, CrPC 144, Public Emergency

- ✚ The culture of misinformation and fake news should be tackled at source rather than going for a blanket internet shutdown.

Risk assessment and aversion for businesses

- ✚ Investors should make sure that Internet shutdown becomes a key component of risk assessment. They must prepare a contingency plan so that overall shock on the economy can be reduced.
- ✚ Small businesses who operate outside the purview of the Information Communication Technology (ICT) framework must be made aware of the impact of the network disruptions on their future expansion plans.

Role of Civil Society

- ✚ To ensure transparency and accountability of government in the implementation of Internet shutdowns civil society should play a crucial role.
- ✚ It should track impact of internet shutdowns and provide feedback to authorities as and when need arises.

Bail Reforms in India

News Excerpt

The Supreme Court expressed its concern over the situation of bails given in India. It asserted that there is a pressing need for reforms in the law related to bail. It also called on the government to make legislation regarding bail rules in India on the lines of the law in the United Kingdom.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- Legally bail means procurement of release from prison of a person awaiting trial or an appeal, by the deposit of security to ensure their submission at the required time to legal authority.
- The concept of bail can trace back to 399 BC, when Plato tried to create a bond for the release of Socrates. The modern bail system evolved from a series of laws originating in the Middle Ages in England.
- The Magna Carta of 1215 prohibited imprisonment without being judged by his peers or the law of the land.
- In 1275, the Statute of Westminster was enacted which divided crimes as bailable and non bailable.
- The Bill of Rights of constitution of US through the 5th, 6th and 8th Amendments, guaranteeing citizens the right to due process of law, a fair and speedy trial and protection against excessive bail.

Criminal Jurisprudence in India

- ❖ **The Indian Penal Code (IPC)** is the official criminal code of India drafted in 1860 on the recommendations of the first law commission of India established in 1834 under the Charter Act of 1833 under the Chairmanship of Lord Thomas Babington Macaulay.
- ❖ **The Code of Criminal Procedure (CrPC)** is the main legislation on procedure for administration of substantive criminal law in India. It was enacted in 1973 and came into force on 1st April 1974.

Situation In India

- The Code of Criminal Procedure (CrPC), 1973 does not define the word bail rather chapter 33 of the code relates to the provisions related to bail in India.
- The basic scheme of granting bail is a legislative division or judicially evolved conditions.
- CrPC categorises offences as bailable and non-bailable

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

- Section 436 of the CrPC states that a person accused of a bailable offence under I.P.C. can be granted bail.
- Section 437 of the CrPC states that the accused does not have the right to bail in non-bailable offences. It is the discretion of the court to grant bail in case of non-bailable offences.
- A provision mandates the court to consider granting bail to an accused below 16 years, someone who is sick, or is a woman.
- In India, due to the lack of guided and vivid precedents, and definitive legislation there have been inconsistencies in matters related to bail. Despite the judgments and amendments, the Code lacks a proper system or framework to govern the bail procedure.
- The extent of problem can be underlined from the fact that according to data compiled by the National Crime Records Bureau (NCRB) for 2020, about 76% of all prison inmates in the country were undertrials. This shows the rot in the criminal justice system.
- In 2005, CrPC was amended to add two new principles:
 - Granting bail on the personal bond to a person who is indigent without sureties. However, financial obligation still remains a major obstacle for bail. Though such obligations are necessary as without them chance of absconding of accused might increase.
 - Provision of 436A was added according to which any accused incarcerated for the period prescribed in the provision has right to bail.
- Though Law commission had called bail system in India as inadequate and inefficient. It recommended reforms as an amendment to the Code rather than bringing a new standalone law.

Protection against Indiscriminate Arrest

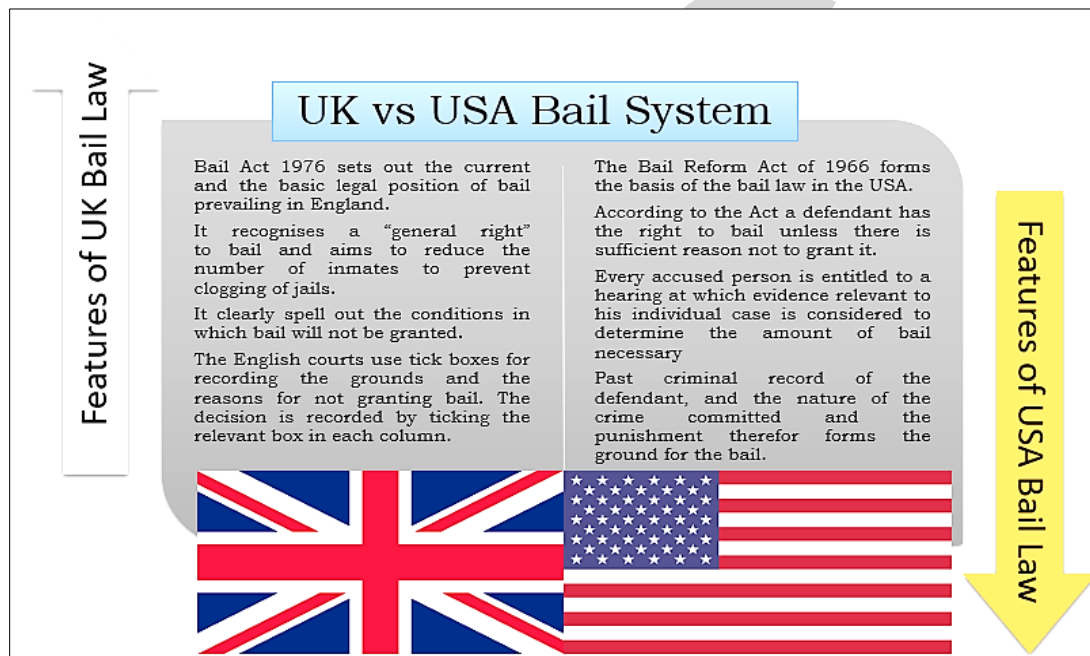
- ❖ **Article 20:** "No person shall be convicted of any offence except for violation of the law in force at the time of the commission of the act charged as an offence, nor be subjected to a penalty greater than that which might have been inflicted under the law in force at the time of the commission of the offence."
- ❖ **Article 21:** "No person shall be deprived of his life or personal liberty except according to procedure established by law."
- ❖ **Article 22:** Protection against arrest and detention in certain cases.
 - Right to be informed of the grounds of arrest.
 - Right to consult and be defended by a legal practitioner.
 - Right to be produced before a magistrate within 24 hours, excluding the journey time.
 - Right to be released after 24 hours unless the magistrate authorises further detention.

Supreme Court Observations

- ✓ From cases like *State of Rajasthan v Balchand* or *Moti Ram and Ors. v State of M.P* or *Maneka Gandhi v Union of India* or *Hussainara Khatoon and others v. Home Sec, State of Bihar*, time and again Supreme court raised concerns about the unfair and discriminatory the bail system in India.
- ✓ Courts have underlined and suggested various reforms such as:
 - If not otherwise required bails application have to be disposed of within two weeks and anticipatory bail within six weeks.
 - Unwarranted arrests are carried out in violation of Section 41 (empowers police to arrest without a warrant) and Section 41A (deals with the procedure for appearance before

police) of the CrPC. There is need to stop rising culture of too many arrests for this lower courts should make sure that:

- No arrest for non-cognisable offence
- For cognisable offence arrest must be necessitated only prevent accuse from further committing crime or tampering with evidence or from disappearing.
- One is arrested because they are requiring to be produced before courts.
- In any other, situation bail should be granted.
- There need not be any insistence on a bail plea while considering a plea under Sections 88, 170, 204 and 209 of CrPC. Magistrate should grant bail on their own discretion in some situations.



- There should be facilitation of standing orders to ensure compliance and avoid indiscriminate arrests by the government.
- Courts should identify undertrials who are unable to comply with bail conditions and take action to facilitate their release.
- ✓ Supreme court recently reiterated the need for a separate law for bail in India. It is of opinion that colonial legacies are reflected in our bail system. Despite amendments of CrPC required change has not been observed on the ground. It believes that uniformity and certainty in the decisions of the court are the foundations of judicial dispensation. Uniformity and certainty in the decisions of the court are the foundations of judicial dispensation.

Way-forward

- Just like funds are set aside for various schemes funds can be set aside to help those who can't afford bail due to financial constraints.
- The under trials who have been charged with petty crimes can further be put in reformative homes instead and asked to do community service till the time they are released on bail.

PEPPER IT WITH
Prison reforms, Criminal Justice reforms, Hussainara Khatoon case and PIL, Malimath Committee Report

- Increasing awareness of law among police personnel and social workers and also increase police personnel and stations.
- Increase the inclusiveness in the police force from the different section of the society, so as to provide with balanced mindset to avoid indiscriminately arrests against any caste/class/community.

Conclusion

- ✚ Bail reforms in India would help in the implementation of jail reforms. Even Apex court in recent time decided to have a single bench to hear bail applications. However, one can reach Supreme court only by appealing through a special leave petition under Article 136. Therefore, major responsibility lies with lower courts but a lot of confusion and inconsistency between the courts doesn't allow for the streamlining of the bail system. Therefore, there is a need of a proper standalone legislation, as in the United States (Bail Reforms Act) or the UK (Bail Act), which renders a better clarity to the bail system, instead of amending the existing provisions. It will help in realisation of the fact which courts in India often reiterated- "**Bail is rule and Jail is exception**"

Digital Free Speech

News Excerpt

Microblogging site Twitter has recently filed a case against government of India in Karnataka High Court alleging disproportionate use of power by officials and challenging several blocking orders from the Union government on content posted on its website.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

Freedom of Speech and Expression

- Freedom of speech and expression had existed since ancient times, dating back at least to the Greek Athenian era more than 2400 years ago.
- It means everyone can express themselves through any media and frontier without outside interference, such as censorship, and without fear of reprisal, such as threats and persecutions
- It includes:
 - Freedom of opinion and expression
 - Freedom to seek, receive and impart information and ideas of all kinds
- Constitution of India provides for freedom of speech and expression for its citizens under **Article 19 (1) (a)**. It also places several restrictions on the following grounds:
 - Sovereignty and integrity of India
 - Security of the State
 - Friendly relations with foreign States
 - Public order
 - Decency or morality
 - Contempt of court
 - Defamation
 - Incitement to an offence
- In 2020, The High Court of Tripura has held that posting on social media was virtually the same as a fundamental right of speech and expression applicable to all citizens, including government employees.

About Issue

- According to twitter they decided to move against government after Ministry of Electronics and Information Technology using Section 69A of the Information Technology Act, 2000 asked twitter to block tweets and even handles.
- Twitter readily agreed to limit the number of accounts mentioned by government in June 2022. However, after few days twitter called the action as a violation of integrity of the platform. It also alleged that majority of these accounts belong to users who are active critics of the government.
- A cause of concern in this debate of sovereign vs MNC is parliamentary data which shows that orders restricting twitter accounts have increased from 471 in 2014 to 9,849 in 2020 representing a 1991% increase.
- Since such orders are beyond qualitative assessment owing to official secrecy, there is a cause of concern that these orders instead of ensuring law and order are used to stifle freedom of speech and thereby curtails democracy in India.
- Such apprehensions were even emerging from a joint reading of the *Shreya Singhal* and *Anuradha Bhasin* judgments. It showed that the apex court is in favour of a comprehensive qualitative assessment of such orders.

Regulation of Digital Speech in India	
Information Technology Act 2021	
	<ul style="list-style-type: none"> • It mandates social media to exercise greater diligence with respect to content on their website. • They should establish a grievance redressal officer to take down objectionable content within stipulated time frames • A Grievance Appellate Committee where user can complain against the redressal officer if they are not satisfied with the resolution. However this won't curtail user right to approach courts
Section 66 IT Act 2000	
	<ul style="list-style-type: none"> • It empowers police to make arrest if in its their subjective discretion they found any post as offensive or menacing and can cause annoyance, inconvenience etc. • Under its ambit punishment prescribed is conviction of maximum of three years in jail. • Supreme court in <i>Shreya Singhal vs Union of India</i> case (2015) used doctrine of severability and removed the word offensive given in the act as it was very vague.
Section 69A of IT Act 2000	
	<ul style="list-style-type: none"> • Central and State government are empowered to intercept, monitor or decrypt any information generated, transmitted, received or stored in any computer resource. • It enables the Centre to ask any agency of the government, or any intermediary, to block access to the public of any information generated, transmitted, received or stored or hosted on any computer resource. Any such request for blocking access must be based on reasons given in writing. • Such powers can be exercised when it's a matter of <ul style="list-style-type: none"> • Sovereignty or integrity of India, defence of India, the security of the state. • Friendly relations with foreign states. • Public order, or for preventing incitement to the commission of any cognizable offence relating to these. • For investigating any offence

Sovereign vs TIFY (Twitter-Instagram-Facebook-YouTube)

- ✓ There is growing debate how much a sovereign can control social media giants who act a medium of free speech and expression. These debate points need to be engaged with:
 - **Media or Technology Platform-**
 - If TIFY are media then they will come under the media accountability and exercises editorial choices. But if they are platform then they have to allow all kinds of opinions, irrespective of whether they are ideologically or politically aligned to theirs or not.
 - Cambridge Analytica incident showed that TIFY can manipulate elections and infiltrate democracies across the globe. Now if they accept them as media, they can do it but if they categorize themselves as technology platforms then they are guilty and dangerous.
 - **Dilemma of Government Regulation-**

- Any regulation must be based on principles of citizen interests. Serving individual political ideology through government regulations would be counterproductive.
- One can opt for either rule based or principle-based intervention- rule based would be easy to dispense while principle based would allow for ease of doing business.
- **Deliver Private Good or Public Good**- TIFY structurally are private companies but their power goes beyond economics. They do wield power by controlling information. Therefore, they do need a government-enabled oversight mechanism.

Analytica

- There are genuine causes of concerns with the current regulation mechanism in India such as
 - **IT Act 2021**
 - It made government the arbiter of permissible speech on the internet. This has a potential to be misused. It can be used for censorship a ground not mentioned either in section 69A of IT act, 2000 or **Article 19(2)**.
 - By binding grievance redressal in a limited time frame of 72 hours invites for hastier approach and might infringe freedom of speech.
 - Despite Shreya Singhal case use of Section 66A of IT Act, 2000 is rampant without any procedural safeguards and used literally on their whims by designated authorities.
 - Indiscriminate use of Section 66A or 69A of IT Act, 2000 contrary to both **Articles 19** (free speech) and **Article 21** (right to life) of the Constitution.
- To Say that government is wrong would be a serious folly as:
 - Government regulatory actions is not wrong and linking it with freedom of expression every time is wrong on so many counts. It can promote incidents of Hate Speech and culture of bigotry.
 - TIFY have often used to Civil Society under their term of service and because of their scale think they are above regulations drafted by government.
 - TIFY had to engage and have a dialogue with government for better collaboration rather than their current insisting of engagement to change a law.
 - TIFY have to change their attitude towards Indian law they can't blatantly say that Indian laws are inconsistent with open, democratic principles. It's true there might be some genuine flaw in the law however that can be addressed through Indian courts or pushed by people but not by TIFY.

PEPPER IT WITH
GAFA Tax, Section 79A
of IT Act 2000

Way Forward

- ✚ There is need to expedite the passing of Personal Data Protection Bill 2019. This will assure citizen that their data privacy is safeguarded while government tackles law and order problem which can be generated through social media.
- ✚ Regulations mentioned in the IT Act 2021 or IT Act 2000 both should have provisional safeguards with clear mandate of compulsory implementation.
- ✚ Using route of publication of white paper can help government understand civil society point of view on any regulation it intended to bring for digital speech.
- ✚ Engagement on meaningful terms with TIFY and other platforms will help in creating online platforms which are public as well as private, one that allows for profits as well as expression.

Conclusion

Dependence on online platforms for fulfillment of constitutional rights in our very own country points towards rise of digital imperialism. Only a nation of equals, citizens standing for their own right in a democracy can undo that imperialism. For this government need to be more transparent and objective in restricting freedom of speech on online platforms. However, at the same time it should make these platforms realise that Government of India decree will run large over the decree of these platforms no matter where they originate or the power they wield.

Party Symbol and Election Commission of India (ECI)

News Excerpt

Political split among the political parties is becoming a common phenomenon. Recently, a political party approached the Election Commission of India to stake a claim over the party symbol.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

Elections Symbol

- An election symbol is a standardized identification associated with the candidate which helps voters to identify which political party candidate belongs or does not belong.
- The idea behind these symbols is to facilitate voters in voting even if they are illiterate. Symbols play crucial role in early decades after Independence as Indian literacy rate were low.

- The regulation, reservation and allotment of electoral symbols is entrusted with Election commission of India and done in accordance with Election Symbols (Reservation and Allotment) Order, 1968.
- Rules classify Election symbols as
 - **Reserved:** Symbol reserved for a recognised political party for exclusive allotment to contesting candidates set up by that party.
 - **Free:** Symbol other than a reserved symbol.

Disputes over Election Symbol and Role of ECI

- Disputes over election symbol first occurred in 1969 with a split in largest political party in India. Since then, various splits have occurred and the dispute over election symbol remains one of most contested one.

Types of Political Parties

- ❖ According to Election Symbols (Reservation and Allotment) Order, 1968, Political parties are classified as recognized political party or unrecognized political party.
- ❖ Recognized political party is further divided into State Party or National Party on the basis of their poll performance.
- ❖ A State party is a party which
 - Secures 6% of the valid votes polled in the election to the legislative assembly of the state and wins 2 seats in the assembly of the state concerned or
 - Secures 6% of the valid votes polled in the state at a general election to the Lok Sabha and wins 1 seat in the Lok Sabha from the state. or
 - If it wins 3% of seats in the legislative assembly or 3 seats in the assembly, whichever is more or
 - If it wins 1 seat in the Lok Sabha for every 25 seats or any fraction thereof allotted to the state at a general election to the Lok Sabha from the state concerned or
 - If it secures 8% of the total valid votes polled in the state at a General Election to the Lok Sabha or to the legislative assembly of the state. This condition was added in 2011
- ❖ A party is recognised as a national party if any of the following conditions is fulfilled:
 - If it secures 6% of valid votes polled in any four or more states at a general election to the Lok Sabha or to the legislative assembly and in addition, it wins four seats in the Lok Sabha from any state or states, or
 - If it wins 2% of seats in the Lok Sabha at a general election and these candidates are elected from three states, or
 - If it is recognised as a state party in four or more states.

- Election Symbols (Reservation and Allotment) Order, 1968, Under Paragraph 15 empowers ECI to decide disputes among rival groups or sections of political party who stake claim over party name and symbol.
- Supreme court in *Sadiq Ali and others vs. ECI (1971)* also upheld Election Commission as the only body to decide in such disputes.
- The verdict of ECI is final and binding on all such rival section or groups in case of recognized national and state parties. For unrecognized but registered parties it usually advises them to resolve issue internally or approach court.
- The decision of ECI is based on support enjoyed by a claimant within a political party in
 - **Organizational wing-** Examines party constitution and its list of office-bearers at the time when it was united. Then it classifies them into rival factions and look out their numerical strength.
 - **Legislative wing-** It classify Member of Parliament and Member of Legislative Assemblies into the factions which they support by providing an affidavit.
 - ECI may then rule to give party name and symbol to the faction which has majority in both the wings.
 - It may also allow the losing faction to register as separate political party.
- In case where there is no certainty i.e., no clear majority visible of any rival faction ECI:
 - Can freeze party symbol and allow groups to register as new party with a new name.
 - It may also allow to add prefixes or suffixes to the party's existing names.
- If claimants reunite in future, then may approach the EC again and seek to be recognised as a unified party. ECI may restore the symbol and name of the original party.
- In case when large party breaks into various factions and register themselves as new political parties then they cannot lay claim to national or state party status of their parent party. They will have to follow the procedure for status anew.

Election Commission of India

- ❖ It is an autonomous constitutional authority responsible for administering Union and State election processes in India.
- ❖ The body administers elections to the Lok Sabha, Rajya Sabha, State Legislative Assemblies and State Legislative Councils in India, and the offices of the President and Vice President in the country.
- ❖ The Election Commission was established in accordance with the Constitution on 25th January 1950.
- ❖ Article 324 to 329 of the constitution deals with powers, function, tenure, eligibility, etc. of the commission and the member.

PEPPER IT WITH

Article 324-329, Model code of conduct Election Symbols (Reservation and Allotment) Order, 1968

OBC Sub-Categorization

News Excerpt

Government of India has extended the tenure of the Commission to examine sub-categorisation of other backward classes (OBCs) headed by former Chief Justice of the Delhi High Court, Justice G Rohini, until January 31, 2023. Since its constitution on October 2, 2017, the panel has received ten extensions.

Pre-Connect

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

- OBC is one among the classification of castes used by Government of India. It represents socially or educationally disadvantaged groups.
- To identify backward classes other than Scheduled Castes (SCs) and Scheduled Tribes (STs), government of India under the power given in **Article 340**, set up First backward class commission under the leadership of **Kaka Kalelkar in 1953**.
- Later in 1980, Second Backward commission was formed under the leadership of BP Mandal which estimated that OBC's constitute 52% of country population and include 1257 communities.
- Mandal commission recommended that OBCs should be given quotas upto half of their population which is 27%. This increases all over quotas from 22.5% to 49.5%.
- OBCs got reservation in union civil posts and services under **Article 16(4)** and in Central government educational institutions under **Article 15 (4)**.
- As per National Sample Survey Organisation (NSSO) 2006 report, the OBC's comprised 41% of the population.
- In 2008, the Supreme Court directed the central government to exclude the creamy layer (advanced sections) among the OBCs.

Article 340

- ❖ The President may by order appoint a Commission consisting of such persons as he thinks fit to investigate the conditions of socially and educationally backward classes within the territory of India and the difficulties under which they labour and to make recommendations as to the steps that should be taken by the Union or any State to remove such difficulties.
- ❖ A Commission so appointed shall investigate the matters referred to them and present to the President a report setting out the facts as found by them and making such recommendations as they think proper.
- ❖ The President shall cause a copy of the report so presented together with a memorandum explaining the action taken thereon to be laid before each House of Parliament.

About Commission

- In 2015, National Commission for Backward Classes (NCBC) recommended that OBCs should be categorised into extremely backward classes, more backward classes and backward classes.
- Accordingly in 2017, Government of India using **Article 340** formed a commission under Justice G Rohini with the objective to:
 - Examine the uneven distribution of reservation benefits among different castes in the central OBC list.
 - Define criteria, norms and parameters using scientific approach for sub-categorisation within OBCs.
 - Identifying the respective castes/communities/sub-castes/synonyms for comprehensive data coverage.
 - Recommend correction of any repetitions, ambiguities, inconsistencies and errors of spelling or transcription.
- The expenditure related to the establishment and administration costs of the Commission is borne by the Department of Social Justice and Empowerment.
- The commission had to interact with all the States/UTs which have subcategorized OBCs, and the State Backward Classes Commission.

- Extensions were given as repetitions, ambiguities, inconsistencies and errors of spelling or transcription etc. appearing in the existing Central List of OBCs need to be cleared. This was further aggravated by Covid-19 pandemic.

Why Sub-categorization?

- ✓ Despite providing 27% of reservation to OBCs in jobs and education and safeguard mechanism such as Creamy layer, benefits has not percolated to the lowest rung, and major chunk of reservation still goes to handful of communities. This is evident from the data that out of 1.3 lakh central jobs given to OBC's till 2018:
 - 95% of these jobs and seats have gone to just 10 OBC communities.
 - 97% of all jobs and educational seats have gone to just 25% of all sub-castes classified as OBCs.
 - 983 OBC communities, 37% of the total, have zero representation in jobs and educational institutions.
 - 994 OBC sub-castes have a total representation of only 2.68% in recruitment and admissions.
- ✓ A parliamentary panel on the Welfare of OBCs noted that in spite of four revisions of the income criteria since 1997, the 27 per cent vacancies reserved in favour of OBCs were not being filled up. A close to 20 per cent of OBC communities did not get a quota benefit from 2014 to 2018.
- ✓ Paucity of data on the population of various sub-categories handicaps government efforts of ensuring a more equitable representation of all sub-communities. This data collection is one of the major tasks of the commission.

PEPPER IT WITH
Socio Economic Caste
Census, EWS reservation,
Mandal Commission

Recommendations of Commission

- Commission has recommended to divide OBCs in four categories and split reservation of 27% into 2, 6, 9 and 10%, respectively.
- It has also called for the use of ICT by digitizing of all OBC records and a standardised system of issuing OBC certificates.
- The Commission is likely to make recommendations for benefit of such marginalized communities in the Central List of OBCs.

Election of the the President and Vice President of India

News Excerpt

Election commission of India has announced election schedule for the office of the President and Vice President.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

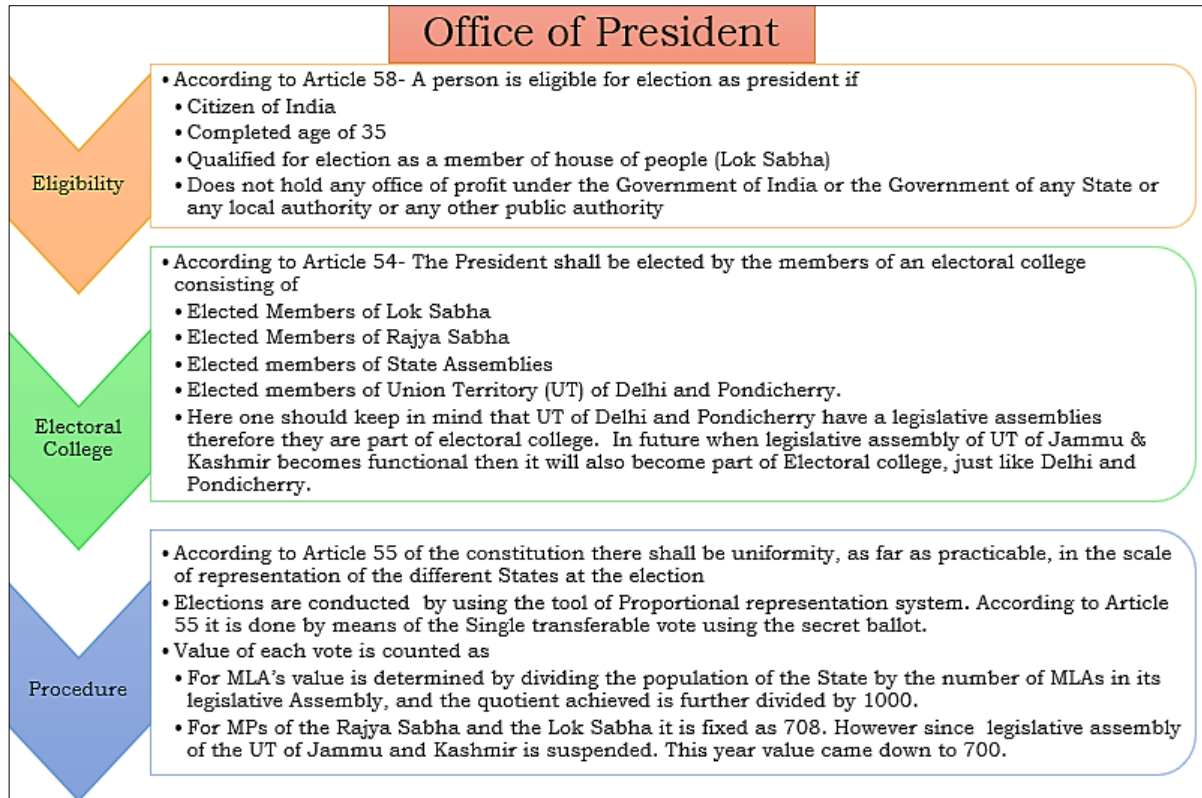
Pre-Connect

- Manner of the Election of the President of India is borrowed from the Irish Constitution and the office of vice-president comes from USA.
- Article 324 and the Presidential and Vice-Presidential Elections Act, 1952 along with the Presidential and Vice-Presidential Elections rules, 1974 vests the superintendence, direction and control of elections to the Election commission of India.
- Elections to Office of the President and the Vice President are done using the instrument of Single-Transferrable Vote. In this voter do not caste single vote but instead rank candidates in order of preference. This allows voters to vote across party lines and select the most preferred candidate. Further, it doesn't cause wastage of voter's vote.

Key Rules and Procedures.

➤ **Notification:**

- For both President and Vice President notification calling election must be issued within the period of sixty days before the expiry of the term of the office.
- The idea is to make sure that President or Vice President elect enter upon his office on the day following the expiry of the term of the outgoing President/Vice-President.



➤ **Returning Officer:**

- **For the election of the office of President**
 - The Secretary General, Lok Sabha or the Secretary General, Rajya Sabha on rotation basis act as returning officer.
 - Assistant Returning Officers includes
 - Two other senior officers of the Lok Sabha/ Rajya Sabha Secretariat.
 - The Secretaries and one more senior officer of Legislative Assemblies of all States including Union territories with legislative assemblies.
- For the election of the office of Vice-President, no officers from state assemblies participate rest all remain as the office of the President.

