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Empowerment or infantalisation?





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Balancing nation's security interests and citizens' liberty and rights



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Linking Voter ID with Aadhaar number

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Ranks in **Top 10**

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Vaibhav Rawat



Pulkit Singh



Divya Mishra



RANK 30

Divyanshu



Megha Swaroop



Rallapalli Jagat Sai



Aparna Ramesh

RANK 37 Narwade Vinayak

RANK 38 Varuna Agarwal



Aswathy Jiji



RANK 42

Pooja Gupta



Jubin Mohapatra



Incredible Results

CSE 2019

4 Ranks in top 10

13 Ranks in top 50

22 Ranks in top 100



Pratibha Verma



Vishakha Yadav



Abhishek Saraf



Sanjita Mohapatra

CSE 2018



28 Ranks in top 100

183 Ranks in the final list











Rank 31 Mainak Ghosh

CSE 2017

5 Ranks in top 50

34 Ranks in top 100

236 Ranks in the final list



Sachin Gupta



Kova Sree Harsha



Anubhay Singh





CSE 2016

8 Ranks in top 50

18 Ranks in top 100

215 Ranks in the final list











CSE 2015

5 Ranks in top 50

14 Ranks in top 100

162 Ranks in the final list



Rank 20 Vipin Garg



Khumanthem Diana Devi



Chandra Mohan Garo





CSE 2014

6 Ranks in top 50

12 Ranks in top 100

83 Ranks overall selections



Suharsha Bhagat







Kushaal Yadav Vivekanand T.S

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|---|---|--|--|--|--|---|
| 1st March to | Polity | | Daten 3 | Daten 4 | Daten 3 | |
| 5 th April, 2021 6 th April to 10 th May, 2021 | Economics | Economics | | | | |
| 11 th May to 15 th June, 2021 | Geography | Geography | Geography | | | |
| 16 th June to 21 st July, 2021 | Modern History | Modern History | Modern History | Modern History | | |
| 22 nd July to 25 th August, 2021 | International Relations + World History | Polity | Polity | Polity | Polity | |
| 26 th August to 1 st October, 2021 | Ethics + Governance | Ethics + Governance | Economics | Economics | Economics | Economics |
| 4 th October to 8 th November, 2021 | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India | Geography | Geography | Geography |
| 9 th November to 14 th December, 2021 | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology | Modern History | Modern History |
| 15 th December to 18 th January, 2022 | Justice + Essay + | Social Issues & Social Justice + Essay + Disaster Management + Compulsory Language Paper | Justice + Essay + | Social Issues & Social Justice + Essay + Disaster Management + Compulsory Language Paper | Social Issues & Social Justice + Essay + Disaster Management + Compulsory Language Paper | Polity |
| 19 th January to 22 nd February, 2022 | Internal Security + CSAT | Internal Security + CSAT | Internal Security + CSAT | Internal Security + CSAT | Internal Security + CSAT | Internal Security + CSAT |
| 23 rd February to 30 th March, 2022 | | International Relations + World History | International Relations + World History | International Relations + World History | International Relations + World History | International Relation + World History |
| 31 st March to 4 th May, 2022 | | | Focus Prelims | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India |
| 5 th May to 8 th June, 2022 | | | Focus Prelims | Focus Prelims | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology |
| After Prelims 2022 | | | Ethics + Governance | Ethics + Governance | Ethics + Governance | Ethics + Governance |
| After Prelims 2022 | | | | | | Social Issues & Social Justice + Essay + Disaster Managemen + Compulsory Language Paper |



YEAR LONG TIMETABLE

(Evening Batch)
Monday to Friday | 5:30 PM to 8:30 PM

| Slots | Batch 1 | Batch 2 | Batch 3 | Batch 4 | Batch 5 | Batch 6 |
|--|--|--|--|--|--|--|
| 1 st March to 5 th April, 2021 | Geography | | | | | |
| 6 th April to 10 th May, 2021 | Modern History | Modern History | | | | |
| 11 th May to 15 th June, 2021 | Economics | Economics | Economics | | | |
| 16 th June to 21 st July, 2021 | Polity | Polity | Polity | Polity | | |
| 22 nd July to 25 th August, 2021 | International Relations + World History | Geography | Geography | Geography | Geography | |
| 26 th August to 1 st October, 2021 | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology | Modern History | Modern History | Modern History | Modern History |
| 4 th October to 8 th November, 2021 | Ethics + Governance | Ethics + Governance | Ethics + Governance | Economics | Economics | Economics |
| 9 th November to 14 th December, 2021 | Internal Security + CSAT | Internal Security + CSAT | Internal Security + CSAT | Internal Security + CSAT | Polity | Polity |
| 15 th December to 18 th January, 2022 | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India | Geography |
| 19 th January to 22 nd February, 2022 | Social Issues & Social Justice + Essay + Disaster Management + Compulsory Language Paper | Social Issues & Social Justice + Essay + Disaster Management + Compulsory Language Paper | Social Issues & Social Justice + Essay + Disaster Management + Compulsory Language Paper | Social Issues & Social Justice + Essay + Disaster Management + Compulsory Language Paper | Social Issues & Social Justice + Essay + Disaster Management + Compulsory Language Paper | Social Issues & Socia Justice + Essay + Disaster Managemen + Compulsory Language Paper |
| 23 rd February to 30 th March, 2022 | | International Relations + World History | International Relations + World History |
| 31 st March to 4 th May, 2022 | | | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology |
| 5 th May to 8 th June, 2022 | | | | Focus Prelims | Internal Security + CSAT | Internal Security + CSAT |
| After Prelims 2022 | | | | Focus Prelims | Focus Prelims | Ancient India + Medieval India + Art & Culture + Post Independent India |
| After Prelims 2022 | | | | Ethics + Governance | Ethics + Governance | Ethics + Governance |



YEAR LONG TIMETABLE

(Weekend Batch)
Saturday - 2:00 to 8:00 PM
Sunday - 10:00 AM to 8:00 PM

| Slots | Batch 1 | Batch 2 | Batch 3 | Batch 4 | Batch 5 | Batch 6 | |
|---|--|--|--|--|--|--|--|
| March (06, 07, 13, 14, 20, 21, 27 & 28) + April (03 & 04) | Economics | | | | | | |
| April (10, 11, 17, 18, 24, 25) + May (01, 02, 08 & 09) | Geography | Geography | | | | | |
| May (15, 16, 22, 23, 29 & 30) + June (05, 06, 12 & 13) | Polity | Polity | Polity | | | | |
| June (19, 20, 26 & 27) + July (03, 04, 10, 11, 17 & 18) | Modern History | Modern History | Modern History | Modern History | | | |
| July (24, 25 & 31) + August (01, 07, 08, 14, 15, 21 & 22) | Ancient India + Medieval India + Art & Culture + Post Independent India | Economics | Economics | Economics | Economics | | |
| August (28 & 29) + September (04, 05, 11, 12, 18, 19, 25 & 26) | International Relations + World History | International Relations + World History | Geography | Geography | Geography | Geography | |
| October (02, 03, 09, 10, 16, 17, 23, 24, 30 & 31) | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology | Polity | Polity | Polity | |
| November (06, 07, 13, 14, 20, 21, 27 & 28) + December (04 & 05) | Justice + Essay + | Justice + Essay + | Social Issues & Social Justice + Essay + Disaster Management + Compulsory Language Paper | Justice + Essay + | Modern History | Modern History | |
| December (11, 12, 18, 19, 25 & 26) + January '22 (02, 08, 09 & 15) | Internal Security + CSAT | Internal Security + CSAT | Internal Security + CSAT | Internal Security + CSAT | Internal Security + CSAT | Economics | |
| January '22 (16, 22, 23, 29 & 30) + February '22 (05, 06, 12, 13 & 19) | Ethics + Governance | Ethics + Governance | Ethics + Governance | Ethics + Governance | Ethics + Governance | Ethics + Governance | |
| February '22 (20, 26 & 27) + March '22 (05, 06, 12, 13, 19, 20 & 26) | | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India | Ancient India + Medieval India + Art & Culture + Post Independent India | |
| March '22 (27) + April (02, 03, 09, 10, 16, 17, 23, 24 & 30) | | | International Relations + World History | International Relations + World History | International Relations + World History | International Relations + CSAT | |
| May '22 (01, 07, 08, 14, 15, 21, 22, 28 & 29) + June '22 (04) | | | | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology | Environment & Ecology + Science & Technology | |
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POLITY

Government Polides and Interventions for Development in various sectors and issues arising outoftheir Design and Implementation.

1. ART Bill Features and Concerns

- » Prelims: Key Features of the ART Bill
- » Mains: Provisions and Concerns Related to ART Bill

Context:

 The Assisted Reproductive Technology (Regulation) Bill, 2020 has been passed in the Lok Sabha.

The objective of the bill:

 The Bill seeks to provide for the regulation of Assisted Reproductive Technology services in the country and make provisions for its safe and ethical practice.

Definition of ART:

 The Bill defines ART to include all techniques that seek to obtain a pregnancy by handling the sperm or the oocyte (immature egg cell) outside the human body and transferring the gamete or the embryo into the reproductive system of a woman.

Key Features of the Bill:

- Regulation of ART clinics and banks: The Bill provides that every ART clinic and bank must be registered under the National Registry of Banks and Clinics of India.
 - * The National Registry will be established under the Bill and will act as a central database with details of all ART clinics and banks in the country.
 - * State governments will appoint registration authorities for facilitating the registration process.
 - * Clinics and banks will be registered only if they adhere to certain standards (specialised manpower, physical infrastructure, and diagnostic facilities).
 - * The registration will be valid for five years and can be renewed for a further five years. Registration may be cancelled or suspended if the entity contravenes the provisions of the Bill.
- Conditions for gamete donation and supply: Screening of gamete donors, collection and storage of semen, and provision of oocyte donor can only be done by a registered ART bank.

- * A bank can obtain semen from males between 21 and 55 years of age, and oocytes from females between 23 and 35 years of age.
- * An oocyte donor should be an ever-married woman having at least one alive child of her own (minimum three years of age). The woman can donate oocyte only once in her life and not more than seven oocytes can be retrieved from her.
- * A bank cannot supply gamete of a single donor to more than one commissioning couple (couple seeking services).
- Conditions for offering ART services: ART procedures can only be carried out with the written informed consent of both the party seeking ART services as well as the donor.
 - * The party seeking ART services will be required to provide insurance coverage in the favour of the oocyte donor (for any loss, damage, or death of the donor).
 - * A clinic is prohibited from offering to provide a child of pre-determined sex.
 - * The Bill also requires checking for genetic diseases before the embryo implantation.
- Rights of a child born through ART: A child born through ART will be deemed to be a biological child of the commissioning couple and will be entitled to the rights and privileges available to a natural child of the commissioning couple. A donor will not have any parental rights over the child.
- Offences and penalties: Offences under the Bill include: (i) abandoning, or exploiting children born through ART, (ii) selling, purchasing, trading, or importing human embryos or gametes, and (iii) exploiting the commissioning couple, woman, or the gamete donor in any form. These offences will be punishable with a fine between five and ten lakh rupees for the first contravention. For subsequent contraventions, these offences will be punishable with imprisonment between eight and twelve years, and a fine between 10 and 20 lakh rupees.

Concerns:

Exclusivity:

 Although the bill is very progressive by its very nature, it glaringly excludes members of the LGBTQIA+ community, single men and cohabiting heterosexual couples from accessing ARTs. As citizens, these groups too have the right to exercise reproductive rights.



 Bill allows foreigners to access ART but not Indian citizens in loving relationships. This is an illogical result that fails to represent the actual spirit of the Constitution.

Inadequate protection for donors:

- The Bill mandates the egg donor's written consent but fails to provide for her counselling or the ability to withdraw her consent before or during the procedure.
- For loss of salary, time and effort, the donor receives no compensation or reimbursement of expenses. Failing to pay for bodily services amounts to unfree labour, which is outlawed by Article 23 of the Constitution.

Overlap between ART and SSB (Surrogacy (Regulation) Bill, (SRB) 2019):

 Surrogacy and ART procedures are regulated by different bills. These bills provide for different registration procedures for clinics and specify different age-related eligibility criteria. It is unclear why the two Bills differ on these common aspects of registration and eligibility.

Conclusion:

- Bill that the government of the land intends to make law, cannot be exclusivist at the very outset.
 The laws on reproductive rights must recognize differences in orientation, relationship choices.
- The ART Bill must be thoroughly reviewed before it is passed as it involves various constitutional, medico-legal, ethical, and regulatory concerns.

Covernment Polides and Interventions for Development in various sectors and listues arising out of their Design and Implementation.

2. Dam Safety Bill

» Mains: Safety issues of Dams in India; Centre Legislation on State Subject; Issues with Dam Safety Bill.

Context

 The Dam Safety Bill, 2019 which has been debated for decades, finally got the nod of the Rajya Sabha.

What is the Dam Safety Bill?

- The Dam Safety Bill aims to make dam safety procedures similar across all states and union territories.
- The bill applies to dams with a height of more than 15 metres and a height of between 10 and 15 metres, subject to specified conditions.
- · Aims and Objectives: -
 - * To "provide for the monitoring, inspection, operation, and maintenance of the designated dam in order to prevent dam failure-related tragedies."

* To create institutional procedures to assure their safe operation, as well as things related to or incidental to that."

Important Provisions:

- 1. National Committee on Dam Safety
- · Term: three-year tenure
- · Composition:-
 - * Chairman of the Central Water Commission
 - * In the ranks of joint secretary, there can be no more than ten members from the central government.
 - * There will be a maximum of seven state government officials and three specialists.
- 2. State dam safety organisation
 - A state dam safety organisation which will be responsible for the dam safety.

Aim

- To examine and collect data in order to conduct a thorough assessment.
- To study the many aspects of dam design, building, maintenance, and expansion, as well as appurtenant structures.

Functions:

- It must also report events such as dam failures to the National Dam Safety Authority.
- It maintains records of major dam incidents of each specified dam.
- 3. The National Dam Safety Authority
 - The National Dam Safety Authority would be based in Delhi.
- It would be led by an official not below the rank of Additional Secretary to the Government of India.

Need of Dam safety Laws

- India is ranked third in the world, with major dams in operation.
- The ageing of dams in the country has been a source of worry for water sector stakeholders.
- The Jal Shakti Minister remarked in the Rajya Sabha that 42 dam failures had occurred since 1979
- Given the fact that dam ownership and upkeep are primarily the responsibility of the states, there is no single Central law that covers the matter.

Centre legislation on State Subject: -

- Though water is under the state list, the Centre has brought the legislation under Article 246 of the Constitution in the Union list.
- Article 246 of the Constitution authorises Parliament to legislate on any matter listed in List I of the Union List in the Constitution's Seventh Schedule.



- Entry 56 of the Union List empowers Parliament to enact legislation governing interstate rivers and river valleys if it deems it necessary in the public interest.
- Another argument in favour of the legislation is that inter-State basins span 92 % of the country's land and include the majority of the country's dams, making the Centre competent to adopt such legislation.

Concerns with the Dam Safety Bill

- Infringing State Rights: Several states, notably Karnataka, Kerala, Tamil Nadu, and Odisha, have resisted the Act, claiming that it infringed on state autonomy over dam management.
- Challenges in Maintenance: States claim that the law contains elements that contradict the state's rights and that it would pose challenges in terms of maintenance and operation.
- Constitutional Validity: Critics also questioned the legislation's constitutionality. Because water is on the state list, the bill is unconstitutional and ultra vires.
- No Compensation: Another failure was the lack of payment of compensation to persons impacted by dam development.
- Loss of Control: States like Tamil Nadu have been a vocal opponent of the bill because it fears losing control of dams. Mullaperiyar dam in Kerala is an example.

Way Forward

 Dam safety is crucial for protecting massive public investments in key physical infrastructure, as well as assuring the continuance of damrelated benefits and national water security. The Centre can hold talks with the States to allay their fears and frame rules suitably for legislation. It's also crucial in emerging scenarios of India's water issue, which is connected to the country's expanding population and climate change.

Structure, Organization and Functioning of the Judiciary

3. Judicial infrastructure, a neglected case

» Mains: Concerns associated with infrastructure in the judiciary; Proposal of a National Judicial Infrastructure Authority of India and its significance.

Context

 Recently, the Chief Justice of India proposed creation of a National Judicial Infrastructure Authority of India (NJIAI) as a central agency to take control of infrastructure development of subordinate courts in the country.

Background:

Poor state of Infrastructure in the judiciary:

- The Indian judiciary's infrastructure has not kept pace with the sheer number of litigations instituted every year.
- There is shortage of court halls and also shortage of basic facilities in the court halls. Thus courts in India are having to operate from dilapidated structures making it difficult for them to effectively perform their functions.

Poor implementation of schemes targeted at developing judiciary infrastructure:

- There is gross under utilisation of funds sanctioned under the Centrally Sponsored Scheme (CSS) to the States and Union Territories for development of infrastructure in the courts. As a result of this underutilization, a large proportion of the allocated funds get lapsed every year.
- The improvement and maintenance of judicial infrastructure is still being carried out in an adhoc and unplanned manner. There is the lack of one particular coordinating agency.

Recommendations for NJIAI:

- Rather than placing NJIAI under the Government, the creation of a special purpose vehicle, with a degree of authority and financial autonomy and having an appropriate statutory backing.
- The proposed NJIAI could work as a central agency with each State having its own State Judicial Infrastructure Authority, much like the National Legal Services Authority (NALSA) model. But, unlike NALSA which is serviced by the Ministry of Law and Justice, the proposed NJIAI should be placed under the Supreme Court of India.
- The NJIAI should have a balanced representation from the judiciary and the executive.

Structure, Organization and Functioning of the Judiciary

4. Executive shows a trend to disrespect court orders: CJI

» Mains: Challenges to the Indian Judiciary; Recommendations

Context

 Chief Justice of India's speech at the Fifth Lavu Venkateswarlu Endowment Lecture on "Indian judiciary — future challenges".

Challenges being faced by the Indian Judiciary:

 The Chief Justice of India threw light on some of the biggest challenges that the judiciary in India faces. Some of the most prominent ones include the following.



Non-cooperative executive:

- The executive is supposed to assist, and cooperate with, the judiciary for the rule of law to prevail in the nation given that the courts do not have the power of the purse or the sword. While it is the judiciary which comes out with the judgments, it is the executive which will have to implement them. However of late this has been found lacking in India.
- The "non-cooperative executive" according to the CJI remains one of the major concerns.
 - * The CJI noted that the executive showed a growing tendency to disregard and even disrespect court orders.
 - * Also there have been lack of adherence to timelines with respect to appointment to judicial vacancies and prosecutors from the government's end.
 - » The judiciary had prescribed strict adherence to set timelines to appointment process of judicial vacancies in the Malik Mazhar Case
 - * The repeated reminders to strengthen judicial infrastructure have not been considered seriously by the executive.

Lack of Judicial impact assessment of laws:

- The Chief Justice raised concerns over the absence of well-considered legislations.
- He noted the absence of impact assessment or basic scrutiny of constitutionality before passing of legislations. This is contributing to increasing number of cases in the judiciary.

Attacks on judges:

 The CJI raised concerns over the increasing attacks on the judges and the failure of the law enforcement agencies to deal with such attacks effectively.

Media trials:

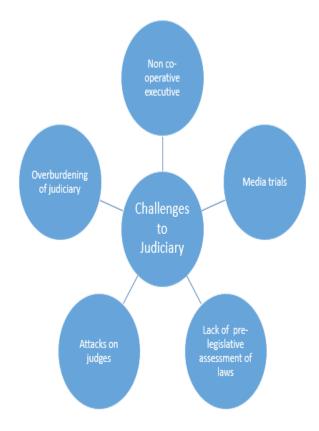
 The CJI noted the concerning development of using concerted campaigns in media against judges if parties do not get a favourable order. These media trials would affect the functioning and independence of the judiciary.

Over burdening of the judiciary:

- The increasing number of cases coming up and the limited number of judges available has resulted in the current judges having to handle a large number of cases. This could impact the quality of the judgments and functioning of the judges.
 - * The judge-to-population ratio in India stands at 21 judges per million people.

Issue with public prosecutors:

 The CJI noted with concern the fact that public prosecutors (PPs) under the government did nothing to prevent frivolous and non-deserving cases from reaching the courts and have in various cases attempted to help the accused.



Recommendations:

- The CJI also provided some recommendations to help improve the functioning of the judiciary.
 Some of the prominent ones include the following.
 - * There should be stakeholder analysis and judicial impact assessment of any new law being introduced.
 - * In order to insulate the institution of public prosecutors, an independent selection committee may be constituted for their appointment.
 - * There is the need to move towards domain expertise in the judiciary as this could help contribute in speeding up the judicial process and also help improve the quality of judgments.



Structure, Organization and Functioning of the Judiciary

5. Mediation Bill: Not getting the Act together

- » Prelims: Article 14, Article 21, Article 39-A.
- » Mains: Alternative Dispute Resolution Mechanisms.

Context:

 The Draft Mediation Bill 2021, slated for presentation to Parliament, bears no resemblance to the original in some crucial places.

<u>What are Alternative Dispute Resolution</u> <u>Mechanisms?</u>

- Alternative Dispute Resolution (ADR) is a technique to resolve disputes and disagreements between parties by arriving at an amenable settlement through negotiations and discussions. It is an attempt to establish an alternative mechanism other than the traditional methods of dispute resolution.
- The ADR mechanism offers to facilitate the resolution of matters of business issues and others where it has not been possible to initiate any process of negotiation or arrive at a mutually agreeable solution.
- In India, ADR is established on the basis of Article 14 (Equality before law) and Article 21 (Right to life and personal liberty) under the Constitution of India.
- The Directive Principles of State Policy (DPSP) of equal justice and free legal aid as engraved in Article 39-A of the Indian Constitution can also be achieved by the ADR.

What is Mediation?

- It is a kind of alternative dispute resolution mechanism.
- A mediator is involved in assisting the parties in dispute to reach an agreement.
- The parties in dispute themselves set the conditions of the settlement to be reached.
- The third party does not impose any decisions on the parties but merely acts as a facilitator involved in improving the dialogue between the parties.

The Draft Mediation Bill 2021:

- It recognises mediation as a profession, which is a huge improvement over the part-time honorarium basis it has in the court-annexed mediation schemes.
- The Bill acknowledges the importance of institutes to train mediators, and service providers to provide structured mediation under their rules.

- It provides for pre-litigation mediation.
- The Bill does away with the confusion emanating from using both expressions 'Mediation' and 'Conciliation' in different statutes by opting for the former in accordance with international practice, and defining it widely to include the latter.
- It also recognises online dispute resolution.
- It provides for enforcement of commercial settlements reached in international mediation viz between parties from different countries as per the Singapore Convention on Mediation to which India was a notable signatory.
- The Convention assures disputants that their mediation settlements will be enforced without much difficulty across the world, unlike the fresh headaches that the litigative decree or arbitration award presents at the time of enforcement.
- It is expected that this Bill would make India a hub for international mediation in the commercial disputes field, and indeed institutions are being opened for this purpose.

Problems with the draft bill:

- Despite dispute resolution being the judiciary's domain, there is no role for CJI in the appointment process.
- It distinguishes between Indian and International settlements: It unwisely treats international mediation when conducted in India as a domestic mediation.
- This distinction is disastrous for foreign parties: Now, that is excellent for cases between Indian parties, but disastrous when one party is foreign. The reason is that the Singapore Convention does not apply to settlements that already have the status of a judgment or decree. Ergo, if you conduct your cross-border mediation in India, you lose out on the tremendous benefits of worldwide enforceability. In sum, go to Singapore or Sri Lanka or anywhere else other than India to conduct your mediation.
- None of the members will be active practitioners.
 Certainly, this Bill will be unique where a profession is being regulated without a single professional on the regulator.
- Negative list for mediation: There is an unnecessary long list of disputes which should not be mediated, which is not understandable.
 For example:
 - * Patents and copyright cases settle on commercial terms leaving untouched the validity of the grant, so why deny this possibility and consign the parties to litigative longevity.
 - * In the case of telecom, why can't manufacturers and service providers and



consumers be allowed to talk and resolve issues?