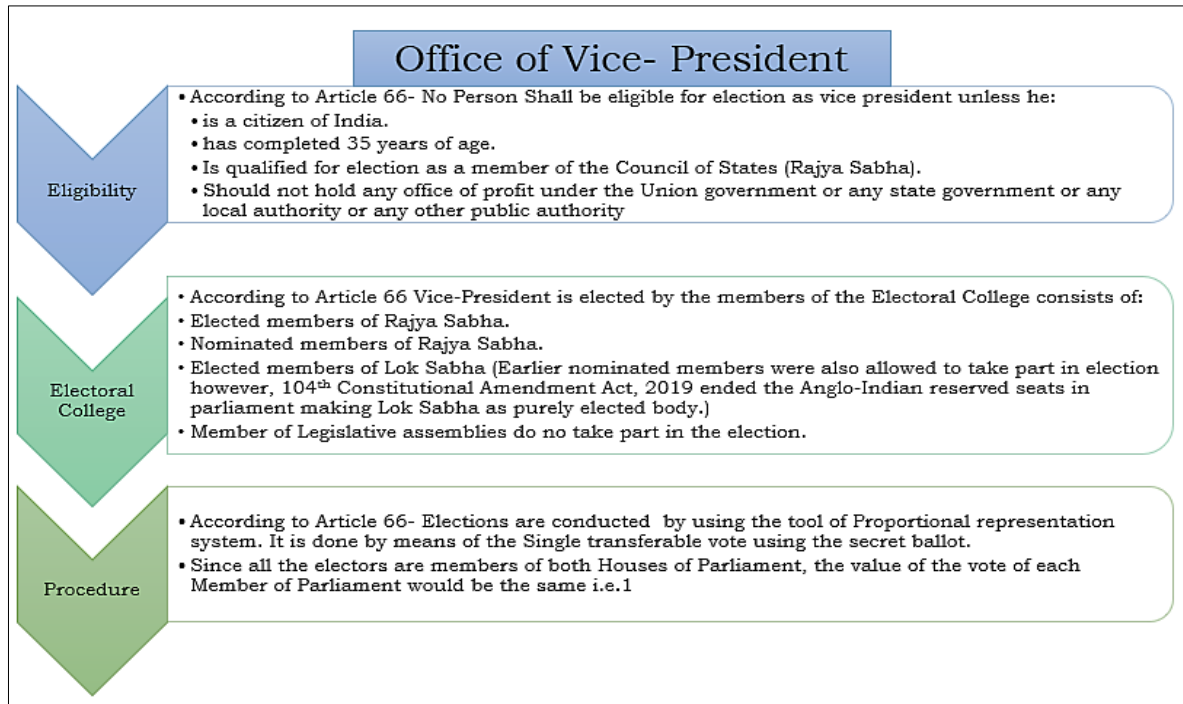
➤ **Nomination**

- For the office of the President
 - A candidate nomination must be subscribed by at least fifty electors as proposers and at least fifty electors as seconders.
- For the office of the Vice-President
 - A candidate nomination must be subscribed by at least twenty electors as proposers and at least twenty electors as seconders

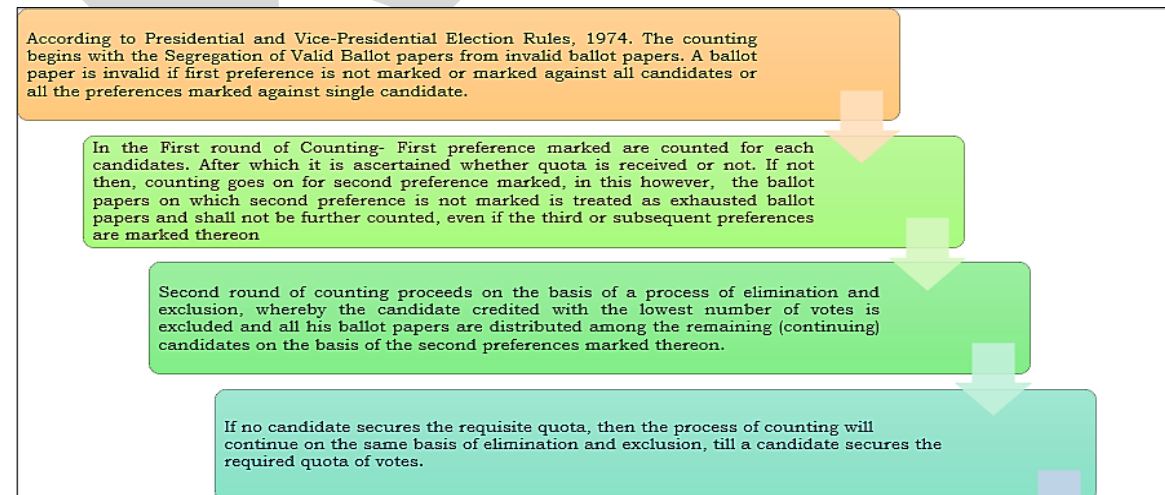
www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
 BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
 t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

- In both President or Vice-President an elector can propose or second the name of only one candidate. If they do for two candidates then their support is counted for the candidate whose nomination paper first received by returning officer.



- For both the office, a candidate had to provide a Security Deposit for the election, of Rs.15000 either in cash with the returning officer or in Reserve Bank of India or in Government Treasury. This deposit shall be forfeited if a candidate failed to secure less one-sixth of the total vote polled otherwise it will be returned to the candidate.
- For both offices, a candidate need is also required to furnish a certified copy of the entry showing his name in the current electoral roll for the Parliamentary Constituency in which the candidate is registered as an elector.
- A candidate can present a maximum of four nomination papers. However, he is required to make only one security deposit in this regard.



www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
 BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
 t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

✓ **Ballot Paper:**

- In Presidential Election:
 - For Member of Parliament- Green color ballot paper printed in Hindi and English
 - For Member of Legislative Assemblies- Pink color ballot paper printed in States official language and English.
- In Vice-Presidential Election:
 - For Member of Parliament- Pink color ballot paper printed in Hindi and English

✓ **Challenging the result:**

- An election to the Office of the President or the Vice-President can be called in question by means of an election petition presented to the Supreme Court.
- In case of President such petition can be presented by candidate or twenty or more electors joined together. In case of Vice-President other than candidate ten or more electors joined together can present the petition.
- Such petition should be filed within the 30 days of publication of result.

PEPPER IT WITH

General Election, Legislative-Executive-Judicial powers of the President

✓ **Other Rules:**

- Only a voter under preventive detention can vote by post.
- A disabled or illiterate elector cannot vote with the help of companion. The voter must take the assistance of the Presiding Officer to record vote.
- Only the marking of first preference is compulsory for a ballot paper to be valid. Marking other preferences is optional.
- Anti-defection law is not applicable and Members of the Electoral College can vote according to their choice and are not bound by any party whip.
- NOTA is not provided in both the elections.

National Emblem of India**News Excerpt**

Prime Minister of India recently unveiled a national emblem atop the new Parliament House coming up as part of the Central Vista Project. It is a 6.5 metre bronze emblem weighing about 9,500 kg. The State Emblem of India is the national emblem of the Republic of India as is used by Union and state governments along with other government agencies.

Pre-Connect**About Sarnath Lion Capital of Ashoka**

- Built at Sarnath in 250 BC to commemorate the first sermon of Gautama Buddha where he shared the Four Noble Truths of life.
- It contains four lions which are standing back-to-back, seen mounted on an abacus with a frieze carrying sculptures in high relief of an elephant,

Legal Provision

- ❖ State Emblem of India (Prohibition of Improper Use) Act 2005 and the State Emblem of India (Regulation of Use) Rules 2007 allows for the use of National emblem.
- ❖ It also provides punishment for any unauthorized use with punishment for imprisonment of up to 2 years or a fine up to Rs 5000 if someone violates the law.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

- a galloping horse, a bull and a lion separated by intervening wheels over a bell-shaped lotus.
- It was carved out of a single block of polished sandstone. It is crowned by the Wheel of the Law (Dharma Chakra).
- It was built in the commemoration of the first sermon by Buddha known as Dharmachakrapravartna
- The wheel appears in relief in the centre of the abacus with a bull on right and a horse on left and the outlines of other wheels on extreme right and left.
- Lions have deep connection in Buddhism, one of the names of Buddha is Shakyasimha which means Lion of the Shakyas. Buddha's first sermon at Sarnath was also called as the 'Simhanda (Lion roar) of the Buddha.
- The pillar was part of Asoka's plan to spread Buddha's teachings
- Chinese traveller Hiuen Tsang has left a detailed account of Asoka's lion pillar in his writings.

Adoption by Constituent Assembly

- Constituent Assembly adopted Sarnath pillar as the national emblem as the pillar epitomised the power, courage and confidence of the free nation.
- On January 26, 1950, the Lion Capital of Asoka at Sarnath officially became the national emblem of India. However, the bell-shaped lotus has been omitted.
- The words Satyameva Jayate from Mundaka Upanishad, meaning 'Truth Alone Triumphs', are inscribed below the abacus in Devanagari Script.
- The emblem represents the seal of the Republic of India.
- It was designed by Dinanath Bhargava who observed lions at the zoo from close quarters for months and then finalized it.



Controversy over Emblem Design

- ✓ There has been criticism of the new Emblem design with critics pointing out that the new design shows lions in menacing and aggressive position. It was alleged that it was built in hurry to meet deadline of Central Vista project.
- ✓ It is also been argued that it was commissioned without the prior sanction from the Delhi Urban Art Commission, and the Heritage Conservation Committee as mandated by the Supreme Court in issues regarding new Parliament building.
- ✓ Some also argues that unveiling of New Emblem by Prime Minister instead of President or Speaker of Lok Sabha is a gross violation of separation of Powers.

- ✓ The counter arguments revolve around the fact that the change in dimensions and placement of emblem at a significant height requires viewing from different angles and to appreciate from a distance.
- ✓ Government also clarified that eight stages of preparation including clay modelling to computer graphics were undertaken in making of new emblem.
- ✓ Some sees the change in emblem as change in attitude of India from docile to assertive nation.

Usage of National Emblem	
Official Use	<ul style="list-style-type: none"> • On Letterheads of governments and its agencies. • On the Currency of India • On the Passports of India
National Flag	<ul style="list-style-type: none"> • The Ashoka Chakra
Buildings	<ul style="list-style-type: none"> • Rashtrapati Bhawan • Parliament House • Supreme Court (with a different moto- Yato Dharamtato Jaya) • High Courts • Central Secretariat • Secretariat Buildings of States and Union Territories • Raj Bhawan/Raj Niwas • State Legislature
Diplomatic	<ul style="list-style-type: none"> • Premises of India's Diplomatic Mission abroad • Residence of Heads of Missions in the countries of their accreditation • At the entrance doors of buildings occupied by Indian Consulates abroad

PEPPER IT WITH
Mauryan Pillars,
Fundamental Duties

Other National Symbols

		
<p>National Flag</p> <ul style="list-style-type: none"> • The ratio of width of the flag to its length is two to three. In the center of the white band is a navy-blue wheel which represents the chakra. • Adopted by the Constituent Assembly of India on 22 July 1947. 	<p>National Anthem</p> <ul style="list-style-type: none"> • Jana Gan Mana- Composed by Rabindranath Tagore. First sung at Kolkata session of congress in 1911. • Hindi version adopted by constituent assembly on 24 January 1950 	<p>National Song</p> <ul style="list-style-type: none"> • It was composed in Sanskrit by Bankim Chandra Chatterjee. • Dr. Rajendra Prasad was of opinion that the song Vande Mataram, which has played a historic part in the struggle for Indian freedom, shall be honored equally with Jana Gana Mana and shall have equal status with it.
	<p>National Animal</p> <ul style="list-style-type: none"> • The magnificent tiger, <i>Panthera Tigris</i> is a striped animal. It has a thick yellow coat of fur with dark stripes 	 <p>National Flower</p> <ul style="list-style-type: none"> • Lotus (<i>Nelumbo Nucifera</i> Gerten) is the National Flower of India.

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupks | Instagram.com/khanstudygroup | WhatsApp 9868005599

SOCIAL ISSUES, GOVERNMENT SCHEMES, REPORT

NFSA Ranking

News Excerpt

Odisha has been adjudged as the top ranked State followed by Uttar Pradesh at the 2nd spot and Andhra Pradesh at third amongst the General Category States in 'State Ranking Index for NFSA'.

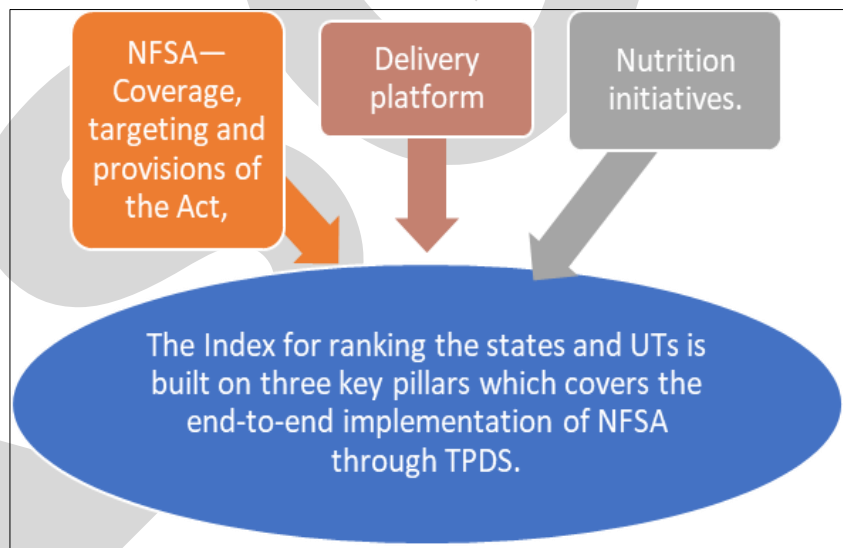
GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-connect

The National Food Security Act (NFSA) was enacted in 2013. The Act legally entitles upto 75% of the rural population and 50% of the urban population to receive subsidized foodgrains under Targeted Public Distribution System. The National Food Security Act, (NFSA) 2013 is being implemented in all the States/UTs, on an all-India basis.

About the State ranking Index for NFSA

- This "State ranking Index for NFSA" attempts to document the status and progress of implementation of NFSA and various reform initiatives across the country, post consultation with states.
- It highlights the reforms undertaken by States and UTs and create a cross-learning environment and scale-up reform measures by all states and union territories.
- The present Index is largely focused on NFSA Distribution and will include procurement, PMGKAY Distribution in future.



Different types of category of States

General category

- Odisha, Uttar Pradesh and Andhra Pradesh scored the highest and secured the top three positions in the Index.
- The states performed very well on all parameters and indicators governing the implementation of NFSA through TPDS.
- Jharkhand, Uttar Pradesh, Dadra and Nagar Haveli and Daman and Diu scored the highest in terms of coverage, targeting and implementing provisions of NFSA.
- Bihar, Andhra Pradesh and Telangana had the best delivery platform displaying the efficiency of the TPDS supply chain.

- Kerala has been ranked at the 11th position, Telangana 12th, Maharashtra 13th, West Bengal 14th and Rajasthan 15th.
- Punjab is at the 16th position, followed by Haryana, Delhi, Chhattisgarh and Goa.

Special Category State

Among the special category States (the Northeastern States, Himalayan States, and the Island States), Tripura has obtained the first rank. Himachal Pradesh and Sikkim are at the second and third positions.

Significance of the Index

- ✓ NFSA's implementation through TPDS has not been uniform in the country. While some states and Union territories lead, others are yet to pick up in terms of coverage, beneficiary satisfaction, digitisation and overall system efficiency.
- ✓ NFSA plays a critical role in combating hunger and safeguarding food security in the country. Yet, the uneven implementation of the Act across the states highlighted the need for a standard framework to measure the efficiency and impact of food security initiatives through NFSA across all states and union territories.
- ✓ The index has been developed to create an environment of competition, cooperation and learning among states while addressing matters of food security and hunger
- ✓ It has also been developed for creating transparency in the system to publish reliable and standard data in the public domain for citizens and for periodically publishing data that global and Indian agencies can use for their research and analysis.

IMPLEMENTING FOOD SECURITY

How the 20 'general category' states ranked in terms of NFSA implementation

TOP THREE

Rank	State	Index score
1	Odisha	0.836
2	Uttar Pradesh	0.797
3	Andhra Pradesh	0.794

BOTTOM THREE

18	Delhi	0.658
19	Chhattisgarh	0.654
20	Goa	0.631

Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY)

- ❖ Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY) is a scheme as part of Atmanirbhar Bharat to supply free food grains to migrants and poor.
- ❖ The free food grain scheme or the Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) was introduced by the Narendra Modi government during the first nationwide lockdown due to Covid-19 in March 2020.
- ❖ Under this scheme, the center provides 5kg of free food grains per month to the poor. This is in addition to the subsidized (Rs 2-3 per kg) ration provided under the National Food Security Act (NFSA) to families covered under the Public Distribution System (PDS).
- ❖ PMGKAY caters free food grain, either rice or wheat, to over 80 crore beneficiaries of NSFA.

Analytica

What are the major issues related to this index?

- The current version of the Index measures the effectiveness of NFSA implementation majorly through operations and initiatives under TPDS (Targeted Public Distribution System).

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

- It does not cover programs and schemes implemented by other ministries and departments under the NFSA.
- The Index denotes only the efficiency of TPDS operations, it does not reflect the level of hunger, if any or malnutrition, or both, in a particular State or union territory, the report clarified.
- The Index focuses on NFSA and TPDS reforms, which can be standardized across the States and Union Territories.
- It rests upon three pillars that consider various facets of food security and nutrition. Each pillar has parameters and sub-parameters that support this evaluation.
- The first pillar measures coverage of NFSA, rightful targeting, and implementation of all provisions under NFSA.
- The second pillar analyses the delivery platform, while considering the allocation of foodgrains, their movement, and last-mile delivery to Fair Price Shops (FPS).
- The final pillar focuses on nutrition initiatives of the department.
- The findings from the exercise revealed that most States and Union Territories have fared well in digitisation, Aadhaar seeding, and ePoS installation, which reiterates the strength and scale of the reforms.

PEPPER IT WITH

Targeted Public Distribution System (TPDS), One Nation, One Ration Card (ONORC), PM-GKAY

Conclusion

States and Union Territories can improve their performance in a few areas. Exercises, such as conducting and documenting social audits thoroughly and operationalising functions of State food commissions across States and Union Territories, will further bolster the true spirit of the Act.

India's first ever Animal Health Summit

News Excerpt

Ministry of Fisheries, Animal Husbandry and Dairying has recently Inaugurated First India Animal Health Summit 2022.

About the Summit

India Animal Health Summit 2022' was organized by Indian Chamber of Food and Agriculture (ICFA) and the Agriculture Today Group.

The first India Animal Health Summit 2022 was held at the NASC Complex in New Delhi, with the goal of understanding the importance of animal health to the country's food and nutrition security, rural income and prosperity, and overall economic development.

Significance of Animal Health

- In terms of food security, nutrition, and overall sustainability, animals and animal products are critical components of the country's development.
- The total livestock population in the country is 535.78 million, a 4.6 percent increase from the 2012 Livestock Census. The total bovine population was 302.79 million in 2019, a 1.0 percent increase from the previous census.
- India has the most cattle and produces the most milk in the world, but per-animal productivity remains low.
- Low productivity can be caused by a variety of factors, the most important of which is animal health, which has a significant impact on productivity.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
V											

Common animal diseases

Anthrax

- Anthrax, a highly infectious and fatal disease of cattle, is caused by a relatively large spore-forming rectangular shaped bacterium called *Bacillus anthracis*. Anthrax causes acute mortality in ruminants. The bacteria produce extremely potent toxins which are responsible for the ill effects, causing a high mortality rate. Signs of the illness usually appear 3 to 7 days after the spores are swallowed or inhaled. Once signs begin in animals, they usually die within two days.
- It is an acute infectious and highly fatal, bacterial disease of cattle. Buffaloes, sheep and goats are also affected. Young cattle between 6-24 months of age, in good body condition are mostly affected. It is soil-borne infection which generally occurs during rainy season. In India, the disease is sporadic (1-2 animal) in nature.

Foot and mouth disease

- ✓ The foot-and-mouth disease is a highly communicable disease affecting cloven-footed animals. It is characterized by fever, formation of vesicles and blisters in the mouth, udder, teats and on the skin between the toes and above the hoofs. Animals recovered from the disease present a characteristically rough coat and deformation of the hoof.
- ✓ In India, the disease is widespread and assumes a position of importance in livestock industry. The disease spreads by direct contact or indirectly through infected

Government schemes and interventions to promote animal health

RASHTRIYA GOKUL MISSION: The Rashtriya Gokul Mission (RGM) is being implemented for development and conservation of indigenous bovine breeds since December 2014. The scheme is important in enhancing milk production and productivity of bovines to meet growing demand of milk and making dairying more remunerative to the rural farmers of the country.

National Livestock Mission: The focus of the scheme is on entrepreneurship development and breed improvement in poultry, sheep, goat and piggy including feed and fodder development. The scheme is implemented with the following three Sub-Missions:

- ❖ Sub-Mission on Breed Development of Livestock & Poultry
- ❖ Sub-Mission on Feed and Fodder development
- ❖ Sub-Mission on Extension and Innovation

Livestock Health and Disease Control: The overall aim of the Livestock Health & Disease Control scheme is to improve the animal health sector by way of implementation of prophylactic vaccination programmes against various diseases of livestock and poultry, capacity building, disease surveillance and strengthening of veterinary infrastructure.

National Programme for Dairy Development (NPDD): The NPDD scheme aims to enhance quality of milk and milk products and increase share of organized milk procurement.

National Animal Disease Control Programme (NADCP): National Animal Disease Control Programme (NADCP) is a flagship scheme launched by Hon'ble Prime Minister in September, 2019 for control of Foot & Mouth Disease and Brucellosis by vaccinating 100% cattle, buffalo, sheep, goat and pig population for FMD and 100% bovine female calves of 4-8 months of age for brucellosis with the total outlay of Rs.13, 343.00 crore for five years (2019-20 to 2023-24).

water, manure, hay and pastures. It is also conveyed by cattle attendants. It is known to spread through recovered animals, field rats, porcupines and birds.

Rabies (Mad dog disease)

- Rabies is a disease of dogs, foxes, wolves, hyaenas and in some places, it is a disease of bats which feed on blood.
- The disease is passed to other animals or to people if they are bitten by an animal with rabies. The germs which cause rabies live in the saliva of the sick (rabid) animal. This is a killer disease but not every dog which bites is infected with rabies.
- When the rabid animal bites another animal or human, the germs which live in its saliva pass into the body through the wound caused by the bite. The germs travel along the nerves to the brain. The time between the bite and the first appearance of signs that the bitten animal or human has been infected can take from 2 to 10 weeks or more. The time taken depends on the distance of the bite from the brain. If the bite is on the face or head, the bitten animal or human will quickly show signs, but if the bite is on the leg it will take much longer for signs to develop.

POX

Epidemiology : sheep-pox is a highly contagious disease. It causes a mortality of 20 to 50 per cent in animals below the age of 6 months, and causes damage to the wool and skin in adults. Of the pock diseases, sheep-pox ranks only second to human small-pox in virulence. The disease is transmissible to in-contact goats but not to other species of animals. It, however, spreads slowly.

Blue tongue

- ✚ Bluetongue, a disease which is transmitted by midges, infects domestic and wild ruminants and also camelids, however sheep are particularly badly affected. Cattle, although infected more frequently than sheep, do not always show signs of disease. Virus spreads between animals occurs via the midges of *Culicoides* species.
- ✚ The likelihood of mechanical transmission between herds and flocks, or indeed within a herd or flock, by unhygienic practices (the use of contaminated surgical equipment or hypodermic needles) may be a possibility.

Analytica

A review of animal health

- > Animal disease surveillance is less developed and infrastructure to support delivery of services is inadequate. Several groups are known to offer animal health services.
- > The untrained “animal health workers” and para-veterinarians are more popular with farmers as they charge less for consultations (compared to veterinarians who are few and charge more).
- > Over-the-counter access of antibiotics, without prescription, and direct marketing of drugs to farmers are common. Because of this, farmers are able to treat their animals and only consult when cases become non- responsive to treatment.
- > Antibiotics are mostly used in management of mastitis cases. Drug withdrawal periods are rarely observed and occurrence of antibiotic- contaminated milk has been reported.
- > Awareness on AMR is low and antimicrobial stewardship in livestock is yet to be developed. Initiatives such as the National programme for containment of AMR, National Action Plan on AMR, and the National Health policy point to government’s commitment in addressing the problem of AMR in the country.

PEPPER IT WITH

Avian Influenza, World Organization for Animal Health, Chamber of Food and Agriculture (ICFA), NPDD, DIDF and AHIDF

Way forward

- > Zoonotic diseases have emerged as global health threats as a result of the complex interactions between humans, animals, and the environment. Furthermore, food-borne illnesses and antimicrobial resistance (AMR) have strained the country's healthcare system and economy. Given the resurgence of old diseases as well as the emergence of new ones, a call for a comprehensive national animal health strategy is critical.
- > Disease surveillance in animals has the added benefit of protecting humans through early diagnosis because animals are reservoirs of various developing diseases. Animal health is a major concern in India. To address animal health issues and scale-up government efforts across states, India's animal health industry must be prepared for the future.

Rise in unvaccinated children in India

News Excerpt

According to UNICEF, The Covid pandemic left India's immunisation programme in tatters, with an estimated three million children not having received the first dose of the DPT vaccine in 2020.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-connect

DTP vaccine can prevent diphtheria, tetanus, and pertussis.

Diphtheria and pertussis spread from person to person. Tetanus enters the body through cuts or wounds.

- **DIPHTHERIA (D)** can lead to difficulty breathing, heart failure, paralysis, or death.
- **TETANUS (T)** causes painful stiffening of the muscles. Tetanus can lead to serious health problems, including being unable to open the mouth, having trouble swallowing and breathing, or death.
- **PERTUSSIS (P)**, also known as "whooping cough," can cause uncontrollable, violent coughing that makes it hard to breathe, eat, or drink. Pertussis can be extremely serious especially in babies and young children, causing pneumonia, convulsions, brain damage, or death. In teens and adults, it can cause weight loss, loss of bladder control, passing out, and rib fractures from severe coughing.
- DTP is only for children younger than 7 years old. Different vaccines against tetanus, diphtheria, and pertussis (Tdap and Td) are available for older children, adolescents, and adults.

Universal Immunisation Programme

Immunization Programme in India was introduced in 1978 as 'Expanded Programme of Immunization' (EPI) by the Ministry of Health and Family Welfare, Government of India. In 1985, the programme was modified as 'Universal Immunization Programme' (UIP) to be implemented in phased manner to cover all districts in the country by 1989-90 with the one of largest health programme in the world. Ministry of Health and Family Welfare, Government of India provides several vaccines to infants, children and pregnant women through the Universal Immunisation Programme.

Mission Indradhanush

Mission Indradhanush (MI) was launched in 2014 and aims at increasing the full immunization coverage to children to 90%.

Under this drive focus is given on pockets of low immunization coverage and hard to reach areas where the proportion of unvaccinated and partially vaccinated children is highest.

About the data published by WHO and UNICEF.

- The increase in zero dose, or those who missed their first dose of diphtheria-tetanus-pertussis, between 2019 and 2021 is the “first time ever there has been a decline in evaluated coverage in immunisation for India as a whole.
- Though immunisation coverage continues to decline the world over, India was able to arrest the trend between 2020 and 2021.
- The number of children with zero dose rose sharply to three million in 2020. But a further backsliding was prevented and the number dropped to 2.7 million in 2021 due to catchup programmes such as the third Intensified Mission Indradhanush (IMI), notes the WHO-UNICEF report.

Analytica

Impact of Covid-19 in children Vaccination schedules

- ✓ The coronavirus disease (COVID-19) pandemic has led to significant interruptions in immunisation programmes globally alongside the disruption of other routine health services.
- ✓ 230 lakh children missed out on basic vaccines which have to be delivered through routine immunisation services in 2020 and up to 170 lakh children likely did not receive even a single vaccine during the entire year worldwide.
- ✓ Coming to the Indian scenario, nearly 31 lakh children missed their first vaccination dose against diphtheria, tetanus, and whooping cough in 2020. India is now experiencing a large dropout, with DTP-3 coverage falling from 91% to 85%.
- ✓ A large study that was conducted recently showed in different countries showed that the most common reason for missed childhood vaccination was getting affected by COVID-19 at the vaccination clinic (15%).
- ✓ Other reasons for missed vaccination include worry about getting COVID-19 when leaving the house (11%), following healthcare provider recommendations (10%), clinic closure (10%), or wanting to save services for people who need the most(10%).
- ✓ Due to the fear of contracting the Covid infection a lot of parents avoided taking their kids for even the very basic primary vaccinations. This increases their chance to catch the dreaded vaccine-preventable diseases like measles, mumps, rubella, diphtheria, pertussis, and tetanus, thus leading to an overall increase in childhood morbidity and mortality.

Progress today

- Until the pandemic, India steadily improved immunisation coverage from 43% during the National Family Health Survey (NFHS) -3 (2005-2006), to 62% in the (NFHS) -4 between 2015 and 2016 and the (NFHS)-5 between 2019 and 2021.
- India started the fourth round of IMI from February, which is expected to further reduce the number of unvaccinated children in the next round of WHO and UNICEF estimates of national immunisation coverage (WUENIC) in 2023. Annually, India vaccinates more than 30 million pregnant women and 27 million children through the Universal Immunisation Programme.
- Globally, the percentage of children who received three doses of the vaccine against diphtheria, tetanus and pertussis (DTP3) — a marker for immunisation coverage within and across countries — fell five percentage points between 2019 and 2021 to 81%.
- As a result, 25 million children missed out on one or more doses of DTP through routine immunisation services in 2021 alone. This is two million more than those who missed out in 2020 and six million more than in 2019, highlighting the growing number of children at risk from devastating but preventable diseases.

What should be done if certain due vaccines are missed?

This is a common situation in the COVID-19 pandemic. The parents have to be reassured that the vaccination schedule can be resumed without any need to restart the series. Multiple vaccines in one sitting and using the minimum permitted interval between two doses of the same inactivated vaccine can be practiced to complete the schedule in the shortest possible time. Multiple epidemics of measles occurred in 2015 in Guinea because of the interrupted immunisation during the Ebola outbreak.

Conclusion

This is a red alert for child health. We are witnessing the largest sustained drop in childhood immunisation in a generation. The fall in immunisation coverage is especially worrying as it is being accompanied by a rapidly rising rate of severe acute malnutrition due to a fall in income levels during the pandemic. A malnourished child already has weakened immunity and missed vaccinations can mean common childhood illnesses quickly become lethal to them. The convergence of a hunger crisis with a growing immunisation gap threatens to create the conditions for a child survival crisis.

Extension of Beti Bachao Beti Padhao programme

News Excerpt

According to the guidelines issued by Women and Child Development (WCD) Ministry, Beti Bachao Beti Padhao, the Centre's flagship programme for women's empowerment, which focuses on education of girl child and improving sex ratio, will now be extended across the country.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-connect

Government launched the Beti Bachao Beti Padhao (BBBP) in 2015 at Panipat in Haryana. It was initiated as a tri-ministerial effort of Ministries of Women and Child Development, Health & Family Welfare and Human Resource Development. From 2021-22, the Ministry of Skill Development and Entrepreneurship and Ministry of Minority Affairs have also been added as partners.

The objectives of the Scheme are as under:

- To prevent gender biased sex selective elimination
- To ensure survival and protection of the girl child
- To ensure education and participation of the girl child
- To increase girl's participation in the fields of sports

BBBP scheme aims to achieve the following:

- Improvement in the Sex Ratio at Birth (SRB) by 2 points every year,
- Improvement in the percentage of institutional deliveries or sustained at the rate of 95% or above,
- 1% increase in 1st Trimester ANC Registration per year, and
- 1% increase in enrolment at secondary education level and skilling of girls/women per year.
- To check dropout rate among girls at secondary and higher secondary levels.
- Raising awareness about safe menstrual hygiene management (MHM)

What are the new guidelines?

- The component will aim for zero-budget advertising and encouraging greater spend on activities that have on-ground impact...for promoting sports among girls, self-defence camps, construction of girls' toilets, making available sanitary napkin vending machines and sanitary pads, especially in educational institutions, awareness about PC-PNDT Act, etc.

- According to the guidelines, the ministry has now targeted improvement in the Sex Ratio at Birth (SRB) by 2 points every year, improvement in the percentage of institutional deliveries at 95% or above, 1% increase in 1st Trimester ANC Registration per year, 1 per cent increase in enrolment at secondary education level and skilling of girls and women per year, to check dropout rate among girls at secondary and higher secondary levels and raising awareness about safe menstrual hygiene management.
- The scheme will also look at increasing girls' participation in sports by identifying talent and linking them with appropriate authorities under 'Khelo India'.
- The ministry also plans to strengthen One-Stop Centres (OSCs), set up to help women facing violence, including domestic violence and trafficking, by adding 300 OSCs in districts which either have a high rate of crimes against women or are geographically large, preferably in aspirational districts.
- The toll-free, 24-hour women's helpline, 181, will be merged with the Emergency Response Support System, and other platforms such as 1098 child line and NALSA, will also be connected to OSCs.