* In cases involving minors or persons of unsound mind, the law provides for the court to pass orders to protect them.

Conclusion:

 Eventually, this draft bill, needs a wider level of discussion and consideration amongst all stakeholders that will enable a faster resolution of disputes resulting in the restoration of faith of the litigants in the judicial and lawmaking arms of the government.

Covernment Polides and Interventions and issues arising out of their Design and Implementation

6. Minor cases, major delays

- » Prelims: Juvenile Justice (Care and Protection of Children) Act – provisions
- » Mains: Reasons for high pendency in JJ cases and associated concerns; Recommendations

Context:

 As per the data recently provided by the Delhi Commission for Protection of Child Rights (DCPCR) before the Delhi High Court, a substantial number of criminal cases have been pending before the Juvenile Justice Boards (JJBs) over the stipulated time limits as provided under the Juvenile Justice (Care and Protection of Children) Act, 2015.

Juvenile Justice (Care and Protection of Children) Act, 2015:

- The Juvenile Justice (Care and Protection of Children) Act, 2015, was brought in with the purpose of conducting criminal trials of minors or children in conflict with the law (CCLs) who are accused of petty or serious offences before the Juvenile Justice Boards (JJBs).
- To safeguard the children in conflict with law, the juveniles after being presented before the board, are generally granted bail and handed over to their parents. They are sent to an observation home only when the family is untraceable or at the court's discretion.
 - * When any person, who is apparently a child and is alleged to have committed a bailable or non-bailable offence, is apprehended or detained by the police or appears or brought before a Board, such person shall, notwithstanding anything contained in the Code of Criminal Procedure, or in any other law for the time being in force, be released on bail with or without surety or placed under the supervision of a probation officer or under the care of any fit person
- To ensure timely disposal of related cases, the Juvenile Justice Act states that inquiry pertaining to minors involved in petty offences, shall stand

terminated if it remains inconclusive till six months.

Reasons for high pendency:

- The biggest problem that causes long delays is ascertaining the minor's age. The lack of adequate infrastructure with the JJBs, lack of identity documents and legal technicalities leads to an extended age verification process.
- The JJBs are overburdened with a large number of cases. The unequal distribution of cases among JJBs is another reason for the increasing delay as some jurisdictions see more juvenile cases than others.
- In some cases, the preparation of the Social Investigation Report of the child, which contains the family background, takes time.
- The frequent adjournments also add to the time taken for the disposal of the cases.
- Police laxity and the JJB's failure to pull them up for not following the rules laid out under the Act also has been contributing to the delays.
- Apart from the above issues, COVID-19 further restricted the JJB's functioning, much like other courts. During the COVID lockdown, there was restricted functioning of JJBs.

Concerns:

- The failure to close the proceedings in cases against juveniles within the legally permissible period amounts to the encroachment of the personal liberty of the children.
- The pendency leads to social stigma and thus affects the dignity of the child.
- The tag of being a criminal, especially for petty offences, has a negative psychological impact on the child's mind. This could have an adverse impact on the child's mental health.
- The separation of the child from parents in some cases and the pendency in such cases affects the children's upbringing. It denies them their familial love and personal freedom duly enshrined in the Constitution.
- The long-drawn legal process affects the child's rehabilitation process. It affects the minor's after-care plan, which includes educational and vocational training.

Recommendations:

- The officers dealing with juvenile cases must be adequately trained and sensitised to handle related cases.
- More JJBs should be set up so that there is an equal police station-wise distribution of matters and they should be adequately resourced to ensure their smooth functioning.
- Any shortcomings or deviations from the rules laid out by the Act should be strictly dealt with.
 The judiciary should take the lead in this regard.



The Magistrates should come down heavily on police officers and make them follow the law.

Constitution of India — significant provisions and basis structure

7. Protect, don't pander

» Mains: Role of State in ensuring the freedom of expression and the provision dealing with "reasonable restraints."

Context:

• The article describes how 'heckler's veto' seems to be winning repeatedly in the cases against comedians such as Munawar Faruqui.

What is 'heckler's veto'?

- A notion known as heckler's veto exists in free speech law. It refers to a private actor's capacity, but not right, to be loud and annoying enough to obstruct others' free speech.
- A heckler, by definition, is someone who is unable to explain his position using genuine facts, logic, and reason.
- The term "heckler's veto" refers to the belief that those who disagree with a concept can prevent it from being spoken by endangering public safety.
- When the government approves speech limits due to the expected or actual reactions of opponents of the speech, this is known as a heckler's veto.

Recent Case Studies:

- Munawar Faruqui, a stand-up comedian, was unjustly imprisoned after a political party functionary's son claimed that he was preparing to mock gods in a planned event. For the same reason, he was prevented from performing in a number of events.
- After being suppressed by conservative and religious organisations, Tamil writer Perumal Murugan announced his own "death" in a literary sense.

Against Freedom of Speech and Expression:

- When such matters are brought before a court of law, the ensuing decisions are speech-protective, but the authorities' inclination to pander to chauvinist organizations poses a severe threat to society's free expression.
- Instead of appeasing individuals who threaten to take the law into their own hands, it is necessary to emphasise the state's responsibility to safeguard free expression and maintain peace and order.
- It's a shame that police officers urge authors, lecturers, and artists to be quiet rather than taking proactive actions to preserve their fundamental rights.

Supreme Court Observation:

- A number of Supreme Court decisions have upheld the values of freedom of expression by interpreting Article 19 of our Constitution, notably the provision dealing with "reasonable restraints."
- Suppression of free speech in response to a threat of demonstration or protest "would be tantamount to negation of the rule of law and a surrender to blackmail and intimidation," as the Supreme Court stated in S. Rangarajan etc. vs P. Jagjivan Ram (1989), appears to have few takers among those in positions of power.

Indian Constitution - historical underpinnings

8. The Citizenship question in the Constituent Assembly

» Mains: Difference between Jus soli and Jus sanguinis; determination of Indian citizenship

Context:

• The article discusses Constituent Assembly debates on Citizenship.

Determining Indian citizenship

- There were two principles the Constituent Assembly discussed on the basis of which citizenship was to be offered to people in India, one was Jus soli and the other was Jus sanguinis.
- Jus soli means "the law of the place of birth".
 - * It is commonly referred to as birthright citizenship, which is the right of anyone born in the territory of a state to nationality or citizenship.
- Jus sanguinis means "the law according to blood".
 - * It is a principle of nationality law by which citizenship is not determined by place of birth but by having one or both parents who are citizens of the state.

Debates and Deliberations

Supporters of Jus Soli

- Some members during the discussion said that everyone born in the Union should be considered an Indian citizen – part of "We the people", irrespective of religion.
 - * R.K.Sidhva from C.P. and Berar said that mention of some communities would alienate other communities and they may feel ignored.
 - * Jawaharlal Nehru said, "you cannot have rules for Hindus, for Muslims and for Christians only. It is absurd on the face of it".



Critics of Jus Soli

- A few members suggested that no matter where people were born, people belonging to a particular race should get the citizenship.
 - * Dr P.S.Deshmukh from the Central Provinces and Berar proposed changes to the draft by suggesting to replace the "jus soli" principle with a religious appendage that "every person who is a Hindu or a Sikh by religion and is not a citizen of any other State, wherever he resides shall be entitled to be a citizen of India."
 - » He received support from Thakur Das Bhargava from East Punjab who exclaimed "Hindus and Sikhs have no other home but India!"
 - » These views were further supported by Prof. Shibban Lal Saksena of the United Provinces.

Conclusion

 Thus we had BR Ambedkar, Jawaharlal Nehru and several others who made an effort to divorce the question of citizenship from the subject of religion.

Powers, Functions and Responsibilities of various Constitutional Bodies

9. Questioning the impartiality of the Election Commission

- » Prelims: Election Commission of India-Constitutional provisions, composition, functions and powers
- » Mains: Concerns/challenges with the functioning of the ECI

Context:

 The informal meeting between Chief Election Commissioner (CEC) and Election Commissioners with the Principal Secretary to the Prime Minister have raised questions of propriety.

Election Commission of India:

- The Election Commission of India is a constitutional authority responsible for administering election process in India. The body administers elections to the Lok Sabha, Rajya Sabha, and State Legislative Assemblies in India, and the offices of the President and Vice President in the country.
- As per Article 324 of the Indian Constitution, the superintendence, direction and control of elections to be vested in an Election Commission.
- The important functions of the commission include deciding the election schedules, preparing electoral roll, issuing Electronic Photo Identity Card (EPIC), granting recognition to

political parties, allotting election symbols, issuing the Model Code of Conduct in election for political parties and candidates, setting limits of campaign expenditure and also monitoring of the same.

Concerns:

- The meeting has raised questions about the functioning of the Commission. It has raised questions about the neutrality and independent functioning of the Commission.
 - * The three ECs are expected to maintain distance from the executive, a constitutional safeguard to insulate the commission from external pressure and allow it to continue as an independent authority.
- Over the last couple of years, several actions of the commission have come under criticism. It is blamed of overlooking various instances of violations of the model code of conduct during the various Elections. The Commission's belated decision in banning election campaigns in the midst of the pandemic came under severe criticism.

Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein.

10. The Sustained attack on federalism

» Mains: Fiscal federalism in India; Challenges and Recommendations

Context:

• This article underlines the concerns with fiscal federalism in India.

Background:

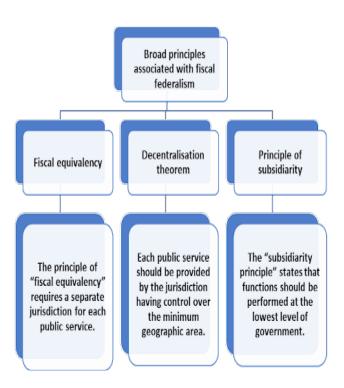
- The Union government has taken a number of initiatives that challenged the ideas of federalism, particularly fiscal federalism.
- They are:
 - * Increasing monetary share of the States in Centrally Sponsored Schemes (CSS),
 - * The terms of reference of the 15th Finance Commission,
 - * Imposition of demonetisation without adequate consultation with the States, institutionalization of the Goods and Services Tax (GST).
 - * Outsourcing of the statutory functions under the Smart Cities Mission,
 - * Delay in the transfer of GST compensation,
 - * 'One Nation One Ration'.



- The establishment of the Ministry of Cooperation, as well as the Reserve Bank of India's guidelines on cooperatives, are seen by the states as attempts to strangle a sector already reeling from the devastation of demonetisation.
- Following this, measures such as the suspension and transfer of Member of Parliament Local Area Development (MPLAD) money to the Consolidated Fund of India were made.

What is Fiscal federalism?

- Fiscal federalism refers to the financial relationships between the federal government system and various levels of government in India.
- It is the study of how government spending and earnings are distributed across several vertical tiers of government administration.



Issues under the Current Fiscal Federalism Structure

- Horizontal Imbalances: Finance commissions have essentially evolved into a tool for pressuring states to implement fiscal reforms as part of economic liberalization. It has caused an unfortunate surge in horizontal imbalances because of the differing levels of attainment by the states, resulting from the differential growth rates and their developmental status in terms of the state of social or infrastructure capital.
- Vertical Imbalances: Vertical imbalances are created as a result of fiscal asymmetry in taxing powers conferred in various levels of government in proportion to their expenditure duties as defined by the Indian Constitution. These disparities are compounded in the case of third tiers, which include elected local authorities and panchayats.

- Pandemic and Federalism: Union's repressive measures, along with the pandemic-induced economic shock, have exacerbated state governments' budgetary plight.
 - * Tax collection: Increasing the non-divisible pool of revenues in the form of a cess in the gasoline tax and establishing the Agriculture Infrastructure and Development Fund Cess has resulted in a scenario in which the Union continues to gain solely from tax collection.
 - * GST: Throughout the epidemic, the Union government regularly breached the GST regime's reimbursement commitments to the states. Delays in paying the states' dues exacerbated the effects of the economic recession.

Recommendations

- In a cooperative federalist framework, it is critical to have provisions for further devolution to state governments in order to economically empower them to fulfil the aims of the New India-2022 national development programme.
- In reality, rather than using a top-down strategy, all levels should be economically empowered to accomplish state-specific fiscal deficit objectives.
- Central Government legislation relating to states should include additional provisions for cost-sharing to assist them in carrying out their responsibilities.
- States should seek the establishment of a formal institutional structure to require and promote dialogue between the Union and the States in the areas of legislation covered by the Concurrent List, as suggested by the National Commission to Review the Working of the Constitution.
- State governments may also consider deploying human resources to assist them in formulating replies to the Union's consultations, particularly with an emphasis on the federalism issue.
- Chief Ministers should endeavor to establish regular venues for discussion of this topic.

Conclusion:

 Federal flexibility will be critical in defining the future of our democracy. The Union government should devote resources to enable efficient engagement with states as part of the legislative process. It is vital that the Union creates a structure in which individuals and states are considered as partners rather than as subjects.



Issues and Challenges pertaining to the Federal Structure/Statutory, Regulatory and various QuasifuditialBodies

11. Examining the federal nature of the Central Bureau of Investigation

- » Prelims: CBI Functions, powers and appointment process
- » Mains: Tussle between the states and Union government over the functioning of central agencies

Background:

- Eight States West Bengal, Maharashtra, Kerala, Punjab, Rajasthan, Jharkhand, Chhattisgarh and Mizoram — have withdrawn 'general consent' to the Central Bureau of Investigation (CBI) for launching investigations in their territory.
- The widespread withdrawal of consent has left the CBI handicapped with regard to the investigation of corruption charges against Central employees and undertakings working within the territorial jurisdiction of various States.
 - * Though the withdrawal of general consent does not affect pending investigations or the cases registered in another State in relation to which investigation leads into the territory of the State which has withdrawn general consent; nor does the withdrawal circumscribe the power of the jurisdictional High Court to order a CBI investigation, however, it disrobes the CBI office's general status as Police Stations. It reduces the freedom of action available to CBI while investigating cases.
- The CBI had filed an affidavit in the Supreme Court. A Supreme Court bench has referred this case for the consideration of the Chief Justice of India.

Understanding the legal status:

- The CBI is a force constituted for Union Territories as recognised under the Delhi Special Police Establishment Act of 1946.
- Entry 80 of the Union List which provides for the extension of powers of the police force belonging to one State to any area in another State provides the legal foundation for the functioning of CBI in other states.
- Notably "Police" comes under State List of the Seventh Schedule of the Constitution. Hence the provision of general consent has been provided to safeguard the domain of the states while providing the necessary avenue for investigation by CBI in corruption cases.

 According to Section 6 of the Delhi Special Police Establishment Act of 1946, the State's consent is required to extend CBI investigation beyond Union Territories. Hence the CBI can conduct an investigation into the territories of the States only with their consent.

Salient Features of the Representation of People's Act

12. Electoral Reforms

- » Prelims: Representation of People's Act provisions
- » Mains: Measures to improve the electoral process in India and strengthening electoral participation

Context:

• The Election Law (Amendment) Bill, 2021 was passed in the Lok Sabha.

Provisions:

Linking of Aadhar and electoral ID:

- The amendment will allow for the linking of the electoral roll data with the Aadhaar ecosystem.
 - * The Bill will allow electoral registration officers to ask for Aadhaar numbers of new applicants wanting to register as voters and will also allow them to ask for the Aadhaar number from persons already included in the electoral roll.
- The linking of the electoral roll with a person's Aadhaar would be voluntary.
 - * No application shall be denied and no entries in the electoral roll shall be deleted for the inability of an individual to provide the Aadhaar number. Also, those who cannot provide their Aadhaar numbers will be allowed to present other documents to establish identity.
- The move will help curb the menace of multiple enrolments of the same person in different places and hence will help purify the electoral rolls.

Additional qualifying dates:

- The new amendment will allow four "qualifying" dates for eligible people to register as voters instead of one date currently available.
 - * Currently, January 1st of every year is the only qualifying date. People turning 18 on or before January 1 can only register as voters in that particular year whereas those turning 18 after that are having to wait for a year to register as voters.
- Henceforth January 1, April 1, July 1 and October 1 will be the four qualifying dates.



 This move will help increase the electoral participation among the youth and is thus a welcome step for strengthening and deepening democracy in India.

Provision for service voters:

- The new amendment will replace the word "wife" with "spouse" in the provisions relating to service voters.
- This will make the provision "gender-neutral" and will help address the discrimination against male spouses of women armed services employees.

Significance:

- The linking of aadhaar and voter ID will help in verifying the identity of voters.
 - * The Aadhaar database contains the unique identification numbers of every resident in the country.
 - * Aadhaar information is authenticated using biometrics, which cannot be replicated, and in turn, the duplication of voter ID cards is prevented.
- The linking will help weed out bogus voters and those who figure in the electoral rolls in more than one constituency (help check multiple registrations of the same voter). Thus it will help in reducing voter fraud and cleaning the electoral rolls of the country. This will help in consequently reducing electoral malpractices.
- A Parliamentary Standing Committee report had also argued for linkage of unique Aadhaar ID Card numbers with voter I-card as it would help streamline alterations in voter ID during change of ordinary residence by the electors.
- As per the Election Commission of India, the integration can help improve accessibility to voting in India. The move can help allow migrant workers the right to vote regardless of their location, in order to let them participate in elections in their home states. One of the major reasons why India lags in voter participation compared to other large democracies is because of the large number of migrant workers in India— an estimated population of 300 million. Linking the two databases will allow the ECI to track migrant workers and improve election participation.

Challenges:

- Usage of vague terminology: The Registration Officer may "require" an individual to furnish their Aadhaar number in order to establish their identity. Despite the assurance that the absence of the Aadhaar shall not lead to deletion, the usage of the word 'require' is not defined in the amendment bill.
- Shifting the Burden of Proof: Instead of ensuring house-to-house verification and voter drives, the Government has shifted the burden upon the citizens to ensure that their identity is verified before the elections.
- Absence of Procedural Mechanism: In case of deletion of the name of any individual on failure to provide for the Aadhaar number as per the Rules prescribed by the Central Government, the Amendment Act is completely silent and does not provide for any mechanism.
- Chances of Political Profiling: By linking electoral IDs with Aadhaar numbers, it is much easier for the Government to track which voter has accessed welfare subsidies and benefits using their Aadhaar.
- Privacy Concerns: There have been credible reports in the media about the lack of suitable security mechanisms to protect the data of the Aadhaar Card by UIDAI. Under that threat, the data of voters from the largest democracy in the world may further lead to many privacy concerns. This has also been the experience considering the 2015 issue in Telangana and Andhra Pradesh when election IDs were linked with Aadhaar numbers.
- Lack of Any Compelling Need: The stated objective of the amendment bill is unfulfilled since there has been no issuance of data on the problem of bogus voters which needs to be resolved using Aadhaar registrations.
- Failure of Democratic Process: The dilution of the legislative processes has been observed when an important issue such as voter registration was passed through a voice vote without much debate or discussion.
- Judicial Concern: Both the Calcutta High Court and the Allahabad High Court have refused to rely on the authenticity of Aadhaar data

Way forward:

There is an inherent tension between maintaining privacy and shoring up the integrity of electoral rolls. To balance them following measures can be taken up:

- Firewalls will need to be put in place, and strengthened.
- The risks and dangers of "profiling" the voters will need to be examined.



Conclusion:

• These issues need to be thoroughly debated. Therefore, the government should initiate a larger discussion on the bill



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ECONOMY

Indian Agricultural Sector

1. Animal Husbandry Startup Grand Challenge

Context:

 The second edition of the Animal Husbandry Startup Grand Challenge launched.

About the Animal Husbandry Startup Grand Challenge:

- · Launched jointly by:
 - * Department of Animal Husbandry and Dairying
 - * Startup India
- The first edition was launched in 2019.
- The aim is to scout for innovative and commercially viable solutions to address six problems faced by the animal husbandry and dairy sector.
- The winner will be awarded Rs 10 Lakh and one runner-up Rs 7 Lakh cash for each of the 6 problem areas. Up to 12 winners would also get incubation support for their ideas.
- The six problem areas are:
 - * Cost-effective, Long-term, and User-friendly Alternatives for Storage and Supply of Semen Doses
 - * Development of Cost-effective Animal Identification (RFID) and Traceability Technology
 - * Development of Heat Detection Kits
 - * Development of Pregnancy Diagnosis Kits for Dairy Animals
 - * Improvement of existing milk supply-chain from village collection centre to the dairy

plant

* Development of Low-cost Cooling and Milk Preservation System and a Data Logger

Indian Agricultural Sector

2. <u>Agricultural Technology Management Agency</u> (ATMA) Scheme

- » Prelims: Facts about the scheme, Centrally Sponsored schemes
- » Mains: Significance of the scheme, Dissemination of technology with a bottom-up approach

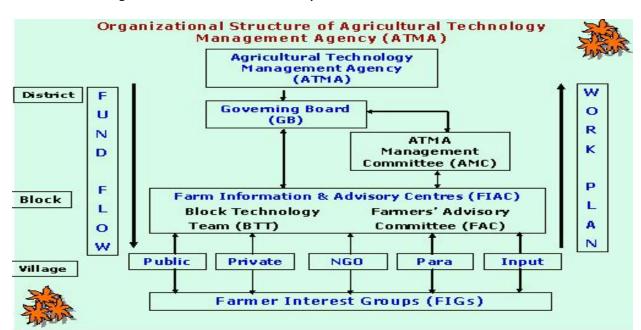
Context:

 The ATMA scheme and the progress it has made so far have been discussed in the Lok Sabha.

About the Scheme:

- It is a centrally sponsored scheme which was launched in the financial year 2005-06.
- The scheme is also known as Support to State Extension Programmes for Extension Reforms that largely focuses upon technology dissemination among farmers with an integrated approach.
- It operates at state, district, block and village levels and it involves a decentralized farmerfriendly extension system.
- The extension process includes activities such as farmers' training, exposure visits, Kisan Mela, mobilization of farmer groups and setting up farm schools. This promotes a bottom-up approach with sharing of agricultural knowledge from lab to land.

Working of the Scheme:





Objectives

- To strengthen research extension farmer linkages
- To provide an effective mechanism for coordination and management of activities of different agencies involved in technology adaption / validation and dissemination at the district level and below.
- To increase the quality and type of technologies being disseminated.
- To develop new partnerships with the private institutions including NGOs

Salient Features:

- The scheme results in the validation and refinement of technologies through various research units.
- It includes extensive usage of information technology along with private sector participation in technology transfer in the field of agriculture.
- The Farmer Advisory Committee created within the ambit of the scheme assists in the improvement of feedback provided by research institutions.

Participants:

 The scheme involves participants such as farmers/farmer groups, NGOs, Krishi Vigyan Kendras, Panchayati Raj Institutions.

Indian Economy and issues relating to planning, mobilization of resources, growth, development

3. 'Cybersecurity a key concern with CBDC' (Central Bank Digital Currency)

» Mains: Meaning of CBDC; how is it different from normal currency; economic implications

Currency

- It is a type of money that is issued by the Government or by the Central Bank acting as the representative of the Government.
- Currency is fiat, it is legal tender.
 - * Fiat money is physical money that includes paper money and coins.
- It is a liability of the issuing central bank (and sovereign) and an asset of the holding public.

<u>Central Bank Digital Currency (CBDC)</u>

- It is a sovereign currency issued by a central bank in electronic form.
- It is the same as a flat currency and is exchangeable one-to-one with the flat currency. Only its form is different.

- It would appear as a liability (currency in circulation) on a central bank's balance sheet.
- They can be divided into two broad categories:
 - * Wholesale CBDCs: financial intermediaries i.e. financial institutions holding reserve deposits in a central bank
 - * Retail CBDCs: wider economy i.e. for the general public

How is CBDC different from stable and crypto coins?

- Cryptocurrencies are independent digital currencies that run without predetermined value or backing, such as Bitcoin (BTC) or Ethereum (ETH).
- In contrast, CBDC has the backing of central banks.
 - * For example, China's proposed CBDC is digital yuan (e-CNY).
 - * In India, RBI has given the name "Digital Rupee" to the proposed CBDC.
- Stable coins too are backed, but by private entities.
 - * For example, Tether (USDT), USD Coin (USDC) and Facebook-backed Diem (earlier known as Libra) are all pegged to the US dollar.

Why do central banks want CBDC?

- One of the major reasons to move towards CBDC is to counter the volatility and unaccountability of cryptocurrencies as CBDCs are issued and regulated by the country's central bank, which is the main monetary authority.
- At the same time, CBDCs will retain the advantages of being digital such as lower printing cost, reduced settlement risk, avoidance of time zone issues, and cost-effective globalisation of payment systems.

A look at numbers

 A 2021 survey by the Bank for International Settlements (BIS) found that 86% of central banks were actively researching the potential for CBDCs, 60% were experimenting with the technology and 14% were deploying pilot projects.

Need for a CBDC

- Increasing usage of private virtual currencies by the general public has allowed the central banks to explore this domain to avoid the more damaging consequences of such private currencies.
- CBDCs have some clear advantages over other digital payments systems – payments using CBDCs are final and thus reduce settlement risk in the financial system.



 Sweden's central bank is working with banks to test how the digital currency might work practically so that it can popularize a more acceptable electronic form of currency. Central banks are thus promoting such initiatives.

Does India Need CBDC?

- India is leading the world in terms of digital payments innovations. Its payment systems are available 24X7, available to both retail and wholesale customers, they are largely real-time, the cost of transaction is perhaps the lowest in the world, and users have an impressive menu of options for doing transactions and digital payments.
 - * There is thus a unique scenario of the increasing proliferation of digital payments in the country.
- India's high currency to GDP ratio holds out another benefit of CBDCs. To the extent large cash usage can be replaced by CBDCs, the cost of printing, transporting, storing and distributing currency can be reduced.

Global examples

 China, the Bahamas, Sweden and the European Union are piloting their currency systems through CBDC.

Significance

- The introduction of CBDC would possibly lead to a more robust, efficient, trusted, regulated and legal tender-based payments option.
- It would reduce the dependency on cash, higher seigniorage due to lower transaction costs, reduced settlement risk.
 - * Seigniorage is the difference between the value of currency/money and the cost of producing it.
- It could protect the public from the abnormal level of volatility some of these Virtual Currencies (VC) experience.

Challenges

- The risk of cyber frauds is one of the major challenges of rolling out a central bank digital currency.
 - * It would require advanced monitoring and protection so that the cyber security architecture can thwart malafide attempts.
- Legal changes would be necessary as the current provisions have been made keeping in mind currency in a physical form under the Reserve Bank of India Act.
- Consequential amendments would also be required in the Coinage Act, Foreign Exchange Management Act (FEMA) and Information Technology Act.

Way forward

 Setting this will require careful calibration and a nuanced approach in implementation.

Major crops cropping patterns invarious parts of the country

4. Kalanamak Rice

- » Prelims: About the rice variety, One district One product, GI tag
- » Mains: Significance of conserving indigenous rice varieties

Context:

 It has been reported that the production and export of Kalanamak variety has significantly increased in the last three years.

About Kalanamak Rice:

- It is a non-basmati scented rice variety.
- It is grown in the Terai region of Uttar Pradesh and it is named so because of its black husk.
- This rice variety upholds larger hopes for the farmers and rice exporters to promote indigenous varieties of rice and conserve the traits of rice native to the subcontinent.
- In March 2021 the government of Uttar Pradesh celebrated Kalanamak Rice Festival in order to promote the one district and One Product campaign.
- It has high salt content and overshadows basmati due to its agronomic potential.

Benefits of Kalanamak Rice:

- Highly resistant to notorious rice diseases like panicle blast, stem rot and brown spot that cause huge crop losses for the farmers, unlike the Dehradun basmati which is highly susceptible to diseases.
- The Bacterial blight is rarely observed.
- Requires low water content and doesn't need standing water during transplantation.
- Can be grown without chemical fertilizers and pesticides.
- Low input and labour cost.
- It was observed that the 2001-2003 drought in the Terai region left the Kalanamak rice yield unaffected.

The Kalanamak Belt:

 The region where Kalanamak rice is grown comprises the Terai belt of Uttar Pradesh bordering Nepal along with Siddharthnagar, Sant Kabir Nagar, Maharajganj, Basti, Gonda and Gorakhpur. This stretch of area is known as the Kalanamak belt.



 The Kalanamak rice from the Siddharthnagar district is conferred with the GI tag.

Indian Agricultural Sector

5. Indian agriculture needs a Verghese Kurien

» Mains: Issues in agricultural sector and the potential of the AMUL model in addressing the challenges

Context:

 This article highlights the contribution of Verghese Kurien and the significance of the Amul Cooperative model.

Verghese Kurien

- Who was Verghese Kurien& what were his contributions?
 - * Dr Verghese Kurien was a chairman of Amul, an Indian cooperative dairy company.
 - * He is also called 'the father of the White Revolution' in the country.
 - * Verghese Kurien is known for transforming India's dairy's sector; his contribution made the country the largest milk producer in the world.
- Influence of Gandhian Thoughts:
 - * Kurien's enthusiasm for the cooperative model was influenced by Gandhian ideas on poverty alleviation and social development.
 - * He thought that co-operatives were the most physical incarnation of Mahatma Gandhi's powerful insight that "what the world needs is not mass production, but production by the masses."
 - * He also questioned the business sector's objectives in terms of social responsibility.
 - * He argued that profit drove much of the corporate sector, rather than public benefit.

Agriculture and Amul

- Issues in Agricultural Sector:
 - * In India, the cooperative movement is in a state of change. It has suffered as a result of a lack of competent management, inadequate funding, and low technological uptake.
 - * Suicides among farmers are not uncommon, and they weigh hard on the nation's conscience.
 - * Meanwhile, the epidemic has widened the gap between urban and rural areas.
 - * In rural India, incomes are decreasing, and the country appears to be on the verge of a major human disaster.

- Significance of Amul in Agriculture:
 - * The success of Amul has sparked similar movements in other agricultural commodities in India.
 - * The private sector excels in areas such as marketing and management, branding, and technology, and sets benchmarks for firms all around the world to follow and adapt.
 - * Simultaneously, Amul was progressively establishing itself as a laboratory, creating important inventions and inventing its own technologies, which have bolstered its competitiveness against global firms.
- · Case Study: Amul Cooperative Model
 - * Amul has steadily expanded its product line and added new ones, building on the strong foundation created by its visionary leader.
 - * Amul is still one of India's most well-known food brands, and other dairy cooperatives such as Nandini in Karnataka, Aavin in Tamil Nadu, and Verka in Punjab look up to it for inspiration.

Conclusion

 India's digital revolution has bypassed the agriculture sector. India should focus on smart villages and development models such as Amul.

Infrastructures Energy, Ports, Roads, Aliports, Railways, etc.

6. The NMP is hardly the panacea for growth in India

» Mains: Critical Evaluation of the National Monetisation Pipeline (NMP) scheme.

Context:

 This article examines the significance and concerns associated with the National Monetisation Pipeline (NMP).

What is monetisation?

- In a monetisation transaction, the government essentially transfers income rights to private parties for a specific length of time in exchange for cash upfront, a revenue share, and a commitment to invest in the assets.
- The major structures used to monetize assets in the road and power sectors, for example, are real estate investment trusts (REITs) and infrastructure investment trusts (InvITs).



What is the National Monetisation Pipeline (NMP)?

- The NMP is intended to maximize the value of investments in brownfield public-sector assets by leveraging institutional and long-term financing.
- National Monetisation Pipeline is worth Rs 6 lakh crore.

Objectives of NMP:

- To extract the value of public-sector asset investments by leveraging private-sector resources and efficiencies.
- To release idle money from non-strategic/ underperforming government-owned assets.
- To reinvest the proceeds in new infrastructure projects and asset augmentation, such as Greenfield infrastructure building.

Significance of NMP:

- The NMP demonstrates that while the government may have constructed assets, the private sector may put them to better use.
- NMP assists in generating value from idle assets without the Centre permanently relinquishing control of public sector assets to private parties.
- The Centre has emphasized that the government will retain primary ownership of assets under the NMP
- NMP funds will be utilized to build infrastructure as part of the National Infrastructure Pipeline.
- Private entities will utilize the asset for a specified period of time before returning it to the public authorities.

Other Government measures: – Pradhan Mantri Gati Shakti National Master Plan

- The "Pradhan Mantri Gati Shakti National Master Plan" for multi-modal connectivity was launched to synchronise the activities of 16 Ministries' departments, including railroads and highways.
 - * The Gati Shakti is a national master plan aimed at the coordinated planning and execution of infrastructure projects in India to reduce logistics costs.

Challenges:

- Key challenges: Lack of identifiable revenue streams in various assets, level of capacity utilization in gas and petroleum pipeline networks, dispute resolution mechanism, regulated tariffs in power sector assets, and low interest among investors in national highways below four lanes.
- Structural Challenges: Slow pace of privatization in government companies and less-thanencouraging bids.

 Pricing Issues: High cost for the end-consumer, lack of identifiable revenue streams in various assets, dispute resolution, presence of regulated tariffs in certain sectors are some hurdles NMP needs to cross.

Essential steps

- To strengthen public sector businesses by completely revamping their corporate governance structure in order to enhance operational autonomy of governance practices.
- To revamp the performance monitoring system of central public sector enterprises to make them more transparent, objective and forward looking, based on sectoral indices/benchmarks.
- To boost domestic production in the steel sector, viz. inclusion of "speciality steel", incentives under the production linked incentive (PLI) scheme; etc.

Conclusion:

 The goal of the NMP is to enable 'Infrastructure Creation through Monetisation,' in which the public and private sectors combine to offer socioeconomic growth and quality of life to the citizens of the country.

Indian Economy & Issues Relating to Planning, Mobilization of Resources, Growth, Development & Employment

7. <u>Cabinet approves 76,000 crore push for</u> semiconductor makers

- » Prelims: PLI scheme for semiconductor and display systems- provisions
- » Mains: Significance of the scheme.

Context:

• The Union Cabinet has approved a Productionlinked incentive (PLI) scheme for semiconductor and display board production

Details:

- The scheme has been provided with a budget of around ₹76,000 crore scheme to boost semiconductor and display manufacturing in the country.
- The programme aims to provide a globally competitive incentive package to companies in the sector.
 - * The scheme would provide fiscal support of up to 50% of the project cost for setting up semiconductor and display fabrication units.
 - * The government will work towards setting up high-tech clusters with the required infrastructure in place.



 Also a specialised and independent 'India Semiconductor Mission' will be set up under the leadership of global experts in semiconductor and display industry. It will act as the nodal agency for efficient and smooth implementation of the schemes on semiconductors and display ecosystem.

Significance:

- The scheme will provide an impetus to domestic electronic design and production capabilities.
 - * Electronics manufacturing in the country had increased to \$75 billion over the past seven years and is expected to reach \$300 billion in the next six years.
- The programme will help make India a global hub of electronic system design and manufacturing. The scheme is expected to attract investment of ₹1.67 lakh crore and lead to production worth ₹9.5 lakh crore.
- The programme will also help create highly skilled employment opportunities in India. The entire programme would lead to 35,000 highquality direct jobs and indirect employment for 1 lakh persons. This would provide an opportunity to harness the demographic dividend of the country.
- The programme would propel innovation and build domestic capacities to ensure the digital sovereignty of India.
- Domestic production will help uphold trust in digital devices. This has gained utmost importance in the current geopolitical scenario where the security of critical information infrastructure holds immense strategic importance.

International Trade

8. Mixed Signals

» Mains: Effects of Liberalization on the economy and Changes in industrial policy.

Context:

- India has been giving ambiguous cues regarding its stand on economic globalization.
- On one hand, Foreign Minister rebuked Globalisation supporters for not acknowledging geopolitical motivations behind the open market. On the other hand, ministers and dignitaries are busy convincing investors for Atmanirbhar Bharat.

Problems with Protectionism:

- In face of rising anti-china sentiment, there is an opportunity for India to be its substitute, especially in manufacturing.
- The earlier period of protectionism during the 1960s-70s lead to a lot of inefficiencies in production and also restricted access to products. It also leads to a low-productivity cycle by supporting low-productivity businesses.
- Lack of capital for new initiatives can be tackled with foreign investment.
- · Protectionism stifles access to technology.

Argument in favour of protectionism:

- Non-existence of fair global trade order.
- Relying on other countries may compromise Sovereignty of the country.
- Pandemic has highlighted the limitations of the global supply chain.
- Countries like China use trade as a weapon by blocking supplies.

Way forward:

 Since India is benefiting from rising exports and is also looking for free-trade agreements with partners like UAE, Canada, the EU, there is no benefit in denying or rebuffing globalization. Rather India should take whatever opportunity it can find viz-a-viz globalization.

Infrastructures Energy, Ports, Roads, Aliports, Raflwaysets

9. The problems within the UDAN scheme

- » Prelims: UDAN scheme provisions
- » Mains: Initiatives taken to provide impetus to regional connectivity – Significance and challenges

UDAN Scheme:

- The Ude Desh Ka Aam Nagrik (UDAN) scheme is a low-cost flying scheme launched in 2017. The scheme aims to make flying affordable to all.
- It is also known as the Regional Connectivity Scheme (RCS) as it seeks to improve air connectivity to tier-2 and tier-3 cities through the revival of unused and underused airports.
 - * The Government under the RCS has earmarked around ₹4,500 crore for revival of 50 airports in the first three years.
- Airlines are required to offer airfares at the rate of ₹2,500 per hour of flight. At least 50% of the total seats on a flight have to be offered at these rates.
- The government offers subsidy for a period of three years to ensure financial viability of the routes.



Status of the scheme:

- As against the target set by the Ministry of Civil Aviation of operationalising as many as 100 unserved and underserved airports and starting at least 1,000 RCS routes by 2024, the Airport Authority of India has awarded 948 routes under UDAN.
 - * Out of these only a little over 400 routes have been launched by airlines, hence most of the routes awarded under UDAN are not active and some of the routes launched have been discontinued.
 - » Out of the total 28 seaplane routes connecting 14 water aerodromes, only two have commenced.
 - * The initiatives to provide improved connectivity to hilly regions and islands through helicopters and seaplanes have remained unimplemented.
 - * The Government offers subsidy for a route for a period of three years and expects the airline to develop the route during this time so that it becomes self-sufficient. But some airlines have stopped operating the route once the tenure of the subsidy expired.

Factors responsible for the poor performance:

- Failure to set up airports or heliports due to lack of availability of land.
- Poor financial health of the smaller, regional carriers.
- So far, only those routes that have been bagged by bigger domestic players such as IndiGo and SpiceJet have seen a better success rate under the UDAN scheme.
- The smaller entities find it hard to compete with the bigger airlines. They find it hard to provide a comparable salary to domestic pilots on par with the bigger airlines. They have problems with availability of pilots and are forced to hire foreign pilots which costs them a lot of money and makes the business unviable.
- This financial stress has impacted the functioning of the airlines – maintenance of aircraft, payment of rentals to aircraft lessors, salaries to the staff, etc. As a result they are having to function with a very small fleet.
- These factors have made it difficult for the airlines to start flights on routes awarded to them or have found it difficult to sustain the routes awarded to them.
- Impact of the COVID-19 pandemic
 - * The COVID-19 pandemic and the corresponding restrictions and regulations

have adversely impacted the sector which has only further strained their financial health.

Economies of Animal - Reading

10. BKU against opening of dairy sector

» Mains: Arguments against opening up of India's dairy sector to foreign dairy majors

Background:

- India and Australia have been in discussion for concluding a Comprehensive Economic Cooperation Agreement (CECA) by the end of 2022.
- With indications of such a CECA allowing for the opening up of India's dairy sector for Australian dairy majors, Bharatiya Kisan Union (BKU) has stated that it will oppose any such move.

<u>Arguments against opening up of India's dairy sector:</u> Flooding of cheap dairy imports:

 The opening up of the dairy sector to foreign dairy majors could result in the flooding of cheap dairy imports into India. As a result, its impact on Indian dairy product prices would be significant and this will definitely undermine the domestic players in the sector.

Price realization by Indian farmers:

- The private milk companies would find it far more profitable to import milk from Australia or New Zealand rather than buy it from Indian farmers. In such a scenario, the sale price of milk received by Indian farmers would fall sharply.
 - * The unit cost of milk production is relatively low in countries like Australia because of extensive grazing lands (which reduce feed costs), mechanised operations and the advantages of economies of large-scale production, and the high productivity of milch animals (about 30 L/day).

Unequal competition:

- The government policy in countries like Australia has consciously helped their major dairy companies become major global players.
- On the contrary, India's dairy sector is composed predominantly of small producers.
 - * In 2017, if the average herd size in a dairy farm was 191 in the U.S., 355 in Oceania, 148 in the U.K. and 160 in Denmark, it was just 2 in India
- This unequal competition will only undermine the operations of the Indian domestic players.



Concerns over livelihood:

- India's dairy sector provides livelihood to about 70 million households.
- Many small farmers are dependent on dairy work and opening the sector to foreign countries like Australia will hurt millions of farmers and dairy workers.

False arguments:

- As against the argument that India would soon become a milk-deficient country and be forced to import milk and it stands to gain from cheap dairy imports from countries like Australia, forecasts from Niti Aayog show that this argument is wrong.
- India's contribution to world milk production stands at 20% in 2018. As per the available estimates, in 2033, India's milk production would rise to 330 MMT while its milk demand would be 292 MMT. Thus, India is likely to be a milk-surplus country by 2033.
- Thus unlike other developing countries India is self-sufficient in milk production and will continue to be so in the coming years as well. The influx of cheap dairy imports is not necessary for meeting the dairy needs in the domestic market.

Opting out of RCEP:

 Having opted out of the RCEP [Regional Comprehensive Economic Partnership] deal over fears of the Indian dairy sector being overwhelmed by dairy majors of countries like Australia and New Zealand, the move to have a bilateral Free Trade Agreement with an RCEP member like Australia would have the same adverse impact on India's dairy sector.

Issues Relating to Intellectual Property Rights.

11. India revokes PepsiCo's potato patent

- » Prelims: Intellectual Property Rights (IPR), Protection of Plant Varieties and Farmers Rights' Authority (PPV&FRA)
- » Mains: Violation of Intellectual Property Rights and Farmers Rights

Context:

 The Protection of Plant Varieties and Farmers Rights' Authority (PPV&FRA) revoked PepsiCo India's potato patent.

Background

In order to provide for the establishment of an effective system for the protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants it has been considered necessary to recognize and to protect the rights of the farmers in respect of their contributions made at any time in conserving, improving and making available plant genetic resources for the development of new plant varieties. The Govt. of India enacted "The Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001" adopting sui generis system.

Rights under the Act

- Breeders' Rights: Breeders will have exclusive rights to produce, sell, market, distribute, import or export the protected variety. Breeder can appoint agent/ licensee and may exercise for civil remedy in case of infringement of rights.
- Researchers' Rights: Researcher can use any of the registered variety under the Act for conducting experiment or research. This includes the use of a variety as an initial source of variety for the purpose of developing another variety but repeated use needs prior permission of the registered breeder.
- Farmers' Rights
 - * A farmer who has evolved or developed a new variety is entitled for registration and protection in like manner as a breeder of a variety;

Pepsi

- They were growing a variety of Potato FL 2027, also called FC5 — on which PepsiCo claimed exclusive rights by virtue of a Plant Variety Certificate (PVC) under the Act.
 - * PepsiCo had invoked Section 64 of the PPV&FR Act, 2001 to claim infringement of its rights.



 Farmers groups cite Section 39 of the same Act, which specifically says that a farmer is allowed "to save, use, sow, resow, exchange, share or sell his farm produce including seed of a variety protected under this Act" so long as he does not sell "branded seed".

Farming techniques

12. Zero Budget Natural Farming

- » Prelims: ZBNF- Techniques; Paramparagat Krishi Vikas Yojana.
- » Mains: Pros and cons of ZBNF.
- Zero-budget natural farming is a technique of farming that aims to bring down input costs by making farmers rely on natural inputs, shifting away from agricultural chemicals, such as pesticides and fertilisers.
- It was popularised by Subhash Palekar.
- ZBNF recommends the "four wheels": Bijamrit, Jivamrit, Mulching and Waaphasa and three methods of insect and pest management: Agniastra, Brahmastra and Neemastra (all different preparations using cow urine, cow dung, tobacco, fruits, green chilli, garlic and neem).
 - * Bijamrit is the microbial coating of seeds with formulations of cow urine and cow dung.
 - * Jivamrit is the enhancement of soil microbes using an inoculum of cow dung, cow urine, and jaggery.
 - * Mulching is the covering of soil with crops or crop residues.
 - * Waaphasa is the building up of soil humus to increase soil aeration.
- ZBNF is both an economically and environmentally sustainable method of crop production.

Significance of ZBNF:

- Reduced input costs
- Reduced cost of production
- Reduce indebtedness among farmers
- Reduced/zero input of chemicals in agriculture
- Avoid adverse impact of environmental pollution
- Help protect humans/animals from the adverse impact of chemicals

Economical



Environmental



Criticism

- The concept of Zero Budget Natural Farming is not well-accepted by the scientific community. National Academy of Agricultural Sciences scientists mentioned that India cannot rely on Zero Budget Natural Farming as there is no scientific validation of the techniques used in Zero Budget Farming.
- As against the name suggests, the farming method does bear a minimum input cost
- The maintenance of the local cow breed is difficult as against those that are used currently
- Organic certification of the crops planted by the Zero Budget Natural Farming will face another hurdle and it might lead to a difficulty in selling the products to the organic brands.



Conclusion

 While it has definitely helped preserve soil fertility, its role in boosting productivity and farmers' income isn't conclusive yet

 Experts have warned that multi-location studies are needed to scientifically validate the longterm impact and viability of the model before it can be scaled up and promoted country-wide.



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INTERNATIONAL RELATIONS

Bilateral, Regional and Global Groupings and Agreements involving India and/or affeating India's interests

<u>EU plans €300 billion infra fund to counter China's</u> <u>BRI</u>

- » Prelims: The Global Gateway plan
- » Mains: China's debt diplomacy and its adverse impacts; Implications for India in its neighbourhood; Recommendations to counter China's plan

Background:

China's Belt and Road initiative:

- China Belt and Road initiative is a flagship project of the country launched in 2013. Officially, it aims to develop land and sea infrastructure to better connect China to Asia, Europe and Africa for trade and development. Many countries have become a part of this initiative.
- There is a growing concern that China is using the BRI as a tool to influence poorer countries. China is being blamed for pushing forward financially unviable infrastructural projects which could push the countries into a debt trap.
- There are also concerns that China's contractual terms ignore abuses of human, labour and environmental rights while also being a major cause of corruption in the recipient countries.

Details:

- The European Commission has announced the Global Gateway plan to mobilise €300 billion (\$340 billion) between 2021 and 2027 in public and private infrastructure investment around the world.
- It will seek to bring together resources of the EU, member states, European financial institutions and national development finance institutions.
 - * To finance the project, the EU will use its European Fund for Sustainable Development Plus, which can make available 40 billion euros in guarantee capacity, and will offer grants of up to 18 billion euros from external assistance programs.
 - * The program will also seek to "crowd-in private capital" to boost investments
- The plan mostly brings together existing initiatives and funding programs with the goal of supporting Europe's interests and competitiveness around the world.
 - * It also seeks to bolster sustainable environmental standards and values such as democracy and human rights.

- The EU strategy is an offshoot of a plan by G7 countries [Build Back Better World (B3W)] to offer developing countries an alternative to the Belt and Road Initiative
 - * B3W is an international economic initiative undertaken by the Group of Seven (G7).
 - * It has the goal of creating "a valuesdriven, high-standard, and transparent infrastructure partnership" to help finance projects in developing countries.

India and its Neighbourhood Relations

2. Ramna Kali Temple

- » Prelims: About Ramna Kali Temple, Operation Searchlight
- » Mains: India's role in the Liberation of Bangladesh

Context:

 The President of India inaugurated the renovated Sri Ramna Kali Temple on his maiden state visit to participate in the golden jubilee celebrations of the independence of Bangladesh from Pakistan.