Mission Shakti

Ministry of Women and Child Development has issued detailed guidelines for 'Mission Shakti' scheme. The Government of India has launched 'Mission Shakti' - an integrated women empowerment programme as umbrella scheme for the safety, security and empowerment of women for implementation during the 15th Finance Commission period 2021-22 to 2025-26.

About the Mission

- ❖ 'Mission Shakti' is a scheme in mission mode aimed at strengthening interventions for women safety, security and empowerment. It seeks to realise the Government's commitment for "women-led development" by addressing issues affecting women on a life-cycle continuum basis and by making them equal partners in nation-building through convergence and citizen-ownership.
- ❖ The scheme seeks to make women economically empowered, exercising free choice over their minds and bodies in an atmosphere free from violence and threat. It also seeks to reduce the care burden on women and increase female labour force participation by promoting skill development, capacity building, financial literacy, access to micro-credit etc.
- ❖ 'Mission Shakti' has two sub-schemes - 'Sambal' and 'Samarthya'. While the "Sambal" sub-scheme is for safety and security of women, the "Samarthya" sub-scheme is for empowerment of women. The components of 'Sambal' sub-scheme consist of erstwhile schemes of One Stop Centre (OSC), Women Helpline (WHL), Beti Bachao Beti Padhao (BBBP) with a new component of Nari Adalats - women's collectives to promote and facilitate alternative dispute resolution and gender justice in society and within families.
- ❖ The components of 'Samarthya' sub-scheme consist of erstwhile schemes of Ujjwala, Swadhar Greh and Working Women Hostel have been included with modifications. In addition, the existing schemes of National Creche Scheme for children of working mothers and Pradhan Mantri Matru Vandana Yojana (PMMVY) under umbrella ICDS have now been included in Samarthya. A new component of Gap Funding for Economic Empowerment has also been added in the Samarthya Scheme.

Analytica

Issues related with BBBP Scheme

- ✓ Among BBBPS's aims was improving the sex ratio at birth (SRB) in gender critical districts by ten points in a year.
- ✓ As per the CAG reports, in various districts of Haryana and Punjab, the sex ratio has worsened. For example, in Panipat, Haryana the ratio was 892 against the target of 902 but, it dropped further to 881.
- ✓ The target of increasing girls' enrolment in secondary schools and achieving 100% re-enrolment of girls who had dropped out was also left incomplete. The Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, 1994 could also do with more strengthening.
- ✓ BBBPS is a centrally sponsored scheme that provides 100% financial assistance to state governments to encourage girl child education.
- ✓ The expenditure has been categorised as 'irregular' and is tantamount to the diversion of funds. Similarly, an expenditure of Rs 21.24 lakh was incurred in 2015 by the women and child development department from funds provided by the scheme to purchase 1,800 laptop bags and 2,900 mugs.
- ✓ Overall, out of a total amount of Rs 43 crore that was set aside for BBBP in the fiscal year 2016-2017, only Rs 5 crore has been correctly utilised, according to the report of the Parliamentary Standing Committee on Human Resource Development.
- ✓ According to the report, nearly 80 per cent of the funds for the scheme has been used for its advertising and not on sectoral interventions such as in health and education for women.

Other related Scheme and Initiatives

- ❖ Sukanya Samridhi Yojana
- ❖ National Girl Child Day
- ❖ Scheme for Adolescent Girls
- ❖ National Scheme of Incentive to Girls for Secondary Education
- ❖ CBSE Udaan Scheme

Implementation challenges – cases of Haryana and Punjab

The scheme is being implemented with an inter-disciplinary approach. At the national level, the responsibility is shared by the Ministry for Women and Child Development (MoWCD); the Ministry of Health and Family Welfare (MoHFW), and the Ministry of Human Resource Development (MoHRD). At the State level, the respective departments are responsible for co-ordination and implementation of the scheme. District Collectors are meant to lead and coordinate actions of all departments for implementation of BBBP at the district level. Most importantly, a task force is mandatory to monitor the scheme's progress at all three levels – national, state and district.

Challenges	Haryana	Punjab
Underutilisation of funds	Over the period January 2015-March 2016, GOI released INR 8.08 crores and State government was able to spend INR 5.31 crores	Over the period 2014-16, INR 6.36 crores released by GOI, of which INR 0.91 crores utilised upto March 2016.
Infrequent task force meetings	Scheme being implemented in 20 districts, and three districts were audited. Only one meeting was held at State level, and none at district level between January 2015 and March	Scheme being implemented in 20 districts. Infrequent task force meetings adversely affected implementation in 11 districts, while scheme could not take off in another 9 districts.

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
 BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
 t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

	2016, as against a requirement of quarterly meetings.	
Non-compliance to guidelines	Scrutiny of rewards showed that as against target of Rs. 15 lakh to be awarded to schools for the three districts surveyed, only Rs. 1 lakh was awarded in total during 2015-16.	Monthly progress reports, statements of expenditures and reports of district / block level task forces not prepared / delayed.

Recommendations to strengthen BBBP implementation:

- Increase planned expenditure allocation for education and health related interventions.
- District level task forces should be headed by local female frontline workers.
- Ensure that on-ground implementation personnel are adequately trained in community outreach activities.
- Incentivise public private partnerships for executing community level activities
- Necessitate greater use of mobile technology for monitoring and documentation.

Conclusion

Successive governments have taken multiple measures to improve the gender ratio yet, across India, the practice of female infanticide and foeticide is remains rampant. Every policy contributes in improving the ratio but when policies are not implemented and numbers are manipulated, it sets us back by many years. The long-term effects of a skewed gender ratio range from a lack of employment opportunities for women and health concerns to its impact on the overall development of the country. A drop in the number of women may lead to a decline in population, increase in crimes against women and an increase in human trafficking.

Urban Planning

News Excerpt

Recently, PARIMAN portal was made open to the public of NCR which is developed National Informatics Centre (NIC). s

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-connect

- Geo-Portal for NCR known as 'PARIMAN' was launched in 2021 by NCRPB and Union Minister for Housing & Urban Affairs.
- The National Capital Region Planning Board (NCRPB), constituted in 1985 under the provisions of NCRPB Act, 1985, is a statutory body functioning under the Ministry of Urban Development, Government of India. NCRPB has a mandate to systematically develop the National Capital Region (NCR) of India.
- The NCR spreads over an area of 33,578 sq. km. The constituent areas of the National Capital Region are:
 - Haryana Sub-region – Faridabad, Gurgaon, Rohtak, Sonapat, Rewari, Jhajjar, Mewat and Panipat districts of Haryana (40.0 percent of NCR area);
 - Rajasthan Sub-region – Alwar district of Rajasthan (23.3 percent of NCR area);
 - Uttar Pradesh Sub-region – Meerut, Ghaziabad, Gautam Buddha Nagar, Bulandshahr and Baghpat districts of UP (32.3 percent of NCR area)

About the PARIMAN portal

- NCR Geo-portal (PARIMAN) is a robust system to facilitate better sub-regional and local planning. This contains various layers collected from authentic sources.
- The portal has many Base Maps, Satellite Image services and Night Light Data of different time spans. Terrain map provides the Elevation Profile of a route.
- Administrative units like State Boundaries to Village Boundaries, various Headquarters to Habitations, Parliamentary and Assembly Constituency Boundaries are integrated in this portal.
- Other layers include Road, Rail and Metro Networks, Points of Interest like Education, Health, Banking, Post Office, Power and Telecom, Industries, Tourism, River and Canal Networks and many more. Area of Interest function facilitates a comprehensive view for any information of a particular State or District or Tehsil.
- This Geo-portal is an important platform to know where and what exist in National Capital Region (NCR) that enables better planning.

What is Geospatial Technology?

Geospatial Technology is an emerging field of study that includes Geographic Information System (GIS), Remote Sensing (RS), and Global Positioning System (GPS). Geospatial technology enables us to acquire data that is referenced to the earth and use it for analysis, modeling, simulations, and visualization. Geospatial technology allows us to make informed decisions based on the importance and priority

Analytica

Indian and Urbanization

Urbanization in India has expanded rapidly as increasing numbers of people migrate to towns and cities in search of economic opportunity.

Slums now account for 1/4 of all urban housing.

Meeting the needs of India's soaring urban populations is and will therefore continue to be a strategic policy matter. Critical issues that need to be addressed are:

- ✓ Poor local governance
- ✓ Weak finances
- ✓ Inappropriate planning that leads to high costs of housing and office space; in some Indian cities these costs are among the highest in the world
- ✓ Critical infrastructure shortages and major service deficiencies that include erratic water and power supply, and woefully inadequate transportation systems
- ✓ Rapidly deteriorating environment

Fast Facts - Urbanization in India

- ❖ Most Urbanized States: Tamil Nadu 43.9%; Maharashtra 42.4%; Gujarat 37.4%
- ❖ 3 out of world's 21 mega cities: Mumbai (19 mill); Delhi (15 mill); Kolkata (14 mill)
- ❖ Large Cities: 23 in 1991; 40 in 2001
- ❖ Urban Pop.: 25% of 850 mill in 1992; 28% of 1,030 mill in 2002.
- ❖ Estimated Urban Pop. by 2017: 500 mill
- ❖ % of Urban Residents who are Poor: About 25%
- ❖ Slum Population: About 41 million in 2001
- ❖ Estimated Slum Pop. by 2017: 69

CHALLENGES

Planning:

- ✓ Many urban governments lack a modern planning framework
- ✓ The multiplicity of local bodies obstructs efficient planning and land use
- ✓ Rigid master plans and restrictive zoning regulations limit the land available for building, constricting cities' abilities to grow in accordance with changing needs.

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

Housing:

- ✓ Building regulations that limit urban density - such as floor space- reduce the number of houses available, thereby pushing up property prices
- ✓ Outdated rent control regulations reduce the number of houses available on rent – a critical option for the poor
- ✓ Poor access to micro finance and mortgage finance limit the ability of low income groups to buy or improve their homes
- ✓ Policy, planning, and regulation deficiencies lead to a proliferation of slums
- ✓ Weak finances of urban local bodies and service providers leave them unable to expand the trunk infrastructure that housing developers need to develop new sites.

Service delivery:

- ✓ Most services are delivered by city governments with unclear lines of accountability
- ✓ There is a strong bias towards adding physical infrastructure rather than providing financially and environmentally sustainable services
- ✓ Service providers are unable to recover operations and maintenance costs and depend on the government for finance
- ✓ Independent regulatory authorities that set tariffs, decide on subsidies, and enforce service quality are generally absent.

PEPPER IT WITH

Smart Cities, AMRUT Mission, Swachh Bharat Mission-Urban, The National Heritage City Development and Augmentation Yojana (HRIDAY) and Pradhan Mantri Awas Yojana-Urban

Infrastructure:

- ✓ Most urban bodies do not generate the revenues needed to renew infrastructure, nor do they have the creditworthiness to access capital markets for funds
- ✓ Urban transport planning needs to be more holistic – there is a focus on moving vehicles rather than meeting the needs of the large numbers of people who walk or ride bicycles in India's towns and cities.

Environment:

- ✓ The deteriorating urban environment is taking a toll on people's health and productivity and diminishing their quality of life.

Way forward

- Our new government has many challenges, with multiple claimants for limited public resources. Hence, a large part of leadership is about prioritization. Like electoral math that looks at seat share rather than vote share, addressing the challenges of 17% of cities addresses the quality of life for 70% of citizens.
- Ensuring that the urban future is substantially secured can be achieved with a twin-track approach of good governance and robust spatial planning in the top 468 cities of India.

Consumer Protection**News Excerpt**

The government recently issued new guidelines to prevent misleading advertisements, including those targeting children and making free claims to woo consumers. The guidelines was issued by The Central Consumer Protection Authority (CCPA).

Pre-connect**What is the Central Consumer Protection Authority?**

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

- The authority is being constituted under Section 10(1) of The Consumer Protection Act, 2019. The Act replaced The Consumer Protection Act, 1986, and seeks to widen its scope in addressing consumer concerns. The new Act recognises offences such as providing false information regarding the quality or quantity of a good or service, and misleading advertisements. It also specifies action to be taken if goods and services are found “dangerous, hazardous or unsafe”.
- The CCPA, introduced in the new Act, aims to protect the rights of the consumer by cracking down on unfair trade practices, and false and misleading advertisements that are detrimental to the interests of the public and consumers.

Who is covered by these guidelines?

- All advertisements regardless of form, format or medium
- A manufacturer, service provider or trader whose goods, product or service is the subject of an advertisement
- An advertising agency or endorser whose service is availed for the advertisement of goods, products or services.

New guidelines defines valid advertisement

- The guidelines lay down the conditions for non-misleading and valid advertisements. Briefly, an advertisement can be considered non-misleading if it contains true and honest representation of goods and does not exaggerate the accuracy, scientific validity or practical usefulness or capability.
- In case of unintentional lapse, the advertisement may still be considered as valid if the advertiser has taken prompt action in letting the consumer know the deficiency.
- It must be noted that rather than defining what constitutes a 'misleading or invalid advertisement,' the guidelines have sought to define 'valid or non-misleading advertisement.' This take on policy drafting significantly reduces the scope for exploitation of any inadvertent loopholes.

What surrogate advertisement?

- ✓ Surrogate advertisement" refers to the advertisement of goods in the shadow of other goods. For example, the advertisement of tobacco in the garb of pan masala.
- ✓ Advertisement of tobacco as such is prohibited by the law. While existing laws such as the Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply, and Distribution) Act, 2003 already seeks to govern advertisements related to tobacco, manufacturers and advertisers have been able to circumvent the regulation through the grey area created by a surrogate advertisement.
- ✓ The guidelines seek to ensure that these grey areas are filled by the black letter of the law, completely disallowing any attempts to advertise products that are otherwise prohibited by law.

Children targeted advertisements

- Advertisements that condone, encourage, inspire or unreasonably emulate behaviour that could be dangerous for children or take advantage of children's inexperience, credulity or sense of loyalty etc. have been prohibited.
- It goes without saying that advertisements tend to influence children's buying behaviour and encourage them to consume unhealthy goods, or develop negative feelings toward healthy goods.
- The guidelines further require that the goods which require a health warning should not be advertised through children as well as personalities from music, sports and cinema.

- Advertisements that state “any health or nutritional claims or benefits without being adequately and scientifically substantiated” or any surgery which may have adverse effects on the physical and mental health of children are prohibited.
- Furthermore, an advertisement may be considered as children targeted if the advertisement of any goods, product or service

How new guidelines are important for children?

- ❖ The youth form the most impressionable demographic for all advertisers. To catch them young is a well-known marketing strategy. Children can be influenced through advertisements fairly easily — they are individually capable of making buying decisions, can influence the decisions of their parents and make up the future adult demographic. A marketing strategy that seeks to aggressively play on the immaturity of the younger audience can invariably impinge upon their ‘right to choose’ as well as their right to be informed and protected against unsafe goods and services as well as unfair trade practices.
- ❖ Additionally, the guidelines also require that advertisements including “chips, carbonated beverages and such other snacks and drinks” shall not be cast on channels exclusively meant for children. However, it remains to be seen as to whether such a guideline can survive a challenge under Article 14 and Article 19(1)(g) of the Indian Constitution in as much as it impinges upon the right of the channels such as Cartoon Network to earn revenue from such advertisements.

which addresses or targets children may develop negative body image in children or give any impression that such goods, product or service is better than natural or traditional food.

Other Reforms

- ✚ The guidelines have also introduced the need to have “disclaimers in advertisements” to “clarify a claim made in such advertisement or make qualifications or resolve ambiguities therein in order to explain such claim in further detail.” Moreover, the advertiser must not “attempt to hide material information with respect to any claim made in such

Why are these guidelines important?

- ❖ “Advertising laws in India have historically been lacking in enforcement. These new guidelines now have the force of law, and are mandatory (and not merely voluntary like the ASCI code). They carry the threat of punishment if their mandate is not followed.
- ❖ Advertising is considered misleading under the consumer law if it contains false, misleading, or deceptive information that is likely to influence the ordinary consumer to behave in a way they would not otherwise. In other words, it can be said that if any vital information that the customer requires to make an informed decision is omitted from advertising, it may be called deceptive. Misleading advertisements tend to misrepresent the product or service in a positive light, due to which the consumer may be duped and ends up having an experience not in line with the raised expectations brought about by the advertising.
- ❖ Advertisements have a significant impact on how consumers make decisions. They may even establish the consumer’s requirements and wants. Hence, to reduce the number of complaints against deceptive advertising and to standardize advertisements, the issuance of these guidelines will provide the stakeholders belonging to this industry a framework to avoid misleading advertisements, and also enables consumers to register complaints against the same.

advertisement, the omission or absence of which is likely to make the advertisement deceptive or conceal its commercial intent". The guidelines require that the disclaimer must be visible to normally sighted persons and prominently placed so that the consumer may read it carefully.

- The guidelines also impose duties on the manufacturers, service providers and advertising agency to not claim and make comparisons in an advertisement which relate to matters of objectively ascertainable facts. Moreover, the advertisement must be framed to gain the trust of the consumers and not to "abuse the trust of consumers or exploit their lack of experience or knowledge".

Conclusion

The enforcement issues in existing advertisement laws have been addressed by the guidelines in as much as it imposes severe penalties. The guidelines are momentous in empowering customers against mischievous advertisers. The advertisers, too, must take a cue from the guidelines and impose self-regulation to comply with the same. While the guidelines must be hailed as a step in the right direction, there is a definite need to ensure their implementation in the spirit they have been drafted with.

Road Safety

News Excerpt

Recently, new Lancet Study claims that Steps taken to check vehicle speed on roads in India could alone have the biggest impact on ensuring road safety by saving 20,554 lives annually.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Key finding of the Study

- In India, interventions to check speeding could save 20,554 lives and promotion of crash helmets could save 5,683 lives. Encouraging the use of seatbelts can also save 3,204 lives in the country.
- The estimate for drunken driving was not available for India because either the percentage of total deaths due to alcohol consumption was not reported or calculations were found to be unstable.
- The report uses mortality data from Global Burden Diseases 2017, which are based on modelling and estimated 2,18,876 deaths due to road injuries in India in 2017, while the government of India's figures which suffer from under-reporting stood at 1,47,913 for the year.
- Steps undertaken to reduce speeding such as infrastructure changes and electronic speed control could save an estimated 3,47,258 lives globally each year, while measures to tackle drunk driving such as enhanced drink driving enforcement could save a further 16,304 lives.

Safety check |

The table lists the country-wise number of lives that can be saved through interventions in key road safety risk factors. For instance, 20,554 lives can be saved in India every year if steps are taken to check vehicle speed



	Drunk-driving	Helmet use	Speeding	Seat belt use
India	NA	5,683	20,554	3,204
U.S.	5,188	14,121	22,353	2,409
China	248	13,703	88,374	13,228
Mexico	1,072	911	7,532	2,395
S.A.	2,684	176	6,233	3,718
Thailand	652	3,057	6,557	1,872
Turkey	72	202	3,064	1,691

- An estimated 1,21,083 and 51,698 lives could be saved by enforcing rules on wearing seatbelts and motorcycle helmets, respectively.
- Improving seatbelt use would have a particularly large effect on reducing road deaths in the U.S. by saving an estimated 14,121 lives every year and 13,228 lives could be saved in China.
- Tackling speeding would be the single most effective measure to reduce road fatalities in most countries, preventing an estimated 88,374 deaths in China, 22,353 in U.S. and 17,898 in Brazil.
- Road traffic injuries (RTIs) are the eighth leading cause of death globally for all ages and the first cause in the 5-29 years age group. Close to 14 lakh people die each year, and up to 5 crore are injured by RTIs. India accounts for almost 10% of all crash-related deaths, while accounting for only 1% of the world's vehicles.

Analytica

Indian and the Road Safety

- India amended its law on motor vehicles in 2019, but its implementation by State governments is not uniform or complete. A National Road Safety Board was constituted under the Motor Vehicles Act, with advisory powers to reform safety.
- The focus of State governments, however, remains conventional, with an emphasis on user behaviour (drivers and other road users), education and uneven enforcement.
- Low emphasis is placed on structural change such as raising engineering standards for roads, signages, signals, training for scientific accident investigation, raising policing skills and fixing responsibility on government departments for design, creation and maintenance of road infrastructure.

Impact of Road accident on Indian economy

- ✓ India's socio-economic cost of road traffic accidents for the year 2019 was in the range of \$15.71 billion to \$38.81 billion, which amount to 0.55–1.35% of the GDP, reveals a study by Bosch India.
- ✓ As per Road Accident Sampling System - India (RASSI) data, 781,668 vehicles were involved in road accidents in 2019, amounting to \$0.57 to \$1.81 billion in damages. Of these damages, commercial vehicles accounted for \$356.2 million, cars \$69.8 million, two-wheelers \$18.7 million and buses \$39.6 million. According to the findings of the study, the total medical cost of road traffic accidents' victims in 2019 was close to \$0.82–1.92 billion.

PEPPER IT WITH

Global New Car Assessment Programme (NCAP), Brasilia Declaration on Road Safety, Motor Vehicles Amendment Act, 2019, The Carriage by Road Act, 2007, The Control of National Highways (Land and Traffic) Act,

What need to be done?

- The ambitious amendments to the Motor Vehicles Act in 2019 (MV Act) have not yielded significant results, although the restrictions on vehicular movement for COVID-19 temporarily slowed the rising graph of fatalities and injuries. In many countries, post-COVID-19 driving has turned more unruly, leading to a rise in pedestrian deaths.
- Major interventions in India, first suggested by the Sundar Committee (2007) and ordered by the Supreme Court in S. Rajasekaran vs Union of India have not made a dent in the problem. The measures include setting up of an apex national body for road safety, and fixing decentralised responsibility at the district level.
- The Sundar Committee pointed out that India lacked a technically competent investigation arm that could determine the cause of accidents; the National Road Safety Board Rules,

2021, provide for the formation of technical working groups covering, among other things, crash investigation and forensics.

- There is little clarity on whether the States have formed such units to aid traffic investigation, or whether the insurance industry has pressed for these to accurately determine fault. In the absence of scientific investigation, perceptions usually guide the fixing of liability.
- The MV Act stipulates only a fine up to one lakh for failure to follow norms and stipulations by the designated authority, contractor, consultant or concessionaire, leading to death or disability, and there is little evidence that even this has been enforced after a public inquiry.

Steps taken by government to prevent road accidents

- ❖ Government has launched a mobile app for highway users i.e. "Sukhad Yatra 1033" which enables highways users to report potholes and other safety hazards on National Highways including accidents.
- ❖ Road Safety Week is observed every calendar year for spreading awareness about safer behavior of road users on National Highways.
- ❖ The Government has approved a National Road Safety Policy. This Policy outlines various policy measures such as promoting awareness, establishing road safety information data base, encouraging safer road infrastructure including the application of intelligent transport, enforcement of safety laws.
- ❖ The Ministry has constituted Group of Ministers of State Transport Ministers to examine the best practices of Transport and suggest issues to improve road safety. Based on the recommendation of Group of Ministers, the Ministry introduced and Motor Vehicle (Amendment) Act, 2019 was passed by the Parliament which includes the entire gamut of road safety.
- ❖ The Ministry has formulated a multi-pronged strategy to address the issue of road safety based on 4 'E's viz. Education, Engineering (both of roads and vehicles), Enforcement and Emergency Care.
- ❖ Ministry of Road Transport & Highways has constituted a District Road Safety Committee in each district of the country to promote awareness amongst road users under the chairmanship of Hon'ble Member of Parliament (Lok

Performance Grading Index for Districts for school system

News Excerpt

The Union Ministry of Education had recently released the Performance Grading Index for Districts (PGI-D) in the country for the sessions 2018-19 and 2019-20.

Pre-connect

The Performance Grading Index (PGI) is a tool to provide insights on the status of school education in States and UTs including key levers that drive their performance and critical areas for improvement. Department of School Education and Literacy (DoSEL) has designed the PGI to catalyse transformational change in the field of school education.

How is PGI worked out?

- Performance Grading Index (PGI) for States and released its report for the reference years 2017-18 to 2019-20. Based on the success of the State PGI, an 83-indicator-based PGI for District (PGI-D) was designed to grade the performance of all the districts in school education.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

- The data is filled by the districts through the online portal. The PGI-D is expected to help the state education departments to identify gaps at the district level and improve their performance in a decentralized manner.
- The indicator-wise PGI score shows the areas where a district needs to improve. The PGI-D will reflect the relative performance of all the districts in a uniform scale which encourages them to perform better.
- It further stated that the PGI-D structure comprised a total weightage of 600 points across 83 indicators, which were grouped under six categories– Outcomes, Effective Classroom Transaction, Infrastructure Facilities and Student's Entitlements, School Safety and Child Protection, Digital Learning, and Governance Process.
- These categories are further divided into 12 domains, viz., Learning Outcomes and Quality (LO), Access Outcomes (AO), Teacher Availability and Professional Development Outcomes (TAPDO), Learning Management (LM), Learning Enrichment Activities (LEA), Infrastructure, Facilities, Student Entitlements (IF&SE), School Safety and Child Protection (SS&CP), Digital Learning (DL), Funds convergence and utilization (FCV), Enhancing CRCs Performance (CRCP), Attendance Monitoring Systems (AMS) and School Leadership Development (SLD).

Key finding of the index

- The PGI-D report graded 725 districts in 2018-19 edition and 733 districts in 2-19-20. The report showed that 33 States and UTs have improved their PGI score in 2019-20 compared to the previous year with Andaman and Nicobar Islands, Punjab and Arunachal Pradesh have improved their score by more than 20%.
- Rajasthan leads the way in performance in school education. Three districts namely Sikar, Jhunjhunu and Jaipur from Rajasthan achieved the second grade, while the number of districts in the third Uttam grade rose from 49 to 86 during 2018-29 and 2019-20.
- The only two states, namely Madhya Pradesh and Chhattisgarh have scored less than 2018-19. The top 5 achievers in PGI 2019-20 includes Punjab, Chandigarh, Tamil Nadu, Andaman & Nicobar Islands and Kerala.
- As per the report, none of the districts attained highest grade 'Daksh' in both 2019-20 and 2018-19 indicating that there is scope for the districts to further improve their performance in future years.

Need for Performing Grading Index

The Education System in India is touted as one of the largest in the world with about 15 lakh schools, 97 lakh teachers, and nearly 26 crore students from varied socio-economic backgrounds. This grading system is expected to help the state education departments to understand and identify the gaps at the district level and further, improve their performance in a decentralized manner. The index is also responsible for indicating the areas (score-wise) where a district needs to improve.

Way forwards

- ✓ States and UTs mainly need to improve their performance in terms of governance processes.
- ✓ This domain carries several parameters, including teacher availability, teachers training, regular inspection, and availability of finances.
- ✓ In the domain Governance Processes, there are 24 States/UTs which have scored less than 288 (80% of the maximum possible score).
- ✓ The PGI too accords the highest importance to this Domain because compliance with the indicators here will lead to critical structural reforms in areas ranging from monitoring the attendance of teachers to ensuring a transparent recruitment of teachers and principals.

- ✓ The second area that requires attention is the Domain for Infrastructure and facilities, where twenty States/UTs have scored less than 120 (80% of maximum possible score in this domain).

Black Fever

News Excerpt

Recently, Eleven districts of Bengal reported at least 65 cases of black fever or 'Kala-Azar' disease in the last couple of weeks.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-connect

- Kala-azar or Visceral Leishmaniasis is a protozoan parasitic disease, spread by sandfly bites. Sandflies are brown in colour and have hairs on their bodies. The flies are infected with the parasite called 'leishmania donovani'.
- The vector sandfly is known to live in cracks and crevices of muddy houses, especially in dark and humid corners. According to the WHO, there are 3 main forms of leishmaniasis of which kala-azar is the most serious form.
- The disease affects some of the poorest people and is linked to malnutrition, population displacement, poor housing, a weak immune system and a lack of financial resources. Leishmaniasis is also linked to environmental changes such as deforestation, and urbanisation.

In 2020, more than 90 per cent of new cases reported to WHO occurred in 10 countries: Brazil, China, Ethiopia, Eritrea, India, Kenya, Somalia, South Sudan, Sudan and Yemen.

Detection of Black Fever in India

- In West Bengal, the districts where the maximum number of cases were registered include Darjeeling, Malda, Uttar Dinajpur, Dakshin Dinajpur and Kalimpong. The districts of Birbhum, Bankura, Purulia, and Murshidabad have also reported a few cases, while none have been detected in Kolkata yet.
- It was found that the disease was mostly prevalent in people who have spent a considerable amount of time in Bihar, Jharkhand and in Uttar Pradesh. Some individuals from Bangladesh, too, have been showing symptoms of kala-azar," the official said. A top bureaucrat at the state secretariat claimed that the government would treat all people diagnosed with the disease "free of cost".
- The disease is endemic in Bihar, Jharkhand, Uttar Pradesh and West Bengal. An estimated 165.4 million people are at risk, according to data from the National Centre for Vector Borne Disease Control Programme (NCVBDC). In the country as a whole, there has been a

What is an endemic disease?

According to the US Centers for Disease Control and Prevention (CDC), a disease is endemic when its presence or usual prevalence in the population is constant. When the cases begin to rise, it is classified as an epidemic. If this epidemic has been recorded in several countries and areas, it is called a pandemic.

When does a disease become endemic?

One mathematical modelling published in the Journal of Epidemiology and Community Health states that if R_0 , which is the rate at which the virus is transmitted is equal to 1, then the disease is endemic. When $R_0 > 1$, it implies that the cases are increasing and that the disease will eventually become an epidemic. If $R_0 < 1$, it implies the number of cases of the disease are decreasing. Here, R_0 refers to the number of people infected by a person who has the disease.

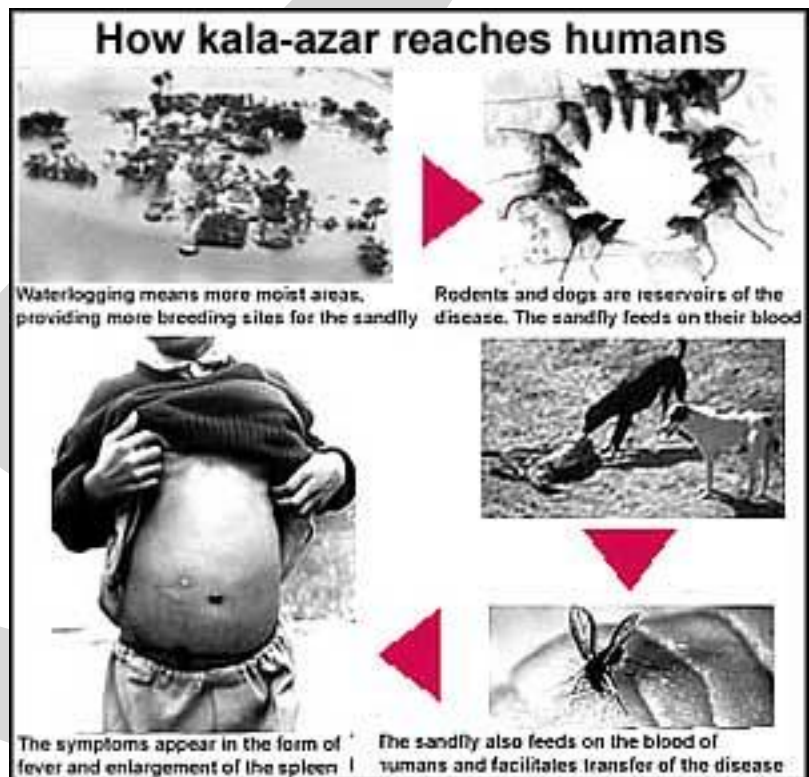
significant decline in cases over the years. In 2014, around 9,200 cases were reported while in 2021 the number fell to 1,276 cases.