About the temple:

- The Ramna Kali temple was destroyed by Pakistani forces in an army operation which was called Operation Searchlight.
 - * Operation Searchlight was a planned military killing carried out by the Pakistan Army to killing carried out by the Pakistan Army to suppress the Bengali nationalist movement in East Pakistan durin g the liberation war of 1971
- The temple was set on fire and destroyed the lives of many devotees and people residing in it.
- The Ramna Kali Bari was comprised of the temple and a housing complex.
- The renovation and conservation of the temple has been supported by India in association with the government of Bangladesh. After 50 years of the liberation war, the temple was renovated and inaugurated.
- This historic temple stands as an example of the spiritual and cultural connection between India and Bangladesh.



Bilateral, Regional and Global Groupings and Agreements involving India and/or affecting Indias interests

3. India lays emphasis on UNCLOS

- » Prelims: UNCLOS Provisions, membership and functioning
- » Mains: Maritime security Significance, challenges and initiatives being taken up by India

Context:

 Minister of State for Defence's statement in a written reply in the Lok Sabha.

Details:

- The Government has reiterated support for the United Nations Convention on the Law of the Sea (UNCLOS).
 - * The United Nations Convention on the Law of the Sea, also called the Law of the Sea Convention, is an international agreement that establishes a legal framework for all marine and maritime activities. It lays down a comprehensive regime of law and order in the world's oceans and seas establishing rules governing all uses of the oceans and their resources.
 - * India is a party to the UNCLOS.
- In this regard, the government has clarified that it supports freedom of navigation and overflight, and unimpeded commerce as envisaged under the principles of the UNCLOS.
- The government has stated that it stands committed to promoting a free, open and rulesbased order rooted in international law and has stated that it would remain undaunted by coercion. This seems to be in reference to China's increasing assertiveness in the region.

Initiatives take up:

- India is committed to safeguarding maritime interests and strengthening security in the Indian Ocean Region (IOR) to ensure a favourable and positive maritime environment for itself.
 - * India has taken 'Mission-based Deployments' of naval ships and aircraft to enhance Maritime Domain Awareness, promote maritime security and address any contingencies.
 - * India has proactively engaged with regional and extra-regional maritime forces through multilateral exercises, joint surveillance, coordinated patrols to promote maritime security in the region in an inclusive and cooperative manner. This is in consonance with the Government's vision of Security and Growth for All in the Region (SAGAR).

Effect of Polities and Polities of Developed and Developing Countries on India's interests, Indian Diaspora

4. Yameen leads 'India Out' campaign in Maldives

- » Prelims: Uthuru Thila Falhu (UTF) harbour development project
- » Mains: India Maldives bilateral relations Challenges and Potential

Context:

- The 'India Out' campaign in the Maldives has intensified, with ex-President Abdulla Yameen now leading it.
 - * Notably, India-Maldives ties deteriorated considerably when the Yameen administration was in power from 2013 to 2018. Mr. Yameen's perceived China tilt at the time was a major source of concern for India.

Government's response:

- The Government of Maldives has stated that it is profoundly concerned by attempts to spread hatred towards India, which it feels will not only hurt the bilateral ties but will also affect the safety and security of the citizens of the two countries.
- It has termed the campaign as being based on misguided and unsubstantiated information and being limited to a small group of individuals and political personalities. Opposing the claims of the campaign resisting India's military presence in the Maldives, the current Maldivian government has denied any Indian military presence in the island nation.
- While acknowledging the consistent support offered by India to the Maldivian people, the government has termed India as one of the closest bilateral partners of the Maldives and its ally and trusted neighbour.
 - * The new government has signed the Uthuru Thila Falhu (UTF) harbour development defence deal with India, in February 2021. This project has been termed vital for the "effective functioning" of the Maldivian Coast Guard.
 - * India has undertaken many developmental works in the archipelago and has also offered concessional lines of credit for various infrastructural projects in the Maldives.
- The new government in the Maldives has declared an "India first" foreign policy and has openly expressed the opinion of India being the single most important country for the Maldives.





Effect of polities and polities of developed and developing countries on India's interests

5. For Afghan women, it's the great regression

» Mains: Challenges faced by Afghan women in Taliban-led Afghanistan.

Context:

• This article discusses the issues faced by women and girls in Afghanistan.

<u>What is happening to women and girls in Afghanistan?</u>

- The recent transfer of power from the former Afghan government to the Taliban has created a great deal of anxiety in Afghanistan.
- Women and girls in Afghanistan continue to experience pervasive discrimination and violations of their human rights.
- The country scores among the worst on the Gender Inequality Index, and women's literacy rates are among the lowest in the world.
- Violence against women and girls is rampant, and the majority of them do not attend school.



Challenges Faced by Afghan women

- · The diktat
 - * The diktat is an example of how the Taliban, in the guise of upholding Islamic law, has begun to erode Afghan women's rights.
 - * The Taliban imposed new norms of conduct on Afghan women, limiting their movement and robbing them of their autonomy.
 - * They required women to wear clothing that totally covered their hair, torso, and most of their face.
 - * They also required men to accompany ladies when they left their homes.
- Restrictions on jobs
 - * The Taliban have set limitations on even female municipal government officials, forbidding women from returning to work; men are expected to fill the resulting gaps.
 - * As a result, the new Taliban administration has exclusively male officials who are now in charge of all decisions, even those affecting women.
- · Restrictions on Education
 - * The Taliban's Ministry of Education issued an order for male students and teachers in Classes 6 to 12 to report to their schools, with no mention of schoolgirls.
 - * According to a recent BBC report, a top Taliban leader has affirmed that girls would continue to be barred from attending secondary school.
 - * Taking away girls' access to education completely poses a serious risk of forcing them into poverty and backwardness.



· Special decree

- * The Taliban released a special decree on women's rights, including restrictions for Afghan women's marriage and property.
- * The decree has some ambiguity with respect to the rights of "adult women" and makes no mention of the common problem of child marriage.
- * It also does not define how the Islamist organisation intends to put women rights into action.

· Gender-based violence

- * According to studies, approximately 87% of Afghan women have experienced at least one type of violence, whether physical, sexual, or psychological, and nearly 62 percent have experienced numerous forms.
- * Women in Taliban-ruled Afghanistan do not have access to shelters or basic services such as medical treatment, psychological counselling, or pro bono legal representation.
- * Under the Taliban, inmates who have been convicted of crimes linked to gender-based violence are being freed from prison, putting survivors' lives in jeopardy.

Recommendations:

Women's Women Must An International Connect Afghan Have Equal Agency and Push for Human Women Inside Access to **Engagement** Rights and and Outside of Humanitarian Must Be Women's Rights. the Country. Assistance. Encouraged.

Conclusion:

 Afghanistan needs a broad-based representative government that includes women. The future Afghan government must be multi-ethnic, representative, and committed to human rights, particularly those of women and girls. Afghan women should be able to select their roles in the future.

Miscellaneous

6. At the centre of the Ukraine crisis

- » Prelims: Map based Questions; Minsk Protocol
- » Mains: Human rights issue in Donbas region; Russia's Aggression Against Ukraine

Donbas

 Donbas is a small region in eastern Ukraine adjoining the Russian border



Background

Fall of Russian Empire

- For hundreds of years, an elite, wealthy Czarist regime ruled Russia, the rest of which largely consisted of peasants. It came to an end during the February Revolution of 1917
- After the fall of the Russian empire, the region was incorporated into the newly created Ukrainian People's Republic in 1918.

Ukraine in the interwar period

- In the aftermath of World War I and the revolutionary upheavals that followed, Ukrainian territories were divided among four states. Bukovina was annexed to Romania. Transcarpathia was joined to the new country of Czechoslovakia. Poland incorporated Galicia and western Volhynia
- The territories under Bolshevik control were formally organized as the Ukrainian Socialist Soviet Republic

Second World War

- During the Second World War, the Nazis took the region. Over 3,00,000 civilians were killed in Donbas alone during the Nazi occupation.
- In 1943, after defeating the Nazis in Stalingrad, the Red Army took Donbas back.



1991

• In 1991, with the disintegration of the Soviet Union, the region, which comprises the Donetsk and Luhansk Oblasts, became part of the newly born Ukrainian nation.

Context

- Donetsk and Luhansk are run by rebels backed by Russia.
- With Russia mobilising thousands of troops on its border with Ukraine, it has sparked fears of war, Donbas is once again at the centre of a looming conflict.

Origin

- The current crisis started with the 2013 Euromaidan protests in Ukraine.
 - * Ukrainians took to the streets in peaceful protest after then-president Viktor Yanukovych chose not to sign an agreement that would have integrated the country more closely with the European Union
 - » It was also the rejection of the post-Soviet politics of corruption and nepotism.
- When pro-western protesters forced President Viktor Yanukovych to resign in 2014, counterprotests broke out in the Crimean Peninsula and Donabs, where a majority of people speak Russian.
 - * Immediately after Russia's annexation of Crimea, protests picked up in Donbas, eventually leading to an armed rebellion.
 - * Donetsk and Luhansk, separatists declared self-ruled republics in 2014.

Response of west and Russia

- Ukraine and Western countries accused Russia of supplying weapons to the rebels and sending military personnel to the region to fight the Ukrainian army.
- Russia's official position is that it has nothing to do with the insurgency, but President Vladimir Putin said in 2016 that Russia "was forced to defend the Russian-speaking population in the Donbas...".
 - * In Donbas, ethnic Ukrainians make up a majority, while ethnic Russians are the largest minority. But over 70% of the population, across the ethnic divisions, speak Russian.
 - * Moscow says the post-Yanukovych regimes in Kiev are discriminatory to the Russian-speaking people in the east.

Minsk Protocol

MINSK I

 Unable to defeat the Russian-backed rebels, Ukraine agreed to the Minsk Protocol

- The Minsk Protocol is an agreement which sought to end war in the Donbas region of Ukraine and called for an immediate ceasefire
 - * It was mediated by France and Germany, in 2014
- Its provisions included prisoner exchanges, deliveries of humanitarian aid and the withdrawal of heavy weapons
 - * The agreement quickly broke down, with violations by both sides.

MINSK II

- Representatives of Russia, Ukraine, the Organisation for Security and Cooperation in Europe (OSCE) and the leaders of two pro-Russian separatist regions signed a 13-point agreement in 2015 in Minsk.
- The deal set out a series of military and political steps that remain unimplemented
 - * Withdrawal of all heavy weapons by both sides
 - * A pardon and amnesty for people involved in the fighting
 - * An exchange of hostages and prisoners.
 - * Constitutional reform in Ukraine including decentralisation, with specific mention of Donetsk and Luhansk.

Current condition

- Ukraine started getting enhanced military and financial aid and training from the U.S. and other western nations. Since 2014, the U.S. has committed over \$2.5 billion in military assistance to Ukraine.
- As the Minsk process hit a dead end and Ukraine, under President Volodymyr Zelensky, moved closer to the West, Russia changed its approach.
- Mr. Putin sees Ukraine joining NATO or the latter moving advanced weaponry to Ukraine as a direct threat to Russia's "command positions".

Conclusion

- Russia demands a commitment from the U.S. that Ukraine would not be taken into the NATO fold. The U.S. would not give any such assurance.
- As the stalemate continues, Donbas, a region of roughly 4 million people, has been caught in the middle of the most dangerous great power rivalry in Europe since the end of the Cold War.

India and its neighbourhood relations

7. The battle for the Trincomalee oil tank farm

- » Prelims: Location of ports (map-based questions)
- » Mains: Development of Oil tank farm and its significance for India





Image source: www.sundaytimes.lk



Image source: www.vifindia.org

Trincomalee Oil Tank Farm

- It is the oil tank farm that was initially built by the British during WW2.
 - * The main purpose of the oil tank farm was to fuel the Royal Navy and the Royal Air Force (RAF), which were used during the East Indian defense against Japanese aggression.
 - * The storage complex fell into disuse after the British ceded power in 1948.

• Trincomalee harbour is the second deepest natural harbour in the world.

The facility has 99 storage tanks.

- They have a capacity of 12,000 kl each.
- 84 of those are in the 800-acre Upper Tank Farm (UTF).
 - * These tanks have remained unused for many decades.
- The Lower Tank Farm (LTF) has 16 tanks, spread across 50 acres.
- Overall 15 are operational and run by the LIOC, while the UTF, for decades, remains neglected.
 - * Four of the 15 tanks are used for water storage by the Sri Lanka Air Force and Prima Group.

History of India's interest in Trincomalee

- India's engagement with Sri Lanka for the development of the oil tank storage farm project dates back to the India-Sri Lanka Accord of 1987.
- In 2003, the Indian Oil Corporation set up Lanka IOC (LIOC), its Sri Lankan subsidiary.
 - * In an agreement with the Government of Sri Lanka and the State-run Ceylon Petroleum Corporation in 2003, the LIOC obtained for an annual payment of \$1,00,000 a 35-year lease to develop the oil tank farm spanning 850 acres in the north-eastern tip of the island.
- However, the agreement remained dormant for years, until the Sirisena-Wickremesinghe administration tried revisiting it through the 2017 MoU.

Significance

- From India's geostrategic viewpoint, Trincomalee is an important counterbalance to the southern Hambantota Port backed by China.
- India also views the project as a means to participate in Sri Lanka's development.

Challenges

- Vagaries of internal politics in Sri Lanka.
- Workers protesting the "handing over" of a strategic national asset to another country.

How does it help Sri Lanka?

- Developing the upper tank farm in Trincomalee would help the coastal town become a regional petroleum hub.
- The region has also emerged as a favoured destination for surfers from around the world, gradually transforming with plush resorts and restaurants dotting its coast. Thus it can be developed as a tourist hub.



India and its Neighborhood-Relations

8. Four-pronged plan on Sri Lanka crisis

- » Prelims: Currency swap agreement
- » Mains: Challenges to the bilateral relationship between India and Sri Lanka; Measures being taken

Context:

- Sri Lankan Finance Minister's visit to New Delhi amid the economic crisis in Sri Lanka.
 - * Sri Lanka's government has declared an economic emergency amid rising food prices, a depreciating currency, and rapidly depleting forex reserves.

Details:

- India and Sri Lanka have agreed to a fourpronged approach to help mitigate Sri Lanka's economic crisis.
 - * India would provide lines of credit for food, medicines and fuel purchases.
 - * India and Sri Lanka would sign a currency swap agreement to help Sri Lanka deal with its balance of payment issues.
 - » A currency swap is a transaction in which two parties exchange an equivalent amount of money with each other but in different currencies. The parties are essentially loaning each other money and will repay the amounts at a specified date and exchange rate.
 - » Central banks and Governments engage in currency swaps with foreign counterparts to meet short term foreign exchange liquidity requirements or to ensure adequate foreign currency to avoid the Balance of Payments (BOP) crisis till longer arrangements can be made.
 - * Sri Lanka has committed to finalizing quickly the proposed modernisation project of the Trincomalee oil farms by India.
 - * Sri Lanka has also committed to facilitating Indian investments in various sectors.
 - » India and Sri Lanka have had a number of differences on economic issues in the past two years, particularly over the perception that the current Sri Lankan Government has favoured Chinese companies over Indian companies in infrastructural projects.
- India and Sri Lanka have agreed to open direct lines of communication and to be in direct and regular contact with each other to coordinate the proposed four-pillar initiative.

Effect of polities and polities of developed and developing countries on India's interests

9. The 'diplomatic' Olympic boycott

» Mains: Tensions between the U.S. and China; Global repercussions

Context:

• The US has announced a diplomatic boycott of the 2022 Winter Olympics in China.

What does a 'diplomatic boycott' of the games mean?

- A complete boycott would mean that U.S. athletes and officials would not participate in the winter Olympics.
- However, a diplomatic boycott means no U.S. official will be present at the Winter Olympics in Beijing but athletes will still compete in the Games. It will not have an impact on the games.

Reasons given by the USA for the boycott

- It is aimed to highlight Chinese actions in Xinjiang which includes "genocide and crimes against humanity".
- They have committed human rights violations against the ethnic minorities including mass detentions and forced use of contraception and sterilizations.

Support from other countries

 Australia, Canada, and New Zealand have also announced that their officials will not be present at the games. None, however, has said their athletes will not attend.

China's reaction

 Chinese foreign ministry spokesman warned the Games were "not a stage for political posturing and manipulation" and said China will take resolute countermeasures.

Impact on U.S.-China relations

 The spat over the Winter Olympics is the latest clash between the U.S. and China, adding to a long list of differences on trade, Taiwan, human rights and the South China Sea.

10. Freedom and power

Context:

 The new Democrat government in the United States of America invited 110 nations across the globe for the 'Summit for Democracy.'

Summit for Democracy

It was a virtual summit hosted by the United States
 "to renew democracy at home and confront



autocracies abroad" and to bolster democratic institutions that appear to be faltering.

- The three themes are defending against authoritarianism, addressing and fighting corruption, and advancing respect for human rights.
- Leaders were "encouraged" to announce "specific actions and commitments" to meaningful domestic reforms and international initiatives that advance the summit's goals.

Announcements

 The Biden administration committed to announcing specific targets on helping free media, ensuring free and fair elections, and the participation of women, and listed authoritarianism, corruption and human rights violations as key challenges

Other countries

- Prime Minister Narendra Modi referred to the principles of "inclusion, transparency, human dignity, responsive grievance redressal and decentralisation of power" as key to Indian democracy.
- Many accused big tech companies and social media of "digital authoritarianism", and some spoke of the devastating impact of COVID-19, climate change and rising economic inequality as major stumbling blocks.

Criticism

- The State Department's decision to "arbitrarily place" restrictions on the invitee list, has led to a controversy. In South Asia, the inclusion of Pakistan, along with India and Nepal, but the exclusion of Bangladesh, Bhutan and Sri Lanka raises serious doubts on the criteria applied.
 - * The summit's guestlist was criticized for inviting participants based on the political interests of the United States, not on its democracy ratings.
- The Summit was roundly criticised for the most notable exclusions: Russia and China.
 - * In a joint editorial, the Russian and Chinese Ambassadors to the U.S. claimed their own states are democratic in practice, and criticised the U.S.'s experiments in regime change and "democratic transformations" in Iraq, Libya and Afghanistan.

Conclusion

 Apart from a more inclusive guest list, the summit would have done better to begin with a globally accepted definition for democracy, and a common understanding of the challenges. Effect of polities and polities of developed and developing countries.

11. Far from over

» Mains: Importance of Israel and Syria in the West Asian power game.

Context:

• Syria has blamed Israel for carrying out missile strikes on its Latakia port.

Details:

- This is the second such instance within weeks.
- Israel, which has been occupying the Golan Heights region of Syria, has seen Iran's growing influence in the region as a security threat. In this regard, Israel has targeted Iranian and Hezbollah shipments at the Syrian port of Latakia.



Golan Heights:

- Golan Heights is a hilly area, originally a part of Syria.
- Israel captured the Golan Heights in the 1967 Middle East war and later annexed the territory.

<u>Problems associated with the approach of Israel</u>

- With repeated strikes against Syria, Israel is violating international laws and norms. It has been blamed for disrupting peace in the region.
- In the recent past, Israel had carried out military strikes in Iran and assassinated prominent military personnel of Iran. Iran counterattacked and destroyed vessels of Israel.
- The repeated strikes are also a blatant violation of Syria's sovereignty.



Bilateral, Regional and Global Groupings and Agreements involving India and/or affecting India's interests

12. India Russia Relations

- » Prelims: India-Russia Relations, 2+2 Dialogue
- » Mains: Aspects of India-Russia Relations; Areas of Convergence and Divergence.

Context:

- 21st annual India-Russia summit meeting between the Indian Prime Minister and Russian President.
 - * The visit was significant in part because Putin has not travelled abroad to attend recent summits in person, like the G-20 and COP26 in Glasgow

Background:

- The robust alliance between India and Russia has broken free from the Cold War's restraints.
- India has evolved as an economic powerhouse and a vital player in today's global debates, whether it is about climate change, international commerce, or the threat of terrorism, in the post-Cold War era.

Major highlights of the Summit:

- The Indian Prime Minister noted how despite the several geopolitical changes having taken place in the world, the India-Russia friendship had remained unchanged and had stood the test of time
- The two countries despite having built robust relationships with other countries (often at differences with the other) have continued to not only cooperate with each other but have also paid the necessary attention to each other's sensitivities.
- The Russian President referred to the common fight against organised crime, drug trafficking and terrorism.
- The two leaders expressed satisfaction at the sustained progress in the 'Special and Privileged Strategic Partnership' between both countries.
- The leaders underscored the need for greater economic cooperation and called for long term predictable and sustained economic cooperation.
- The two leaders emphasized the importance of connectivity projects like the International North-South Transport Corridor (INSTC) and the proposed Chennai – Vladivostok Eastern Maritime Corridor.
- The two leaders have called for greater interregional cooperation between various regions of Russia, in particular with the Russian Far East, with the States of India.

- Important Government-to-Government Agreements and MoUs, as well as those between commercial and other organizations of both countries, were signed in different sectors such as trade, energy, science & technology, intellectual property, outer space, geological exploration, cultural exchange, education, etc. Both sides concluded around 28 agreements with most of them in the defence and energy domains.
- India and Russia have renewed the militarytechnical cooperation agreement until 2031 and also signed the deal for the manufacture of AK-203 assault rifles in India.
- A bilateral logistics support deal, Reciprocal Exchange of Logistics Agreement (RELOS), as well as a Navy-to-Navy cooperation MoU were also on the agenda.
- The Joint Statement titled India-Russia: Partnership for Peace, Progress and Prosperity was released.

Major highlights of the 2+2 meeting:

- During the 2+2 ministerial meeting, the Indian defence minister highlighted the emerging security challenges confronting India like "unprovoked aggression" on its northern borders from China along with the increasing militarisation and expansion of armament in the region. In this regard, the Indian Defence Minister called for closer military-to-military technical collaboration with Russia.
- The Indian Defence Minister sought greater engagement between the two countries in Central Asia and the Indian Ocean Region.
- The Russian counterpart stated that security agencies from both countries would collaborate with each other to increase "regional trust and global security".
- The Indian Foreign Minister, noting the time tested nature of the India – Russia bilateral relationship, called for deepening of this relationship amid the turmoil in the geopolitical environment, especially after the COVID-19 pandemic. The Indian Foreign Minister called for multipolarity in world affairs.

Significant Aspects of India-Russia Relationship:

- Strategic Partnership
 - * The remarkable resilience of India-Russia ties is based on a solid foundation of strategic national interest and geopolitical synergy.
 - » 2000: "Declaration on the India-Russia Strategic Partnership" unlocked new opportunities in strategy, science and technology, space, energy, etc.
 - » 2010: A new chapter in India-Russia relations when the Strategic Partnership was elevated to the level of a "Special and Privileged Strategic Partnership".



- · 2+2 dialogue:
 - * The '2+2' technique has become the conventional framework. The '2+2' discourse has the potential to breathe fresh life into this unique and privileged strategic collaboration.
 - * This method is unusual in that it assures result-oriented collaboration while simultaneously debating regional and global issues of mutual concern and interest.
- The Russian president appears to have wanted to establish that Moscow can handle the India and China relationships independently of each other.
 - * Putin's visit is seen as an effort to repair the damage done to the relationship over the last couple of years, as Russia and India drifted apart.

Areas of Convergence

- Bilateral trade: Bilateral trade has seen the two countries progressing from defence and energy to IT, pharmaceuticals, agro-industries, mineral and metallurgy, fertilizers, and infrastructure projects.
- India-Russia defence cooperation: Russia is the key and principal supplier of arms and armaments to the Indian armed forces accounting for over 60% of weapons. India recently inducted the S-400 Triumf missile systems.
- Military-technical collaboration: The BrahMos missile system was a successful collaboration of joint research, development, and production. Science and technology, nuclear energy, and space have been key driving forces.

Areas of Divergence

- The distance between India and Russia is expanding due to shifts in interests and capabilities fuelled by geopolitical disagreements.
- In terms of geostrategic alignment, Russia is aligned with China, whereas India is more associated with the US.
 - * For Russia, China has become its go-to allround strategic partner especially against the backdrop of Moscow's isolation from the West. But for India, China has become a primary threat
 - * This has necessitated that India develop closer strategic partnerships with the U.S. and others, like Australia and Japan, which share similar threat perceptions about China. This has created wrinkles in the India-Russia relationship, despite their close bilateral relations, as well as trilateral engagements such as the Russia-India-China (RIC) grouping and broader engagements such as through the BRICS and Shanghai Cooperation Organization (SCO).