What are the symptoms of kala-azar?

- ✓ Irregular bouts of fever over many days, weight loss, enlargement of the spleen and liver, and anaemia are known symptoms. The skin may become dry, thin and scaly in patches and hair may be lost. In people with a light skin tone, greyish discolouration of the skin of hands, feet, abdomen and face may be seen, that is why the disease is also called “Black fever”, as per the NCVBDC.
- ✓ Leishmaniasis is a treatable and curable disease, which requires an immunocompetent system and thus those having a weak immune system are prone to get severely affected. All patients diagnosed require prompt and complete treatment.

Instances of Black fever in India

- Between 1862 and 1872, 'Burdwan' fever was reported in what is now West Bengal, and this was most likely the first report of kala-azar. Early epidemics were often confused with malaria.
- Kala-azar hit the Garo Hills of Assam in 1863, and subsequent epidemics hit Assam from 1890 to 1900. Bihar's first case was reported in 1882, and there were severe epidemics between 1933 and 1937.
- Although most cases came from northern Bihar, other areas such as Assam, Bengal, Uttar Pradesh, and Tamil Nadu also suffered from kala-azar outbreaks.



Way forward

- ✚ The government aimed to eliminate the disease in India by 2015, but that deadline was missed. However, the number of cases has been brought down significantly through the National Kala-Azar Elimination Programme.
- ✚ Medicines, insecticides and technical support were given by the central government, while state governments provided for costs involved in implementation. The program was implemented through State/District Malaria Control Offices and the primary health care system.

ECONOMY

Gig Workforce in India: NITI Aayog

News Excerpt

NITI Aayog released a report titled 'India's Booming Gig and Platform Economy'.

Pre-Connect

- In a gig economy, temporary, flexible jobs are commonplace and companies tend to hire independent contractors and freelancers instead of full-time employees. A gig economy undermines the traditional economy of full-time workers who often focus on their career development.
- Examples of a gig economy are those jobs that individuals discover and access through online platforms that list such jobs. These jobs are often one-time or short-term contract jobs. These include driving for a ride-sharing service, painting someone's house, freelance work, coaching, fitness training, and tutoring. The job is exchanged for cash and there are no other benefits, such as health insurance.
 - Gig workers – those engaged in livelihoods outside the traditional employer-employee arrangement – can be broadly classified into platform and non-platform-based workers.
 - Platform workers are those whose work is based on online software apps or digital platforms.
 - Non-platform gig workers are generally casual wage workers and own account workers in the conventional sectors, working part-time or full time.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Estimates and Projections for the Gig & Platform Sector

- The study estimates that in 2020- 21, 77 lakh (7.7 million) workers were engaged in the gig economy.
- The gig workforce is expected to expand to 2.35 crore (23.5 million) workers by 2029-30.
- At present about 47% of the gig work is in medium skilled jobs, about 22% in high skilled, and about 31% in low skilled jobs.
- Trend shows the concentration of workers in medium skills is gradually declining and that of the low skilled and high skilled is increasing. It may be expected that while the domination of medium skills would continue till 2030, gig work with other skills will emerge.
- The report points out that the employment elasticity to GDP growth for gig workers was above one throughout the period 2011-12 to 2019-20, and was always above the overall employment elasticity.

The challenges and opportunities with gig economy

- ✓ The gig economy has been a driving force in shaping the future of work. Its characteristic of unique employment relationship upends the traditional ways of working in many ways; since there is no employer-employee relationship, the gig workers are not beholden to any particular employer and therefore have greater flexibility in terms of the work they can choose and the hours they dedicate.
- ✓ Businesses enjoy similar flexibility when they are not dependent on a set of employees for executing tasks, and additionally benefit from avoiding the cost of social security and fixed remuneration that are provided to an employee. However, gig economy has invited praise and ire in equal measures. Although it seems like a win-win situation for both parties, the ground reality is often more complicated.
- ✓ Over the years, the growing popularity of platform businesses has been accompanied with pockets of protest by their workers — primarily those engaged in cab and delivery services — from time to time.

- ✓ In India, the grievances have mainly been related to remuneration and the working conditions.
- ✓ According to gig workers in India, the low payment often pushes them to work longer than 8 hours, and work on all days of the week. However, it is the very model of gig economy that exposes the workers to such vulnerabilities, as a business cannot be held accountable if the workers are not employees. This raises questions about the ethical basis of the gig economy, and necessitates a further study of its overall structure.
- ✓ Gig economy has more options of work assignments and payment offerings to choose from, more flexibility of working hours and greater freedom of switching from task to task. However, when the labour supply is high and more disposable, as in the case of blue-collar workers, the gig workers have no power to influence payment offerings, and freedom to choose becomes but an illusion. In the interplay of demand and supply mechanisms, the gig workers always lose out. Thus, as platforms become more popular among gig workers, more of them join the pool, thus driving down their own remuneration.
- ✓ Nevertheless, the gig economy still has a lot to offer. In a country like India where informal working arrangements dominate the economy, many blue-collar workers already work in precarious conditions, face income insecurity and have no employment stability.
- ✓ In comparison, gig economy is a better alternative. Besides having a system in place that is fairer than informal work arrangements, it is also characterised by ease of entry. The informal networks in the informal economy that may create barriers of entry for outsiders does not exist in the gig economy.
- ✓ Gig work has also been a source of supplementary income for those facing economic hardships, and tided them over until they could find employment opportunities. For the Indian economy as well, the gig economy has been responsible for a huge proportion of job creation, which is only projected to increase in the coming years.

Recommendations made by the report

- **CATALYSING PLATFORMIZATION** - A Platform India initiative, built on the pillars of accelerating platformization by simplification and handholding, funding support and incentives, skill development, and social financial inclusion, like the immensely successful Startup India initiative, may be introduced.
 - Self-employed individuals engaged in the business of selling regional and rural cuisine, street food, etc. may be linked to platforms so that they can sell their produce to wider markets in towns and cities.
- **ACCELERATING ACCESS TO FINANCE FOR PLATFORM WORKERS** - Access to institutional credit may be enhanced through financial products specifically designed for platform workers and those interested to set-up their own platforms. Venture capital funding, grants and loans from banks and other funding agencies should be provided to platform businesses of all sizes at the pre-revenue and early-revenue stages.
 - Unsecured loans to first-time borrowers participating in the platform economy may be classified as Priority Sector Lending.
 - Special emphasis may be placed on access to formal credit for women and Persons with Disabilities (PwDs).
- **SKILL DEVELOPMENT FOR PLATFORM JOBS** - Platform-led models of skilling and job creation need to be promoted for the gig and platform sector. Platforms can collaborate with the Ministry of Skill Development and Entrepreneurship, and the National Skill Development Corporation (NSDC) to nurture skilled workers and micro-entrepreneurship.
- **ENHANCING SOCIAL INCLUSION IN THE NEW-AGE DIGITAL ECONOMY** - Platform businesses can undertake partnerships with Civil Society Organizations (CSOs) to enable different sections of workers such as women workers and PwDs to take up employment

opportunities in the platform sector through skill development, access to finance and assets. These CSOs may also promote sensitization on legal/ economic/ social rights of women and PwDs for workers and platforms.

- Platform businesses can create a more enabling environment for women and PwD workers through changes in the work design and workplace facilities. Platform businesses can implement communication plans which are gender-and accessibility-inclusive.
- **RAISE Framework for Operationalizing the Code on Social Security (CoSS), 2020** - As Central and State governments draw up rules and regulations under CoSS 2020, they could adopt the five-pronged RAISE approach to ensure realisation of full access to social security for all gig and platform workers:
 - Recognise the varied nature of platform work to design equitable schemes.
 - Allow augmentation of social security through innovative financing mechanisms.
 - Incorporate, while designing schemes, the specific interests of platforms, factoring the impact on job creation, platform businesses and workers.
 - Support workers to subscribe to government schemes and welfare programmes through widespread awareness campaigns.
 - Ensure benefits are readily accessible to workers

Analytica

- ✚ The rapidly burgeoning gig workforce is ushering in a new economic revolution globally. India – with its demographic dividend of half-a-billion labour force and the world’s youngest population, rapid urbanisation, widespread adoption of smartphones and associated technology – is the new frontier of this revolution.
- ✚ In this backdrop, this first-of-its-kind report presents comprehensive perspectives and recommendations on the gig-platform economy in India, engaging gig platform workers in the millions.
- ✚ The gig economy has its sets of pros and cons, and the benefits that it brings to the Indian economy makes it imperative for policymakers to reduce the cons. However, the heterogeneity of platform-enabled gig work and the ambiguity of its employment relationship elude regulators around the world. The meagre pay and poor working conditions often lead policymakers to demand that gig workers be labelled as employees, but this completely erases the gig economy rather than addressing the issue.
- ✚ The main issue with gig economy is the employment relationship, which needs to be more clearly defined. Most of the time, it is the ambiguity around the rights of workers and the responsibilities of platforms that allows businesses to treat their gig workers as employees in terms of the control they exert upon them, but without the cost that hiring an employee entails. As a result of this arrangement, the workers get the short end of the stick.

RBI's System for trade in rupees

News Excerpt

The Reserve Bank of India (RBI) has put in place a mechanism to settle international trade in rupees “in order to promote growth of global trade with emphasis on exports from India and to support the increasing interest of global trading community in the rupee”. The central bank’s move has come in the wake of increasing pressure on the Indian currency in the wake of Russia’s invasion of Ukraine and sanctions by the US and the EU.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
 BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
 t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

Pre-Connect

Currency Internationalisation

Currency internationalization is the widespread use of a currency outside the borders of its original country of issue. The level of currency internationalization for a currency is determined by the demand that users in other countries have for that currency. This demand can be driven by the use of the currency to settle international trade, to be held as a reserve currency or a safe-haven currency, or in general use as a medium of indirect exchange in other countries' domestic economies via currency substitution.

Currency Internationalization Requirements

- The Bank for International Settlements (BIS) highlights some important characteristics that need to be in place for internationalization.
- The most critical is that the government of the issuing country has no restrictions on the purchase or sale of that currency by any entity.
- Secondly, exporters, whether from the country concerned or others, must be able to invoice some, if not all, of their exports in that currency.
- Third, a range of entities, including private and official companies and banks as well as individuals, should be able to hold the amounts they desire. If enough is held by foreign central banks, then the currency will become a reserve currency.
- Finally, both domestic and foreign firms and institutions should be able to issue marketable instruments in that country's currency, irrespective of the place of issue.

Benefits of Currency Internationalization

- There are a number of benefits to a country whose currency is internationalized. Economically, it enlarges the sphere of the market in which they can participate, without the need to exchange currencies and incur the related transaction costs. It provides more certainty to residents, who can denominate foreign transactions in their home currency. They can also borrow in foreign markets without incurring exchange rate risk, potentially enabling them to find cheaper funding.
- In general, the underpinned demand for the currency should dampen interest rates and thus help lower the domestic cost of capital. While a potential cost of internationalization could be destabilizing effects if a foreign loss of confidence were to lead to a sell-off in assets denominated in the currency, most major currencies have large domestic debt markets that could act as a shock absorber in such a scenario.

Internationalization of Rupee

- ✓ Internationalization of Rupee means adopting full capital account convertibility. Capital account tracks movement of capital between two countries via investment and loans.
- ✓ A full convertible capital account means that there is no restriction on amount of rupee you can convert into foreign currency to buy an asset overseas. Similarly, there is no restraint on overseas investors to bring in dollars or acquire assets in India.
- ✓ The internationalization of the rupee lowers the transaction costs of cross-border trade and investment operations by mitigating exchange rate risk, but it makes pursuing both exchange rate stability and a domestically oriented monetary policy more difficult, unless supported by large and deep domestic financial markets capable of effectively absorbing external shocks.

RBIs new Mechanism

How will the new mechanism work?

- Banks will now need to put in place additional arrangements for export and import transactions in rupee. First, they require approval from the Foreign Exchange Department of the RBI.

- Then the concerned Indian banks need to open a Special Rupee Vostro account of the correspondent bank(s) of the partner trading country, take Russia for example.
- Russian banks will be required to open rupee accounts with Indian banks and Indian banks will need rouble accounts in Russia. Both countries would have to agree to hold a sum, say \$1 billion, in local currencies in their respective accounts. So, Russian banks will have Rupees worth \$1 billion in their Indian accounts and Indian banks will have roubles worth \$1 billion in their Russian accounts.
- Based on a mutually agreed exchange rate, Indian exporters can then be paid in rupees for their Russian exports while Russians get paid in roubles for their Indian exports.
- Once a mutually acceptable exchange rate determined by the market is decided upon, trade between India and Russia can commence using this rupee-rouble route.
- Since India is importing large quantities of oil from Russia at a discounted rate, a mechanism to work out payments that bypass the US dollar was crucial. This arrangement also gives Russia access to a big market and liquidity amid the Ukraine conflict.
- This mechanism helps India bypass western sanctions and trade with any country.

How can this arrest rupee's slide?

- ✚ Indian rupee hit all-time low at 79.43 against US dollar on July 11. This is happening because of huge capital outflows from the country as investors bet on the safety of the greenback and are lured by the US Federal Reserve's aggressive rate hikes to control inflation.
- ✚ For months, India has been paying for substantial oil imports at a time when the commodity prices have peaked in the international market. At the same time, Indian exports are feared to decline amid concerns over a global slowdown as well as a softening in commodity prices.
- ✚ This has depleted the country's foreign exchange reserves and widened the deficit. Domestic demand is also growing in an economy that is still on the path to recovery after Covid. So, the rupee outflows are expected to remain.
- ✚ However, the new mechanism to settle trade in rupee will save the country's foreign exchange reserves and also enable India to pay for its oil imports in rupees.
- ✚ Russia will maintain its trade balance as it can invest its rupee balance with Indian banks in Indian assets. It is a trade off as India will also be able to plug the currency outflow.

Benefits of the move

- > The RBI mechanism is expected to facilitate importers and exporters to avoid rules that prevent the use of a global currency such as the US dollar for trade with certain countries. After Russia attacked Ukraine, several countries had imposed sanctions on Russia. Indian companies which were looking for alternative modes of payment for imports can make use of the new mechanism.
- > It would facilitate trade with countries under sanction like Iran and Russia. Ever since sanctions were imposed on Russia, trade has been virtually at standstill with the country due to payment problems. As a result of the trade facilitation mechanism introduced by the RBI, the payment issues with Russia will ease. The move would also reduce the risk of forex fluctuation specially looking at the Euro-Rupee parity. This is being seen as a first step towards 100% convertibility of Rupee.

Conclusion

- It is notable that the rupee has not weakened against every currency. It has strengthened against the currencies of most major countries. So, the option to settle trade in rupee comes at a time when already many countries are facing huge forex shortage and the dollar has turned extremely volatile. Many countries are hitting new lows against the dollar.
- While the new mechanism will not break dollar dominating monopoly over trade, this is a

settlement that many countries are now exploring due to new geopolitical orders that have taken shape.

- Although dollar hegemony is here to stay for several decades, the RBI is starting to make efforts to internationalise the India rupee and make it a fully convertible currency so that India can participate more easily in the global market. A fully convertible rupee would make India a truly global economy and integrate it with the international system.

Digitisation of Primary Agricultural Credit Societies

News Excerpt

The Cabinet Committee on Economic Affairs (CCEA) approved a proposal to digitise around 63,000 Primary Agricultural Credit Societies (PACS). PACS are the smallest unit in the cooperative sector and their computerisation will prove to be a boon for it. PACS will be digitised at a cost of ₹2,516 crore, which will benefit about 13 crore small and marginal farmers. Each PACS will get around ₹4 lakh to upgrade its capacity and even old accounting records will be digitised and linked to a cloud-based software.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- A Primary Agricultural Credit Society (PACS) is a basic unit and smallest co-operative credit institutions in India. It works on the grassroots level (gram panchayat and village level). The first Primary Agricultural Credit Society (PACS) was formed in the year 1904.
- The Primary Agricultural Credit Societies are the association of persons, unlike in the case of the Joint Stock Companies, where there is an association of capital. Association of persons in Primary Agricultural Credit Societies confers an equal level of rights on all of society members without considering their holding of share and their social standing.
- The Primary Agricultural Cooperative credit societies (PACS) constitute the lowest tier of the three-tier short-term cooperative credit (STCC) in the country comprising of around 13 crore farmers as its members, which is crucial for the development of the rural economy. PACS are registered under the Co-operative Societies Act and also regulated by the RBI.

Role

- It is the basic unit organized at the village's grass-root level with the main role of dealing with agricultural borrowers of the village by giving agricultural, short-term, and medium-term purpose loans to the borrowers then collecting the repayments against those loans.
- They act as a link between the country's higher financial agencies who can resolve various issues of the members and the ultimate borrowers. It is an important role because it is very difficult for the farmers to approach directly to the higher financial agencies for their problems, and thus, PACS helps them in that matter.

Functions of PACS

- ✓ The main function of the PACS is to provide short and medium-term purpose loans to its members.
- ✓ Borrowing an adequate amount of funds from central financial agencies in order to help its members in a timely manner.
- ✓ Maintaining the supply of the hire light machinery for the agricultural purpose.
- ✓ It is to promote savings habits among its members.
- ✓ To make the arrangement of supplying of the agricultural inputs is another function of the PACS. Example of the inputs for agricultural purpose includes seeds, fertilizers, insecticides, etc. Along with this, they also supply required domestic products like kerosene, etc.
- ✓ It helps its members by providing marketing facilities that could enhance the sale of their agricultural products in the market at the proper prices.

Advantages

- Primary Agricultural credit society helps the farmers to get credit for agricultural, short-term, and medium-term purpose and government-related funds distribution to eligible farmers at their place.
- These credit societies also help in implementing any government schemes which are related to farmers at their level and also to observe these schemes if they are attaining the purpose or not.
- PACS acts as a link between the higher financial agencies of the country who can resolve various issues of the members and the ultimate borrowers, thereby helping in resolving the problems of the farmers.

Disadvantages

- ✚ **Organizational Weakness:** Though this corporative society covers the major portion of the villages, still there are few parts of villages, especially to the northeast side, which are not covered in this scheme. Thus this may be a disadvantage.
- ✚ **Over Dues:** The larger over dues of this scheme are from landowners than compared to the small cultivators, which means undue advantage was taken against this scheme by a few of the farmers who are relatively stronger in the village.
- ✚ **Lack of Resources:** There was no appropriate resources given to the short term and medium credits. Hence inappropriate resources cause a disadvantage to the scheme.

Benefits of Computerization of Primary Agriculture Credit Societies

- > The Primary Agricultural Cooperative credit societies (PACS) constitute the lowest tier of the three-tier Short-term cooperative credit (STCC) in the country comprising of approx. 13 Cr. farmers as its members, which is crucial for the development of the rural economy. PACS account for 41 % (3.01 Cr. farmers) of the KCC loans given by all entities in the Country and 95 % of these KCC loans (2.95 Cr. farmers) through PACS are to the Small and Marginal farmers.
- > The other two tiers viz. State Cooperative Banks (StCBs) and District Central Cooperative Banks (DCCBs) have already been automated by the NABARD and brought on Common Banking Software (CBS). However, majority of PACS have so far been not computerized and still functioning manually resulting in inefficiency and trust deficit. In some of the states, stand-alone and partial computerization of PACS has been done. There is no uniformity in the software being used by them and they are not interconnected with the DCCBs and StCBs.
- > Computerization of PACS, besides serving the purpose of financial inclusion and strengthening service delivery to farmers especially Small & Marginal Farmers (SMFs) will also will become nodal service delivery point for various services and provision of inputs like fertilizers, seeds etc.
- > The project will help in improving the outreach of the PACS as outlets for banking activities as well as non-Banking activities apart from improving digitalisation in rural areas. The DCCBs can then enrol themselves as one of the important options for taking up various government schemes (where credit and subsidy is involved) which can be implemented through PACS. It will ensure speedy disposal of loans, lower transition cost, faster audit and reduction in imbalances in payments and accounting with State. Cooperative Banks and District Central Cooperative Banks.

Conclusion

The project comprises of development of a cloud based common software with cyber security and data storage, providing hardware support to the PACS, digitization of existing records including maintenance support and training. With digitalization, PACS will become nodal service delivery

point for interest subvention scheme (ISS), PM Fasal Beema Yojana, Direct Benefit Transfer and provision of inputs like fertilisers, seeds etc. It will ensure speedy disposal of loans, lower transition cost, faster audit and reduction in imbalances in payments and accounting with SCBs and DCBs.

Startup Ranking 2021

News Excerpt

The results of the third edition of Ranking of States on Support to Startup Ecosystems were released recently.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
V											

Pre-Connect

- The Department for Promotion of Industry and Internal Trade (DPIIT) has been conducting the States' Start-up Ranking Exercise since 2018 to facilitate the ease of building a start-up and doing business across the country.
- The exercise has grown in its impact over the last three editions, with 31 participating states and union territories this edition, the highest till date. The State Start-up Ranking Exercise aims to support states and union territories in developing their start-up ecosystem and learn from the best practices in each state and union territory.
- For the purposes of the Ranking, States and Union Territories are classified into 5 Categories, viz. Best Performers, Top Performers, Leaders, Aspiring Leaders and Emerging Start-up Ecosystems.
- The rankings were accompanied by the release of the National Report which highlights the vision, framework, evolution across the years, methodology and implementation, and the way ahead for the States' Startup Ranking. A State Specific Report for each of the 31 participating States and Union Territories has also been released, containing an extensive analysis of respective ecosystem, which highlights strengths and priority areas for future.

Key Findings of the report

- Gujarat and Karnataka emerged as the Best Performers in a category of States which included NCT of Delhi. Meghalaya won the top honour among UTs and North-eastern (NE) States. While Kerala, Maharashtra, Orissa and Telangana got the Top Performers award among states, Jammu & Kashmir emerged as the Top Performer among UTs and NE states.
- Assam, Punjab, Tamil Nādu, Uttarakhand and Uttar Pradesh were adjudged the winners in the Leaders category among states; Andaman & Nicobar Islands, Arunachal Pradesh and Goa bagged the Leaders honour among the UTs and NE states.
- Chhattisgarh, Delhi, Madhya Pradesh and Rajasthan were declared as Aspiring Leaders among the States. Chandigarh, Dadra and Nagar Haveli & Daman and Diu, Himachal Pradesh, Manipur, Nagaland, Puducherry and Tripura were the Aspiring Leaders from the UTs and NE states.
- Andhra Pradesh and Bihar from States category and Mizoram and Ladakh from the UTs/NE States were clubbed under the Emerging Start-up Ecosystem.

Conclusion

- ✓ The State Start-up Ranking Exercise aims to support states and union territories in developing their start-up ecosystem and learn from the best practices in each state and union territory.
- ✓ The States Startup Ranking 2021 highlighted the support being extended by over 30 states and union territories through startup policies to the ecosystem. There were only 4 states with startup policies prior to 2016.

Financial Services Institutions Bureau

News Excerpt

The government has transformed Banks Board Bureau (BBB), the headhunter for directors of state-owned banks and financial institutions, into Financial Services Institutions Bureau (FSIB) by making some amendments.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
IM											

About

- **Financial Services Institutions Bureau (FSIB)** - It's a government body set up under the Department of Financial Services. The board will be entrusted with making recommendations for the appointment of full-time directors and non-executive chairman of state-run financial services institutions.
- It would also issue guidelines for selecting general managers and directors of public sector general insurance companies. While its main task is to play the role of head-hunter for the state-owned financial services entities, the board will also be involved in formulating and developing business strategies for state-run banks and help them in their fund-raising plans.
- FSIB would be headed by a chairman, a central government nominee. The board would comprise the Secretaries of the DFS, the chairman of IRDAI, and a deputy governor of the RBI. Additionally, it will have three part-time members who are experts in banking and three more from the insurance sector.

Why has it replaced Banks Board Bureau (BBB)?

- The Banks Board Bureau (BBB), came in to controversy in 2018, just two years after its inception in April 2016.
- The 2019, \$2-billion fraud at PNB shocked the banking community.
- The BBB was declared an incompetent authority last year by the Delhi High Court, when a general manager at state-owned National Insurance Company challenged the appointment of a person junior to him for Director's position by the BBB. Consequent to the order, 10-11 directors appointed by the BBB had to vacate office.
- To end this logjam, the BBB had to be struck down and a new body, namely, FSIB had to be put in place vide approval from the Appointments Committee of the Cabinet, headed by the prime minister.

What is FSIB's mandate?

- ✓ The primary role of FSIB is to identify manpower capabilities and ensure proper selection of talent for senior positions at financial institutions owned by the government. However, when BBB was brought into force in April 2016, it was envisaged as a body that would efficiently corporatise and make government entities function like private players, but it didn't make much headway on that front.
- ✓ With FSIB, the intent is to go beyond the man-manager role and assist the government in formulating a code of conduct and ethics for whole-time directors in these entities. It would also monitor and assess the performance of public sector banks, government-owned financial institutions and insurance companies.

Conclusion

- When BBB was brought into action, there was consolidation within public sector banks, first with Bank of Baroda in 2018 and then a year later with 10 PSU banks. Again, there could be another round of bank mergers and privatisation of both banks and insurance companies.
- The criticism often surfacing is whether PSU entities are ready to withstand the test of privatisation from an operations and management perspective — and this has a deep nexus

with the efficiencies of manpower at all layers. Therefore, the silent mandate of FSIB would be to ready banks and insurance companies for the privatisation process and undertake the necessary clean-up/HR upliftment practices.

Cryptocurrencies

News Excerpt

Finance Minister revealed that, Reserve Bank of India (RBI) has asked the government to frame regulations for cryptocurrencies, considering their destabilising effect of them on the monetary and fiscal stability of a country.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- A cryptocurrency is a form of digital or virtual currency based on a network that is distributed across a large number of computers. It is nearly impossible to counterfeit or double-spend. Many cryptocurrencies are decentralized networks based on blockchain technology.
- Cryptocurrencies are generally not issued by any central authority. Therefore, it makes them theoretically immune to government interference or manipulation.
- Cryptocurrencies can be mined or purchased from cryptocurrency exchanges. Not all e-commerce sites allow purchases using cryptocurrencies. In fact, cryptocurrencies, even popular ones like Bitcoin, are hardly used for retail transactions. However, the skyrocketing value of cryptocurrencies has made them popular as trading instruments. To a limited extent, they are also used for cross-border transfers.
- Bitcoin is by far the most popular cryptocurrency followed by other cryptocurrencies such as Ethereum, Binance Coin, Solana, and Cardano.

Are Cryptocurrencies Legal?

- Fiat currencies derive their authority as mediums of transaction from the government or monetary authorities. For example, each dollar bill is backstopped by the Federal Reserve.
- But cryptocurrencies are not backed by any public or private entities. Therefore, it has been difficult to make a case for their legal status in different financial jurisdictions throughout the world. It doesn't help matters that cryptocurrencies have largely functioned outside most existing financial infrastructure. The legal status of cryptocurrencies has implications for their use in daily transactions and trading. In June 2019, the Financial Action Task Force (FATF) recommended that wire transfers of cryptocurrencies should be subject to the requirements of its Travel Rule, which requires AML compliance.
- As of December 2021, El Salvador was the only country in the world to allow Bitcoin as legal tender for monetary transactions. In the rest of the world, cryptocurrency regulation varies by jurisdiction.

Advantages and Disadvantages of Cryptocurrency

Advantages

- ✓ Cryptocurrencies represent a new, decentralized paradigm for money. In this system, centralized intermediaries, such as banks and monetary institutions, are not necessary to enforce trust and police transactions between two parties. Thus, a system with cryptocurrencies eliminates the possibility of a single point of failure, such as a large bank, setting off a cascade of crises around the world, such as the one that was triggered in 2008 by the failure of institutions in the United States.
- ✓ Cryptocurrencies promise to make it easier to transfer funds directly between two parties, without the need for a trusted third party like a bank or a credit card company.
- ✓ Because they do not use third-party intermediaries, cryptocurrency transfers between two

transacting parties are faster as compared to standard money transfers. Flash loans in decentralized finance are a good example of such decentralized transfers. These loans, which are processed without backing collateral, can be executed within seconds and are used in trading.

- ✓ Cryptocurrency investments can generate profits. Cryptocurrency markets have skyrocketed in value over the past decade, at one point reaching almost \$2 trillion. As of May 2022, Bitcoin was valued at more than \$550 billion in crypto markets.
- ✓ The remittance economy is testing one of cryptocurrency's most prominent use cases. Currently, cryptocurrencies such as Bitcoin serve as intermediate currencies to streamline money transfers across borders. Thus, a fiat currency is converted to Bitcoin (or another cryptocurrency), transferred across borders and, subsequently, converted to the destination fiat currency. This method streamlines the money transfer process and makes it cheaper.

Disadvantages

- Though they claim to be an anonymous form of transaction, cryptocurrencies are actually pseudonymous. They leave a digital trail that agencies such as the Federal Bureau of Investigation (FBI) can decipher. This opens up possibilities of governments or federal authorities tracking the financial transactions of ordinary citizens.
- Cryptocurrencies have become a popular tool with criminals for nefarious activities such as money laundering and illicit purchases. The case of Dread Pirate Roberts, who ran a marketplace to sell drugs on the dark web, is already well known. Cryptocurrencies have also become a favorite of hackers who use them for ransomware activities.
- In theory, cryptocurrencies are meant to be decentralized, their wealth distributed between many parties on a blockchain. In reality, ownership is highly concentrated. For example, an MIT study found that just 11,000 investors held roughly 45% of Bitcoin's surging value.
- One of the conceits of cryptocurrencies is that anyone can mine them using a computer with an Internet connection. However, mining popular cryptocurrencies requires considerable energy, sometimes as much energy as entire countries consume. The expensive energy costs coupled with the unpredictability of mining have concentrated mining among large firms whose revenues running into the billions of dollars. According to an MIT study, 10% of miners account for 90% of its mining capacity.
- Though cryptocurrency blockchains are highly secure, other crypto repositories, such as exchanges and wallets, can be hacked. Many cryptocurrency exchanges and wallets have been hacked over the years, sometimes resulting in millions of dollars worth of "coins" stolen.
- Cryptocurrencies traded in public markets suffer from price volatility. Bitcoin has experienced rapid surges and crashes in its value, climbing to as high as \$17,738 in December 2017 before dropping to \$7,575 in the following months. Some economists thus consider cryptocurrencies to be a short-lived fad or speculative bubble.

RBI on cryptocurrency

- ✚ RBI has expressed concerns on the destabilising effect of cryptocurrencies on the monetary and fiscal stability of a country. RBI has recommended for framing of legislation on this sector. The RBI is of the view that cryptocurrencies should be prohibited.
- ✚ The RBI has mentioned that cryptocurrencies are not a currency because every modern currency needs to be issued by the central bank or the government.
- ✚ The value of fiat currencies is anchored by monetary policy and their status as legal tender, however the value of cryptocurrencies rests solely on the speculations and expectations of high returns that are not well anchored, so it will have a destabilising effect on the monetary and fiscal stability of a country.

Conclusion

- > The Reserve Bank of India (RBI) has been cautioning users, holders and traders of Virtual Currencies (VCs) since 2013 at regular intervals that dealing in VCs is associated with potential economic, financial, operational, legal, customer protection and security related risks.
- > Further, the RBI on May 31, 2021 also advised its regulated entities to continue to carry out customer due diligence processes for transactions in VCs, in line with regulations governing standards for Know Your Customer (KYC), Anti-Money Laundering (AML), Combating of Financing of Terrorism (CFT), obligations under Prevention of Money Laundering Act, etc.
- > Cryptocurrencies are by definition borderless and require international collaboration to prevent regulatory arbitrage.
- > Therefore, any legislation for regulation or for banning such currencies can be effective only after significant international collaboration on evaluation of the risks and benefits and evolution of common taxonomy and standards.

India's Defence Exports

News Excerpt

India's defence exports for 2021-22 were estimated at ₹13,000 crore, the highest ever. The U.S. was a major buyer, as also nations in Southeast Asia, West Asia and Africa.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- India, in 2021-22, exported defence items and technology worth a record ₹13,000 crore, an impressive 54.1 per cent rise over the previous year, and almost eight times of what they were about five years ago.
- India's defence exports are chiefly to the United States, the Philippines and other countries in the South-East Asia, the Middle-East and Africa.
- Defence exports registered a record ₹13,000 crore with 70 per cent contribution coming from the private sector and the remaining 30 per cent from the public sector.
- India exports military hardware, including advanced light helicopters, missiles, offshore patrol vessels, surveillance systems, personal protective gear, and various radars. Besides this, light combat aircraft, air-to-air missiles, sonars, and Akash surface-to-air missile systems hold export potential for India.
- In January, India signed a \$374.96-million deal with the Philippines to supply three batteries for the BrahMos cruise missile. This deal emerged as the biggest defense export order for India.
- Majority of India's defense export is in the aerospace sector, in which Indian companies have been manufacturing fuselage for foreign companies. For example, all fuselages of the American helicopter Apache sold worldwide are made in India and developed by a joint venture between Tata and Boeing. Similarly, Lohia Group and Adani Defence are making fuselages for Israeli drones.

Draft Defence Production and Export Promotion Policy 2020

- In order to provide impetus to self-reliance in defence manufacturing, multiple announcements were made under 'Atmanirbhar Bharat Package'. In implementing such framework and to position India amongst the leading countries of the world in defence and aerospace sectors, Ministry of Defence (MoD) has formulated a draft Defence Production and Export Promotion Policy 2020 (DPEPP 2020). The DPEPP 2020 is envisaged as overarching guiding document of MoD to provide a focused, structured and significant thrust to defence

- production capabilities of the country for self-reliance and exports.
- The policy has laid out following goals and objectives-
 - To achieve a turnover of Rs 1,75,000 Crores (US\$ 25Bn) including export of Rs 35,000 Crore (US\$ 5 Billion) in Aerospace and Defence goods and services by 2025.
 - To develop a dynamic, robust and competitive Defence industry, including Aerospace and Naval Shipbuilding industry to cater to the needs of Armed forces with quality products.
 - To reduce dependence on imports and take forward "Make in India" initiatives through domestic design and development.
 - To promote export of defence products and become part of the global defence value chains.
 - To create an environment that encourages R&D, rewards innovation, creates Indian IP ownership and promotes a robust and self-reliant defence industry.
 - The Policy brings out multiple strategies under the following focus areas-
 - Procurement Reforms
 - Indigenization & Support to MSMEs/Startups
 - Optimize Resource Allocation
 - Investment Promotion, FDI & Ease of Doing Business
 - Innovation and R&D
 - DPSUs and OFB
 - Quality Assurance & Testing Infrastructure
 - Export Promotion

Atmanirbhar Bharat and self-reliance in defence

- ✓ The call for Aatmanirbhar Bharat has provided further impetus to realise the goal of self-reliance. On 12 May 2020, the special economic and comprehensive package of INR 20 lakh crores, roughly equivalent to 10% of India's GDP, was made available to make India self-reliant and meet the challenges thrown by COVID-19. Aatma Nirbhar Bharat's five pillars are Economy, Infrastructure, System, Vibrant Demography and Demand.
- ✓ The defence sector was identified as an important area with many opportunities for self-reliance because it is one of the critical sectors of the Indian economy. It has the potential for tremendous growth because of the large, talented pool of skill sets in human resources and large-scale modernisation requirements of the Indian Armed Forces.
- ✓ The government has initiated various policy actions to boost indigenous design, development and manufacture of defence equipment in the country and make a sustainable defence industrial ecosystem.
- ✓ One of the steps is to obtain capital goods from the indigenous market through the revised Defence Acquisition Procedure (DAP)-2020.
- ✓ Announcement of two Positive Indigenisation Lists of 209 items of goods and services and one Positive Indigenisation List of a total of 2851 Defence Public Sector Undertakings (DPSUs). Import of these items has been restricted.
- ✓ Simplification of the Industrial licensing process with a more extended validity period.
- ✓ Increasing of Foreign Direct Investment (FDI) policy allowing 74% FDI under automatic route and 100% through approval of the govt.
- ✓ To further advance and strengthen the abilities of our Indian Armed Forces, the capital outlay for the defence sector in the annual budget of 2022-23 was increased by 12.82% from

the previous year. To reduce import dependence and modernise our Forces with our home-grown technology, the Government has gradually increased the domestic industry's capital procurement budget, and for the year 2022-23, it is 68%.

Conclusion

- Self-sufficiency in defence will be the single-most-important fundamental of strategic independence. The indigenous industry would assume significance in the days to come, not only to meet the requirement of Bharat but also to export. Since its independence, India has pursued self-reliance, yet efforts have resulted in dismal outcomes. India built up its domestic defence production facilities with the help of countries like the former USSR and the British in the 1960s and 1970s, primarily for the assemblage under licence.
- India is an aspiring superpower. To achieve its ordained place among the elite militaries of the world requires modernising the Indian Armed Forces. Its immediate neighbourhood's continuous threat also propels the desire to modernise. The persistent clashes over unsettled boundary disputes with China and Pakistan, terrorism in Jammu and Kashmir, insurgency in the North-Eastern states, the uncontrolled menace of left-wing extremism, and the rising challenges from urban terrorism have further complicated India's security environment. To fight a modern-day war, it must have modern-day weapons.
- Now, the time is ripe to get out of the slumber, make things happen, and usher in a new era.

Depreciation of Indian rupee

News Excerpt

Recently, Finance minister in Lok Sabha asserted that Indian rupee has declined by about 25 per cent in comparison with the US dollar. Trends have shown that 1 US dollar now cost over 80 rupees, a new low in the history of Dollar-rupee currency exchange rate.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- The price of one currency in terms of other currency is called exchange rate.
- Exchange rate system is classified into
 - Fixed Exchange rate system
 - Floating Exchange rate system
- Under Fixed exchange rate system central bank of a country itself decide the rate of its currency to foreign currency:
 - If it decides to strengthen its currency then it is called Revaluation.
 - If it decides to weaken its currency then it is called devaluation.
- Under the Floating exchange rate system market mechanism of supply and demand decides the exchange rate:
 - If currency gets strengthen then it is called currency Appreciation.
 - If currency gets weaken then it is called Depreciation.
- India since 1995 is following a managed floating exchange rate wherein RBI follows a minimum reserve system in which it keeps gold of some amount along with some additional amount of foreign currency or securities.
- Nominal Effective Exchange rate (NEER): Tracking of only dollar-rupee exchange doesn't provide full picture as India trades with others countries and thereby in their currency. Therefore, RBI calculates geometric average of rupee's exchange rate against upto 36 types of foreign currency. This average is called NEER.

- Real Effective Exchange Rate (REER)- When NEER is adjusted as per the CPI-Inflation levels in India and those foreign countries it is called Real effective exchange rate.
- NEER vs REER give us the real picture on currency being strengthening or weakening against foreign currencies and this help us in understanding our export competitiveness.

Why Is Rupee Falling?

- The value of the Indian rupee to the US Dollar works on a demand and supply basis. If there is a higher demand for the US Dollar, the value of the Indian rupee depreciates and vice-versa.
- If a country imports more than it exports, then the demand for the dollar will be higher than the supply and the domestic currency like Rupee in India will depreciate against the dollar.
- The rupee has been on the decline since early this year, especially after supply chain disruptions in view of the Russia-Ukraine war, global economic challenges, inflation, and high crude oil prices, among other issues.
- Besides, there have been heavy foreign fund outflows from the domestic markets as the foreign institutional investors (FIIs) have sold shares worth \$28.4 billion so far this year, outstripping the \$11.8-billion sell-off seen during the Global Financial Crisis of 2008. The rupee has depreciated 5.9 per cent versus the dollar so far this calendar year.
- As money flows out of India, the rupee-dollar exchange rate gets impacted, depreciating the rupee. Such depreciation puts considerable pressure on the already high import prices of crude and raw materials, paving the path for higher imported inflation and production costs besides higher retail inflation.
- Meanwhile, the US Federal Reserve recently increased the interest rates, and the return on dollar assets increased compared with those of emerging markets such as India. Speculations are there could be more aggressive rate hikes by the US Fed and that may further dent the Indian currency. In fact, the International Monetary Fund (IMF) expects the rupee to weaken past the 94 rupees to a dollar mark by FY29.

Impact of depreciating rupee

- ✓ The primary impact of a depreciating rupee is felt by importers as they need to spend more for the same quantity.
- ✓ The most adversely affected sector will be oil and gas, India imports over 85 per cent of oil and half of the gas it consumes. This means that the pricing of oil will increase, which, in turn, will percolate down to a host of products.
- ✓ Buying cars will also become a more expensive idea as 10-20 per cent of a car's total raw materials by value are imported.
- ✓ Electronic items, such as mobile phones and other appliances are also likely to become more expensive.
- ✓ Flying will also become more expensive as purchasing fuel will become costlier.
- ✓ For students who wish to go abroad to study, a depreciating rupee could be an issue. This is because the fees would now be costlier in rupee-dollar comparison. Prospective students or even existing ones may face a hike in their spending.
- ✓ Another major impact of falling rupee might be felt on the tourism sector. People wanting to resume their abroad travel will end spending much higher than they would have a few days ago.

Positive impact

- One benefit of the depreciating rupee would be exports from India will become cheaper. The Information and Technology sector would be one of the biggest gainers, as they bill most clients in US dollars. Their rupee earnings rise as the Indian currency falls.
- Many financial experts note that this is the right time for foreign companies to invest in

manufacturing and services in India. Moreover, this period will be a boon for India's tourism sector.

What is being done?

- ✚ The Reserve Bank of India (RBI) regularly monitors the foreign exchange market and intervenes in situations of excess volatility. It has raised interest rates in recent months that increase the attractiveness of holding Indian rupees for residents and non-residents.
- ✚ Earlier this month, the RBI raised the overseas borrowing limits for companies and liberalised norms for foreign investments in government bonds as it announced a slew of measures to boost foreign exchange inflows.
- ✚ The RBI increased the ECB limit under the automatic route from USD 750 million or its equivalent per financial year to USD 1.5 billion, and eased norms for foreign portfolio investments in the debt market.
- ✚ The central bank have sold dollars at 78.97-78.98 per US dollar and has heavily expanded its foreign exchange reserves to shield the rupee from a runaway depreciation. Since February, the headline foreign exchange reserves have declined by \$40.94 billion.
- ✚ More foreign investments in international currency into the country would mean more demand for the rupee in exchange for buying the domestic currency-denominated Indian assets.

INTERNATIONAL RELATIONS

India-EU Trade and Investment Agreements

News Excerpt

India and the European Union concluded first round of negotiations for India-EU Trade and Investment Agreements, including the Geographical Indicators (GI).

Pre-Connect

- India-EU Cooperation Agreement (1993) is the foundational agreement of bilateral relationship.
- In 2004 at the 5th India-EU summit when India and the EU became strategic partners.
- India and the EU trade agreement started in 2007, however by the year 2013 disagreements on movements of professionals and custom duties stalled the progression.
- At the 15th India-EU Summit both sides adopted "India-EU Partnership: A Roadmap to 2025". It was based on five pillars:
 - Foreign Policy and Security Cooperation
 - Trade and Economy
 - Sustainable Modernization Partnership
 - Global governance
 - People-to-People relations
- At the India-EU summit in May 2021, both parties decided to resume negotiations on a free trade agreement.

Trade Data

- As of 2021, the bilateral trade between India and the EU is valued at €65.30 billion
- The EU is India's third largest trading partner, accounting for €88 billion worth of trade in goods in 2021 or 10.8% of total Indian trade, after the USA (11.6%) and China (11.4%).
- The EU is the second-largest destination for Indian exports (14.9% of the total) after the USA (18.1%), while China only ranks fourth (5.8%).
- India is the EU's 10th largest trading partner, accounting for 2.1% of EU total trade in goods in 2021, well behind China (16.2%), the USA (14.7%) or the UK (10%).

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
IN											

Types of Trade Agreements

- **Preferential Trade Agreement (PTA):** Two or more partners agree to reduce tariffs on agreed number of tariff lines. Such list of products is called positive list. e.g., India MERCOSUR PTA.
- **Free Trade Agreement (FTA):** Covers a substantial list of items between two countries. However, each maintains individual tariff structure for non-members. Unlike PTA, FTA contains a negative list on which duty is not reduced or eliminated. e.g., India Sri-Lanka FTA
- **Comprehensive Economic Cooperation Agreement (CECA) and Comprehensive Economic Partnership Agreement (CEPA):** Such agreements contain an integrated package consist of goods, services and investment along with other areas including IPR, competition etc. e.g., India-Korea CEPA.
- **Custom Union:** Partner countries have zero duty among themselves while common tariff against non-member e.g., Southern African Customs Union (SACU).
- **Common Market:** It's a more deeper integration than custom union. It includes provisions to facilitate free movements of labour and capital, harmonize technical standards across members etc. e.g., European Common Market
- **Economic Union:** It's a one step forward from common market and includes harmonization of fiscal/monetary policies and shared executive, judicial & legislative institutions. E.g., European Union.

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

- Trade in goods between the EU and India increased by about 30% in the last decade.
- Trade in services between the EU and India reached €30.4 billion in 2020.
- EU is one of the largest sources of Foreign Direct Investment (FDI) for India with FDI inflows from the EU to India valued at US \$ 88.32 billion from Apr 2000-March 2021. This is significant but way below EU foreign investment stocks in China (€201.2 billion) or Brazil (€263.4 billion).
- Some 6,000 European companies are present in India, providing directly 1.7 million jobs and indirectly 5 million jobs in a broad range of sectors.

Gist of the recent trade Negotiations

The trade negotiations aim to:

- Remove barriers and helping EU firms – especially smaller ones – to export more;
- Open up services and public procurement markets;
- Ensure protection of geographical indications;
- Pursue ambitious commitments on trade and sustainable development, and;
- Make sure the agreed rules are enforceable.

The investment protection negotiations aim to provide investors from both sides with a predictable and secure investment environment, through commitments on:

- Non-discrimination;
- Protection against expropriation without compensation and unfair treatment of investors and their investments, while preserving the right to regulate, and;
- Transfer of returns.

The investment protection negotiations also seek to put in place an effective and state-of-the-art dispute settlement mechanism to enforce such rules.

Analytica: The EU and India

- ✓ Circumstances has a crucial role in resumption of India-EU trade talks. In the age of de-globalization and economic decoupling, trade is being looked at through a strategic lens than primarily through an economic one.
- ✓ For India trade agreement with EU will help in establish its credentials as a reliable trading partner. Without adequate capabilities to attract other economic players, it will remain marginal to the global economic order.
- ✓ For EU the idea of being not in the business of geopolitics is over, with China emerging as a systematic challenger to it, there is a new keenness to build a robust partnership with India.
- ✓ After India rejected Regional Comprehensive Economic Partnership (RCEP) new trade deal can help India in upping its economic game in the Indo-Pacific region and beyond. This coincides

Early Harvest Scheme

- It is a precursor to a free trade agreement (FTA) between two trading partners.
- It acts as a confidence building measure between two countries.
- Under the scheme, both partners decide to identify certain products for tariff liberalization.
- It helps trading partners prepare for bigger economic engagement.

Rules of Origin

- They are the criteria needed to determine the country of origin of a product for purposes of international trade.
- They are used to implement:
 - Anti-dumping duty and safeguard measures.
 - For giving a product benefit of most-favored nation or preferential treatment.
 - Purpose of trade statistics
 - Application of labelling and marking requirements
 - Government procurement.

PEPPER IT WITH

Free Trade Agreement, Data Secure, Non-tariff barriers, India-EU Summit, European Union, Most Favored Nation

with the new-found focus of EU in the Indo-Pacific and It look towards India as a major player in the region.

- ✓ Further, the shock of Covid also alerted India and the rest of the world to reduce their dependence on China as global supply chains got disrupted to an unprecedented degree, alerting the world to the problems that are likely to emerge if no remedial measures are taken.
- ✓ Despite such overlapping interest, negotiations are not going to be easy as divergence ranging from restrictive visa regime for professionals and tariffs on spirits and dairy products from the EU to data localization and European regulatory frameworks.
- ✓ At the same time EU has concerns regarding non-discriminatory and predictable regulatory and business environment for European companies trading with or investing in India, including the protection of their investments and intellectual property.
- ✓ On the economic front India should keep in mind that:
 - It needs trade complementarities and high margin of preference to make sure any trade agreement reaps benefits in long run.
 - It should work towards reducing compliance cost and administrative delays to increase utilization rate of FTA.
 - A proper safety and quality standards should be set to avoid dumping of lower quality hazardous goods into the Indian market.
 - Any circumvention of rules of origin should be strictly dealt with by the authorities.

Conclusion

The India-EU FTA in this scheme of things has the potential to be a game changer. India should focus on getting a comprehensive FTA with the EU rather than a tempting “early harvest”. A trade agreement with EU will help in India’s march to a \$10 trillion economy by the end of the decade.

Partnership for Global Infrastructure and Investment (PGII)

News Excerpt

United States and other G7 leaders have unveiled ambitious plans to mobilise \$600 billion in funding by 2027 to deliver transparent and game-changing infrastructure projects in developing countries like India, in a move seen as a counter to China's Belt and Road Initiative.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- The Partnership for Global Infrastructure and Investment (PGII) unveiled in Elmau during the G7 Summit relaunches a scheme unveiled at last year's G7 talks in England.
- The infrastructure plan was first announced in June 2021 during last year’s G7 Summit in the UK. Back then, US President Joe Biden had called it the Build Back Better World (B3W) framework. However, it did not register much progress and details regarding the plan’s time period or funding source were unclear.
- The initiative will be geared towards tackling climate change, improving global health, achieving gender equity and building digital infrastructure.

Partnership for Global Infrastructure and Investment

- Essentially, G7 countries, the US, Canada, Italy, the UK, France, Germany, and Japan, and the EU have noted the infrastructure projects being undertaken and funded by China at a global level and decided to present their alternative mechanism for it.
- The stated purpose of both the PGII and the BRI is to help secure funding for countries to build critical infrastructure such as roads, ports, bridges, communication setups, etc. to enhance global trade and cooperation.

- The G7 say their initiative is meant to be transparent, focused on building climate change-resilient infrastructure, and help in achieving objectives of gender equality and health infrastructure development. Around a dozen projects are already underway, with financing from both government and the private sector.
- The US president mentioned that the fund does not mean “charity or aid”, but loans, and will be beneficial for both the countries lending and receiving them.

Where are funds being directed under the plan?

- ✓ In India, the US International Development Finance Corporation, the development bank of the country, will invest up to \$30 million in the Omnivore Agritech and Climate Sustainability Fund 3, described as an impact venture capital fund that invests in entrepreneurs building the future of agriculture, food systems, climate, and the rural economy.
- ✓ The fund will invest in companies that “increase food security and promote both climate resilience and climate adaptation in India, as well as improve the profitability and agricultural productivity of smallholder farms.” Apart from India, projects have been announced in countries across West Africa, Southeast Asia, and South America.

China’s response to the PGII announcement

- When asked about the PGII, Chinese foreign ministry said that China continues to welcome all initiatives to promote global infrastructure development.
- China said that they believe that there is no question that various related initiatives will replace each other. They are opposed to pushing forward geopolitical calculations under the pretext of infrastructure construction or smearing the Belt and Road Initiative.
- While the US has been critical of BRI, other countries of the G7 have had varying responses to it. Italy became the first G7 member to be a part of the BRI in 2019, and the UK described the policy as a “vision” in the same year, though it is not officially a part of the BRI. The UK claimed that they are committed to helping to realise the potential of the BRI and doing so in a way that works for all whose lives are touched by the project.
- Germany and France, while not directly participating in the BRI, have also partnered with China in building rail networks and other projects for connectivity.

Conclusion

- ✚ There is strong bipartisan support in Congress to counter China, and the US should take advantage of this moment. Communication and cooperation not only within the U.S. government but with other G7 partners and the private sector will be critical to the success of PGII. Proper and continued engagement with the private sector will theoretically lead to better PGII projects and greater capital to make progress on its ambitious priority areas. To that end, PGII will require a comprehensive, multi-stakeholder approach to not only provide developing countries with quality and resilient infrastructure, but to ensure that China is the alternative, not the default.

PEPPER IT WITH

Climate Sustainability Fund, Hambantota Port in Sri Lanka, China Pakistan Economic Corridor (CPEC)

Partners in the Blue Pacific’ initiative

News Excerpt

Amid China’s aggressive push to increase its Pacific sphere of influence, the US and its allies have launched a new initiative called ‘Partners in the Blue Pacific’.

Pre-Connect

- In its 2019 strategy report, the US Department of Defence called the Indo-Pacific the “*single most consequential region for America’s future*”. Spanning a vast stretch of the globe from the west coast of the United States to the western shores of India, the region is home to the world’s

GS CONNECT										
GS	1	2	3	4	5	6	7	8	9	10
I										
II										
III										
IV										
M										

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

most populous state (China), most populous democracy (India), and largest Muslim-majority state (Indonesia), and includes over half of the earth's population.

- Among the 10 largest standing armies in the world, 7 reside in the Indo-Pacific, and 6 countries in the region possess nuclear weapons. Nine of the world's 10 busiest seaports are in the region, and 60 percent of global maritime trade transits through Asia, with roughly one-third of global shipping passing through the South China Sea alone.
- The US has long maintained a balance of power in the region with its hub-and-spoke system where America is the hub and its allies are speaking whose security is guaranteed by the US military power.

Partners in the Blue Pacific (PBP) initiative

- The PBP is a five-nation "informal mechanism" to support Pacific islands and to boost diplomatic, economic ties in the region. Announced on June 24, it speaks of enhancing "prosperity, resilience, and security" in the Pacific through closer cooperation. It simply means that through the PBP, these countries, together and individually, will direct more resources here to counter China's aggressive outreach.
- The initiative members have also declared that they will "elevate Pacific regionalism", and forge stronger ties with the Pacific Islands Forum.
- The forum remains open to cooperating with additional partners, at every stage, PBP will be led and guided by the Pacific Islands. The forum will seek Pacific guidance on the PBP's selection of its lines of effort and its flagship projects.
- The areas where PBP aims to enhance cooperation include "climate crisis, connectivity and transportation, maritime security and protection, health, prosperity, and education".

How is China trying to transform its ties in the Pacific?

- ✓ As China signed a security pact with Solomon Islands in April, the deal flagged serious concerns about the Chinese military getting a base in the southern Pacific, close to the US island territory of Guam, and right next to Australia and New Zealand.
- ✓ The deal, which boosted Beijing's quest to dominate crucial shipping lanes crisscrossing the region, rattled the US and its allies. It also triggered urgent moves to counter China's growing Pacific ambition amid a power vacuum fuelled by apparent lack of US attention.
- ✓ But Beijing followed up on that win with its Foreign Minister undertaking a multi-nation tour to push 10 Pacific nations to endorse a "game-changing" agreement called the "Common Development Vision".
- ✓ The draft agreement spoke about China wanting to work with "traditional and non-traditional security," and expand law enforcement cooperation with these countries.
- ✓ The diplomatic blitz saw the Chinese Foreign Minister visit the Solomon Islands, Kiribati, Samoa, Fiji, Tonga, Vanuatu, and Papua New Guinea, and hold virtual meetings with the Cook Islands, Niue, and the Federated States of Micronesia.
- ✓ By the time Chinese Foreign Minister ended his tour, the deal ran aground amid warnings of the Pacific states becoming part of "Beijing's orbit". Despite that setback, China indicated that it would continue pursuing this goal.
- ✓ This intention became even more clear on June 27, as China was trying to arrange a virtual meeting with the leaders of 10 Pacific Island states on the sidelines of the high-level Pacific Islands Forum gathering in Fiji.
- ✓ China and the US are among 21 PIF dialogue partners, but this year the regional forum had decided not to engage with the dialogue partners in-person during the Fiji meet.

PEPPER IT WITH
G7, Blue Water Navy, Exclusive Economic Zones, Solomon Island, Belt and Road Initiative

Conclusion

Before launching the PBP, the US and its partners started the Indo-Pacific Economic Framework for Prosperity (IPEF), a trade-boosting play in the region with 13 nations, Australia, Brunei, India, Indonesia, Japan, Malaysia, New Zealand, the Philippines, Singapore, South Korea, Thailand, Fiji and Vietnam, as partners. Away from the Pacific, the G7 announced Partnership for Global Infrastructure and Investment (PGII) to rival China's Belt and Road Initiative by promising to raise \$600 billion to fund development projects in low and middle-income countries.

CAATSA: India and USA

News Excerpt

The US House of Representatives has passed a legislative amendment that **approves waiver to India** against the punitive CAATSA sanctions for its purchase of the **S-400** missile defence system from Russia.

Pre-Connect

Countering America's Adversaries through Sanctions Act (CAATSA):

- It is a USA law that allows the American government to impose sanctions on any country that has **"significant transactions with Iran, North Korea or Russia"**.
- The law entails economic & financial penalties for any nation that transacts with Russia on arms. The law has been in force since **August 2017**.
- The law came **in response to Russia's annexation of Crimea** in 2014 and its alleged meddling in the 2016 US presidential elections.
- The sanctions are intended to economically hurt Russia over its international actions. CAATSA primarily allows the US government punish any country that engages in transactions with Russian defence and intelligence sectors.

S-400 and its need:

- Manufactured by Russian state-owned defence company, Almaz-Antey, the S-400 Triumf (also known as the SA-21 Growler) is **one of the most advanced missile defence systems** on the market, designed to engage targets at ranges of up to 400 km, in an intensive jamming environment.
- Stuck in a not-so-friendly neighbourhood, India's best bet to maintain **strategic stability** is to bulwark its defences — and a robust air defence system (ADS) is intrinsic to this.

About the Issue

- The issue has been looming over India since October 2018 when New Delhi signed a \$500 billion deal with Russia to buy five units of the S-400 air defence missile systems.
- USA in December 2020 imposed **sanctions on NATO-ally Turkey** for its purchase of Russia's S-400 missile defence system.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

India has signed a \$ 5.43 billion (about ₹ 40,000 crore) deal with Russia to procure five S-400 Triumf advanced air defence missile systems

S-400 Triumf Features

- Can engage all types of aerial targets including aircraft, unmanned aerial vehicles and all types of missiles
- Locates targets at 600 km and can destroy them at 400 km range, up to an altitude of 30 km
- The system can engage multiple targets simultaneously

Integrates:

- Multifunction radar
- Anti-aircraft missile systems
- Launchers
- Autonomous detection and targeting systems
- Command and control centre


Range of missiles:

- 40N6: 400 km
- 9M96E2: 120 km
- 48N6: 250 km
- 9M96E: 40 km

Possible deployment options

PAKISTAN INDIA NEPAL CHINA

Map not to scale



- The sanctions on Turkey raised apprehensions that Washington would impose similar punitive measures on India.
- In 2021, the US levied CAATSA **sanctions on China's** Equipment Development Department (EDD) of China's Ministry of Defence for its purchase of 10 SU-35 Russian combat aircraft in 2017 and S-400 equipment in 2018.

Implications of USA waiver for India:

- ✓ It will enable India to freely purchase Russia's S-400 missile system without worrying about being subject to American penalties.
- ✓ It is the strategic win of India's diplomacy as India was pursuing an independent foreign policy and its defence acquisitions are guided by its national security interests.
- ✓ This is another great relief for India after the nuclear deal with USA and sign of growing strategic bilateral relationship between India and USA.
- ✓ The main need for the waiver was that India diversifies its military purchases because ceasing all arms purchases suddenly may severely damage India's strategic position.
- ✓ The relief is also because the sanction could impose economic and financial repercussions for India which could further deteriorate the economic situation in India facing high inflation, depreciating rupee etc.
- ✓ It will be an opportunity for India to attract defence manufacturing industry from USA to develop home grown weapons and defence technologies.

India-USA defence partnership:

- ❖ The US has recognised India as a **"major defence partner"**.
- ❖ 2+2 dialogue.

India and the US have finalised troika of **"foundational pacts"** for deep military cooperation:

- ❖ Logistics Exchange Memorandum of Agreement (LEMOA)
- ❖ Communications Compatibility and Security Agreement (COMCASA)
- ❖ Basic Exchange and Cooperation Agreement (BECA)

Joint Exercises:

Malabar, Yudh Abhyas, Vajra Prahar etc.

Reasons for giving USA waiver:

The waiver is more beneficial for the US than India because of the following reasons:

- **Threat from China:** The USA wants India to act as an alternate pole in South Asia because with Russia's advance in Ukraine, and China flexing its muscles in the Indo Pacific region.
 - Chinese aggression could launch the Indo-Pacific into turmoil making it the next source of global chaos.
 - To counter China's growing weight, the US needs the power balance to shift in India's favour to keep the region free of Chinese monopoly.
- **A key partner in the region:** India's strategic importance and geopolitical influence is also evident in the fact it is a partner in two key security and economic groupings of countries that span the Indian Ocean – **the Quad and I2U2**.

US VERSUS RUSSIA IN INDIAN ARMS MARKET			
RUSSIA		THE US	
India's biggest arms supplier for decades. Sales worth \$65 billion since early-1960s	MIG fighters & Sukhoi-30MKI jets to Kilo-class submarines, Talwar/Tabar-class frigates & aircraft carrier INS Vikramaditya	Overtook Russia in bagging Indian deals over last 3/4 years. Sales worth \$15 billion since 2007	C-17 Globemaster-III strategic airlifters, C-130J Super Hercules aircraft & P-8I maritime patrol planes to M-777 ultra-light howitzers, Apache attack & Chinook heavy-lift helicopters
FUTURE PROJECTS		FUTURE PROJECTS	
➤ Lease of 2nd nuclear-powered submarine (after first one, INS Chakra) for around \$1.5 billion ➤ Five S-400 Triumf air defence systems for around \$5.5 billion ➤ Four Grigorovich-class stealth frigates (2 to be built in India) for around \$4 billion ➤ Joint production of 200 Kamov-226T light utility helicopters (140 in India) for \$1 billion		➤ US pushing F/A-18 "Super Hornet" or F-16 fighter production line in India to supply 110 jets for IAF for \$20 billion ➤ In contention for 57 multi-role fighters to operate from aircraft carriers ➤ Also for 111 armed naval light utility helicopters (Rs 21,738 crore) ➤ Also 24 multi-role helicopters with anti-sub warfare capabilities (Rs 12,000 crore). Another 123 such choppers later	
			

- India and US ties have come a long way since the latter sanctioned India for its 1998 Pokhran nuclear tests. The punitive action in the last century caused India-US ties to sour and pushed India further into Russia's orbit.
- **Strategy:** The amendment has urged the US government to do more to support India's decision to reduce its reliance on Russian-made weapons. The revision is **consistent with the prevailing strategic tone** of bilateral ties. The waiver will set the stage for Delhi and Washington to find a way around the problem of India's continuing dependence on Russian weapons.