- * The Indian and Russian approaches to Afghanistan reflected this divergence.
- At a time when global politics is in upheaval, compatibility with geopolitical and geoeconomic realities, as well as leadership trust, is more vital than ever.

Ways to strengthen India-Russia Relations:

- In Southeast Asia and Central Asia, India and Russia must collaborate in a trilateral way or through other flexible structures.
- Their expanding cooperation can be a stabilising influence, resulting in the growth of multilateralism.
- Youth exchanges, as well as deeper linkages in many domains such as athletics, cultural, spiritual and religious studies, are also needed by the two nations.
- Buddhism may be a place where both countries can deepen their cooperation, and where peace and sustainability can serve as a cure in this turbulent world.

Conclusion:

- It is critical for trustworthy partners to maintain long-term awareness of their shared interests in the new syntax of multipolarity and globalisation.
- The India-Russia conference, taking place in the midst of tremendous regional and global developments, will undoubtedly add to the energy of this long-standing partnership.

Bilateral, Regional and Clobal Groupings and Agreements involving India and/or affecting Indias interests

13. India-Central Asia Dialogue

» Mains: Potential/Significance of the relationship with Central Asian Nations; Challenges and recommendations

Context:

 The third India-Central Asia dialogue, hosted by Indian External Affairs Minister saw participation from the Foreign Ministers of Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan.

Why was the meeting significant?

- Foreign ministers of the five countries travelled to India in these uncertain times when the threat of Omicron, is raging around the world. This is testimony to the importance that these countries accord to their relations with India.
- It is particularly noteworthy that they opted to come to India when a Meeting of Foreign Ministers of the Organisation of Islamic Cooperation to discuss humanitarian aid to Afghanistan was taking place in Islamabad.



Details:

Afghan issue:

- The six nations shared common concerns and objectives in Afghanistan.
- The participating ministers noted the broad 'regional consensus' on the issues related to Afghanistan like the formation of a representative and inclusive government in Afghanistan, preserving the rights of women, children and other national ethnic groups, combating terrorism and drug trafficking from Afghanistan.
 - * Notably none of the countries recognise the Taliban. While Turkmenistan and Uzbekistan have reopened their missions in Kabul and also exchanged ministerial-level visits with Kabul, like Kazakhstan and the Kyrgyz Republic, Tajikistan has taken a strong stand against the Taliban.
- The joint statement noted the importance of providing immediate humanitarian assistance for the Afghan people

Bilateral ties:

- The dialogue involved discussions on how to increase links between Central Asian countries and India in terms of connectivity and trade relations.
- Noting Pakistan's block on land trade from India, the countries proposed making use of the sea route via India-run terminal at the Chabahar port in Iran and the International North South Transit Corridor that goes via the Iranian port of Bandar Abbas.
 - * InternationalNorth-SouthTransportCorridor (INSTC), is multi-modal transportation established for the purpose of promoting transportation cooperation among the Member States. This corridor connects India Ocean and the Persian Gulf to the Caspian Sea via the Islamic Republic of Iran and then is connected to St. Petersburg and North Europe via the Russian Federation.
- The dialogue also decided to explore establishing joint working groups to address issues of free movement of goods and services between India and Central Asian countries.

Future cooperation

- The ministers expressed their commitment to achieving the full potential of trade, especially in sectors like pharmaceuticals, information technology, agriculture, energy, textiles, gems and jewellery, etc.
 - * They also focused on establishing direct linkages between the States of India and Regions of Central Asian countries, including through the establishment of twinning/ partnership relations between them.

- * The ministers encouraged the India-Central Asia Business Council (ICABC), established in 2020, "to promote business linkages and incentivize mutual investments."
- Several areas like healthcare, including medical tourism, pilgrimage, historical and cultural tourism, encouraging investment in tourism infrastructure, etc were identified for focused attention.
- The ministers agreed to collaborate in the area of defence and security and hold regular consultations among the National Security Councils of the countries to fight against terrorism and other emerging challenges in the region.

<u>Central Asian countries expressed support for India's</u> permanent membership in UNSC

- The ministers reiterated their support for a permanent seat for India in an expanded UN Security Council.
- India invited the Central Asian countries to join the International Solar Alliance and the Coalition for Disaster Resilient Infrastructure.

The China angle

- Over the years, the Central Asian countries have become active partners of China through the Belt and Road Initiative (BRI).
 - * Antipathy against China in many of these countries has however grown because of the rapidly expanding Chinese footprint in their economic and political systems as also due to the incarceration and persecution of several Kyrgyz and Kazakh along with Uyghurs in the Xinjiang region. These have resulted in many anti-Chinese protests in these countries.

Conclusion

 India has strengthened ties with other parts of Asia, it must now redouble its efforts towards Central Asia if it is to counter the 'Great Game' rivalries playing out in the region, and reclaim its shared history with countries that are an important market, a source for energy, and also a bulwark against the threats of extremism and radicalisation.

Important International Institutions

14. The UNSC Draft on Climate

» Mains: Role of UNSC as the peacekeeping arm of the United Nations



Context:

- A draft proposal on climate change was introduced in the United Nations Security Council by Niger and Ireland and claimed to be backed by the 113 member countries including the US, UK and France in order to bring the climate related security risks within the purview of the UNSC.
- This resulted in a heated argument involving clash of interests among the member countries with strong opposition from India and Russia.

Russia's Veto:

 Russia has vetoed the proposal to integrate climate related risks within the ambit of the UNSC. There were 12 votes recorded in favor of the proposal, 2 against and an abstention from China.

The need to bring Climate Change within the UNSC mandate: Arguments in Favor

- The issue of climate change had been discussed at the UNSC for a long period of time witnessing several statements that associated the impact of global warming with conflicts. Such a correlation was inferred by Niger and Ireland who stated that the countries that are more susceptible to climate change are most vulnerable to terror activities.
- This is why there needs to be a mandate on peacekeeping under the intervention of UNSC
- The climate related conflicts include arable land, food security, desertification and forced migration.
- According to a report by the Peace Research Institute (SIPRI), 10 out of 21 peacekeeping operations of the United Nations are located in the countries that are highly influenced by climate change.
- The major and sole advantage of introducing climate related security risks in the UNSC jurisdiction is that the resolutions passed are mandatory and binding on the signatories and they must abide by it.

The Oppositions' Version: Arguments against

- Russia and India raised major concerns over the inclusion of climate change within the UNSC mandate despite strong support for the proposal.
- As an outcome of the 2+2 dialogue that was held in the India – Russia Annual Summit in early December, 2021, India ensured to oppose the interventions and overreach of UNSC on sovereign issues. Therefore India is firm on its decision to disagree with the proposal introduced in the UNSC.
- It is believed that the United Nations Framework Convention on Climate Change (UNFCCC) which recently concluded the COP26 at Glasgow, offers a dynamic platform of consensus to tackle the issues of climate change and promote sustainable development goals popular as SDGs.
- India exerts emphasis on the fact that it would be misleading to view conflicts through the prism of climate change worldwide as India has taken exemplary measures to mitigate climate change and establish a sustainable network of climate justice. For example the International Solar Alliance (ISA), National Hydrogen Energy Mission, Wind Energy Potential and so on and so forth.
- Besides, a group of experts does believe that there is a predominance of the permanent members of UNSC taking an upper-hand on several issues over other members.
- Therefore an additional framework on climate change will add on to the complexities and invite clashes of opinion which will make the functioning of climate friendly policies difficult.

Suggestive measures for a harmonious future:

 India suggested that there shall be a more limited draft that will focus on the Sahel region of North Africa which suffers due to desertification of arid areas resulting in water related conflict which is often overlooked.



 To establish a consensus within the present situation of heated arguments, it is recommended that any mandate that involves the important issues of climate related risks must not overreach on issues that might disturb the sovereignty of any member country and thereby retain the integrity of the institution of UNSC that stands as the stalwart agency of peacekeeping.



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ART AND CULTURE

Salient aspects of Art Forms, Literature and Architecture from ancient to modern times.

1. Amuktamalyada

- » Prelims: About Krishnadevaraya
- The 'Amuktamalyada' is a Telugu epic poem written in the early 16th century by Krishnadevaraya, the Vijayanagara Emperor.
- The name Amuktamalyada means "one who presented the garland after wearing it themself."

Misællaneous

2. Chalcolithic Cultures of Central India:

» Prelims: About the Excavation Sites

Context:

 The Archeological Survey of India (ASI) has carried out excavations in the state of Madhya Pradesh to investigate the Chalcolithic Culture of central India and has come up with highlights of the status of investigation.

Excavation at Eran:

- Eran (Ancient name: Airikina) is located on the left bank of Bina river which was known as Venva river in the ancient time.
- It is 75 kms from the Sagar district
- Recent excavations have unearthed several antiquities like copper coins, iron arrowhead, terracotta bead, stone beads, stone celts, animal figurines, miniature pots, stone querns, pestles.
- A red slipped terracotta with inscription in Devnagari script was also found
- The existence of few metallic objects confirmed the usage of iron in the chalcolithic period (18th -7th BCE)

Excavation at Tewar:

- Tewar village is located in the Jabalpur district of Madhya Pradesh
- The ancient site of Tripuri is situated 2kms away from the Tewar village.
- Excavation was carried out at two sites of Tewar namely TWR 1 and TWR 2
- Four fold culture sequences were prevalent in Tewar such as Kushana, Shunga, Satavahana and Kalachuri.
- Brick walls and sandstone column structures were found

 The antiquarian remains included terracotta balls, iron nails, copper coins, red, black wares in ceramics, big jars, and spouted pots.

Miscellancous

3. Durga Puja of Kolkata

- » Prelims: About UNESCO, Heritage sites of India
- » Mains: Role of Indian festivals in the promotion of cultural heritage of India in International platforms

Context:

 The United Nations Educational, Scientific and Cultural Organization (UNESCO) inscribed "Durga Puja in Kolkata" on the "Representative List of the Intangible Cultural Heritage of Humanity".

Details

- The decision to recognise the Durga Puja festival as the Intangible Cultural Heritage was taken during the sixteenth session of the annual convention of UNESCO.
- The festival is characterized by large-scale installations and pavilions in urban areas, as well as by traditional Bengali drumming and veneration of the goddess.
- During the event, the divides of class, religion and ethnicities collapse as crowds of spectators walk around to admire the installations

Important Facts:

- The annual convention includes the Intergovernmental Committee for safeguarding intangible cultural heritage and it was organized on a virtual platform.
- This committee meets annually to assess the nominations made by States Parties to the 2003 Convention and decides to inscribe the best cultural practices.



ON UNESCO HERITAGE LIST

India on Unesco Intangible Cultural Heritage list

- Koodiyattam | A Sanskrit theatre of Kerala
- Mudiyett | A ritual theatre and dance drama of Kerala
- Vedic chanting | Recitation of sacred Hindu texts
- Ramlila | The traditional performance of the Ramayana
- Ramman | A religious festival and ritual theatre of Garhwal, Uttarakhand
- ➤ Kalbelia | Folk songs and dances of Rajasthan
- Chhau dance | A classical dance form of West Bengal and Odisha
- Ladakh Buddhist chanting Recitation of sacred Buddhist texts in Ladakh
- Manipuri Sankirtana | A ritual singing, drumming and dancing of Manipur
- Traditional brass and copper craft of utensil making among the Thatheras of Jandiala Guru, Punjab
- Yoga | Ancient Indian physical, mental and spiritual practices originating in ancient India



Kumbh Mela | Mass Hindu pilgrimage held at Haridwar of Uttarakhand, Nashik of Maharashtra, Prayagraj of Uttar Pradesh and Ujjain of Madhya Pradesh

The world on UNESCO ICH list

- Tango, Argentina and Uruguay
- Baul songs, Bangladesh
- ➤ Samba de Roda of the Recôncavo of Bahia, Brazil
- Frevo, performing arts of the Carnival of Recife, Brazil
- Royal Bellet, Vietnam
- Dragon boat festival, China
- > Flamenco, Spain
- Carnival of Barranquilla, Colombia
- Gastronomic meal of the French
- Three genres of traditional dance in Bali, Indonesia
- > Reggae music of Jamaica

Miscellaneous

4. Hornbill Festival

» Prelims: Important Facts of the Festival

Context:

 The Hornbill Festival is a reflection of the rich culture, lifestyle and food habits of Nagaland and it is the largest festival of the warrior tribes of Nagaland wherein the celebration continues for 10 days.

About the Festival:

 Nagaland is known as the land of festivals as each tribe celebrates its own festival with dedication and passion.

- Some of the important festivals celebrated are: Tsukhenyie by the Chakhesangs in January, Mimkut by the Kukis in January, Bushu by the Kacharis in January, Sekrenyi by the Angamis in February, Aoling by the Konyaks in April, Moatsu by the Aos in May, Tuluni by the Sumis in July, Nyaknylum by the Changs in July, Tokhu Emong by the Lothas in November and Yemshe by the Pochurys in October.
- To encourage inter-tribal interaction and to promote cultural heritage of Naga land, the Government of Nagaland organizes the Hornbill Festival every year in the first week of December. It is also called the 'Festival of Festivals'.

The objective of this festival is to

- To protect and promote the rich culture of Nagaland.
- Revive the traditions of Nagaland.



- To promote inter-tribal interaction.
- Promote tourism in Nagaland, by helping the tourists experience the customs, food, songs and, dance of Nagaland.

Salient aspects of Art Forms, Literature and Architecture from ancient to modern times.

5. <u>SPPEL (Scheme for Protection and Preservation of Endangered Languages of India)</u>

» Prelims: About the scheme

Context:

 The Government of India has decided to promote all Indian languages under the Scheme for Protection and Preservation of Endangered Languages of India.

About the Scheme:

 The Central Institute of Indian Languages, Mysore, under the scheme offers protection, preservation and documentation of all mother languages which are spoken by less than 10,000

- people and these languages are known to be endangered.
- The University Grant Commission (UGC), in the same context, has introduced two schemes to protect the endangered languages:
 - * Funding support to the State Universities for the study and research in indigenous and endangered languages in India.
 - * Establishment of Centres for Endangered Languages in Central Universities.
- The SPPEL scheme was initiated by the then Ministry of Human Resource Development in the year 2013.

Significance

- This scheme is intended to promote unity among Indian languages by developing a scientific approach
- It also seeks to protect the documents of minority and tribal languages.

IAS टेबलेट कार्यक्रम

सर्वोत्तम व्याख्यान की कहीं भी और कभी भी उपलब्धता



500 से अधिक घंटों का प्रारंभिक और मुख्य परीक्षा के पाठ्यक्रम को आवृत करता हुआ व्याख्यान



हमारे मार्गदर्शकों द्वारा प्रत्येक छात्न हेतु मार्गदर्शन और व्यक्तिगत प्रतिपष्टि





मानक पुस्तकों सहित समग्र और अद्यतन अध्ययन सामग्री



पुनरीक्षण नोट्स के साथ चर्चित मुद्दों पर सप्ताह में दो बार लाइव वेबिनार व्याख्यान



साप्ताहिक वेबिनार, चर्चित मुद्दे, समसामयिकी पत्र /पत्रिका और प्रैक्टिस सेट का छात्र पोर्टल उपलब्ध



SCIENCE AND TECHNOLOGY

Addievements of Indians in science & technology, indigenization of technology and developing new technology

1. Azadi Ka Digital Mahotsav

- » Prelims: About the National Strategy on Blockchain, Indigenous Servers
- » Mains: India's future with Digital Revolution, Significance of the Blockchain Technology

Context:

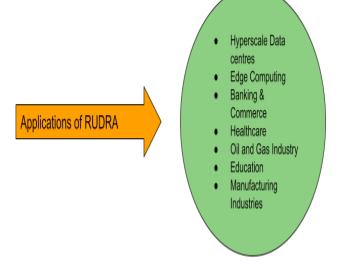
 In order to celebrate Azadi Ka Digital Mahotsav, the Ministry of Electronics and IT released the National Strategy on Blockchain along with the launch of RUDRA, India's first indigenous server.

The Strategy Document aims at the following:

- Creation of digital platforms through Blockchain infrastructure
- Promoting Research and Development, innovation, technology and application development
- Establishing the state of the art, transparent digital service delivery to citizens and businessess
- Making India a global leader in Blockchain technology

RUDRA:

- India's first indigenous server was launched during the celebration of Azadi Ka Digital Mahotsav.
- RUDRA is developed by C-DAC (Centre for development of advanced computing) under the National Supercomputing Mission.
- This was backed by the Ministry of Electronics and IT along with the Department of Science and Technology.
- The RUDRA server was a part of Phase 3 of the National Supercomputing Mission.
- This aims at the design and manufacture of Supercomputers in India offering a secure, reliable, dual-socket updated Intel Xcon scalable processor technology with a faster computing facility.
- This will augment India's digital competency and meet the demands of the country's multidisciplinary computing needs.



 The RUDRA server exemplifies the self-reliance of India in the field of Supercomputing.

The Swadeshi Microprocessor Challenge:

- In order to encourage innovation in indigenous hardware computing systems and to improve microprocessor technology, the Ministry of Electronics and IT announced the Swadeshi Microprocessor Challenge in August 2020.
- This challenge was open to the students at all levels and startups with the objective of creating a microprocessor startup ecosystem.
- The top ten teams who successfully complete the 15 months challenge will be awarded a seed fund of Rs 2.30 crore along with 12 months incubation support and will also get an opportunity to translate their innovative ideas and reach them to the market.
- The power-pack indigenous duo processor which was developed by open-source architecture has been named as SHAKTI processor. This was developed by IIT Madras and the VEGA processor was developed by C-DAC.

Significance:

- The entire event embodied a progressive step of India towards reduced dependency and closer proximity towards the 'Atma Nirbharta' vision.
- This event would be an enabler of creating a startup ecosystem that would assist in employment opportunities and shape the innovative ideas of students across the country by offering them a strong platform.



Science and Technology= developments and their applications and effects in everyday life Awareness in the fields of life Space, Computers, robotics, namotechnology, bio-technology and issues relating to intellectual property rights.

2. 'Al to be a valuable tool in education'

» Mains: Application of Artificial Intelligence in the Education system of India

Context:

 Recently, a panel discussion was held as a part of 'Principals' Meet 2021' on the 'Role of Artificial Intelligence in schools and university education'.

What is Artificial Intelligence (AI)?

- Artificial intelligence may be described as a machine's capacity to mimic intelligent human behavior.
- It improves the intelligence of our digital, automated operations. It also improves any technology's dependability quotient.
- Artificial Intelligence is a branch of research that aims to give robots the ability to reason. It may enable robots to comprehend our daily routines and attempt to mimic them as accurately as possible.

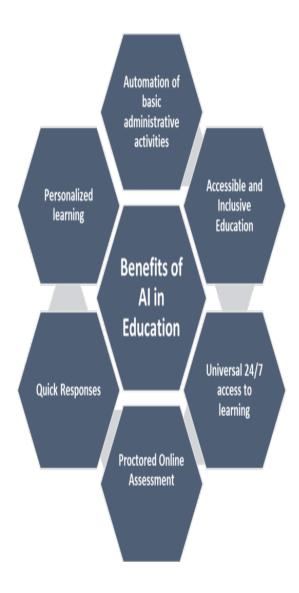
<u>Role of Artificial Intelligence (AI) in Indian Education</u> <u>System: –</u>

- Artificial Intelligence (AI) is a powerful instrument that will help alter education in the future.
- Al can be applied in the education sector, from interpreting our natural language to improving our current solutions.
- Text-to-speech services and voice assistants are examples of Al's output, which may make even the most basic activities like phoning or messaging someone easier.
- The purpose of AI in education is to develop technology by including functions such as thinking, learning, and problem-solving that are similar to human characteristics.

Benefits of AI in Education

- Effective management of administrative tasks: Artificial intelligence frees up time for instructors by automating administrative tasks, allowing them to spend more time engaging with students and guiding them through difficult situations.
- Access to quality content: Automation has also made great education accessible to a broader demographic. With the aid of advanced Al technologies, educators may write or construct study materials that are tailored to the specific needs of students in various places.
- · Personalized learning process: Al is enabling

- teachers to track their students' performance and growth in real time and respond properly to each student's particular requirements. Teachers may spend more time guiding their students to enhance their cognitive skills with the aid of Al.
- Better Outreach: In many colleges, Al is effectively assisting in reducing the effects of scarce infrastructure and a lack of competent or skilled academics. It has improved the mode of distant education. With the support of virtual classrooms and teachers, asynchronous sessions are now well-organized.
- Customized curriculum for increased employability: Al offers an interdisciplinary tailored curriculum that can be built and altered to track each student's reaction in order to determine what they are most interested in.



Way Forward: -

- In the recent future, new technologies hold a lot of promise. They make a student's life easier by providing individualized learning.
- Teachers profit from the automation of boring work because they become more efficient and can focus on other important responsibilities.
- Teachers' responsibilities and skills, on the other hand, will need to be reformed in order to produce a win-win situation for all parties involved, including students, parents, and teachers.
- The online mode of education is also becoming increasingly popular in India, with the government aiming to invest in Al-powered online education with the objective of bringing exclusive and high-quality education to rural regions.

Awareness in the field of Space

3. James Webb Space Telescope

- » Prelims: James Webb Telescope Features; Red shift phenomenon
- » Mains: Difference between Hubble and James Webb Telescope; Significance of the new James Webb Telescope

Context:

 The James Webb Space Telescope (JWST) was launched into space by the Ariane 5 rocket from French Guiana, South America.

Details:

- Billed as the next-generation telescope, the James Webb Telescope is a joint project of the National Aeronautics and Space Administration (NASA), ESA (European Space Agency) and the Canadian Space Agency.
- The James Webb Telescope is a space-based telescope.
 - * Telescopes in space help avoid atmospheric disturbance and thermal turbulence and thus provide clear and sharp images of objects in space. They can also detect objects further away than ground-based telescopes.
 - * While the most giant ground-based telescopes revealed galaxies over 5 billion light-years away, the space-based Hubble space telescope has identified the farthest known galaxy located at 13.4 billion years in the past.
- The James Webb Space Telescope is designed to detect signals in the infrared region of the electromagnetic radiation.
 - * According to the Big Bang theory, the universe has been in a constant state of expansion. As the universe expands, space

- stretches. As the light travels far in space, the wavelength elongates. This is called the red shift.
- * Hence the light from the earliest stars and nascent galaxies after having traversed the vast stretches of the expanding space, turn into infrared rays before reaching the Earth. Thus an infrared telescope is apt to observe the ancient, early universe, which is the primary goal of the JWST.
- The spacecraft will be placed at 'Lagrange point 2' in space.
 - * At this point, the Earth-Sun system's gravitational forces, and the spacecraft's orbital motion would balance each other. Thus the spacecraft in this location will orbit the Sun, tagging along with the Earth in 365 days. Thus the spacecraft will be permanently behind Earth.
 - * This will help shield the telescope from the sun rays and help maintain the low temperatures required in infrared-based telescopes to detect faint signals from distant stellar objects.
 - » The IR telescope must be cooled to -220 degrees C or lower.

<u>Difference between Hubble Telescope and James Webb Telescope:</u>

- Hubble telescope is in a very close orbit around the earth, while the James Webb telescope will be 1.5 million kilometres away at the second Lagrange (L2) point.
- James Webb telescope will primarily look at the Universe in the infrared, while Hubble studies it primarily at optical and ultraviolet wavelengths (though it has some infrared capability).
- James Webb telescope also has a much bigger mirror than Hubble. This larger light-collecting area means that Webb can peer farther back into time than Hubble is capable of doing and will also be able to observe fainter stellar objects that Hubble cannot detect.
 - * JWST will have about seven times as much light-gathering capability as Hubble.
- The James Webb Space Telescope also incorporates a spectroscope.
 - * While a telescope can detect an object and show how it looks, the spectroscope can analyse the light rays emanating from an object and reveal details about it. From the spectral image, one can understand the elemental composition, the temperature of the stellar object, etc.



Salence and Technology- developments and their applications and effects in everyday life. Awareness in the fields of IT, Space, Computers, robotics, nanotechnology, bio-technology and issues relating to intellectual property rights.

4. Can India become a technology leader?

Context:

- India is presently not a major player in the field of technology due to certain challenges and on the other side, there are many celebrated Indian technologists around the world as many of the technology giants choose an India-born techie as their leader.
- The conversation around Indian executives at the helm of top tech companies has gathered some momentum with Parag Agrawal taking over as Twitter CEO. The major technology companies like Google and its parent company Alphabet, Microsoft and Twitter, Adobe and IBM are all headed by Indians.

The Case of the U.S:

- The Indian immigrants in the U.S are the part of the most educated and professionally accomplished communities in that country.
 - * As of 2019, there were 2.7 million Indian immigrants in the U.S.
- The government of the U.S has been instrumental in the triumphs of enterprise and the free market.
- The governmental agencies have been actively supporting the research and developments which carry a higher risk and thus the private sector would not enter into those.

The strategies of China:

- China marked its dominance on the global market by combining the strengths of the public sector, markets and globalisation.
- It restructured the state-owned enterprises which were seen as inefficient.
- The state-owned enterprises strategically participated in the technologically dynamic industries such as electronics and machinery.
- The state retreated from light manufacturing and export-oriented sectors, leaving the field open for the private sector.

The Case of India:

- The starting pitch for the development goals for industry and technology was rightly put as there were industry-oriented objectives in the Indian Planning in the early 1950s.
- There was public sector funding of the latest technologies including space and atomic research
- The era of globalisation required greater efforts to strengthen the technological capabilities of the country.

- But the spending on research and development as a proportion of GDP declined in India from 0.85% in 1990-91 to 0.65% in 2018.
 - * The spending on research and development as a proportion of GDP has increased over the years in China and South Korea.

Favourable Factors For India:

- India has the potential to become a leading nation in the field of technology by the right recognition and strengthening of the supply and demand factors.
- India has the highest enrolment for tertiary education after China.
 - * The tertiary education enrolment in India was 35.2 million in 2019.
- As per the UNESCO data, India has one of the highest graduates from Science, Technology, Engineering and Mathematics programmes as a proportion of all graduates.
- India is a potential market for all kinds of new technologies with the increasing internet consumption across the nation.
 - * India will soon have twice the number of Internet users as the U.S.

Challenges for India:

- The educational infrastructure for higher studies poses certain challenges with respect to quality and accessibility.
- The domestic industry has not yet managed to derive the benefits of the large consumer base of India.
- Also, India is operating far below its potential in sectors like electronic manufacturing.
- India is also highly dependent on imports for electronic goods and components.

Suggestive measures:

- As India accounts for one of the highest tertiary education enrolments, the universities and public institutions in the country should be strengthened to deepen and broaden India's technological capabilities.
- The public spending on education should be increased to improve the quality of and access to higher education.
- A strengthened public sector will create more opportunities for private businesses and widen the entrepreneurial base.
- The PSUs should be valued for their long-term contributions to economic growth and asset building for the nation.
- The government should be more versatile for increasing the business participation of private industries.



- * For example, an initiative like 'Make in India' needs to be more comprehensive than a singular focus on ease of doing business.
- The domestic markets should be categorically strengthened to avail the advantages of a large consumer base for the technology sector.

Salance and Technology — developments and their applications and effects in everyday life; Adhievements of Indians in salance & technology; indigenization of technology and developing new technology.

5. Will U.S. directives on 5G use impact flights?

» Mains: 5G Directives issued by Federal Aviation Administration (FAA); Implications on India.

Background

- When digital mobile phone technology was first introduced in the US, electric wheelchairs began behaving unpredictably.
 - * The pulsing signal interfered with their controls. The solution: simple shielding to stop the interference.
- Again, early in the digital phone era pacemakers could malfunction when hit by a cell phone signal.
 - * A pacemaker is a small device that's placed (implanted) in the chest to help control the heartbeat.
 - » The short-term solution was for doctors to tell pacemaker patients not to carry their phone in the shirt pocket.
 - » Long term, shielding solved the problem.

Context

• Federal Aviation Administration (FAAs) concern is that the 5G signals could possibly interfere with the radio altimeters used in automated aircraft landings.

5G

- 5G like all cellular networks uses radio waves to operate. Signals are sent from our smartphones and received back from cell towers at particular frequencies.
- Generically referred as C-Band, these new 5G frequencies range from roughly 3.7 to 4.2 GHz on what's known as the Radio Frequency (RF) spectrum.

Federal Aviation Administration (FAA)

- It cites potential conflicts and interference with radio altimeters, cockpit instruments which tell pilots how close a plane is to the ground as it comes in for a landing.
- The issue boils down to the fact that radio altimeters use frequencies from 4.2 to 4.4 GHz in their operation.

- 5G cell signals using C-Band frequencies might interfere with radio altimeters.
 - * Any disturbance caused to internal radio altimeter readings caused by 5G or other equipment transmitting in frequency bands close to it can result in disastrous effects on crucial systems during approach/landing.

Is there an issue with mobile phone use?

- In 2000, Swiss aviation investigators believed that "electrical interference from a mobile phone" could have been a factor in the crash of a small aircraft, Crossair flight LX 498, shortly after takeoff.
- In 2021, the French Civil Aviation Authority had warned that the latest generation of smartphones, 5G, can interfere with aircraft altitude instruments, and recommended that they should be turned off during flight.

What about the implications for India?

 In India, 5G could be rolled out in the 3.2 GHz-3.6 GHz band, which may not have the potential to interfere with aircraft operations

Way forward

- There has to be a lot more study done to fully understand the ramifications of 5G on radio altimeters and other aviation systems.
- Expensive defensive countermeasures for mitigation operations may be required.
- Wireless carriers might potentially operate in select frequencies inside the C-band, creating a buffer between 5G communications and aviation frequencies.

Salance and Technology — developments and their applications and effects in everyday life Adhievements of Indians in salance & technology indigenization of technology and developing new technology.

6. The dream of being a chip hub

» Mains: India as a semiconductor chip hub

Context:

- The latest semiconductor chip crunch has sent ripples through entire sections of the economy that rely on them.
 - * From the automobile sector to electronics, the chip shortage has shaken up companies and countries.
 - * The Indian government is aware of this situation and has been taking multiple steps during the last few years to gain a foothold in semiconductor manufacturing and become self-reliant.
- In the midst of this unprecedented crisis, India is in talks with Taiwan to set up an indigenous semiconductor assembly



Previous attempts

- The government had previously floated an offer to foreign companies in 2017 to set up their facilities in India by waiving customs duty for the import of the relevant machinery and equipment. The sop evoked zero response.
- An earlier failed attempt to woo semiconductor giant Intel to India — which chose Vietnam instead — also stands as a stark reminder of India's lack of real progress on the front.

Requirements

1. Energy

- First and foremost, what is important from the Indian context is the need of semiconductor manufacturing facilities to have huge uninterrupted power supply.
 - * One study shows that the annual energy consumption in a large semiconductor manufacturing fab may be around ~169 megawatt hour (Mwh), enough to power an Indian city

2. Water

- Additionally, semiconductor fab facilities are water intensive. A typical semiconductor manufacturing facility may require more than five million gallons of ultra-pure water per day.
 - * To generate this much of pure water, one requires at least eight million gallons of city water per day.
 - * Challenges
 - » Establishing semiconductor manufacturingfacilitiesinIndia,therefore, call for better water management while meeting the drinking, domestic and irrigation water requirements.

3. Availability of electronics grade silicon

- An important component of chip making is the easy availability of purified single crystal silicon wafers.
- Silicon also has other industrial applications such as steel refining and aluminum-casting.
- Besides chip making, the availability of single crystal silicon wafers will also help India in manufacturing the solar cells required for our energy security.
 - * About 60% of a solar power system cost comes from the solar modules.
 - * India imports solar cells and modules from other countries and this situation needs to be reversed by manufacturing purified silicon within the country.
- India has huge reserves of silica minerals required for making silicon wafers

Strengths

1. Chip design capabilities

- All major global semiconductor companies have their fabless Intellectual Property (IP) and System-on-Chip (SoC) design houses in India.
- Students who are trained in IITs and many NITs work in these fabless companies. This fabless Indian semiconductor ecosystem has a great potential.
- IIT Hyderabad has promoted a start-up culture by establishing opportunities such as 'Semiconductor Startup Incubation and Acceleration Program' and encourage their faculty members and students with initial capital and mentoring.

2. Industry and academia collaboration

 With a greater emphasis on flexibility, multidisciplinary approach, research and innovation in India's higher education landscape through ~the newly unveiled National Education Policy, there is now the possibility of a better synergy between industry and academia in designing curriculum to meet the needs of semiconductor companies in India.

3. Interest of Private companies

 The Tata Group is in talks with three States — Tamil Nadu, Telangana and Karnataka — to invest over \$300 million to set up a semiconductor manufacturing facility.

Way forward

 The bigger challenge and immediate need for the Indian government is to connect related industries in India to create the ecosystem. National capability needs to be enhanced.

Conclusion

 With the Indian government's encouraging policies, growing domestic demand for electronic products, increasing number of entrepreneurs in the area of fabless semiconductor companies and availability of large pool of local design talent, the road to India's success as a global hub of semiconductor chip manufacturing looks promising and a near possibility.



DEFENCE AND INTERNAL SECURITY

1. Agni-P (Prime) missile

Context:

 New generation nuclear capable ballistic missile Agni-P was successfully tested.

What is the Agni P missile?

- The Agni-P is a next-generation improved derivative of the Agni missile series.
- The 'Agni P' is a two-stage solid-propellant ballistic missile with a redundant navigation and quiding system.
- According to DRDO, canisterizing missiles saves the time it takes to launch the missile while also enhancing storage and handling.
- The range of the surface-to-surface ballistic missile is 1,000 to 2,000 kilometers.
- In the Indo-Pacific, the new Agni P may be used to attack hostile warships.

Significance

- Many advanced technologies including composites, propulsion systems, innovative guidance and control mechanisms and state-ofthe-art navigation systems have been introduced. The Agni-P missile would further strengthen India's credible deterrence capabilities
- Agni-P has improved parameters including manoeuvring and accuracy in comparison to earlier Agni class of missiles

Defence Equipment

2. The arms race towards hypersonic weapons

- » Prelims: Hypersonic meaning; Scramjet and Ramjet engines
- » Mains: Concerns associated with the development of hypersonic weapons; India's efforts to develop such technology.

Background:

- China tested a nuclear-capable hypersonic missile in August, 2021 while Russia announced that it had successfully test launched a Tsirkon hypersonic cruise missile in early October.
 - * Hypersonic weapon developed by China circled the globe before speeding towards its target, demonstrating an advanced space capability.
- These recent developments have put the spotlight on hypersonic weapons development.

Details:

- Hypersonic weapons can fly at speeds in excess of Mach 5, five times the speed of sound.
 - * The speed of sound is Mach 1, and speeds upto Mach 5 are supersonic and speeds above Mach 5 are hypersonic.
- Unlike the ballistic missiles which can attain higher speeds and follow a fixed trajectory and travel outside the atmosphere to re-enter only near impact, the hypersonic weapons travel within the atmosphere and can manoeuvre midway
- There are two classes of hypersonic weapons, hypersonic glide vehicles (HGV) and hypersonic cruise missiles (HCM). HGVs are launched from a rocket before gliding to a target while HCMs are powered by high-speed, air-breathing engines, or scramjets.
 - * A scramjet (supersonic combustion ramjet) is a variant of the ramjet air breathing jet engine in which combustion takes place in supersonic airflow. As in ramjets, a scramjet relies on high vehicle speed to compress the incoming air forcefully before combustion instead of a mechanical compressor.
 - * In a scramjet engine, air goes inside the engine at supersonic speed and comes out at hypersonic speeds. This allows the scramjet to operate efficiently at extremely high speeds.

Concerns:

- The high speed and their manoeuvrability makes the detection and interception of hypersonic weapons extremely difficult. The radars and air defences would not be able to detect them till they are very close and thus leave very little time to react by a nation under attack.
- The fact that the hypersonic weapons are designed for use with a nuclear warhead makes it all the more lethal and destructive.
- The widespread perception that hypersonic weapons are a game-changer has increased tensions among the U.S., Russia and China, driving a new arms race and escalating the chances of conflict amid the worsening geopolitical situation worldwide

Hypersonic weapon development by other countries:

 As per available reports, apart from China, Russia and U.S., a number of other countries – including Australia, India, France, Germany, and Japan are also developing hypersonic weapons technology.



 India is developing an indigenous, dualcapable hypersonic cruise missile as part of its Hypersonic Technology Demonstrator Vehicle (HSTDV) program and Defence Research and Development Organisation (DRDO) has successfully tested a Mach 6 scramjet with validation of many associated critical technologies.

Miscellancous

3. Mi17V5

Context:

- Chief of Defence Staff General Bipin Rawat and his wife have been killed along with 12 others when the Army chopper they were flying in crashed near Coonoor in Tamil Nadu.
 - * The exact reason for the crash is not yet known
 - * The helicopter that crashed was MI-17 V5

Mi17V5

- It is an advanced transport helicopter which is with the Indian Air Force since 2012.
- It belongs to the MI-8/17 family of military helicopters.
- These choppers are equipped with the latest night vision. They also have weather radar.
 - * Therefore it is capable of operating in any geographical and climatic conditions, day and night, along with adverse weather situations.
- It has a digital flight data recorder and a cockpit voice recorder onboard to monitor flight parameters and cockpit conversations respectively.
- Mi-17V-5 military transport helicopter is designed to carry personnel, cargo and equipment inside the cargo cabin or on an external sling, drop tactical air assault forces and reconnaissance and sabotage groups, destroy ground targets and carry the wounded.
- The MI-17 V5 has a maximum speed of 250 km per hour and a cruise speed of 230 km per hour. It has a service ceiling of 6,000 metres, and the flight range with its main fuel tanks is 675 km. With two auxiliary fuel tanks, it can fly up to 1,180 km. It can carry a maximum payload of 4,000 kg. The maximum take-off weight of the helicopter is 13,000 kg.



Image Source: India Today

Miscellancous

4. Navy Day

- » Prelims: Important operations of the Indian Navy
- » Mains: Contribution of the Indian Navy in assuring Maritime Security

Context:

 In order to recognise the relentless commitment of the Indian Navy and extend warm greetings to the courageous personnel, every 4th day of December is celebrated as Navy Day.

Turning the Pages of History:

- This day stands with enormous significance as it witnessed India's victory during Operation Trident in 1971. This was at the time of the India-Pakistan war.
- This included the deployment of missile boats that successfully fired the ships, oil installations and shore defence installations of Pakistan at Karachi.
- The fighter aircraft from the deck of INS Vikrant attacked the enemy harbours at Chittagong and Khulna and destroyed their vessels, defence facilities and installations. This resulted in the massive defeat of Pakistani forces in Bangladesh (then East Pakistan).
- An anti-ship missile was employed for the first time during this operation.

5. Pralay Missile

- » Prelims: About ballistic missiles
- » Mains: Self-reliance in defence technology

Context:

 The first flight test of indigenously developed surface to surface missile 'Pralay' has been conducted by DRDO from Dr APJ Abdul Kalam Island off the coast of Odisha.



Salient Features:

- The missile is powered with a solid propellant rocket motor with a range of 150 – 500 kilometres.
- Pralay is a next-generation short-range ballistic missile with a carrying capacity of a 1-tonne warhead.
- It can be launched from a mobile launcher.
- The missile guidance system is provided with the latest navigation system and integrated avionics.
- This weapon is based on the Prithvi Defence Vehicle which is a part of the Indian Ballistic Missile Defence Program.
- The missile met all the objectives with greater accuracy.



Seautity challenges and their management in border areas — linkages of organized atime with terrorism

6. Afghanistan, the rise of a Narco-terrorist State

- » Prelims: UNODC, Golden Crescent, Golden Triangle
- » Mains: Rise of Narco Terrorism in Taliban-led Afghanistan and its threats for India.

Context:

 This article discusses the rise of Narco Terrorism in Taliban-led Afghanistan and how it can pose potential threats for India.

What is Narco-Terrorism?

- The link between narcotics and terrorism is known as narco-terrorism.
- The concept of narco-terrorism stems from the realisation that drugs trafficking and terrorism are strongly interconnected.
- Any narco-terrorist organisation employs both terrorism and the drug trade.

 The ultimate goal of narco-terrorism is to destabilise the country through terrorism or to undermine it through the illegal drug trade, either alone or in combination.

Narco-Terrorism in Afghanistan:

- Potential Threat:
 - * According to a UNODC estimate, opium production in Afghanistan has surpassed 6,000 tonnes for the fifth year in a row.
 - * The Taliban controls 85 percent of the world's opium-growing land, making them the world's most powerful narcotics gang.
 - * According to a report by the US Special Inspector General for Afghanistan Reconstruction (SIGAR), illegal drugs account for up to 60% of the Taliban's annual earnings.
 - * India's fears of ungoverned regions and a lawless Afghanistan being a major source of domestic security danger are increasingly becoming a reality.
- Issues with Taliban-led Afghanistan:
 - * As the Taliban is aiming to gain income from the illegal cash crop, cases of smuggling and arrests of huge consignments of narcotics in India have increased.
 - * Afghanistan has dramatically increased its methamphetamine manufacturing.
 - * To transfer opiates, the Taliban employs a variety of smuggling methods.
 - » It transports its products to Western Europe via the Caucasus and the Balkans, and then to North America.
 - » Pakistani security personnel facilitate the southeastern route by collaborating with the Taliban and smuggling syndicates known as "tanzeems" in the region.
- Global Concerns of Rising Narcotism in Afghanistan
 - * The Taliban appear to be taking advantage of the international community's vacuum and disinterest.
 - * Between 2001 and 2020, the worldwide inability to establish an acceptable counternarcotic policy to rein in the narco-trade beginning in Afghanistan might be partly to blame.
 - * The emergence of a narco-terrorist state will have grave implications for the United States, Europe, and the region.
 - * For a number of reasons, efforts to promote alternative livelihood programmes and encourage farmers to plant other income crops have mostly failed. The central

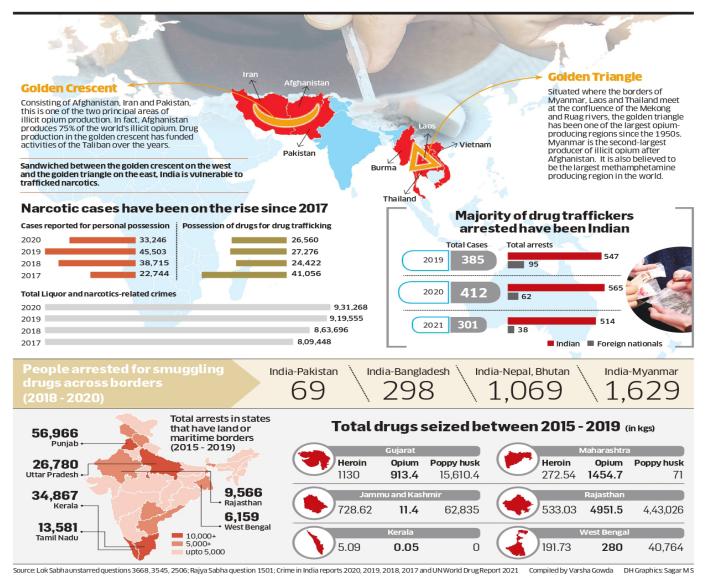


- government in Kabul has minimal authority, and the international community has urged a punishing strategy.
- Production increased as the US and the international community worked to get out of the Afghan quagmire, and it is expected to continue to rise in the coming years.
- * There is widespread agreement that drugs can ruin society, and that money generated from the narco-trade may be used to fund organised crime and terrorism.

India and Narco-Terrorism

- · Potential Threat:
 - * Porous Borders: India has a 15,106-kilometre porous border and a 7,516-kilometre coastline. China, Pakistan, Bhutan, Myanmar, Afghanistan, Nepal, and Bangladesh are all on the same side of those lengthy boundaries.
 - * State-sponsored Terrorism: Narco-terrorism is a key component of Pakistan's statesponsored cross-border terrorism, which is used to fund and conduct asymmetric warfare against its neighbours.

- * Inefficient Policymaking: Terrorist and militant actions are a problem in India, which are supported by the neighboring countries. It's no surprise that few Indians see the importation of ganja, opium, hashish, and other drugs as a concern because secessionism, terrorism, and insurgency have occupied the thoughts of policymakers and the general people.
- * India's Position between Triangle and Crescent: India is inconveniently placed between the Golden Crescent and the Golden Triangle, two of the world's most active hotbeds of illegal drug trafficking. The Golden Triangle is defined as the area where Thailand, Laos, and Myanmar intersect. Until the early twenty-first century, when Afghanistan overtook the Golden Triangle as the world's leading producer, the Golden Triangle produced the majority of the world's heroin.



The Learning App

- * Terror Funding: The lion's share of the source of terror funding in Kashmir emanates from across the border in Pakistan through its notorious agency ISI. The ISI generates its finances through narco-financing which comes from the control of narcotics trade in the AfPak region.
- * Pakistan as a Major Culprit: Pakistan has the highest per capita heroin addiction rate in the world. The ISI pumps drugs in Jammu and Kashmir with twofold intentions. Drugpaddling funds terrorist activities; on the other, there is a strong correlation between receptive attitudes towards radicalism and drug use.
- * Northeast Region: Drugs, sourced from Myanmar and Bangladesh, has a direct bearing on the funding of terror and extremist activities in the northeast. A series of intermittent seizures in India of 'yaba' tablets that were meant for Bangladesh, indicates the existence of multiple exit points along the border in Tripura, Assam, and Meghalaya. The proceeds of this drugtrade find its way to insurgent-outfits.

· Concerns for India From Taliban:

- * India, which lies between the world's two main opium-producing regions, the "Golden Crescent" and the "Golden Triangle," has seen an increase in seizures of Afghan-origin heroin.
- * Afghan opiates have been entering India through convoluted sea and air routes for decades, involving Pakistan, Sri Lanka, African nations such as Mozambique and South Africa, and Qatar.
- * The Taliban's control of Kabul may have sparked a flood of free-for-all narcotics smuggling that, if not halted, might destabilise India's security.
- * If anti-India organisations like the Lashkare-Taiba and the Jaish-e-Mohammed, who are currently active in Afghanistan again, are able to get hold of the money from such narco-trafficking, India's efforts to control terror financing at home would yield only limited benefits.

Possible Solutions

- A legal, accountable, powerful, and inclusive administration in Kabul is the cure to this phenomena.
- India has to restructure its criminal justice system, with forensic science playing a key role in combating narco-terrorism.
- The Afghan state's economic collapse and the escalating humanitarian disaster must be avoided.

- Reaching out to Afghans and raising their voices in support of a government that is genuine and acceptable to them would be a good start.
- India should seek out new partnerships in Central, West, and South Asia in order to form a willing coalition.
- India should take the initiative and reach out to Afghans from all walks of life, including women, civil society organisations, political leaders, and business organisations, who are seeking aid in establishing a credible, representative, and inclusive government in their nation.
- A collapsed state in the neighbourhood, paired with narco-terrorism, cannot be overlooked, and will have grave implications for India's security in the future.

Conclusion:

 There is a tangible and perceptible threat to India's domestic security with the emergence of the Taliban in Afghanistan and their grip over the narco-trade. With greater terror-funding, these trends will encourage the emergence of terrorism and separatist actions. India must be extremely watchful in order to prevent these two dangers, since they provide a clear and present risk.

Security Challenges & their Management

7. The growth of India's defence exports

- » Prelims: Draft Defence Production & Export Promotion Policy 2020.
- » Mains: Status of defence exports from India; Significance and initiatives being taken.