Conclusion:

- ✚ India needed the waiver and smooth relationship with USA to arm itself from further economic problems, sustaining economic growth and technology investment. The need of S-400 is to secure itself against unfriendly neighbours (Pakistan and China). On the other hand, USA needs a cordial relationship with India to emerge as an alternate power centre in South Asia and counter China in the Indo-Pacific. India's **policy of non-alignment and determination** to seek deals which are in its **national interests** has been demonstrated more so now than before. Yet, it remains a democratic, stabilising force that prioritises global order.

PEPPER IT WITH
QUAD, NATO, LEMOA,
COMCASA, BECA

I2U2 summit

News Excerpt:

The **first virtual meeting** summit of the I2U2 grouping was recently held where the United Arab Emirates (UAE) has announced an investment of USD 2 billion to develop a series of integrated food parks across India.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-connect:

- **I2U2 grouping:** I2U2 stands for a grouping of four countries namely-India, Israel, UAE, and USA.
- It was also referred to as the '**West Asian Quad**' by Ahmed Albanna, Ambassador of the UAE to India.
- Earlier, a meeting of the foreign ministers of the four countries had taken place when External Affairs Minister was visiting Israel. At that time, the grouping was called the '**International Forum for Economic Cooperation**'.
- **Aim:** To discuss "**common areas of mutual interest**, to strengthen the economic partnership in trade and investment in our respective regions and beyond".
 - **Six areas of cooperation** have been identified by the countries mutually, and the aim is to encourage joint investments in **water, energy, transportation, space, health, and food security**.
 - With the help of "**private sector capital and expertise**", the countries will look to modernise infrastructure, explore low carbon development avenues for industries, improve public health, and promote the development of critical emerging and green technologies.

Significance of the grouping:

- The grouping has the potential to be **more than just another group capitalizing on the "minilateralism"** trend in international relations.
- It offers India a chance to **broaden and deepen the already cordial political and economic relations** with Israel and the UAE and balance them with other countries in the Gulf with its sizeable Indian diaspora.

- I2U2 is truly **a platform for the 21st century**, driven by economic pragmatism, multilateral cooperation, and strategic autonomy; this stands in sharp contrast to old groupings where religion or political ideology would matter.
- The group countries have not a common threat like in the Indo-Pacific- QUAD. However, the four nations share good bilateral relations amongst themselves, so, the grouping **established on a “positive agenda”** is intended to work on the envisaged six areas effectively.
- I2U2's **perception of security is broad** and unlikely to raise hackles in a region and world that is riven with conflict and is prickly towards multilateral groupings. Its definition of security involves strengthening energy, economic and food security.
- I2U2's prioritisation of food security will strengthen the capacity of its member-nations, and its efforts will ease the vulnerability of South and West Asian nations to hunger, poverty and debt.
- By drawing on the support and resources of other countries, India as part of I2U2 will be in a better position to secure its neighbourhood.
- This platform supports India's strategic goal to **move beyond bilateralism and pursue a regional foreign policy strategy** toward West Asia.

Initiatives announced:

- ❖ The UAE will invest USD 2 billion to develop a series of **integrated food parks** across India.
- ❖ “India will provide appropriate land for the project and will facilitate farmers’ integration into the food parks.
- ❖ The US and Israeli private sectors will be invited to lend their **expertise and offer innovative solutions** that contribute to the overall sustainability of the project”.
- ❖ A **hybrid renewable energy project** in Gujarat consisting of 300 megawatts of wind and solar capacity shall be advanced by the I2U2 group.
- ❖ To tackle the greatest challenges confronting our world the I2U2 aims to harness the vibrancy of our societies and entrepreneurial spirit.

Factors responsible for its emergence:

- ✓ **The Abraham Accords:** of 2020 had led to Israel formally normalising diplomatic ties with the UAE and two other countries in the region, marking an important shift in the stance of West Asian countries on Israel.
- ✓ **USA's pivot to Asia:** Washington has strong intention for expanding the geographic scope of its top relationships, restoring partnerships and alliances and reframing relations with the Middle East.
- ✓ **India's interests:** Playing a greater global role without compromising its strategic autonomy, expanding cooperation with Washington beyond Asia, and deepening ties in a Middle East region it views as strategically significant because of its energy and economic interests and a large diaspora presence.

Conclusion:

- Despite the fact that this new-age organisation is still in its infancy, its leaders exude a reasonable amount of hope. It would be fascinating to see how the collaboration between them develops in the future and affects the trajectory of the South and West Asian regions as a whole.
- The grouping may make its mark if it maintains a sustained and substantive focus on its six areas of shared interest and on pursuing its publicly stated goals - major needs in the four member countries and beyond.

G20 Foreign Ministers Meeting

News Excerpt:

The G20 foreign ministers meeting was recently concluded in Bali, Indonesia. India will be hosting the G20 summit for the first time in 2023.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect:

- **G-20:** or Group of Twenty is an intergovernmental forum comprising 19 countries and the European Union (EU).
- It is a **leading global forum** for international economic cooperation, comprising key advanced and emerging economies.
- The G20 was formed **in 1999** in the backdrop of the financial crisis of the late 1990s that hit East Asia and Southeast Asia in particular.
 - The first G20 Summit took place in 2008 in Washington DC, US.
- **Aim:** To secure global financial stability by involving middle-income countries.
- **Extent:** Together, the G20 countries include 60 per cent of the world's population, 80 per cent of global GDP, and 75 per cent of global trade.
- **Presidency:** The presidency of the G20 **rotates every year** among members, and the country holding the presidency, together with the previous and next presidency-holder, forms **the 'Troika'** to ensure continuity of the G20 agenda.
 - Italy, Indonesia, and India are the Troika countries right now.
- **Working:** The G20 has **no permanent secretariat**. The agenda and work are coordinated by representatives of the G20 countries, known as **'Sherpas'**, who work together with the finance ministers and governors of the central banks.
 - India recently said ex-NITI Aayog CEO Amitabh Kant would be the G20 Sherpa after Piyush Goyal.

India and G20 co-operation:

- In 2023, India will assume the G20 presidency for the first time; New Delhi will set the G20 agenda, organise the Leaders' Summit, and host meetings with ministers, government officials and civil society.
- The shift in focus in recent years to the Global South is illustrative of the growing influence of emerging economies like India in directing international development cooperation and strengthening multilateralism.
- India's vital role in global economic governance has fostered its active participation in the G20 process.
- India has been active in the G20 processes in the Sherpas and Finance Track. Its support for global cooperation, inclusive development, economic stability, and sustainable growth is in line with its national goals and the values espoused by other leaders of the G20.

Conclusion:

- ✓ The G20 process is about balancing competing interests and setting global rules of economic engagement. The **G20's agenda has moved beyond crisis management to enhanced global macroeconomic coordination** to create a new equilibrium and resilience in global economy.
- ✓ Across the summits, India, Asia's third largest economy, has emerged as a **fine balancer, delicately blending its national interests with the imperatives of global economic integration**. With upbeat projections about India's economic growth in the years come, expect India to contribute substantially to global economic growth and be a more proactive player in shaping the G20 process.

- ✓ The global leaders from the G20 countries already recognise India's growing importance in Southeast Asia and in overall world order.
- ✓ It will be **crucial for India to steer the global economic dialogue platform** in a manner which is **most beneficial for the region**, and the country in decades to come.

India-Australia collaboration

News Excerpt

- India and Australia have recently decided to strengthen their partnership in the field of projects and supply chains for **critical minerals**.
- Australia has confirmed that it would commit **A\$5.8 million** to the three-year India-Australia **"Critical Minerals Investment Partnership"**.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

Critical minerals:

- Critical minerals are elements that are the **building blocks of essential modern-day technologies**, and are at risk of supply chain disruptions.
- These minerals are now used everywhere from making mobile phones, computers to batteries, electric vehicles and green technologies like solar panels and wind turbines.
- Based on their individual needs and strategic considerations, **different countries create their own lists**. However, such lists mostly include **graphite, lithium and cobalt**, which are used for making EV batteries; rare earths that are used for making magnets and silicon which is a key mineral for making computer chips and solar panels.
- Aerospace, communications and defence industries also rely on several such minerals as they are used in manufacturing fighter jets, drones, radio sets and other critical equipment.

What makes these resources critical?

- ✓ As countries around the world scale up their transition towards clean energy and digital economy, these critical resources are key to the ecosystem that fuels this change. Any supply shock can severely imperil the economy and strategic autonomy of a country over-dependent on others to procure critical minerals.
- ✓ But these supply risks exist due to rare availability, growing demand and complex processing value chain. Many times, the complex supply chain can be disrupted by hostile regimes, or due to politically unstable regions.
- ✓ As per the USA government- "As the world transitions to a clean energy economy, global demand for these critical minerals is set to skyrocket by 400-600 per cent over the next several decades. For minerals such as lithium and graphite used in electric vehicle (EV) batteries, demand will increase by even more — as much as 4,000 per cent."

China's threat in this sector:

- According to the 2019 USGS Mineral Commodity Summaries report, China is the **world's largest producer of 16 critical minerals**.
- China, according to International Energy Agency (IEA), is "responsible for some 70% and 60% of global production of cobalt and rare earth elements, respectively, in 2019.
- The level of concentration is even higher for processing operations, where China has a strong presence across the board. China's share of refining is around 35% for nickel, 50-70% for lithium and cobalt, and nearly 90% for rare earth elements."
- It also controls cobalt mines in the Democratic Republic of Congo, from where 70% of this mineral is sourced.

- In 2010, China suspended rare earth exports to Japan for two months over a territorial dispute. The decision made the market prices of rare earth elements (REEs) jump anywhere between 60% to 350%. The prices returned to normal only after a year of China resuming shipments.

Way forward:

- ✚ An over-reliance on “foreign sources and adversarial nations for critical minerals and materials posed national and economic security threats”.
- ✚ It is **need to shift its focus on expanding domestic mining, production, processing, and recycling** of critical minerals and materials.
- ✚ India has set up **KABIL or the Khanij Bidesh India Limited**, a joint venture of three public sector companies, to “ensure a consistent supply of critical and strategic minerals to the Indian domestic market”. Australia’s Critical Minerals Facilitation Office (CMFO) and KABIL had recently signed an MoU aimed at ensuring reliable supply of critical minerals to India.
- ✚ There is a need to **study an interactive map of critical mineral deposits** with an aim to help governments to identify options to diversify their critical minerals sources.

India-Australia relations:

- ❖ Upgradation of bilateral relationship to a ‘Strategic Partnership’, including a Joint Declaration on Security Cooperation in 2009.
- ❖ The Australia-India Council (AIC) was established on 21 May 1992.
- ❖ India is Australia’s tenth-largest trading partner. Negotiation for India-Australia FTA is on the table.
- ❖ The two nations had also signed the Civil Nuclear Cooperation Agreement in 2014.
- ❖ Both countries also decided to elevate their 2+2 Strategic Dialogue (3RD country) to that of a Ministerial level.
- ❖ Both have established an Australia-India Strategic Research Fund (2006) in S&T.
- ❖ Military exercises: Malabar, AUSINDEX.
- ❖ Multilateral grouping: QUAD, G20 etc.

PEPPER IT WITH
IEA, KABIL, Malabar exercise.

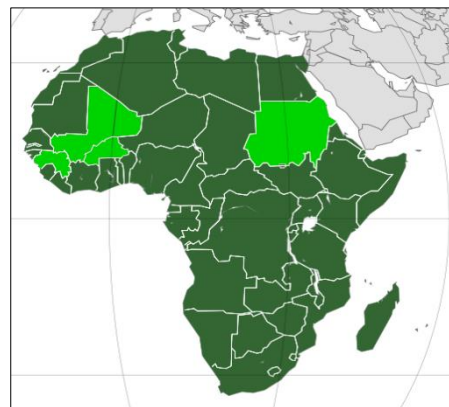
The African Union at 20

News Excerpt:

The African Union says it is deeply concerned by “**the escalating military tension**” between **Ethiopia and Sudan** after seven Sudanese soldiers and a civilian were killed in a border dispute. Also, the continental body (grouping) recently celebrated its 20th anniversary on 9 July.

Pre-Connect:

- **African Union:** The AU was announced in the **Sirte Declaration** in Libya in 1999, calling for the establishment of the African Union.
- The African Union (AU) is a political and administrative organization **founded** in 2001 in Addis Ababa, Ethiopia, and **launched** in 2002 in Durban, South Africa.
- It consists of **54 countries** in Africa with its principal administrative capital located in Addis Ababa, Ethiopia.
 - **Objectives:** The AU has several objectives, the primary of these is to promote and encourage unity among African countries and citizens.



GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
TM											

- In addition, this organization works to retain the independence of its members, to promote peace and security, to protect human rights, and to advance sustainable development economically and socially.
- The **Assembly of the African Union** is the most powerful branch of the organization and is made up of the Heads of Government of the member nations.
- This organization has a **representative branch - the Pan African Parliament**. Its 265 parliamentary representatives are elected by the national AU chapters. It is located in the city of Midrand in South Africa and serves to encourage democratic participation in the workings of the AU.

About:

- The incident happened in the disputed **area of al-Fashaqa**, which is known to **Ethiopians as Alfashga**.
- Ties between the neighbouring countries have deteriorated in recent years amid a long-running border dispute over large swathes of agricultural land in the al-Fashaqa area. Sudan insists the lands are within its borders, according to an agreement that demarcated the boundary between their territories in the early 1900s.
- Sporadic clashes have erupted over the past two years in that area, after Sudan said it reclaimed most of its territory and called on Ethiopia to withdraw troops from at least two locations it says are inside Sudan.
- Ethiopia, in turn, says Sudan took advantage of the deadly conflict in Ethiopia's northern Tigray region to enter Ethiopian territory.

China's interventions in the Horn of Africa:

- ❖ China has been investing across the African continent throughout the last decade. While the emphasis has been on investments and raw materials, it took a new turn on June 20, with the first **"China-Horn of Africa Peace, Governance and Development Conference."**
- ❖ This is the first time China aims **"to play a role in the area of security"**.
- ❖ Beijing has also initiated the "2035 vision for China-Africa cooperation".
- ❖ China's intention on shifting from mere assistance to intervention in security issues and peace establishment is seen as interventionist tendency.

India and African Union:

- ✓ Since the inception of the African Union, India has been regularly participating in its various Summits.
- ✓ The **first ever India-Africa Forum Summit**, attended by the countries representing AU and the Regional Economic Communities of Africa, was held in New Delhi on 8-9 April, **2008**. Leaders of 14 African countries and the African Union Commission participated. It represented a turning point in the India- AU relations. The Summit adopted the **Delhi Declaration and the Africa-India Framework for Cooperation**, which constituted the blueprint for cooperation between India and Africa in the 21st century.
- ✓ India announced unilateral duty free and preferential market access for exports from all Least Developed Countries, 34 of which are in Africa.
- ✓ A Joint Action Plan, with a view to implementing the decisions of the IAFS 2008, was launched on 10th March 2010 between the Government of India and the African Union.
- ✓ The AIFS-II, saw the first ever State visit of the Prime Minister of India to Ethiopia. Two documents, namely 1. the Framework for enhanced cooperation and 2. The Addis Ababa Declaration were adopted during the summit.
- ✓ The proposal for establishing the **Pan-African e-Network Project** was made by the then President of India at the Pan-African Parliament in 2004 and is being implemented in conjunction with the African Union.

- ✓ India had allocated 13 slots each in the years 2008-2010 under the **Indian Technical and Economic Cooperation (ITEC) Programme** to the AU Commission personnel and all the slots were been fully utilized.

Conclusion:

- India-Africa relations are **truly deep-rooted and go back into the recesses of history** as both the India and Africa shares a bonding of fighting against colonialism: Minister of external affairs.
- India is among the African continent's oldest and most consistent development partners, and the country has gained tremendous goodwill in the region. Unlike many Western countries that carry the baggage of colonialism or China, which has been severely criticised for its debt-trap diplomacy, disregard for local laws and lack of local employment creation in Africa, India enjoys good ties with the African states.
- **India needs to focus on:**
 - Clear strategy for African development.
 - Continue the current focus on capacity building. Harness Indian civil society organisations, NGOs, and Indian diaspora.
 - Promote development-friendly private investments.
 - Timely completion of projects.
 - Address concerns about academic experience in India.
 - Improve the experiences of Africans in India.

PEPPER IT WITH
ITEC, India's projects in Africa, Horn of Africa countries.

ENVIRONMENT

U.N. Oceans Conference

News Excerpt

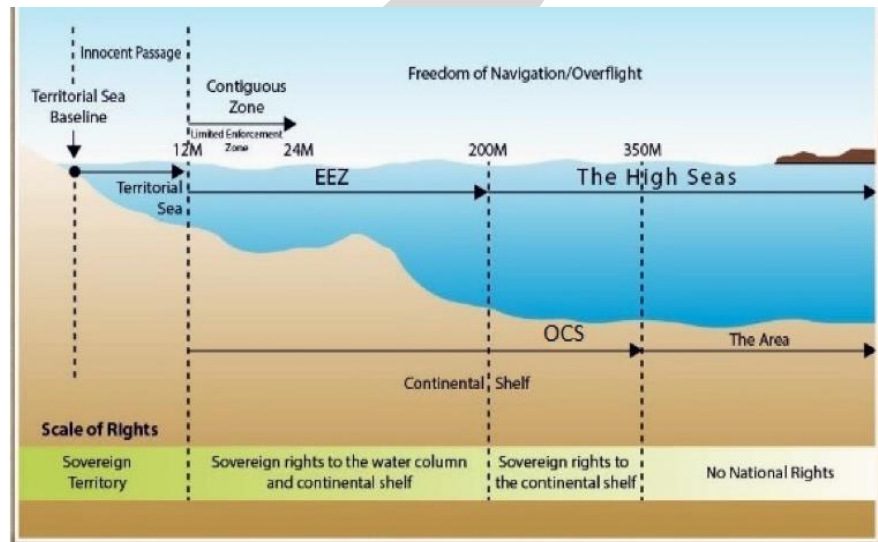
The second United Nations Oceans Conference was held in Lisbon, Portugal. The conference focused on the protection of life underwater and the international agreement on protecting the world's oceans.

Pre-Connect

- The United Nations Convention on the Law of the Sea (UNCLOS) was adopted in 1982.

- UNCLOS lays down a comprehensive regime of law and order in the world's oceans and seas.

- The law of the sea provides rights to nations for a 200-mile zone by their shoreline. The sea and oceanic bed extending this area is regarded to be an Exclusive Economic Zone (EEZ) and any country can use these waters for its economic utilization.



- In 2022, A high ambition coalition on Biodiversity Beyond National Jurisdiction (BBNJ) has been launched at the One Ocean Summit.
- BBNJ encompasses the high seas, beyond the exclusive economic zones or national waters of countries.

Key Points

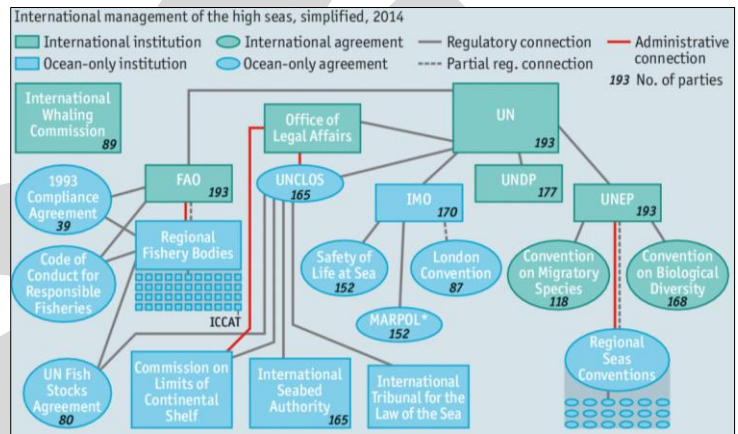
- The conference is aimed to provide a space for the international community to push for the adoption of innovative, science-based solutions for the sustainable management of the oceans, including combating water acidification, pollution, illegal fishing and loss of habitats and biodiversity.
- The UN has set 10 ocean-related targets to be achieved over this decade, as part of the 2030 Agenda for Sustainable Development.
- The Ocean Conference adopted the declaration entitled “Our Ocean, Our Future, Our Responsibility.”
- The declaration also recognizes the importance of the UN Decade of Ocean Science for Sustainable Development (2021-2030) contributing to the solutions necessary to overcome challenges in achieving SDG Goal 14 (Life below water) through:
 - informing integrated ocean management, planning, and decision making
 - restoring and maintaining fish stocks

- preventing, reducing, and controlling marine pollution of all kinds, from both land- and sea-based sources
- developing and implementing measures to mitigate and adapt to climate change, and avert, minimize and address loss and damage, reduce disaster risk and enhance resilience, including through increasing the use of renewable energy technologies, especially ocean-based technologies.
- At the same conference, a global agreement on protecting the world's oceans was also discussed.
- Presently, no comprehensive legal framework covers the high seas, the conference is set to adopt a declaration that, though not binding on its signatories, could help implement and facilitate the protection and conservation of high seas by framing rules to govern high seas.
- "Blue Deal" for global trade, investment and innovation as a means to create a sustainable and resilient ocean economy that benefits all were also mooted in the conference.

Analytica

Ocean and Global climate

- ✓ The ocean and global climate heavily influence one another in many ways. The climate crisis continues to pose an existential threat including anthropogenic activities.
- ✓ The oceans regulate the global climate, mediate temperature and drive the weather, determining rainfall, droughts, and floods. Oceans are the world's largest store of carbon.
- ✓ According to UN data, around 680 million people live in low-lying coastal zones, rising to around one billion by 2050.
- ✓ Ocean currents, including the ocean conveyor belt, play a key role in determining how the ocean distributes heat energy throughout the planet, thereby regulating and stabilizing climate patterns.



Issues with UNCLOS

- The biggest beneficiaries of the UNCLOS are those countries with a huge coastline (Russia, Australia) and big archipelago island states (Indonesia, Japan). Moreover, the Indo-Pacific region continuously became a theatre for violation of UNCLOS and such instances raise questions on the relevance of International Law.
- The area beyond the EEZs is demarcated as the "high seas" and said to be the "common heritage of humankind". International Seabed Authority (ISA) looks after the regulation and control through licenses and contracts with companies and governments.
- EEZs were effectively the inauguration of a process of substantial privatization-nationalization to shrink what has been called the "global commons".
- There is no proper Global Ocean Treaty that aims to seriously protect the "common heritage" of the High Seas.

PEPPER IT WITH

Coral Triangle Initiative, Blue Economy, LiFe, Deep Ocean Mission, International Sea bed authority



Way Forward

- To conserve the ocean food resources, there is a dire need to diversify the food habit, and by doing, so the dependency on sea-led food will be lessened.
- Reducing your amount of trash is the first step towards a healthy ocean. The release of plastic, metal trash and garbage should not be mixed with ocean water. In this regard, proactive efforts are required on the part of citizens and society as a whole. This will reduce the human's environmental footprint on the ocean.

IPBES Report

News Excerpt

A report released by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) has stated that the sustainable use of wild species can meet the requirements of billions of people.

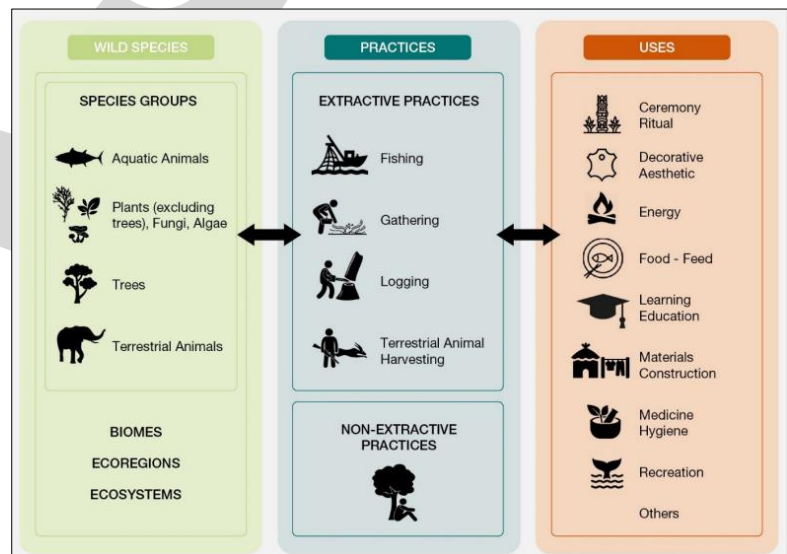
GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- The IPBES is an independent intergovernmental body, established by member States in 2012.
- Its secretariat is based in Bonn, Germany. All States Members of the United Nations are eligible for IPBES membership.
- India is a member of IPBES since 2012, and IPBES is not a UN body.
- The work of IPBES can be broadly grouped into four complementary areas:
 - Assessments, Policy Support, Building Capacity & Knowledge and Communications & Outreach

Key Points of the report

- The report mentioned that Global trade in wild species has expanded substantially in volume, value and trade networks over the past four decades.
- The report asserted that one in five people rely on wild plants, algae and fungi for their food and income; 2.4 billion rely on fuel wood for cooking and about 90% of the 120 million people working in capture fisheries are supported by small-scale fishing.
- Billions of people get benefits from the use of wild species for food, energy, materials, medicine, recreation, inspiration and many other vital contributions to human well-being.
- The Report identifies five broad categories of 'practices' in the use of wild species: fishing; gathering; logging; terrestrial animal harvesting (including hunting); and non-extractive practices, such as observing.



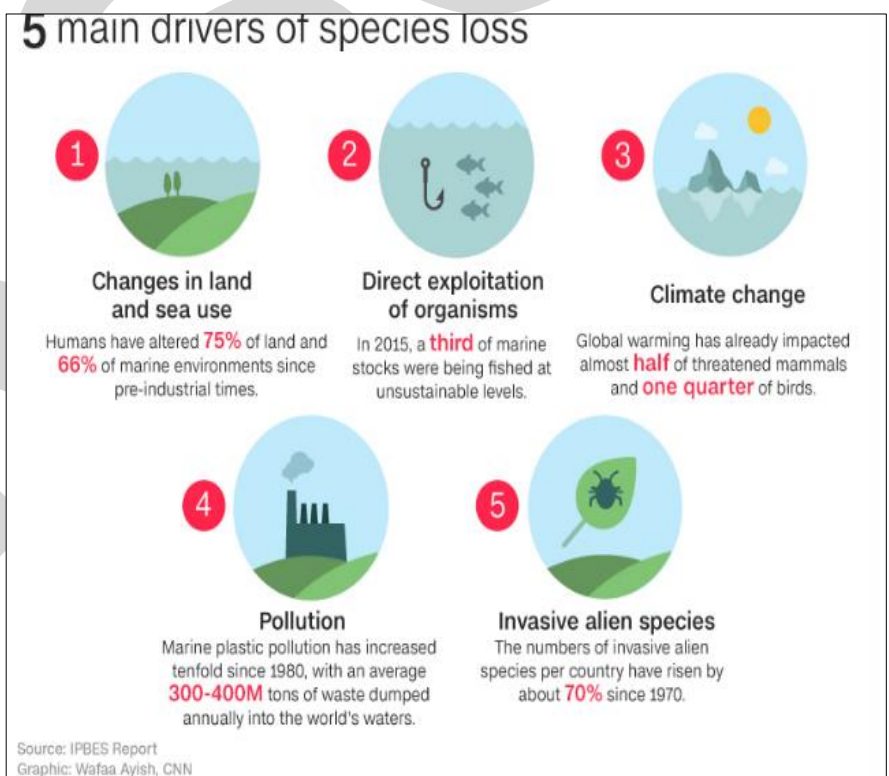
- The report states that illegal trade in wild species represents the third largest class of all illegal trade – with estimated annual values of up to US\$199 billion.
- The use of wild species defines identities and livelihoods and also holds cultural significance. Around 70% of the world's poor are directly dependent on wild species and businesses fostered by them.
- Many species have cultural importance as they offer multiple benefits that define tangible and intangible features of people's cultural heritage.
- The use of wild species by indigenous peoples and local communities, as well as their extensive knowledge, practices and beliefs about such uses, are also explored in the Report. Indigenous stewardship of biodiversity is often embedded in local knowledge, practices and spirituality.

Analytica

- ✓ The use of wild species is an important source of income for millions of people worldwide for instance-wild tree species account for two-thirds of global industrial Roundwood; trade in wild plants, algae and fungi is a billion-dollar industry; and even non-extractive uses of wild species are big business.
- ✓ Trade in wild species provides important income for countries, offers higher incomes for harvesters, and can diversify sources of supply to allow pressure to be redirected from species being unsustainably used, it also decouples the consumption of wild species from their places of origin.

Challenges for the Wild Species

- Overexploitation is one of the main threats to the survival of many land-based and aquatic species in the wild.
- The factors include land- and seascape changes; climate change; pollution and invasive alien species that impact the abundance and distribution of wild species and can increase stress and challenges among the human communities that use them.
- The survival of an estimated 12% of wild tree species is threatened by unsustainable logging; unsustainable gathering is one of the main threats for several plant groups.



- The effective regulation across supply chains – from local to global – global trade of wild species generally increases pressures on wild species, leading to unsustainable use and sometimes to wild population collapses.

Conclusion

- ✚ Addressing the causes of unsustainable use and, wherever possible reversing these trends, will result in better outcomes for wild species and the people who depend on them.
- ✚ The sustainable use of wild species needed “constant negotiation and adaptive management” along with a common understanding of “sustainable use”.
- ✚ There is a dire need to strengthen international cooperation in terms of ‘multilateral convention’. Moreover, to reduce illegal fishing, unreported and unregulated fishing; suppressing harmful financial subsidies; supporting small-scale fisheries; adapting to changes in oceanic productivity due to climate change, and proactively effective transboundary institutions are much needed.

PEPPER IT WITH
TRAFFIC, CITES, Kunming Declaration, 30by30 target, AICHI Target, CBD, Bottom trawling Fishing

Forest (Conservation) Rules, 2022

News Excerpt

The Ministry of Environment, Forest and Climate Change (Merck) notified the Forest Conservation Rules, 2022 under the Forest Conservation Act.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- The Forest Conservation Rules prescribe the procedure to be followed for forest land to be diverted for non-forestry uses such as road construction, highway development, railway lines, and mining.
- Before the latest rules, the Union government was required to verify the consent of the forest dwellers and ensure recognition of their rights over the forest before approval of a private project.
- The broad aims of the Forest Conservation Act are to protect forests, wildlife and deforestation.
- The Forest Rights Act (FRA) acknowledge the rights of the forest-dwelling tribal communities and other traditional forest-dwellers who depend on the forest for their livelihood and habitation.
- The Forest Rights Act (FRA), 2006 requires governments to seek free, prior, and informed consent of forest dwellers before allowing a project on their traditional lands.