Defence exports from India:

- India's defence exports have increased over 5 times between 2016-17 and 2020-21. The defence exports are valued at around ₹8,434.84 cr in 2020-21.
 - * The Government has set an ambitious target to achieve exports of about ₹35,000 crore (\$5 billion) in aerospace and defence goods and services by 2025.
- India has been exporting to over 40 nations and is emerging as a global defence exporter. India figures in the Top 25 defence exporters.
 - * Indian Ocean Region nations have emerged as a major destination for Indian defence exports.
- According to the latest report of the Swedish think tank Stockholm International Peace Research Institute (SIPRI), three Indian companies figure among the top 100 defence companies



in the 2020 rankings — Hindustan Aeronautics Limited (HAL), Ordnance Factory Board and Bharat Electronics Ltd (BEL).

India has the capacity to supply different types
of missile systems, LCA/helicopters, multipurpose light transport aircraft, warships and
patrol vessels, artillery gun systems, tanks, radars,
military vehicles, electronic warfare systems and
other weapons systems.

Factors contributing to defence export growth:

- The changing geopolitical scenario has got many smaller nations worried about their security and are looking to strengthen their defence capabilities. This provides a market for Indian defence products.
- India has developed the required technical capabilities to be able to produce defence goods at low-cost and high-quality.

Defence imports:

 There has been an overall drop in India's arms imports between 2011-15 and 2016-20, according to a 2020 SIPRI report. However India continues to remain among the top importers.

Steps taken to boost defence production:

- · Simplified defence industrial licensing
- Issuance of two "positive indigenisation lists" that cannot be imported and can only be procured from domestic industry.
- A percentage of the capital outlay of the defence budget has been reserved for procurement from domestic industry.

Steps taken to boost defence exports:

- Relaxation of export controls and grant of noobjection certificates
- · Incentives under the foreign trade policy
- Facilitation of Lines of Credit for countries to import Indian defence product
- Defence attaches in Indian missions have been empowered to promote defence exports
- Draft Defence Production & Export Promotion Policy 2020.

Defence Manufacturing

8. More defence systems to be locally manufactured

» Mains: Initiatives being taken to promote defence indigenization; Significance of defence indigenization

Context:

 A positive indigenisation list of defence subsystems and components has been notified by the Department of Defence Production.

Details:

- The list includes 2,500 subsystems and components that have been localised.
- These components would only be procured from the Indian industry. DPSUs will work in close coordination with the local industrial supply chain to ensure the availability of such components.
- The positive indigenisation list is among a series of measures taken to promote defence indigenization in India.

<u>Measures being taken to promote defence</u> indigenization:

- Previously, two indigenous manufacturing lists had barred the import of 209 major platforms and systems. The ministry has also notified another 351 imported items to be so substituted with domestically produced goods in the next three years.
- The Defence Ministry will soon come out with the final version of the Defence Production and Export Promotion Policy (DPEPP) 2020, aimed at promoting domestic defence production.
- The Defence Procurement Policy and the New Defence Acquisition Procedure reserve several procurement categories for indigenous firms. It accords the greatest priority to Buy Indian

 Indigenously Designed Developed and Manufactured defence products.
- Foreign Direct Investment limits into the defence sector have been increased to promote the participation of major defence companies in the Indian defence manufacturing segment.
- Strategic partnership model to incentivize participation of private players in the segment.
- Defence Innovation hubs to promote research and development in the defence manufacturing sector.
- Establishment of Defence Industrial Corridors to link defence investment zones.

Significance of defence indigenization:

- Defence indigenization will help reduce defence imports and achieve self-reliance in defence manufacturing. This is very important for the security of the nation.
- The initiative will help save valuable foreign exchange. Thus it will help reduce the Balance of Payment deficit.
- By helping reduce the cost of production of its defence products, the move will also help reduce the fiscal deficit for India.
 - * According to the Stockholm International Peace Research Institute (SIPRI), in 2019, India became the third-largest defence spender



in the world. The Indian Government has announced plans to spend USD 130 billion on military modernization in the next 5 years.

- The move will also help give a push to domestic manufacturing which can help promote employment and also exports.
 - * At present, India's defence and aerospace manufacturing market is worth ₹85,000 crores. In 2022, the country's defence and aerospace manufacturing market would increase to ₹1 lakh crore and could reach ₹5 lakh crore by 2047.

Role of external state and non-state actors in areating challenges to internal security.

9. Armed Forces (Special Powers) Act (AFSPA)

- » Prelims: Important provisions of AFSPA
- » Mains: Critical Evaluation of Armed Forces (Special Powers) Act – Arguments in favour and against

Context:

 The recent killings of civilians by security forces in Nagaland is seen as an outcome of impunity accorded by the Armed Forces (Special Powers) Act (AFSPA).

Armed Forces (Special Powers) Act, 1958

- AFSPA is a unique law that grants armed forces special powers to regulate "disturbed regions" specified by the government.
- The Central Government, the Governor of the State, or the Administrator of the Union Territory can declare a disturbed area in whole or part of the State or Union Territory.
- The military forces have been given the authority to open fire, enter and search without a warrant, and arrest anybody who has committed a criminal offence, all while being immune from prosecution.

The government can declare AFSPA in the following conditions:

- When the local administration fails to deal with local issues and the police proves inefficient to cope with them.
- When the scale of unrest or instability in the state is too large for the police to handle.

Where is AFSPA in effect now?

 Currently, AFSPA is in effect in Jammu and Kashmir, Nagaland, Assam, Manipur (excluding seven assembly constituencies of Imphal) and parts of Arunachal Pradesh.

Critical Evaluation of AFSPA: -

Arguments in Favour of AFSPA:

- The AFSPA is described as a law that takes a straightforward approach to control criminal activity in disturbed areas.
- Fascist techniques and all groups, private and public, that engage in violence and attempt to pressure the government by organised violence must be controlled.
- As a result, the AFSPA is vital.

Arguments against AFSPA:

- Symbol of Hatred: The Jeevan Reddy Committee, which was founded in 2004, criticised AFSPA as a symbol of hatred, persecution, and a tool of oppression.
- Immunity to Security Forces:
 - * AFSPA has been dubbed a "draconian Act" for the unrestricted authority it grants the military forces and the impunity that security officers have for their acts performed under the law.
 - * Under AFSPA, the "armed forces" have the authority to shoot to kill or demolish a structure based solely on suspicion.
- · Human Rights Issue:
 - * The AFSPA's activities have been criticised because people have died as a result of them.
 - * It's been a contentious issue, with human rights organisations condemning it as being too forceful.
- Prolonged continuation: Despite a nearly 25year ceasefire accord, the Union Government has been chastised for renewing the "disturbed region" tag on Nagaland every year to keep the AFSPA alive.
- · Concerns of AFSPA in Manipur:
 - * Many protests over suspected extrajudicial executions by the security forces have taken place in Manipur throughout the years.
 - * The bullet-riddled body of Thangjam Manorama, who was reportedly raped and killed by a group of Assam Rifles troops in 2004 sparked outrage across the state.
 - * Irom Sharmila, often known as the Iron Lady of Manipur, is a towering figure who is well-known for her 16-year hunger strike in protest of AFSPA atrocities.

Supreme Court about AFSPA

1997 Supreme Court judgment on AFSPA:

 In Naga People's Movement for Human Rights vs Union of India 1997, a Constitution Bench ruled that the ability to use deadly force under Section 4(a) of the AFSPA should only be used in "certain



circumstances."

 A 1997 Supreme Court judgment advocated "caution and use of minimum force against our own people" in AFSPA regions.

Extra-Judicial Execution Victim Families Association (EEVFAM) v Union of India 2017:

- The Supreme Court addressed the extrajudicial executions in 2016, clarifying that the bar under Section 6 of the AFSPA does not offer officers "complete immunity" from any investigation into their alleged misconduct.
- The government received severe criticism from the Supreme Court in 2016 for the continuance of AFSPA.

Constitutionality of AFSPA

- The Act's constitutionality has been challenged on the grounds that it violates the right to equality and the federal framework of the Constitution because law and order is a state responsibility.
- The Supreme Court affirmed the validity of AFSPA in Naga People's Movement of Human Rights v Union of India in a majority ruling in 1998, finding that the Act does not provide arbitrary powers to label a region a "disturbed area."
- The Court concluded that, while the Constitution permitted the deployment of military troops to assist civil authorities, such deployment could only be temporary until normalcy was restored.
- It further said that the Central government should contact state governments before declaring an area a "disturbed area," and that the authorised official should use the least amount of force necessary for successful action.

Recommendations to repeal AFSPA

- Review Committee on the Armed Forces Special Powers Act, 1958 (2004): The Committee headed by Justice B.P.Jeevan Reddy recommended that AFSPA be repealed. Additionally, it recommended that appropriate provisions be inserted in the Unlawful Activities Prevention Act, 1967 instead.
- 5th Report Administrative Reforms Commission (ARC) on 'Public Order': Reiterating the recommendation of the Jeevan Reddy Commission, the report recommended that AFSPA be repealed. It also stated a need to add a new Chapter VIA to the Unlawful Activities Prevention Act, 1967.
- Justice Verma Committee: The issue of violation of human rights by actions of armed forces came under the consideration of the Committee on Amendments to Criminal Law set up in 2012 to review laws against sexual assault.

Conclusion:

 Although the enactment of AFSPA led to the normalisation of the situation in many parts of the country the prolonged deployment of the armed forces for internal security duties is not desirable.

- The final solution to insurgency or terrorism should not be military in nature; it should be political and economical
- It is high time that sincere and concerted efforts are made continuously by the four stakeholders

 civil society, the Armed Forces, the States and the Government of India to find a lasting and peaceful solution to the festering problem, with a little consideration from all quarters.



ENVIRONMENT AND ECOLOGY

Conservation

1. Butterfly species record increase

» Prelims: State list of Butterflies

Context:

 Butterfly survey conducted in the Peechi-Vazhany, Chimmony, and Chulannur Wildlife Sanctuaries, Kerala.

Details:

- The survey notes a remarkable increase in the Butterfly species' numbers.
- Southern Birdwing, the largest butterfly in India, and Grass Jewel, the smallest, were found during the survey. Buddha Peacock, the State butterfly of Kerala, was also recorded.
- Other notable species noted were Nilgiri Grass Yellow, Travancore Evening Brown, Malabar Flash, Orange Tailed Awl, Southern Spotted Ace and Common Onyx.

Environmental pollution and degradation

2. Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)

» Prelims: About CORSIA

Context:

 CORSIA offsetting requirements will be applicable from 2027 for Indian Operators.

Background:

 During the 39th General Assembly, International Civil Aviation Organization (ICAO) decided to implement a Global Market Based Measure (GMBM) scheme in the form of Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) to address CO2 emissions from international civil aviation.

What is CORSIA?

- The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is a global market-based measure designed to offset international aviation CO2 emissions in order to stabilize the levels of such emissions.
- The offsetting of CO2 emissions will be achieved through the acquisition and cancellation of emissions units from the global carbon market by airplane operators.
- CORSIA does not apply to domestic aviation. Under it, aircraft operators will begin monitoring their emissions from international flights and begin acquiring offsets for their emissions growth.

CORSIA and India:

- For Indian Operators, the CORSIA offsetting requirements will be applicable from 2027.
- The measures taken towards implementation of CORSIA in India are as follows:
 - * DGCA has issued Civil Aviation Requirements on CORSIA.
 - * It has also issued guidance material for airline operators to better understand CORSIA.
 - * It has also conducted workshops and seminars/trainings to generate awareness on CORSIA in the industry.
 - * DGCA has worked in close coordination with National Accreditation Board for Certification Bodies (NABCB) to empanel two verification bodies to carry out verification activities on CORSIA for the airlines.

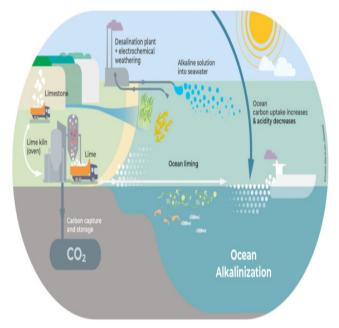
Environmental pollution and degradation

3. Enhancing Ocean Alkalinity by removing CO2

- » Prelims: About Ocean Alkalinity
- » Mains: Measures to reduce greenhouse gas emissions

Context:

- An Indian biogeochemist has won the Swarnajayanti fellowship for his path-breaking work on the enhancement of ocean alkalinity by removing atmospheric carbon dioxide which can be a potential step to tackle increasing carbon emissions contributing towards climate change.
 - * The Swarnajayanti fellowship is conferred by the Department of Science and Technology.



About Ocean Alkalinity:

- Ocean alkalinization can be defined as the removal of carbon dioxide by the addition of substances that are alkaline in nature to the seawater increasing the carbon sink of the oceans.
- These minerals can be olivine, lime or other industrial substances.
- In this process, the atmospheric carbon dioxide is dissolved in water and forms carbonates and bicarbonates. The increasing concentration of carbonates and bicarbonates results in further absorption of carbon dioxide by the oceans to maintain the acid-base equilibrium.

Methods to add Alkalinity to Oceans:

 Spreading finely alkaline substances to oceans, depositing alkaline sand, gravels on beaches or coastal seabeds.

Significance:

- Ocean alkalinization is a potential method to reverse ocean acidification which results in the protection of marine ecosystems which are threatened by implications of climate change.
- The electrochemical fuel cells that are used to increase the alkaline concentration of seawater generates hydrogen that can be clubbed with hydrogen energy plants as India is already heading towards the adoption of hydrogen energy for achieving its low carbon future in accordance with the targets set at the recently concluded COP26. This can also reduce the net cost of alkalinization.
- The alkaline minerals facilitate ocean fertilization.
- Oceans are capable of storing billions of tons of CO2 and this formulates the underlying principle of increasing the alkalinity of oceans.

Concerns:

- The addition of alkaline minerals through artificial means might have an adverse impact on marine ecosystems which is not yet estimated.
- Besides, there can be traces of heavy metals that can accumulate in the marine food chain leading to bioaccumulation.
- The process of alkalinization demands extensive mining and processing of raw materials which might affect the environment and health of the individuals involved.
- The process of ocean alkalinization is thriving in the early stages of research and development and needs government intervention to promote research, scale-up and replication. The policies must ensure sustainability in terms of mining, processing, transport and the supply chain of the minerals.

Conservation

4. Project RE-HAB

- » Prelims: Important facts about RE- HAB
- » Mains: Man Animal conflict, Outcome of the project

Context:

Khadi and Village Industries Commission (KVIC) replicated the project of Reducing Elephant – Human Attacks using Bees which is called as RE – HAB. This innovative project was carried out in Karnataka to prevent Human – Elephant conflict which raises a major concern towards the balance of ecology and economic activities.

About the Project:

- The project has been implemented in Assam by KVIC with the support of local forest departments at the Goalpara district which is surrounded by dense forest.
- A considerable area of Assam is infested with elephants and an estimated 332 human deaths due to elephant attacks have been reported.
- This project uses bee-fences to block the ways of elephants intruding in human territories.



- Image depicting bee boxes fencing the human territories to prevent the entry of elephants.
- These fences are cost effective and scientifically designed.
- The boxes are connected to a string which makes the bees swarm the herd of elephants that intend to trespass the fence.
- This ensures crop safety as the cultivation of paddy, litchi and jackfruit attracts the elephants and they damage the crops and spread fear among farmers.
- The farmers have been trained and educated by KVIC to use the bee boxes

The Underlying Principle of Using Bees:

- It is scientifically observed that elephants are annoyed by honey bees.
- Elephants fear that the bees might harm the sensitive areas of their trunk and eyes.
- This prevents the elephant from intruding into the cultivable lands of the farmer and other territories of human settlement as they are annoyed by the collective buzz of the bees.
- In order to study the impact of bees on elephants, high resolution cameras have been placed at strategic locations in the village.

The Outcome:

- Project RE-HAB was launched in 11 locations of Kodagu district of Karnataka
- Within a period of six months there has been a remarkable reduction of Human- Elephant conflict upto 70%.
- It has reversed the loss of 2500 human lives recorded between 2015 to 2020 as well as loss of 500 elephants in the given period of time.
- Besides, this project doesn't risk the lives of elephants unlike the operations that use barbed fences and dig deep trenches which cost hundreds of crores of rupees.

Environmental Degradation

5. <u>Thar desert expanding fast with land degradation, finds study</u>

- » Prelims: UNConvention to Combat Desertification
- » Mains: Desertification- Causes and concerns

Context:

- The study on desertification of Thar region conducted by the Central University of Rajasthan as part of an assessment of the environmentally sensitive areas within the framework of the UN Convention to Combat Desertification (UNCCD).
 - * The Thar desert is the world's ninth largest hot subtropical desert.

Details:

- The scientists studied the climate and vegetation in Thar to understand the desertification process.
 - * Desertification is land degradation in arid, semi-arid, and dry sub-humid areas, collectively known as drylands, resulting from factors, including both human activities and climatic variations.
 - * Desertification leads to loss of biological productivity of soils as a result of which fertile areas become increasingly arid.
- The study notes the fast eastward expansion of the Thar desert in India.

Contributing factors:

- In general, desertification is caused by variations in climate and by unsustainable landmanagement practices in dryland environments.
- The over-exploitation of resources had led to reduction in vegetation cover in the areas adjacent to the Thar desert, contributing to its expansion beyond four districts in western Rajasthan.
- The destruction of the Aravali ranges due to unregulated and unsustainable mining operations is a major factor contributing to the desertification in the region. The Aravali hills acts as a 'natural green wall' between the desert and the plains.
- Climate change also seems to be contributing to the spread of arid region. The changes in the rainfall pattern, higher temperatures is aiding the spread of sand dunes beyond their traditional regions.

Concerns:

- The degradation of land is posing a threat to the desert ecology and the flora and fauna of the region.
- The failure to control the spread of sand dunes will have an impact on the Aravali ranges' northern part as an ecotonal area, acting as transition zone between the ecological systems. Notably, this region supports a large population.



 The increasing desertification will result in sandstorms from the desert travelling as far as the National Capital Region (NCR) in the years to come. The sandstorms will also become more intense with the erosion of the Aravali's. Also the suspended particles from the arid region are contributing to air pollution in NCR.

Environmental pollution and degradation

6. Home truths on climate change

» Mains: India's international commitments and domestic policies on Climate Change

Context:

 This article examines the gaps between international commitments and domestic policies aimed to tackle the climate crisis.

Reasons behind the climate crisis

- The reasons for the world's climate problem may be found in global capitalism's irresponsible pursuit of profit maximization, driven by the United States and its developed-country allies.
- As a result, environmental degradation has occurred in the name of development.
- The goal at Glasgow was to make 'net zero' emissions by 2050 a global benchmark, without accounting for cumulative emissions for which the Global North is primarily responsible.
- The attempt by some to compare India and other emerging countries with the United States and Europe as the worst "emitters" is similarly misguided, owing to cumulative emissions.

<u>Gaps between International Commitments and</u> Domestic Policies

In the international arena, India's ruling regime wears the crown of a poor country resisting industrialized nations' aggressiveness on climate change issues, while internal policies reflect the interests of local and foreign capital. Some examples are:

- Coal Use Policy: In India, the government's coal policy is motivated by its desire to transfer mineral resources, particularly coal, to the private sector. Even as India brags about transitioning to solar energy to fulfil its emission reduction objectives, it is privatizing the coal business, auctioning coal mines, and pushing open cast mines for commercialization and export.
- Agricultural Policies: Within India, the promotion of corporatisation policies and the support of contract farming under terms imposed by large agri-businesses jeopardizes food security. Important pledges are made in the same proclamation to "recognise and (extend) assistance to smallholders, indigenous peoples,

and local communities." It was expedient for the administration not to accept significant reforms proposed by international laws and institutions because the policies would have contradicted these promises.

- * For example, the recommendations in the International Monetary Fund's 2018 Article IV report consider the MSP to be a market distortion that skews farmers' production decisions, adds to inflation, and enlarges the fiscal burden. But the government promises not to roll back the current Minimum Support Price (MSP).
- Paris Agreement: The Indian government agreed to construct carbon sinks by 2030 at the 2015 COP in Paris. The government established a Green Mission to promote forest regeneration, afforestation, and increased forest and tree cover, among other things. The Estimates Committee of Parliament indicated in its 2018-2019 report that 30 million hectares of land are necessary to plant indigenous trees, not monocultures or plantations, to achieve the promise of sequestering CO2.
- Reduced Power to Gram Sabhas: Recent legislative changes have deprived Gram Sabhas of any say in decision-making processes, making it simpler to pass up forests to the corporate sector. The power of the Gram Sabhas is being ignored.

Way Forward:

- To discover long-term answers, we must look at the internal policies of developing-country governments in addition to rejecting the imperialist attitude of the rich world.
- The majority of these regimes are dedicated to the capitalist expropriation of natural and national resources.
- The government must alter its pro-corporate policies, which are manifested in privatization. It must end its unofficial war on the Forest Rights Act and constitutional protections that protect Adivasi populations.
- Only with the participation of people who have saved forests will India be able to make a significant contribution to efforts to manage climate change and serve as an example to the rest of the world.



Environmental impact assessment

7. Highways in the hills

» Mains: Impact of developmental projects on environment

Context:

 The Supreme Court has upheld the government's mandate to widen three Himalayan highways namely Rishikesh to Mana, Rishikesh to Gangotri and Tanakpur to Pithorgarh as a part of the Char Dham Project of the Ministry of Road Transport and Highways.

About the Issue:

- The move of the Government has been challenged by the environmentalist group which is led by Dehradun based Citizens for Green Doon on the grounds that the project will disturb the Himalayan ecosystem.
- The Government in its response made it clear that the stretches constructed will act as feeder roads to the India- China border and are of immense strategic importance.
- According to the application by the group of environmentalists the double lane construction of highways has the following implications:
 - * Deforestation
 - * Excavation of hills
 - * Dumping of muck
 - * Increase in landslides
 - * Soil Erosion
- The NGT had set up a panel in 2018 and put forth its observations that the length of each of these projects was less than 100 km and did not require environmental clearance. However, it ordered for an oversight committee to monitor the environmental impacts of the project which was challenged in the court.

Supreme Court Intervention:

- The NGT order of 2018 was modified by the Supreme Court and constituted a High Power Committee which examined in detail the impact of Chardham project on the entire Himalayan valley.
- Based on the report of the High Power Committee, the construction of a two lane road structure of 5.5 meters width was allowed. This circular was later amended by the Ministry of Road Transport and Highways to enable the construction of a road of 7 meters width with 1.5 meters paved shoulder on either side.

 This amendment by the government was justified on the grounds of security issues

Way forward:

- The Himalayan region is extensively prone to natural disasters and most of the time the disasters are backed by anthropogenic activities. The infrastructure projects on the grounds of security purpose must be regulated with equal provision of weightage to environmental causes.
- The policy interventions must develop a balanced overview towards the economic activities and environmental causes as both contribute towards the sustainable future that the country aspires for.

8. <u>Protecting wildlife: 2,054 cases registered in three years</u>

» Prelims: WCCB

Context:

 Central Government statistics observed an increase in registered cases of killing or illegal trafficking of wild animals in India.

Important Operations Against illegal trade

- Operation Save Kurma: The operation was carried out to curb the expanding illegal trade of live turtles and their components from the country to foreign destinations. The effort also attempted to draw the attention of law enforcement to such unlawful trade.
- Operation Turtshield: Operation "Operation Turtshield" is a Central programme taken up to tackle the illegal trade of live turtles.
- Operation Softgold: This is an operation to draw the attention of the country's law enforcement officials to the illicit wildlife trafficking in Tibetan antelope (Shahtoosh) species.

Wildlife Crime Control Bureau (WCCB)

 It is a multidisciplinary statutory body which reports to the Ministry of Environment and Forests. Its tasks include combatting the country's organized wildlife crime.



 It is obliged under the Wild Life (Protection) Act of 1972 to gather intelligence relating to organized wildlife crime operations.

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HEALTH ISSUES

Issues relating to development and management of Social Sector/Services relating to Health

1. Misleading Advertisements of Herbal Medicine

- » Prelims: About AYUSH, AYUSH 64
- » Mains: Regulations to prevent misleading information about drugs

Context:

 The Ministry of AYUSH has taken an initiative to prevent the spread of misleading information about herbal medicines through advertisements by strengthening the existing regulations.