About Updated Rules and Concerns

- The Rules have been promulgated to implement the provisions of the Forest (Conservation) Act, 1980. The rules will simplify and shorten the process of diverting forest land for infrastructure and development projects and make land availability for compensatory afforestation easier.
- Compensatory afforestation refers to planting activities done in place of diversion of forest for non-forest purposes such as mining, setting up of an industry or an infrastructure project.
- The rules shift the Union government’s responsibility of taking consent of Adivasis before the approval of a project on to the state governments, which means that the burden to ensure the rights of Scheduled Tribes to their traditional forestlands also lands on the state governments as ‘forest’ falls under the Concurrent List.

- The new rules clarified that the onus of recognizing forest rights is with the state governments and did away with the role of the union ministry in recognition of forest rights before forest clearance is granted to any infrastructure or other project coming up on forest land.
- The Forest (Conservation) Rules, 2022, delinks mandatory FRA compliance for seeking forest clearance for infrastructure projects and puts onus on states/UTs to ensure that.
- The latest version of the rules, allowed forest land to be diverted to industry without settling questions of the rights of forest dwellers and tribals who resided on those lands. For instance-Rules will allow private developers to cut down forests without getting the consent of forest dwellers, a change that violates a provision of the Forest Rights Act.
- Now, the handover of the forest can be approved and the Centre can collect payment for compensatory afforestation from the private developer even before the state government ensures consent of the forest dwellers. This contradicts the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, or Forest Rights Act 2006.
- The new rules do not mention the earlier requirement of attaining a gram Sabha NOC before diverting forestland for a project. These rules allow forest rules to be settled after the final approval is granted by the center.

Analysis

Issues with the Forest Conservation Act (FCA):

- ✓ The Forest Conservation Act was initially an Ordinance (through the 42nd amendment of the Constitution), later enacted into a law by Parliament. It has just six sections.
- ✓ The FCA doesn't prohibit the felling of trees. Its focus FCA is not trees or forests but rather forest land.
- ✓ The Act has failed to attract public support because it has infringed upon the human rights of the poor native people. The very marginal participation of the poor community in the Act remains one of the major drawbacks which affect the proper execution of the Act.
- ✓ A 2019 analysis by the Legal Initiative for Forests and Environment has found that the FAC generally approves land for diversion without examining questions around consent as it relies on the State government to ensure that this is done.

New Rules and Impacts on Tribal People:

- The new rules allow the Union government to permit the clearing of a forest for a project before prior consent of the forest dwellers.
- The new rules will dilute Forest Rights Act, 2006. It will disempower forest tribals and may displace them. Once forest clearance is accorded, dwellers' claims of resettlement can be ignored. States will be under greater pressure from the Centre to accelerate the land diversion process.

Way Forward

- ✚ There should be all stakeholders approach to discuss about new rules. Consensus building led to sustainability regarding the change while considering the indispensable significance of tribal and forest dwellers.
- ✚ The constructive arguments and debate regarding the forest dwellers' rights should be included in the new Forest Conservation Rules.

PEPPER IT WITH

Reserved Forest, ISFR 2021,
Declaration on Forests and Land
Use. Mivawaki method

Green Grids Initiative (GGI)

News Excerpt

The implementation of the GGI comes at an increased environmental cost due to increased waste disposal.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- Under the International Solar Alliance, India announced the launch of the Green Grids Initiative — One Sun, One World, One Grid (GGI-OSOWOG) in partnership with the United Kingdom.
- The goal of this project is to connect energy systems across borders to accelerate the transition to renewable energy.
- Based on deliberations of CoP26, India announced to accelerate the energy transition in India.

About Green Grid Initiative

- The initiative aims to build a framework for global cooperation on the effective utilization of renewable resources and to help ensure that clean and efficient energy is a reliable option for all nations to meet their energy requirements by 2030.
- This project aspires to harness the sun's energy and build a global interconnected electricity grid to accelerate the transition to renewable energy.
- The development of the grids will take place in three stages:
 - The interconnection of the Indian grids with the Middle East, South Asia and Southeast Asian (MESASEA) grids
 - MESASEA grids' interconnection with the African power grid
 - Finally, global interconnectivity

Benefits for India

- ✓ GGI can transform the traditional energy system by replacing thermal power plants with solar energy, making India more resilient against extreme weather conditions and less dependent on fossil fuels.
- ✓ The implementation of GGI can enhance the quality of life of rural communities in many other areas like access to electronic gadgets, clean drinking water, among others.
- ✓ GGI will help the members in attracting investments in renewable energy sources as well as maximizing the use of skills, technology, and finances. The resulting economic gains would have a positive influence on poverty reduction and assistance in addressing water, sanitation, food, and other socio-economic challenges.

Challenges

- There is a hidden environmental cost of setting up solar energy infrastructure. Solar energy technologies such as batteries and panels use energy-intensive raw materials and several chemicals and heavy metals that need to be handled and disposed of correctly.
- In India, the problem of e-waste and industrial discharge in rivers is at an all-time high. This makes proper waste management mechanisms necessary to reduce the environmental stress, primarily caused by an increase in solar energy infrastructure.
- The initiative also does not define strategies to recycle and repurpose existing infrastructure.

Ways to Minimise the Solar Waste

- ✓ Strong e-waste or Renewable Energy Waste Laws have to be enacted for the manufacturer and developers to take responsibility for end-of-life the solar panel.

- ✓ To bring down the cost of recycling infrastructure investment is required, coordination between the energy and waste sector to efficiently handle the renewable energy waste and build more recycling plants to avoid solar panels ending up in landfills.
- ✓ Solar panel waste is harmful to the environment as it contains toxic metals and minerals that may seep into the ground. New business models, incentives or issues of green certificates to be provided to encourage the recycling industry to participate more.
- ✓ Innovation in design may have an impact on the type of waste they generate; technology advancements will be significant in reducing the impact of renewable energy waste. New panels, for example, use less silicon and produce less waste during the manufacturing process.

Socio-Economic Impacts of Solar

Social/Economic		
Impacts	Positive	Negative
Land use and landscape	<ul style="list-style-type: none"> Decreased land use compared to conventional energy resources Reuse of degraded sites Use of unused sites (such as in deserts) Multi-purpose and integrated use on existing developments or buildings (like rooftops, façades) 	<ul style="list-style-type: none"> Unavailable land/ high competition with other land uses (such as agriculture) Degradation of vegetation and soil erosion Higher up-front costs Visual/landscape experience Microclimatic change Glare risk by reflection
Infrastructure	<ul style="list-style-type: none"> Reduced transmission lines/grids Energy supply for decentralized, low-density off-grid areas, also in developing countries 	<ul style="list-style-type: none"> Requirement for energy storage for continuous supply
Political	<ul style="list-style-type: none"> National energy independency from import Lower military expenses (less conflicts in the oil rich countries) 	<ul style="list-style-type: none"> Economically detrimental subsidies such as uncontrolled and miscalculated fee-in-tariff mechanisms
Energy market	<ul style="list-style-type: none"> Diversification Deregulation 	<ul style="list-style-type: none"> Intermittent supply issues
Industry, R&D, education	<ul style="list-style-type: none"> Jobs creation Higher development and education level 	<ul style="list-style-type: none"> Health hazards and risks during manufacturing phase

Conclusion

India is yet to have a dedicated PV waste management and recycling policy. At present, solar module and battery waste are treated as general electronic waste and fall under the Ministry of Environment, Forest and Climate Change. However, given the distinct nature of this waste and the economic value of components, it is necessary to have a separate regulation in place. At present, India's PV module manufacturing industry is underdeveloped and the majority of the modules are imported from countries like China. Having a module recycling policy in place can make India self-reliant by ensuring a sustainable supply of raw materials and creating employment opportunities.

PEPPER IT WITH
E-waste Rules, CPCB, Minamata Convention, Solar Grid

Tropical Ozone Hole

News Excerpt

According to a recent study published in AIP Advances, A new ozone hole has been detected over the tropics, at latitudes of 30 degrees South to 30 degrees North.

GS CONNECT										
GS	1	2	3	4	5	6	7	8	9	10
I										
II										
III										
IV										
M										

Pre-Connect

- **The ozone layer** lies high in the atmosphere, shielding from harmful ultraviolet (UV) rays that come from the Sun. Human activities effectively formed a hole in it, through the use of gases like chlorofluorocarbons (CFCs) in spray cans and refrigerants, which break down ozone molecules in the upper atmosphere.
- **The Montreal Protocol on Substances that Deplete the Ozone Layer** is the landmark multilateral environmental agreement that regulates the production and consumption of nearly 100 man-made chemicals referred to as ozone-depleting substances (ODS).

About

- The tropical ozone hole is about seven times larger than Antarctica, the study suggested. It also appears across all seasons, unlike that of Antarctica, which is visible only in the spring.
- The hole has become significant since the 1980s. But it was not discovered until this study.
- The tropical ozone hole, which makes up 50 per cent of Earth's surface, could cause a global concern due to the risks associated with it. It is likely to cause skin cancer, cataracts and other negative effects on the health and ecosystems in the tropical region.

Effects of Ozone Layer Depletion

- ✓ **Effect on humans:** Human Reduced ozone levels as a result of ozone depletion mean less protection from the sun's rays and more exposure to UVB radiation at the Earth's surface.
- ✓ **Effects on Plants:** UVB radiation affects the physiological and developmental processes of plants. Despite mechanisms to reduce or repair these effects and an ability to adapt to increased levels of UVB, plant growth can be directly affected by UVB radiation. Indirect changes caused by UVB (such as changes in plant form, how nutrients are distributed within the plant, timing of developmental phases and secondary metabolism) may be equally or sometimes more important than the damaging effects of UVB.
- ✓ **Effects on Marine Ecosystems:** Phytoplankton form the foundation of aquatic food webs. Phytoplankton productivity is limited to the euphotic zone, the upper layer of the water column in which there is sufficient sunlight to support net productivity. Exposure to solar UVB radiation has been shown to affect both orientation and motility in phytoplankton, resulting in reduced survival rates for these organisms. Scientists have demonstrated a direct reduction in phytoplankton production due to ozone depletion-related increases in UVB.
- ✓ **Effects on Biogeochemical Cycles:** Increases in UVB radiation could affect terrestrial and aquatic biogeochemical cycles, thus altering both sources and sinks of greenhouse and chemically important trace gases.

Way Forward

Actions required globally to continue the recovery of the ozone layer are-

- Ensuring that existing restrictions on ozone-depleting substances are properly implemented and global use of ozone-depleting substances continues to be reduced.
- Ensuring that banks of ozone-depleting substances (both in storage and contained in existing equipment) are dealt with in an environmentally-friendly manner and are replaced with climate-friendly alternatives.

PEPPER IT WITH
Sudden Stratospheric
Warming, Jet Stream,

- Ensuring that permitted uses of ozone-depleting substances are not diverted to illegal uses.
- Reducing use of ozone-depleting substances in applications that are not considered as consumption under the Montreal Protocol.
- Ensuring that no new chemicals or technologies emerge that could pose new threats to the ozone layer (e.g., very short-lived substances).

India Forum for Nature-Based Solutions

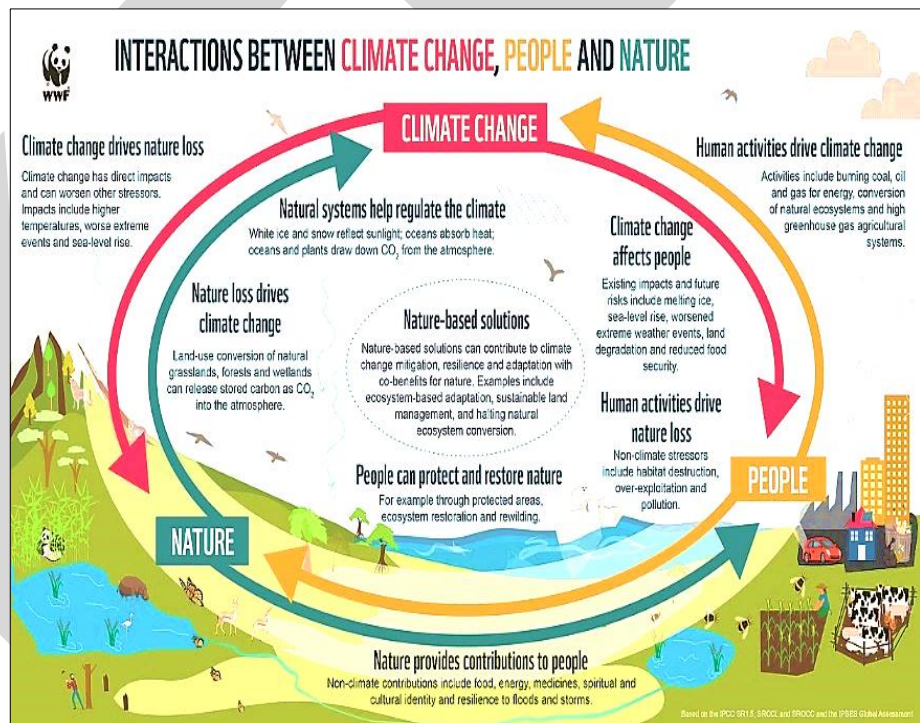
News Excerpt

'India Forum for Nature-based Solutions' is led by the National Institute of Urban Affairs' Climate Centre for Cities (NIUA C-Cube) and anchored by World Resources Institute India (WRI India) under the Cities4Forests initiative.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

About

- The Forum It is intended to mainstream ecosystem-based services and nature-based solutions to build urban climate resilience.
- Nature-based Solutions are actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously benefiting people and nature.
- Nature-Based Solutions (Nbs) are fast emerging as cost-effective and sustainable ways to address climate change-induced challenges such as heat, urban flooding, air and water pollution and storm surges.
- NbS also helps in providing multiple ecosystem benefits along with addressing various societal challenges including building the resilience of the underserved and vulnerable urban communities who are most affected by climate change-induced catastrophes.
- The India Forum for Nature-based Solutions aims to create a collective of NbS entrepreneurs, government entities and like-minded organizations, to help scale urban nature-based solutions by-
 - Defining a shared language and communicating benefits that inform actions at the local level including scaling up of existing NbS interventions.



- Driving investment and strengthening delivery mechanisms through multi-stakeholder coordination.
- Mainstreaming urban ecosystem-based services and nature-based solutions in India through informing policy, plans and project interventions.
- The India Forum for Nature-based Solutions brings together entrepreneurs, solution providers, research organizations, academia, civil society, technical experts, government agencies and policymakers to strengthen climate resilience across Indian cities.
- It is here that nature-based solutions (NbS) should be prioritized as part of India's resilience and adaptation strategy.

Advantages

- Nature-based solutions can contribute to disaster risk reduction, build resilient cities, improve water management and contribute to long-term food security.
- Nature-based solutions can augment the efforts to reduce urban greenhouse gas emissions and help us adapt to the impacts of climate change.
- Besides addressing climate-related impacts, such solutions provide multiple co-benefits in terms of improving air and water quality, enhancing green cover and biodiversity, while creating healthy and sustainable living spaces.

Limitations

- ✓ While nature-based solutions have immense potential for climate-proof cities, there is still a long way to go before they are seamlessly integrated with the overall city development plans.
- ✓ The need of the hour is to move beyond individual and stand-alone initiatives to a more connected and collaborative approach.
- ✓ Research and cooperation at different levels of governance and among institutions will be critical in developing integrated climate, development and biodiversity action plans, to effectively address the intertwined challenges.
- ✓ To successfully mainstream nature-based solutions in city-level development planning, there is a need to make informed choices regarding the identification of appropriate solutions specific to the city's requirements.
- ✓ It is also vital to create awareness and build capacities of local government and institutions to take forward the implementation of nature-based solutions in cities. Faster adoption and effective implementation will also require adequate finance.

Conclusion

A coordinated effort in the planning and implementation of nature-based solutions is critical to its success in our rapidly growing urban areas. Since nature-based solutions have the potential to address the societal challenges prevalent in the regions, they hold the key to transforming our cities into resilient, vibrant and sustainable spaces in the future.

Rajasthan's Menar Bird Village to Become Wetland

News Excerpt

The State government's Forest Department has initiated the process for notification of Menar as a wetland, Menar Village is also recognized as the "bird village".

Pre-Connect

- The Government of India ratified the Ramsar Convention, an international treaty for the conservation of wetlands in 1982. India currently has 49 sites designated as Wetlands of International Importance (Ramsar Sites), with a surface area of 1,093,636 hectares.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

- Wetlands are the 'kidneys' that work as pollution filters from both point and non-point sources and are important for carbon sequestration and emissions.

About

- The villagers in Menar (Udaipur) have built a healthy ecosystem for birds during the last four years with activities such as patrolling, the rescue of injured birds and reporting any attempts for poaching.
- More than 150 species of local and migratory birds inhabit the two lakes in the winter season.
- They include greater flamingo, white-tailed lapwing, pelican, marsh harrier, bar headed goose, common teal, greenshank, pintail, wagtail, green sandpiper and red-wattled lapwing.
- Bird lovers and tourists flock to the village after the arrival of migratory birds from as far as Central Asia, Europe and Mongolia.

Ramsar Convention and Wetlands in India

- ✓ Ramsar Convention on Wetlands of international importance is an international treaty for the conservation and sustainable use of wetlands.
- ✓ It was signed in 1971 and named after Ramsar city of Iran.
- ✓ Every three years, representatives of the contracting parties meet at the **Conference of Contracting Parties (COP)**. Last COP was held at China as COP14 in 2021.
- ✓ 2nd Feb is celebrated as World Wetland Day.
- ✓ There are over 2300 Ramsar sites in 171 Ramsar countries. UK with 175 and Mexico with 142 sites respectively have highest number of sites.
- ✓ Bolivia has the largest area under Ramsar Sites
- ✓ India has 49 Ramsar sites spread across 20 states and these are:

State	Site Name	Important Fact
Andhra Pradesh	Koellru Lake	It supports 200 species of birds including critically endangered Spoon Billed Sandpiper.
Assam	Deepor Beel	Associated with Pabitra WLS. Famous for Mandarin duck and Maguri-Motapung beel.
Bihar	Kabartal Wetland	Added in 2020, an Ox bow lake and a dolphin observatory. Known for Red headed White rumped Indian vulture.
Gujarat	1. Khijadia Wildlife Sanctuary (WLS) 2. Nalsarover Bird Sanctuary 3. Thol Lake Wildlife Sanctuary 4. Wadvana Wetland	1, 3, and 4 were added in 202. Khijadia WLS is fresh water lake and have salt and fresh water marshlands.
Haryana	1. Bhindwas Wildlife Sanctuary 2. Sultanpur National Park	Both were added to list in 2021. Bhindwas WLS is associated with Egyptian Vulture and Sahibi river and Khaparwas WLS

Himachal Pradesh	1. Chandertal Wetland	Renuka is the smallest while Chandertal is the second smallest wetland in India
	2. Pong Dam/Maharana Pratap Lake	
	3. Renuka Wetland	
Jammu & Kashmir	1. Wular Lake	Surinsar-Mansar lakes were added in 2020.
	2. Hokera Wetland	
	3. Surinsar-Mansar Lakes	
	4. Tsomoriri Lake	
Kerala	1. Ashtamudi Wetland	Ashtamudi Lake is associated with Neendakara port and Muroe Island. Vembanad Lake is associated with Kochi Port and Nehru boat race. It is also second largest wetland
	2. Sasthamkotta Lake	
	3. Vembanad Kol Wetland	
Ladakh	Tso Kar Wetland Complex	Made up of two water bodies Startsapuk Tso (fresh-water) and Tso Kar lake (Saline). Situated on Rupshu Plateau and categorized as A1 in Bird Life International.
Madhya Pradesh	Bhoj Wetlands	Known for Sarus Crane
Maharashtra	1. Lonar Lake	Lonar Lake turned pink in color in 2020 due to haloarceae bacteria culture. It is a crater lake.
	2. Nandur Madhameshwar	
Manipur	Loktak Lake	Famous for phumdis floating over it. Keibul Lamjao National Park the only floating national park (NP) in the world is located on loktak lake. The NP is last natural refuge of Sangai.
Odisha	1. Bhitarkanika Mangroves	Bhitarkanika Mangroves are associated with AbdulKalam Island and Gahirmatha Wildlife sanctuary. On south of Chilka lake Rushikulya rivers flows which is associated with olive ridley turtle. Chilka is also third largest wetland in India.
	2. Chilka Lake	
Punjab	1. Beas Conservation Reserve	Beas Conservation reserve is associated with Indus river Dolphin and recently Ghariyal were also realised into Beas river.
	2. Harike Lake	
	3. Kanjli Lake	

	<div>4. Keshopur-Miani Community Reserve</div> <div>5. Nangal Wildlife Sanctuary</div> <div>6. Ropar Lake</div>	
Rajasthan	<div>1. Keoladeo Ghana National Park (NP)</div> <div>2. Sambhar Lake</div>	Keoladeo Ghana NP is the oldest Ramsar Site in India
Tamil Nadu	Point Calimere Wildlife and Bird Sanctuary	Famous for Spoon billed Sandpiper a critically endangered bird.
Tripura	Rudrasagar Lake	It is known for critically endangered three striped roof turtle.
Uttar Pradesh	<div>1. Bakhira Wildlife Sanctuary</div> <div>2. Haiderpur Wetland</div> <div>3. Nawabganj Bird Sanctuary</div> <div>4. Parvati Arga Bird Sanctuar</div> <div>5. Saman Bird Sanctuary</div> <div>6. Samaspur Bird Sanctuary</div> <div>7. Sandi Bird Sanctuary</div> <div>8. Sarsai Nawar Jheel</div> <div>9. Sur Sarovar</div> <div>10. Upper Ganga River (Brijghat to Narora Stretch)</div>	<p>Parbati Arga is a ox-bow lake associated with Saryu river a tributary of river Ganga.</p> <p>Haider[ur wetland is a human made wetland formed in 1984 located in Hastinapur WLS.</p> <p>Bakhira WLS is the largest natural flood plain wetland in India.</p>
Uttrakhand	Asan Conservation Reserve	Located on Asan River and Yamuna River barrage.
West Bengal	<div>1. East Kolkata Wetlands</div> <div>2. Sunderbans Wetland</div>	Sundarbans is the largest wetland in India.

SCIENCE & TECHNOLOGY

ISRO POEM Platform

News Excerpt

India Space Research Organisation (ISRO) had successfully launched the PSLV Orbital Experimental Module or 'POEM'. This was done along with launching of three Singapore satellites, marking 2nd commercial mission of NewSpace India Limited (NSIL), the commercial arm of ISRO.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

Orbital Platforms

- It is a space station constructed for a single purpose.
- It orbits a celestial body such as a planets, asteroid or star.
- They are being used as bases for
 - Fuel refineries
 - Terraforming operations
 - Mining Operations
 - Orbital bombardment
 - Shipping centers

Orbital Platform and ISRO

- ISRO in 2019 started working on reducing space junk through its idea of PS4-OP.
- The core plan was to utilise the fourth stage of PSLV (Polar Satellite Launch Vehicle) as an in-orbit experiment module.
- This module would can be used to carry out scientific experiments for an extended duration of upto 6 months, instead of becoming a junk as soon as it reaches space.
- ISRO in its PSLV-C44 mission kept the fourth stage alive as an orbital platform for space-based experiments.

PSLV Core alone Variant (PSLV-CA)

- Known as work horse of ISRO PSLV is the third generation launch vehicle of India.
- It is the first Indian launch vehicle to be equipped with liquid stages.
- It is a four-stage engine with Solid-Liquid-Solid-Liquid fuel pattern.
- Generally, it uses 6 solid rocket strap-on motors to augment the thrust provided by the first stage. However, in PSLV-CA no strap-on are used.

About POEM

- ✓ It performs in-orbit scientific experiments using the spent PS4 stage as an orbital platform.
- ✓ It is the first time that PS4 stage would orbit the earth as a stabilized platform.
- ✓ It will be a stabilized orbital platform which will help in keeping the payload in a correct position with respect to the Earth, sun etc.

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

- ✓ It contains-
 - Navigation Guidance and Control (NGC) system-
 - It will help in attitude stabilization that will help in controlling its orientation within permissible limits.
 - This will act as the platform's brain to stabilize it with specified accuracy.
 - It navigates using four sun sensors, a magnetometer, gyros & NavIC.
 - It derives the power from the solar panels mounted around the PS4 tank and a Li Ion battery.
 - It carries dedicated control thrusters using Helium gas storage.
 - It is enabled with the telecommand feature.
- ✓ It carried six payloads including two from Indian Space Start-ups Digantara and Dhruva Space, enabled through IN-SPACE and NSIL.

PEPPER IT WITH

Vikas Engine, Gaganyaan Project, Kibo, In-SPACE, NSIL

Significance

- A stabilized orbital platform will help in the conduct of scientific experiments with a lot of accuracies.
- It will help in developing the future space station of India.
- It will provide a continuity factor to in-orbit research and would allow for a detail study of different aspects of space.
- It will also in developing combat capability in space, if and when need arises.
- It will help in reducing the rate of creation of space junk.

TiHAN

News Excerpt

The government of India under the aegis of the Ministry of Science & Technology has inaugurated a first-of-its-kind, state-of-the-art "Autonomous Navigation" facility to develop unmanned ground and aerial vehicles in the IIT Hyderabad campus. It will be called Technology Innovation Hub on Autonomous Navigation (TiHAN).

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- Autonomous navigation (AN) means that a vehicle can plan its path and execute its plan without human intervention. It can either be possible through:
 - Use of remote navigation aids in the planning process.
 - Use of sensors that allows a computer to calculate its path.
 - They can also rely on visual, auditory, and olfactory cues.
- Autonomous navigation relies on
 - Mapping
 - Localization
 - SLAM (Simultaneous localization and mapping)
 - Path Planning

- Row Following
- Trajectory Tracking
- Obstacle Avoidance
- Autonomous navigation is a key technology in the development of robotic intelligence.
- Smart systems are dependent on accurate sensor information in order to function optimally and here autonomous navigation systems play a key role.
- AN is the foundation technology of the Unmanned Aerial Vehicle (UAV), a technology that has multiple applications from primary to secondary to the tertiary sector. However, their military application makes them a crucial technology in modern warfare.

SIRO

- The Scheme will bring together non-commercial organisation which are working in development of indigenous technology.
- The scheme will include the field of natural and applied sciences, agricultural, medical and social sciences.
- They are eligible for customs duty exemption and excise duty waiver on import of equipment/instruments and their spares and consumables
- Scheme will provide other assistance as may be necessary for the efficient working of a research-oriented organization.

About TIHAN

- It is a multidisciplinary initiative with the objective of making India a global player in Smart Mobility technology.
- It will provide testbed to investigate the operation of unmanned and connected vehicles in a controlled environment by simulating various scenarios that may occur in real-life. Incidents modeled will range from frequently occurring to extreme cases.
- It will deliver value through startup support system which includes pre-incubation, incubation and acceleration support programs for entrepreneurs and startups. For this it has program called PRAYAS.



- It is recognized as a Scientific and Industrial Research Organization (SIRO) by the Department of Scientific and Industrial Research.

PEPPER IT WITH

Drone Rules in India, Project Ghatak, RPAS, NM-ICPS

Significance

- ✓ It will allow faster technology development and global market penetration.
- ✓ It will push India's vision of 'Atmanibhar Bharat', 'Skill India' and 'Digital India'.
- ✓ It will help in developing an advance Unmanned Aerial Vehicles (UAVs), Remotely Operated Vehicles (ROVs), etc. industry in India which will help in 360-degree development.
- ✓ Indian high-tech startup system will expand and will be able to compete with global giants like Israel, USA and China.
- ✓ Reduced reliance on foreign countries for critical technologies will help India in mitigation of any security threat. A key lesson from Russia-Ukraine conflict is one has to fend for itself and India can't miss this learning.

ScNa and Renewable Energy

News Excerpt

Scientists at the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) have discovered a new material which is known as "single-crystalline scandium nitride (ScN)". It can convert infrared light into renewable energy.

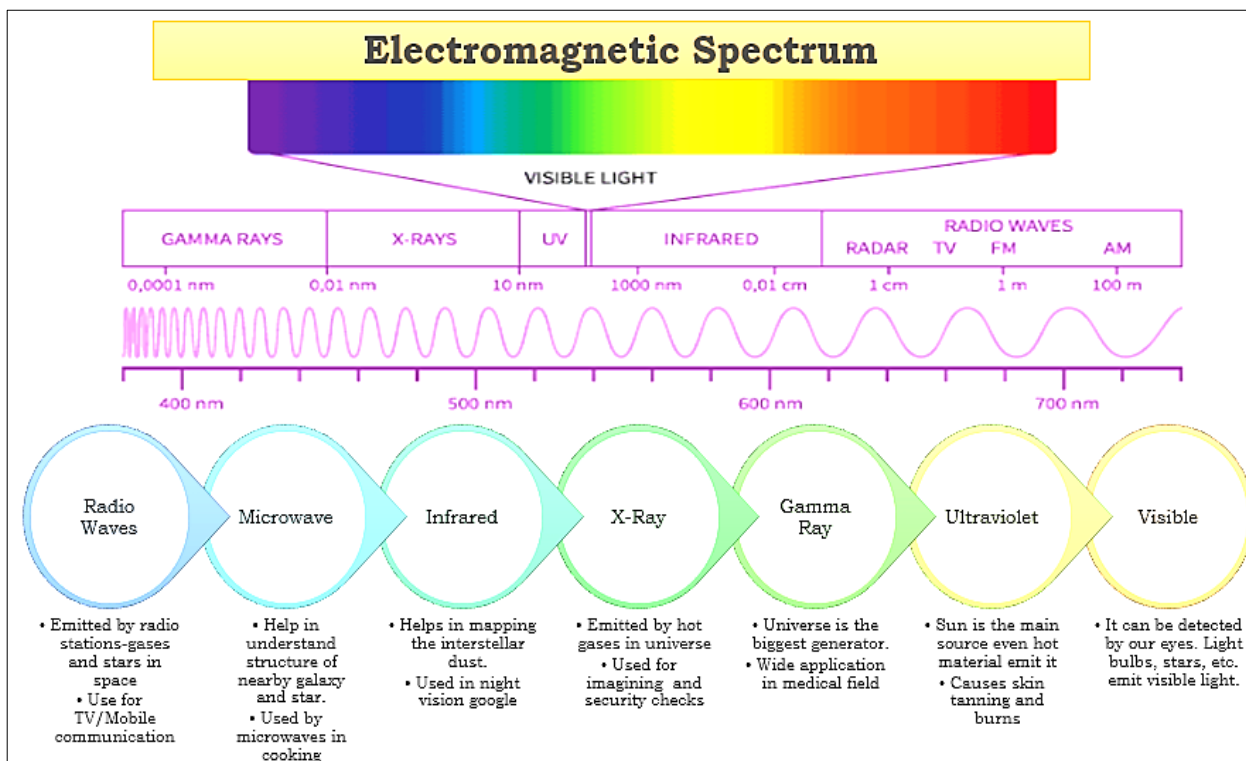
GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- Electricity and magnetism were considered two different phenomena's however James Clark Maxwell introduced the concept of electromagnetism.
- Electromagnetic radiation is a form of energy that is produced when electrically charged particles travel through a matter or vacuum or by oscillating magnetic and electric disturbance.
- Electromagnetic radiation release photons which are bundles of light energy which travel at the speed of light.
- The electromagnetic spectrum shows range of all types of electromagnetic radiation. It covers frequencies from below 1 hertz to above 1025 hertz.
- The entire range of the electromagnetic spectrum is classified in the increasing order of frequency and decreasing order of wavelength.

Visible Light Communication

- ❖ It's a form of wireless communication that uses visible light spectrum. It will transmit data using fluorescent light.
- ❖ In this, light emitted from a LED light (act as a transmitter) through rapid light modulation is received by a receiving device, which is then translated into usable data. MAC layer points direct this data where it needs to go.
- ❖ It has several advantages over present highly-congested radio spectrum.
 - High Bandwidth and Low Latency
 - Lower power consumption
 - Single confinement providing an edge as a more secure network
 - Work where radio frequency is considered as hazardous.
- ❖ It has several applications such as Li-fi, smart grid-friendly appliances, smart networking, medical application etc.



Polariton Excitations

- Polaritons are hybrid particles made up of a photon strongly coupled to an electric dipole.
- Polaritons exist when there is an exciton. This exciton can occur when an incoming electromagnetic wave removes an electron from a quantum wall and thereby create an electron-hole.
- Exciton though a proton lookalike behaves like an electron and it along with the proton still present in a quantum wall act in a manner analogous to the electron and proton in an atom.
- Now in a closed system when the electromagnetic wave hit on the quantum wall and Exciton is created, its wave and the external electromagnetic wave have a strong resonance a quasi-particle results from the admixture of states which is called Polaritons.

PEPPER IT WITH
Spectroscopy, Mobile communication, SATCOM

Experiment and its Significance

- ✓ Using ScN as quantum wall scientist produced excitons which produced new polaritons. They used infrared light as electromagnetic waves as ScN has high efficiency in emitting, detecting, and modulating infrared light
- ✓ These polaritons produced can be utilized for solar and thermal energy harvesting.
- ✓ Similar to ScN, its family members like Gallium nitride (GaN), Scandium nitride are compatible with Si-Chip technology and hence its integration for on-chip optical communication devices is possible using the same Polaritons method.

Varroa Mite

News Excerpt

The Australian government has ordered the killing of millions of honey bees in order to avert the disastrous impact of a parasitic plague called Varroa mite.

Pre-Connect

Various types of interaction between organisms can be classified into-

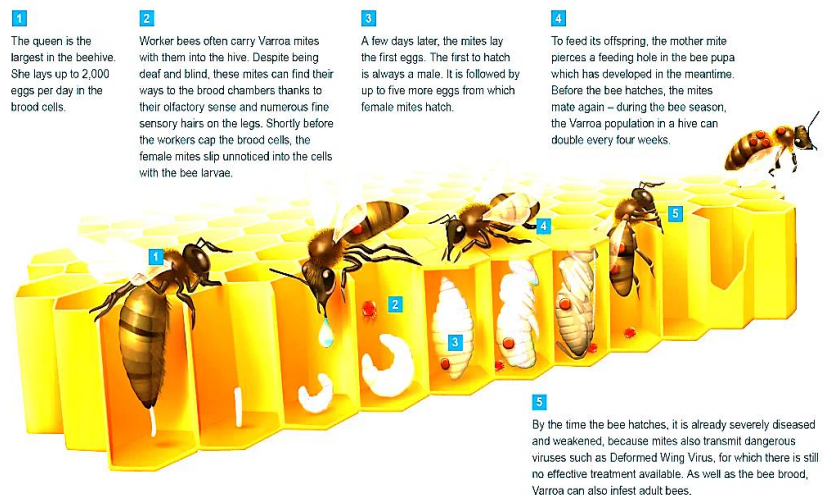
- Negative- At least one species is harmed
 - **Amensalism:** One species is harmed by the other species which remains unaffected by the presence of the other species. Ex- Walnut trees produce chemicals that prevent other trees from growing near them
 - **Predation:** It acts as conduit for transferring energy from one trophic level to another. It keeps prey populations under control. It helps in maintaining species diversity in a community.
 - **Parasitism:** It is a type of relationship between the two living organisms where one is benefited from the expanse of the other. The organism that is benefitted is called the parasite, while the one that is harmed is called the host. Parasitism is very common in insects. E.g., tapeworms, fleas, and barnacles.
 - **Competition:** It is an interaction between two populations in which both species are harmed to some extent. It occurs when both need a vital resource that is short in supply.
- Positive- Both species are benefited
 - **Commensalism:** It is the interaction in which one species is benefitted and the other is not harmed. For e.g., some species benefit by utilizing the shelter or transport of another species. For e.g. Ferns, mosses and orchids and use the surface of trees for support and for obtaining sunlight and moisture.
 - **Mutualism:** It is the interaction between two species where both are benefitted in this interaction. Sometimes both cannot survive without each other. E.g. Include Lichens- algae and fungus.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III							■		■		
IV											
M											

About Varroa Mite

- It feeds on honeybees and is capable of eradicating entire colonies of honeybees.
- It frequently circulates amongst bees as well as through beekeeping supplies like removed combs.

Understanding the life cycle of the Varroa mite



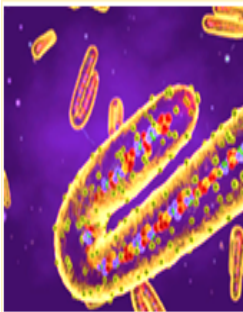
- Their primary feed is larvae and pupa in developing brood, causing malformation and weakening as well as virus transmission.
- As the mite population in bee colonies grows, the symptoms become more severe.
- In general, heavy infestations result in crippled bees, impaired flight performance, a lower rate of return to the colony after foraging, and reduced colony productivity.

Possible Fallout

- ✓ After the Covid-19 pandemic, Australian economy is recovering and this step might threaten the multimillion-dollar honey sector is under severe threat from the recent outbreak.
- ✓ Bees are the most important pollinators, ensuring food and food security, sustainable agriculture, and biodiversity. This might lead to the food crisis in the future.

PEPPER IT WITH
Western Honey Bee, Colony collapse disorder, Pollinator decline

Marburg Virus and Nairobi Fly Infection



Marburg Virus

About Virus

- It's a highly virulent disease which causes hemorrhagic fever.
- Fatality rate is upto 80%.
- It is carried by bats and causes belong to same family as Ebola virus.
- There have been 12 major Marburg outbreaks since 1967, mostly in southern and eastern Africa.

- A case of extremely contagious disease known as Marburg virus was confirmed in Guinea.
- The case came into limelight just after two months when Guinea was declared Ebola free.
- The case was detected in in Guinea's Gueckedou district. It is the same area where first case of Ebola was detected.

- Initial case of human infection is due to prolonged exposure to mines or caves inhabited by Rousettus bat colonies.
- It human to human transmission via direct contact with blood, secretions, organs or other bodily fluids.
- Symptoms include headache vomiting blood, to jaundice, inflammation of the pancreas, severe weight loss etc.
- Case can be confirmed with Polymerase Chain Reaction (PCR) and Enzyme-Linked Immunosorbent Assay (ELISA) testing.
- Since no specific treatment is available Supportive hospital therapy should be utilized which include balancing the patient's fluids and electrolyte, oxygen status and blood pressure and treatment for any complicating infections.



Nairobi Fly Infection

- Recently Students from Sikkim have contracted Nairobi Fly in infection after they came in contact with Nairobi flies. It has caused skin infections
- Initial outbreak of infection was reported in Africa in 1998.
- Recent outbreaks are recorded in India, Japan, and Paraguay.

About Infection

- These species are native to East Africa where it is also known as Kenyan flies or dragon bugs.
- These are orange coloured small beetle like insects and have two species- Paederus Eximius and Paederus sabaeus.
- Areas with high rainfall supports their growth.
- Though they don't bite but on skin they might release a potent acidic substance known as Pederin.
- This substance cause skin irritation which leads to lesions and unusual marks on skin.
- Treatment include antibiotics, steroids, and antihistamines.

SECURITY

Y- 3023 Dunagiri

News Excerpt

Defence Minister launched Y- 3023 Dunagiri, Project 17A frigate built by Garden Reach Shipbuilders Limited (GRSE) in Kolkata.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- P17A Frigates are a follow-on class of the P17 (Shivalik Class) Frigates with improved stealth features, advanced weapons and sensors and platform management systems.
- Seven P17A Frigates are under various stages of construction at Mazagaon Dock Limited (MDL) and GRSE.
- Dunagiri' would be a world-class stealth frigate with multidimensional capabilities to destroy enemies from sea, sky, and underwater.

Significance

- The security challenges in the Indian Ocean region and Indo-Pacific are constantly increasing.
- To achieve the **Prime Minister's Vision of 'SAGAR'**, that is 'Security and Growth for All in the Region' and to protect, preserve and promote India's National Maritime Interests, Indian Navy, Indian Coast Guard and other organisations have to increase the infrastructure and assets so that the country stay ahead of the curve in dealing with these challenges.
- The Dunagiri project generated more than 3000 local employment opportunities.

ART AND CULTURE

Sannati: Ancient Buddhist site

News Excerpt

The Archaeological Survey of India has taken up conservation work at this important Buddhist site near Kalaburagi.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- This ancient Buddhist site is located on the bank of Bhima river near Kanaganahalli (forming part of Sannati site) in Kalaburagi district.
- Sannati and Kanaganahalli were small and ordinary villages on the bank of Bhima till 1986 when the Kali temple at the Chandralamba temple complex in Sannati collapsed.
- In the process of clearing the debris, they discovered an Ashokan edict that put the villages on the world map and opened new avenues of historical research on Mauryan Emperor Ashoka and Buddhism in its early years.

About the site

- It was left almost unattended to for twenty years after it came to light through the excavation by the Archaeological Survey of India between 1994 and 2001.
- A question related to this site was raised in Parliament.

Excavation Finds

- ✓ The Kanaganahalli excavation opened up many marvels.
- ✓ For example, an 'abandoned well' in the eyes of local villagers turned out to be the magnificent Maha Stupa, which was referred to as Adholoka Maha Chaitya (the Great Stupa of the netherworlds) in the inscriptions and, more significantly, the stone-portrait of Emperor Ashoka, surrounded by his queens and female attendants.
- ✓ While the Stupa is believed to be one of the largest of its time, the stone-portrait is considered to be the only surviving image of the Mauryan Emperor which had the inscription 'Raya Asoko' in Brahmi on it.
- ✓ The Maha Stupa is believed to have been developed in three constructional phases – Maurya, Early Satavahana and Later Satavahana periods stretching from 3rd Century B.C. to 3rd Century A.D.
- ✓ The Stupa is believed to have been destroyed in an earthquake.
- ✓ The recoveries included around 60 dome slabs with the sculptural rendering of Jataka stories, Portrait of Ashoka, Shatavahana monarchs and certain unique depictions of Buddhist missionaries sent by Ashoka to different parts; 72 drum-slabs decorated with a variety of Dharma-Chakras, Stupas, the first sermon, Bodhi-tree, Naga Muchulinda, Vihara complexes; over 10 inscribed sculptures of the Buddha, over a dozen Buddha-Padas; fragments of Ayaka pillars, umbrella stones and shafts, parts of sculptures of Yakshas and lion and 250 Brahmi inscriptions with varied paleographical features.

PEPPER IT WITH
UNESCO heritage sites in India, Ashokan inscriptions

A potential UNESCO site

- The ASI site in Sannati is worth being a UNESCO World Heritage Site. There is a preparation a detailed report on the historical importance of the site to submit to UNESCO.

Developmental drawbacks

- ✚ However, as of now, there are not even well-developed roads to Sannati and Kanaganahalli which have the potential of attracting tourists from all over the world, especially from countries

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599

with sizable Buddhist populations like China, Thailand, Japan, Myanmar, Sri Lanka and Vietnam.

- ✚ Barring a few occasions of visits by a handful of research scholars, historians and enthusiasts, the ASI site wears a deserted look throughout the year with armed guards at its gate.

Monument of National Importance

News Excerpt

A team from National Monuments Authority submits report to declare Mangarh hillock in Rajasthan as a monument of National Importance as tribute to 1500 Bhil tribal freedom fighters.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Pre-Connect

- Mangarh, the hillock in Banswara District situated at the Gujarat-Rajasthan border, is a site of a tribal uprising where a massacre of over 1500 Bhil tribal freedom fighters took place in 1913.
- The place is also known as the Adivasi Jallianwala, and there has been a demand to build a memorial.
- On November 17, 1913, British forces opened fire on tribals gathered at the site who were holding a meeting in protest, led by a leader from the community Govind Guru, killing over 1,500.

Who are the Bhils?

- Bhil, an ethnic group of some 12.6 million people in western India.
- Historically, many Bhil communities have been known for rugged independence, and some have been associated with banditry.
- The Bhil are distributed widely in upland areas of several states, **from Ajmer in central Rajasthan on the north, to Thane in western Maharashtra on the south**, to Indore in western Madhya Pradesh on the east, and to Surat in south-eastern Gujarat on the west.
- Nearly all of the Bhil engage in agriculture, some using the **slash-and-burn (jhum) method** but most employing the plough.
- The highland Bhil generally live in scattered houses made of wattle and thatch.
- Most Bhil worship local deities in varied pantheons; a few aristocratic segments such as the Bhilala and some plains groups employ Hindu Brahman priests; others are converts to Islam.
- Their dialects are akin to Gujarati or to other Indo-Aryan languages rather than to the Munda or Dravidian languages of most other **Adivasi, or "original inhabitants,"** of India.

PEPPER IT WITH

Tribal rebellions of
Santhals, Mundas,
Mapillah

MISCELLANEOUS

The platform of Platforms (POP) under eNAM

- With the introduction of POP, farmers will be facilitated to sell the product outside their state borders.
- This will increase farmers' digital access to multiple markets, buyers and service providers and bring transparency in business transactions to improve price search mechanism and quality commensurate price realisation.
- 41 service providers from different platforms are covered under POP facilitating various value chain services like trading, quality checks, warehousing, fintech, market information, transportation etc.
- The PoP will create a digital ecosystem, which will benefit from the expertise of different platforms in different segments of the agricultural value chain.
- The inclusion of various service providers not only adds to the value of the e-NAM platform, but also gives the users of the platform options to avail services from different service providers.
- It enables farmers, FPOs, traders and other stakeholders to access a wide variety of goods and services across the agricultural value chain through a single window, thereby giving more options to the stakeholders.
- Moreover, while selecting a good quality Goods/Service Provider, it saves the time and labour of the stakeholders.
- The POP can be accessed through e-NAM mobile app which can be downloaded from Google Play Store.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III											
IV											
M											

Open Acreage Licensing Programme

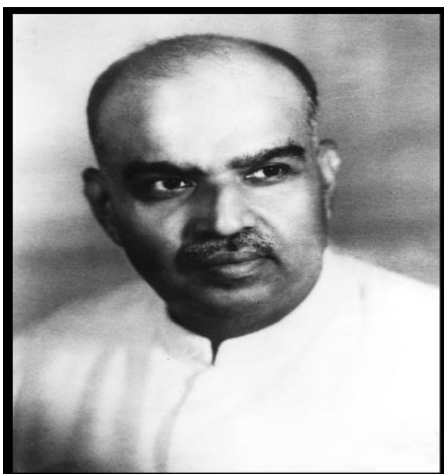
- Ministry of Petroleum and Natural Gas launches Open Acreage Licensing Programme Bid Round-VIII.
- The Hydrocarbon Exploration and Licensing Policy (HELP) was promulgated on 30 March 2016.
- Since then seven rounds of Open Acreage Licensing Programme (OALP) have already been concluded and 134 Exploration & Production blocks awarded comprising 2,07,691 sq.km of area spread across 19 sedimentary basins.
- The Ten blocks under present bid round are spread across 9 Sedimentary Basins and include two on land blocks, four shallow Water blocks, two Deep Water Blocks and two Ultra-Deep Water blocks. It is expected that OALP Round VIII would generate immediate exploration work commitment of around USD 600-700million.
- The Hydrocarbon Exploration & Licensing Policy (HELP), which adopts the Revenue Sharing Contract model, is a giant step towards improving the 'Ease of Doing Business' in the Indian Exploration and Production (E&P) sector.
- It comes with attractive and liberal terms like reduced royalty rates, no Oil cess, no revenue share bidding for blocks in Category-II and III Basins, marketing and pricing freedom, round the year bidding, freedom to investors for carving out blocks of their interest, a single license to cover both conventional and unconventional hydrocarbon resources, exploration permission during the entire contract period, and an easy, transparent and swift bidding and awarding process.

'Statue of Peace' of Swami Ramanujacharya

- A '**Statue of Peace**' of Swami Ramanujacharya made of marble was inaugurated **in Srinagar**.
- Situated in the Sonwar region of Srinagar, this incredible statue symbolises peace in the valley and in the country
- Ramanuja or Ramanujacharya was one great Hindu philosopher and a social reformer who is known for starting the Bhakti Movement in India.
- He was born on April 25, 1077 CE into a Tamil Brahmin community in a small village known as Sriperumbudur (Tamil Nadu) during the Chola period.
- His devotees followed Vaishnava tradition and there are some significant Vaishnava temples associated with Ramanuja's tradition.
- One of the very famous is the Srirangam Ranganatha temple in Tamil Nadu.

Personalities In News

Dr. Syama Prasad Mukherjee



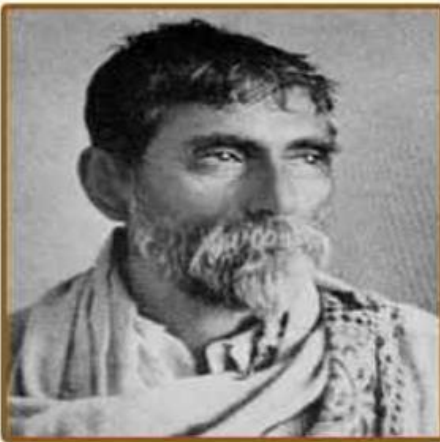
- Dr. Syama Prasad Mukherjee was a leading voice of the Nationalist approach.
- He created a new understanding of Indian nationalism not only through his writings but also as a front leader.
- Mukherjee gained prominence at the national level in the late 1930s when he associated himself with **Hindu Mahasabha** and later became its National President.
- He remained on the **national political scene** till his mysterious death on 23 June **1953 in Srinagar**.
- During this period, he defined and shaped the idea of nationalism for a safe, secure and prosperous India.
- To begin with, he managed to salvage a large territory for India through his efforts.
- He was a modern, conservative, nationalist who not only worked for the idea of '**territorial nationalism**' but also played an important role in popularising the idea of '**cultural nationalism**'.

Acharya Prafulla Chandra Ray

- He is known as "Father of Indian Chemistry", Prafulla Chandra Ray was a well-known Indian scientist and teacher and one of the first "modern" Indian chemical researchers.
- He discovered the stable compound mercurous nitrite in 1896 and established Bengal Chemical and Pharmaceutical Works Ltd, India's first pharmaceutical company in 1901.
- Also a very passionate and devoted social worker, he did not support the caste system.
- His autobiography "Life and Experiences of a Bengali Chemist", published in two volumes in

www.ksgindia.com

DELHI: VIJAY NAGAR 9717380832 & OLD RAJENDER NAGAR 9811293743 | JAIPUR: 8290800441 | PATNA: 7463950774 | RANCHI: 9939982007
BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 | INDORE: 7314977441 | IMPHAL: 9650245599
t.me/ksgindia | facebook.com/khanstudygroup | youtube.com/khanstudygroupksg | Instagram.com/khanstudygroup | WhatsApp 9868005599



1932 and 1935 documents his own motivations as a scientist and the sweeping changes India was experiencing during his lifetime.

KSG

Concept Clearing Assignment

1. "Any road accident is the result of interaction between three players which are driver, vehicle and road". In the context of statements discuss the causes of road accidents in India. Also highlight initiatives taken by government to address the issue of road accidents.
2. Targeting of children by companies as a consumer of products has generated a culture of misleading advertisement. In the context of the statements discuss the need of child consumer protection in India and also enumerate steps taken by government to address the issue.
3. Discuss the challenges in Urban planning in India. Also suggest some measures to ensure sustainable urban development in India.
4. Livestock plays a crucial role in diversification of agro-economy. In the context of the statement critically examine the health issues with livestock in India. Also, highlight initiative taken by government in promotion of animal health.
5. Discuss the significance of India-Australia relationship in assuring energy security of India. Also highlight the cooperation between the two nations in relation with critical minerals.
6. "The debt trap policy of Infrastructure development has led to serious crisis in emerging economies across the globe". In the context of the statement highlight the significance of Partnership for Global Infrastructure and Investment.
7. "While the 21st century is being touted as the century of Asia, Africa is not far behind". In the context of the statement Discuss the significance of Africa in Indian foreign policy. Also, highlight the initiative of government of India in strengthening India-Africa partnership.
8. With the advent of I2U2 and Quad, India's relationship with US is poised for much better complementary synergies in the future. Discuss.
9. Nature bases solutions is our only way out of the environmental catastrophe we created. Comment.
10. What do you understand by the term ozone layer depletion? Highlight the impact of Ozone layer depletion on environment.
11. Forest conservation in India is the soul of Indian environmentalism. In the context of statement discuss the forest conservation rules 2022.
12. What do you understand by the term Primary Agriculture Credit Societies (PACS)? Explain the significance of the computerization of PACS.
13. Explain the factors behind the depreciation of Indian rupee. Do you think Internationalization of Indian currency can address the issue of sliding of rupee? If yes, elaborate with example.
14. India's shift from defence importer to exporter will change the paradigm of defence manufacturing in India. Comment.
15. Gig economy is the new reality of India's job market. In the context of the statement highlight the challenges of the gig economy in India. Also suggest some measures to address those challenges.

PT Oriented Questions

1. Consider the following statements regarding the regulation of Digital Speech in India:

1. Information Technology Act 2021 mandates social media to exercise greater diligence with respect to content on their websites.
2. IT act 2000 empowers police to make arrest if in its their subjective discretion they found menacing and can cause annoyance.

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

2. Recently, Election Commission of India has announced election schedule for the office of President and Vice-President, in this context consider the following statements:

1. Manner of the Election of the President and Vice-President of India is borrowed from the Irish Constitution.
2. For both President and Vice President notification calling election must be issued within the period of sixty days before the expiry of the term of the office.
3. For the office of the President a candidate nomination must be subscribed by at least fifty electors as proposers and at least fifty electors as seconders.

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

3. Consider the following pairs:

National Emblems	Features
1. A Galloping Horse	Representing West direction

2. A lion	Symbolizes spreading of Buddha
3. A Bull	It depicts the attainment of enlightenment
4. An Elephant	It depicts dream of Queen Maya

How many pairs given above is/are correctly matched?

- (a) Only 1 pair
(b) **Only two pairs**
(c) Only three pairs
(d) All four pairs

4. Consider the following statements regarding the Financial services Institutions Bureau (FSIB):

1. It issues guidelines for selecting general managers and directors of public sector general insurance companies.
2. It's a government body set up under the Department of Financial Services.

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

5. Consider the following statements regarding cryptocurrencies:

1. A cryptocurrency is a form of digital or virtual currency based on a network that is distributed across a large number of computers.
2. Cryptocurrencies can be mined or purchased from cryptocurrency exchanges.
3. Cryptocurrencies are backed by any public or private entities.

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
6. Which of the following statements best describe the disadvantages of depreciating of Indian rupee?
1. Buying cars becomes more expensive.
 2. Losses in Information and Technology sector.
 3. Electronic items, such as mobile phones and other appliances are also likely to become more expensive.
- Select the correct answer using the code given below:
- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3
7. Recently, India Space Research Organisation (ISRO) had successfully launched the PSLV Orbital Experimental Module or 'POEM', in this context consider the following statements:
1. It performs in-orbit scientific experiments using the spent PS4 stage as an orbital platform.
 2. It is first time that PS4 stage would orbit the earth as a stabilized platform.
- 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
8. With reference to Autonomous navigation (AN) recently seen in news, consider the following statements:
1. It means that a vehicle is able to plan its path without human intervention.
 2. It uses sensors that allows computer to calculate its path is used.
3. It cannot be used in military application.
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
9. Which of the following statements best describe the features of Visible Light Communication?
1. High Bandwidth and Low Latency
 2. High Power consumption
 3. Work where radio frequency is considered as hazardous.
 4. Single confinement providing an edge as a more secure network
- Select the correct answer using the code given below:
- (a) 1, 2 and 3 only
(b) 2 and 3 only
(c) 1, 3 and 4 only
(d) 2, 3 and 4 only
10. Consider the following statements regarding the Code of Criminal Procedure (CrPC), 1973:
1. Section 436 of the CrPC states that a person accused of a bailable offence under I.P.C. can be granted bail.
 2. Section 437 of the CrPC states that the accused does not have the right to bail in non-bailable offences.
 3. A provision mandates the court to consider granting bail to an accused below 16 years, someone who is sick, or is a woman.
- 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
11. Which of the following conditions recognize a political party as a national party?

1. If it secures 6% of valid votes polled in any four or more states at a general election to the Lok Sabha.
 2. If it wins 1 seat in the Lok Sabha for every 25 seats.
 3. If it is recognised as a state party in four states.
- Select the correct answer using the code given below:
- (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) 1, 2 and 3
12. Which of the following countries are the members of Partnership for Global Infrastructure and Investment?
1. United States
 2. China
 3. Canada
 4. Japan
- Select the correct answer using the code given below:
- (a) 1, 2 and 3 only
 - (b) 2 and 3 only
 - (c) 1, 3 and 4 only
 - (d) 2, 3 and 4 only
13. Consider the following statements regarding the PSLV Core alone Variant recently seen in news:
1. It is the first Indian launch vehicle to be equipped with liquid stages.
 2. It is a four-stage engine with Solid-Liquid-Solid-Liquid fuel pattern.
 3. It uses 6 solid rocket strap-on motors to augment the thrust provided by the first stage.
- Which of the statements given above are correct?
- (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) 1, 2 and 3
14. With reference to Sannati recently seen in news, consider the following statements:
1. It is an ancient Buddhist site located on the bank of Bhima River.
 2. Sannati has recently been declared as UNESCO World Heritage Site.
- 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
15. The word 'Y- 3023 Dunagiri' recently talked about is associated with-
- (a) A rocket launch site
 - (b) A world class stealth frigate
 - (c) Exotic dolphin breeding site
 - (d) Indian station at Antarctica
16. With reference to history of India, which of the following place is referred to as 'Adivasi Jallianwala'?
- (a) Singhbhum
 - (b) Khandesh
 - (c) Mangarh
 - (d) Bastar
17. With reference to Platform of Platforms, which of the following service providers are integrated under it?
1. Logistics Service Provider
 2. International agri-business platforms
 3. Private market platforms
- Select the correct answer using the code given below:
- (a) 1 only
 - (b) 1 and 2 only
 - (c) 2 and 3 only
 - (d) 1, 2 and 3
18. With reference to Statue of Peace, which of the following statements is/are correct?
1. It is devoted to Vaishnav saint Swami Ramanujacharya.
 2. It has been recently inaugurated in Agra, Uttar Pradesh.
- Select the correct answer using the code given below:
- (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2

19. With reference to Dr. Shyama Prasad Mukherjee, consider the following statements:
1. He founded a political party named Bhartiya Jana Sangh (BJS).
 2. He played an important role in popularising the idea of 'cultural nationalism'
 3. He condemned the idea of 'territorial nationalism'.
- Which of the statements given above is/are correct?
- (a) 1 only (b) 1 and 2 only
(c) 2 and 3 only (d) 1, 2 and 3
20. Consider the following statements regarding Technology Innovation Hub on Autonomous Navigation (TiHAN).
1. It is a multidisciplinary initiative with the objective of making India a global player in Smart Mobility technology.
 2. It will deliver incubation and acceleration support programs for entrepreneurs and startups.
- 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
21. Consider the following statements:
1. The concept of electro-magnetism was introduced by James Clark Maxwell.
 2. The entire range of electromagnetic spectrum is classified in the decreasing order of frequency.
 3. Electromagnetic radiation release photons which are bundles of light energy.
- Which of the statements given above is/are correct?
- (a) 1 only
(b) 1 and 3 only
(c) 2 only
(d) 2 and 3 only
22. Consider the following statements regarding Amensalism:
1. It refers to harming of one species by the other species which remains unaffected by the presence of the other species.
 2. It occurs when both need a vital resource which is short in supply.
- 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
23. The report titled as 'India's Booming Gig and Platform Economy' is published by-
- (a) Reserve Bank of India
(b) World Economic Forum
(c) NITI Aayog
(d) Ministry of Finance
24. Consider the following statements regarding the Forest Conservation Rules 2022:
1. The new rules allow the Union government to permit the clearing of a forest for a project before prior consent of the forest dwellers.
 2. It will disempower forest tribals and may displace them.
- 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
25. Consider the following statements regarding the Tropical Ozone Hole:
1. The tropical ozone hole is about seven times larger than Antarctica.
 2. It is likely to cause skin cancer and negative effects ecosystems in the tropical region.
- 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
26. What is the use of biochar in farming? (UPSC 2020)
1. Biochar can be used as a part of the growing medium in vertical farming.
 2. When biochar is a part of the growing medium, it promotes the growth of nitrogen-fixing microorganisms.

3. When biochar is a part of the growing medium, it enables the growing medium to retain water for longer time.
Which of the statements given above is/are correct?
(a) 1 and 2 only (b) 2 only
(c) 1 and 3 only (d) 1, 2 and 3
27. Biological Oxygen Demand (BOD) is a standard criterion for (UPSC 2017)
(a) Measuring oxygen levels in blood
(b) Pollution assay in aquatic ecosystems
(c) Computing oxygen levels in forest ecosystems
(d) None of the above
28. The Chairmen of public sector banks are selected by the—(UPSC 2019)
(a) Banks Board Bureau
(b) Reserve Bank of India
(c) Union Ministry of Finance
(d) Management of concerned bank
29. In India, "Extended producer responsibility" was introduced as an important feature in which of the following? (UPSC 2019)
- (a) The Bio-medical Waste (Management and Handling) Rules, 1998
(b) The Recycled plastic (Manufacturing and Usage) Rules, 1999
(c) The e-Waste (Management and Handling) Rules, 2011
(d) The Food Safety and Standard Regulations, 2011
30. With reference to Ocean Mean Temperature (OMT), which of the following statements is/are correct? (UPSC 2020)
1. OMT is measured up to a depth of 26°C isotherm which is 129 meters in the south-western Indian Ocean during January - March
2. OMT collected during January - March can be used in assessing whether the amount of rainfall in monsoon will be less or more than a certain long-term mean.
Select the correct answer using the code given below:
(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

ANSWERS

- | | | |
|-------|-------|-------|
| 1. C | 11. C | 21. B |
| 2. B | 12. C | 22. A |
| 3. B | 13. D | 23. C |
| 4. C | 14. A | 24. C |
| 5. A | 15. B | 25. C |
| 6. C | 16. C | 26. D |
| 7. C | 17. D | 27. B |
| 8. A | 18. A | 28. A |
| 9. C | 19. B | 29. C |
| 10. D | 20. C | 30. D |