Intervention by Ministry of Ayush:

- The ministry is all set to implement a central sector scheme of Pharmacovigilance of Ayurveda, Unani, Siddha and Homeopathy drugs which intends to educate the consumers and the practitioners.
- The Pharmacovigilance scheme will carry out surveillance and report adverse drug reactions.
- There has been a significant increase in misleading advertisements on herbal medicines which were reported by the Pharmacovigilance centres.
- The Ministry of Ayush had also signed an MoU with the Advertising Standards Council of India for suo moto monitoring of such advertisements made in print and electronic media. This MoU also ensures strict action against the defaulters.

GAMA:

- The Department of Consumer Affairs, Ministry of Consumer Affairs, Food & Public Distribution maintains a portal called Grievance Against Misleading Advertisement (GAMA) wherein the complaints against misleading advertisements can be registered.
- An officer from the Ministry of Ayush is assigned as the nodal officer to handle the complaints related to AYUSH products.
- The complaints received in the GAMA portal are forwarded to the State Licensing Authorities for taking appropriate action.

<u>The Drugs and Magic Remedies (Objectionable</u> Advertisements) Act, 1954:

- This Actincludes provisions to prohibit misleading claims by the manufacturing companies on drug substances along with AYUSH medicines.
- According to the Act, the concerned state government has the power to enforce the provisions of the Act and take necessary steps.

- The states and union territories have been issued with directives to appoint officers for inspection of any premises or examine or seize any record related to the misleading advertisements.
- Section 3 of the Act makes it clear that no person shall engage themselves in the publication of advertisements of drugs which claims to bring the following consequences:
- The use of the drug will result in the miscarriage of women or prevent conception
- · Will improve the capacity of sexual pleasure
- Drugs dealing with menstrual disorder
- Drugs dealing with diagnosis and treatment or prevention of any disorder

<u>Penalties under the Drugs and Magic Remedies</u> (Objectionable Advertisements) Act:

- Under Section 7 of the Act, contravention of any rules mentioned in the Act will lead to imprisonment which can be extended to 6 months with a fine based on the situation.
- The recurrence of offense of spreading misleading information about drugs will result in imprisonment which may extend to 1 year and might be accompanied by a fine as the situation demands.

Issues relating to development and management of Social Sector/Services relating to Health

2. National Fund to Control Drug Abuse

- » Prelims: About the National Fund to Control Drug Abuse (NFCDA)
- » Mains: Initiatives of the government to control drug abuse

Context:

 The Central government has decided to implement the National Fund for Control of Drug Abuse in a more transparent and effective manner under the NDPS rules, 2006.

About the Fund:

- The NFCDA is managed by the Department of Revenue, Ministry of Finance.
- The Department of Revenue does not directly allocate any funds under NFCDA to state governments for the establishment of rehabilitation centres for the victims of drug abuse.



 In case the state governments seek financial assistance under NFCDA, the Department of Revenue examines the authenticity of the cause and places it before the governing body of NFCDA and sanctions the fund with the approval of the Competent Authority.

Objectives of the Fund:

- Combating illicit traffic in narcotic drugs, psychotropic substances and controlled substances
- Prevent the abuse of narcotic and psychotropic substances
- Identification, treatment and rehabilitation of drug addicts
- Educating people about drug abuse
- Ensuring the supply of drugs only if it is of medical necessity

3. Siddha Day

- » Prelims: Siddha system of medicine
- » Mains: Role of Siddha system of medicine in preventing diseases

Context:

 The Ministry of Ayush celebrated the fifth Siddha Day on the eve of the birth anniversary of Agathiyar which falls during the Ayilyam star of Margazhi month. The event was organized in collaboration with the Central Council for Research in Siddha and the Directorate of Indian Medicine & Homeopathy.

Objective:

- The 23rd day of December 2021 has been observed as the fifth Siddha day by the Ministry of Ayush with an aim of preventing several communicable diseases and reviving the ancient art of medicine.
- This year the theme was based on "Strength of Siddha Medicine for Communicable Diseases".

About Agathiyar:

- Agathiyar (Agastya) is the leader of all Siddhas and he is also known as Kurumuni.
- He played a pivotal role in spreading the Vedic religion in southern India.
- Agastya is one of the seven great sages (Saptarishis).
- He has left a prominent mark through his immense contributions in the field of Siddha medicine.
- Therayar and Tholkappiar were his disciples and students.

Siddha System of Medicine

- Siddha system of medicine is one of the most ancient codified traditions of healthcare.
- The word Siddha means established truth, and individuals associated with the Siddha school of thought were called Siddhars.
- The documents of this traditional medicine, yoga and astrology were found in Tamil scripts.
- It involves the novel therapeutic interventions and treatment based on the fundamental principle of Panchabootham which refers to prithvi (earth), jal (water), tejas (fire), vayu (wind) and akasha (space).
- According to the Siddha system of medicine, an individual is considered as a part of the Universe whose body consists of 5 primordial elements: earth, fire, water, air and space.
- The Siddha system of medicine is a part of Ayush (Ayurveda, Yoga, Unani, Siddha and Homeopathy) systems that caters to a considerable proportion of the population through public and private healthcare facilities.
- It was founded by the Siddhars who have achieved the ashta siddhis or the eight supernatural powers.
- It derives its origin from the Dravidians of peninsular India.
- Siddha employs eight methods of examination called Envakai Thervukal which are intended for diagnosis, aetiology, treatment and prognosis.

lssuss relating to development and management of Social Sector/Services relating to Health

4. Low Tobacco Tax, Poor Health

» Mains: Taxes on Tobacco Products; Health Effects of tobacco

Context:

• The article discusses the ill effects of Tobacco and low taxation on Tobacco products.

Stats

- In India, 28.6% of adults above 15 years and 8.5% of students aged 13-15 years use tobacco in some form or the other.
- This makes the country the second-largest consumer of tobacco in the world.

Health issues

 Tobacco use is known to be a major risk factor for several non-communicable diseases such as cancer, cardiovascular disease, diabetes, and chronic lung diseases.



 Smokeless tobacco contains many cancercausing toxins and its use increases the risk of cancers of the head, neck, throat, oesophagus and oral cavity (including cancer of the mouth, tongue, lip and gums) as well as various dental diseases.

India thus bears an annual economic burden of over ₹1,77,340 crore on account of tobacco use. Despite these concerns, India does not tax much to discourage the consumption of tobacco.

India doesn't tax enough on tobacco

- The tax structure has not incorporated any added tax on tobacco products except a few minor changes introduced in the 2020-21 Union Budget.
- In the pre-GST period, State governments used to regularly raise value-added tax (VAT) on tobacco products. This is not the case after the introduction of GST. It effectively means some current smokers smoke more now and some non-smokers have started smoking.

Implications

 India may not be able to achieve a 30% tobacco use reduction by 2025 as envisaged in the National Health Policy of 2017 by the Government of India.

Conclusion

 The Union government should raise taxes to reduce tobacco consumption. The upcoming Union Budget gives a perfect opportunity for this.

lssues Relating to Development and Management of Social Sector/Services relating to Health

5. <u>Kerala tops NITI Aayog Health Index; U.P. at</u> bottom

- » Prelims: NITI Aayog states health Index Parameters; performance.
- » Mains: Findings of the 4th edition of the index and significance of the index.

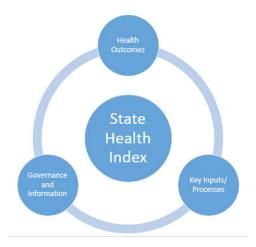
Context:

 Government think tank Niti Aayog has released the fourth edition of its state health index.

Health Index:

- The Index is released as part of the "Healthy States, Progressive India" report.
- The index is being compiled and published since 2017.
- The Health Index ranks states and Union Territories on their year-on-year incremental performance in health outcomes as well as their overall status.

- It is a weighted composite index based on 24 indicators grouped under the domains of 'Health Outcomes', 'Governance and Information', and 'Key Inputs/Processes', with the highest weightage given to health outcome indicators.
 - * Health outcomes include parameters such as neonatal mortality rate, under-5 mortality rate, immunization cover, institutional deliveries, tuberculosis treatment success rate, etc.
 - * Governance and information domain includes parameters like average occupancy of senior officers in key posts earmarked for health, data integrity, etc.
 - * Key inputs and processes domain consists of parameters such as the proportion of shortfall in healthcare providers to what is recommended, functional medical facilities, health expenditure, etc.



- The report is prepared by the NITI Aayog in collaboration with the Ministry of Health and Family Welfare with technical assistance from the World Bank.
- The data is sourced from data sources such as the Sample Registration System (SRS), Civil Registration System (CRS), and Health Management Information Systems (HMIS).

Details:

- Round IV of the report focuses on measuring and highlighting the overall performance and incremental improvement of states and UTs over the period 2018–19 to 2019–20.
- Notably, the 4th Health Index Round does not capture the impact of Covid-19 on health outcomes or any of the other indicators as the Index Performance relates to Base Year (2018-19) and Reference Year (2019-20), largely the pre-Covid-19 period.



- The report was divided into three parts larger states, smaller states and union territories for generating ranks and ensuring comparability among entities.
 - * Among the larger states, Kerala was ranked as the best performer, while Uttar Pradesh was the worst.
 - » Kerala, Tamil Nadu, and Telangana are the top three, which means for four times in a row Kerala has emerged the best in overall health performance.
 - » Bihar and Madhya Pradesh were the second-and third-worst performers, respectively.
 - » Notably, Uttar Pradesh has shown the highest incremental performance between 2018-19 and 2019-20.
 - * Among the smaller states, Mizoram was the best performer and Nagaland was at the bottom.
 - * Among the union territories, Chandigarh was on top, while Puducherry was the worst overall performer, according to the Niti Aayog report.
- The index showed that the gap in overall performance between the best- and the worstperforming larger states and UTs narrowed in the current round of the health index, while it increased for the smaller states.
- Several states are significantly better in one domain suggesting that there was scope to improve their performance in the other domains with specific targeted interventions.
 For instance, 47% of the States showed the highest performance in health outcomes and governance and information domains.

Sianificance:

- Given that it has become an annual tool to assess the performance of states and Union Territories, this report is an example of both competitive and cooperative federalism. The report is playing a major role in prompting States towards improvements in health outcomes. The importance of this annual tool was reemphasised by the ministry's decision to link the index to incentives under the National Health Mission.
- States are beginning to take cognizance of indices such as the State Health Index and use them in their performance evaluation, policymaking and resource allocation.
- The index has been instrumental in shifting the focus from budget spending and inputs to outputs and outcomes.

 The index will thus help India in the achievement of Sustainable Development Goal-3, related to ensuring healthy lives and promoting well-being for all at all ages.



SOCIAL ISSUES

Population and associated issues

1. New paper offers ways to curb suicides

» Mains: Suicide prevention strategies

Context:

 The paper titled 'the national suicide prevention strategy in India: context and considerations for urgent action' was published.

Key stats

- The suicide rate among Indian girls and women continues to be twice the global rate, though it has dropped in the last decade or so.
- Suicide accounts for most deaths in the 15–39 years age group compared with other causes of death.

Suicide methods

 Hanging is the most common method of suicide, followed by pesticides poisoning, medicine overdose, and self-immolation.

Barriers to effective suicide prevention

- · Absence of a national suicide prevention strategy
- Inappropriate media reporting
- Legal conflicts in the interpretation of suicide being punishable
- · inadequate multisectoral engagement

Urbanization, their problems and their remedies

2. The status of the Smart Cities Mission

» Mains: Significance of the mission; Concerns with the implementation of the Smart Cities Mission

Smart Cities Mission:

- Smart Cities Mission was launched in 2015 and is operated as a Centrally Sponsored Scheme. 100 cities have been selected to be developed as Smart Cities.
- The main objective of the Mission is to promote cities that provide core infrastructure, clean and sustainable environment and give a decent quality of life to their citizens through the application of 'smart solutions'. A major aspect of the scheme is the harnessing of technology, especially technology that leads to Smart outcomes. It includes the use of integrated data, use of technology platforms for service delivery to citizens, and mainstreaming of urban development concepts.
- There is no standard definition or template of a smart city. Six fundamental principles on which the concept of Smart Cities is based are:



Recommendation

- The paper calls for the constitution of a task force for suicide prevention research to create a road map.
- There is also a need for more robust and real-time data on suicides and attempted suicides.
- The Mission aims to drive economic growth and improve quality of life through comprehensive work on social, economic, physical and institutional pillars of the city. The focus is on sustainable and inclusive development.



 In 2020, the Ministry of Housing and Urban Affairs (MoHUA) expanded the emphasis on climatefriendly infrastructure in smart cities through the Climate Smart Cities Assessment Framework 2.0 and a "Streets for People" plan that would put pedestrians and non-motorised road users at the centre of urban planning.

Key features of smart cities:



Concerns:

- Many projects under the SCM remain incomplete beyond the original deadlines. This will lead to cost overruns.
- Under the scheme, the citizens' aspirations were to be captured in the Smart City Proposals (SCPs). However, the preparation of smart city plans has lacked wide public discussion. Project finalisation has thus far only involved State governments, the bureaucracy and independent experts.
- There also have been criticisms regarding the poor planning and execution of the proposed projects. Some projects have been criticized for their environmental unsustainability. Ongoing smart city plans face the pressure of designing for climate change.
- There seems to be poor accountability in terms of timelines and deliverables from the scheme. The Smart City Special Purpose Vehicles (SPVs), constituted to implement, operate and monitor the projects and empowered to take decisions on Mission projects under the overall guidance of the State High Powered Steering Committees are not required to submit projects for approval to the Ministry. This effectively puts the onus on these entities to complete the work according to the deadlines, and the Centre does not bear responsibility for delays.
- A core factor of sustainability is inclusivity, which seems to be overlooked in the overall planning and execution of the proposed projects.

Miscellaneous

3. Errors of Judgment

» Mains: Prevention of Sexual Assault against minors

Context:

 Allahabad High Court's observation that oral sex with a minor does not come under the 'aggravated sexual assault' category under the POCSO Act

Background:

Issue

- The child was made to perform an oral sexual act. The child was about 10 years old when the offence took place.
 - * "Child" means any person below the age of eighteen years
- The Court agrees that it was a "Penetrative Sexual Assault" as defined by the Protection of Children from Sexual Offences (POCSO) Act
- However, the court felt it was not "Aggravated Penetrative Sexual Assault"

Punishment

- Section 4. Punishment for penetrative sexual assault.—Whoever commits penetrative sexual assault shall be punished with imprisonment of either description for a term which shall not be less than seven years but which may extend to imprisonment for life, and shall also be liable to fine.
- Section 5. Aggravated penetrative sexual assault
 - * (m) whoever commits penetrative sexual assault on a child below twelve years
- Section 6. Punishment for aggravated penetrative sexual assault.—Whoever, commits aggravated penetrative sexual assault, shall be punished with rigorous imprisonment for a term which shall not be less than ten years but which may extend to imprisonment for life and shall also be liable to fine.



Rule of lenity

- It is also called the rule of strict construction
- It is a principle of criminal statutory interpretation
- It states that if criminal statutes are ambiguous, the rule of lenity generally posits that courts should interpret them narrowly, in favor of the defendant.

Rule of Lenity applied by the Court

- The provision of Section 5(m) deals with aggravated penetrative sexual assault
- In the immediate case, the Allahabad High Court applied the Rule of Lenity, which is the literal and strict interpretation of law and declared the act of oral sex as not conforming to aggravated penetrative sexual assault

Concerns

 The High Court seems to have missed the fact that the child was about 10 years old when the offence took place. It falls under Section 5(m) which is aggravated in nature.

Conclusion

- It is pertinent to note here that the rules against sexual assault on minors are regarded as a heinous offence, the same was discussed by the Hon'ble Supreme Court in the case of the State of Rajasthan v. Vinod Kumar.
- Further, the Constitution under Article 15(3) also allows for special provisions in matters related to women and children, thereby emphasizing the need for further protection of children.
- The age of the minor being 10 years old, further requires a reconsideration of the judgment passed by the Hon'ble Allahabad High Court.

Social Empowerment

4. Raising Legal Age of Marriage for Women

» Mains: Arguments for and against the proposal to raise the marriage age for girls from the current 18 to 21 years.

Context:

 The Union Cabinet has cleared a proposal to raise the legal age of marriage of women from 18 to 21 years.

Background:

- In 2020, the Ministry for Women and Child Development set up a task force to look into the correlation between the age of marriage with issues of women's nutrition, prevalence of anemia, IMR, MMR and other social indices.
- The 10-member task force led by Jaya Jaitly made the recommendation for increasing the minimum age for marriage for women.

Details:

- As of now, the legal age of women to get married is 18, while that for men is 21. The move will bring in much needed uniformity in the marriageable age of men and women.
- This will require the government to move legislative amendments to the Prohibition of Child Marriage Act (PCMA), 2006.
 - * The Prohibition of Child Marriage Act (PCMA), 2006 prescribes a minimum age of marriage to essentially outlaw child marriages and prevent the abuse of minors.
- It will also require amendments to various personal laws relating to marriage of various communities to ensure a uniform age of marriage.

What do the Marriage laws in India Say?

- According to the Hindu Marriage Act of 1955 and the Christian Marriage Act, 1872, the prescribed age is 18 for the bride and 21 for the groom.
- The Muslim Personal Law Application Act, 1937 allows the marriage at the age of puberty.
- The Special Marriage Act of 1954 that governs inter-faith marriage lays down 18 years as the age of marriage for girls and 21 for men.
- Prohibition of Child Marriage Act, 2006 prohibits marriage below 18 years for women and 21 for men.

Other relevant laws

- As per the Majority Act, 1875 the age of majority is eighteen years and such a person is free to enter into a contract as per the Indian Contract Act, 1872.
- Protection of Children from Sexual Offences (POCSO) Act, 2012 and Juvenile Justice (Care and Protection) Act, 2015 define a child as someone under the age of 18.

Significance:

- The move will bring in gender-neutrality in terms of minimum age of marriage.
- Increasing the legal age for the marriage of women has enormous benefits on social and economic fronts.
 - * It will help avoid early age marriages in girls and consequently avoid early pregnancies and its impact on nutritional levels of mothers and their children, and their overall health and mental wellbeing.
 - * The move will help tackle Infant Mortality Rate and Maternal Mortality Rate.
 - * It will provide more opportunities for women to pursue higher education and careers



» Increasing the marriage age will push the mean marriage age higher and will lead to more females doing graduation and hence improving the female labour force participation ratio.

Concerns:

- Child and women's rights activists, as well as experts have opposed the increasing of the minimum age of marriage for women on the basis that such a legislation would push a large portion of the population into illegal marriages.
 - * Notably, even with the legal age of marriage for women being kept at 18 years, child marriages continue in India.
- The law could end up being coercive, and in particular negatively impact marginalised communities, such as the Scheduled Caste and Scheduled Tribes, making them law-breakers.

Recommendation:

- The Law Commission Report of 2008, on reforming family law, recommended a uniform age of marriage for boys and girls at 18 years and not 21
- In 2018, the National Human Rights Commission had also recommended that there should be a uniform age of marriage for boys and girls.

Way forward:

- Awareness campaign must be undertaken on a massive scale on the increase in age of marriage, and to encourage social acceptance of the new legislation. This would be far more effective than coercive measures.
- Notably, the decrease in child marriages in recent times can be attributed to increase in girl's education and employment opportunities and hence to complement the move to increase the legal age for marriage in women, the government must also equally focus on increasing access to schools and colleges for girls, including their transportation to these institutes from far-flung areas. Skill and business training also needs to be mainstreamed for girls. Access to education and livelihood must be enhanced simultaneously for the law to be effective.
- The government must also focus on tackling the root causes contributing to child marriage like poverty through appropriate schemes and policies.



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EDUCATION

listics relating to development and management of Social Sector/Services relating to Education

1. Gender Inclusion Fund

- » Prelims: Important facts about the Gender Inclusion Fund
- » Mains: National Education Policy

Context:

· The Department of School Education and Literacy, Ministry of Education has released a guideline on the accountability of the school management in the matter of safety and security of children studying in government schools, government-aided schools and private schools. This includes the setting up of the Gender Inclusion Fund under the scope of the National **Education Policy.**

About:

- The Gender Inclusion Fund aims to deliver quality and equitable education for all girls.
- It will ensure 100% enrollment of girls in schools and record participation rate.
- The funds will assist the states to build up effective community-based interactions that would identify the cause of barriers that prevent girls' education and look into the issues of transgender students.

Significance:

- The Gender Inclusion fund will be a welcoming step to reduce the gender gap and encourage girls to get enrolled in schools without any hesitation.
- This will provide a foundation stone for women empowerment by addressing the important issue of gender equality and result in increasing the nation's capacity to popularise inclusive education for girls, socially and economically disadvantaged groups (SEDG) and individuals with disabilities and transgenders.
- This fund will offer scholarships to the students by a single-window system without any difficulties.

Issues एटीवॉस्टी एक स्टीपरवरीका

2. State of Foundational Literacy and Numeracy

- » Prelims: About the report on the state of foundational literacy and numeracy
- » Mains: Importance of the report

and Numeracy in India has been released by the Economic Advisory Council to the Prime Minister (EAC - PM).

· Report on the State of Foundational Literacy

Key Highlights of the Report:

- The report is prepared by the Institute for Competitiveness and it addresses the importance of early education in the overall development of a child.
- · It assesses the role of policy interventions like the National Education Policy 2020 and the NIPUN Bharat Programme in the improvement of learning outcomes.
- · There were categories for ranking such as large states, small states, Union Territories and North
- The index on Foundational Literacy and Numeracy offers a thorough understanding of the learning scenario of children below 10 years across the country as it is considered to be the formative years for every child.

Five pillars of the Index on Foundational Literacy and *Numeracy:*

- Educational Infrastructure
- Access to Education
- Basic Health
- Learning Outcomes
- Governance

Important Observations:

- · Kerala has performed well in terms of learning outcomes in the small states category. However Andhra Pradesh has outperformed Kerala in terms of accessibility to education. It is recommended that the states can exchange ideas for betterment of education and learn from each other.
- · West Bengal topped the list in the category of large states and Lakshadweep topped in the Union Territory category and Mizoram became the top scoring region in the Northeast category.
- · Some states exhibited poor performance in terms of Governance and over half of the states have a score below the national average (28.05).
- The North eastern states have performed considerably well.
- · Access to education needs a prompt action as the performance of larger states like Rajasthan, Gujarat and Bihar is significantly poor.

Context:



Significance of the Index:

- India is committed to achieve the SDGs 2030 that aims towards zero hunger, good health, wellbeing and access to education which have been mapped with the index.
- It carries out a holistic assessment of the states and union territories for their overall performance based on the five pillars of the index and identifies the areas that require more emphasis.

3. Recast this apples-and-oranges ranking method

- » Prelims: National Institute Ranking Framework
- » Mains: Critical Evaluation of the Higher Education Institutions (HEIs) Ranking in India.

Context:

• This article critically evaluates the ranking of State-run Higher Education Institutions (HEIs).

What is NIRF?

- The National Institute Ranking Framework, or NIRF, is the government's first attempt to rate the country's higher education institutions (HEIs).
- While participation in the NIRF was initially voluntary, it became mandatory in 2018 for all government-run educational institutions.

Why did the Union government decide to rank HEIs?

- The origins of the NIRF concept may be traced back to worldwide rankings.
- The union government and government-run higher education institutions were dissatisfied with their rankings in the QS World University Rankings and the Times Higher Education World University Rankings.
- To address this, India opted to follow China's example. When China faced the same dilemma around two decades ago, they replied by creating their own university rating system. The Shanghai Rankings, created by Shanghai Jiao Tong University in 2003, arose from this.

Critical Evaluation of NIRF Ranking:

- 1. Deficiencies in the focus
 - * The financial condition of state-sponsored higher education institutions is a well-kept secret, with wage and pension commitments barely kept under check.
 - * As a result, comparing such organisations to centrally sponsored institutions is pointless.
 - On economic indicators, nobody does a cost-benefit analysis of state vs centrally sponsored HEIs.

• 2. Structural Issues:

- * Given the challenges that State HEIs encounter on a daily basis, the NIRF appears to have focused solely on institutional strength while entirely ignoring the concerns.
- * It prevents state universities and colleges from competing on an equal footing with their state-sponsored equivalents.
- * Due to a lack of resources and scepticism on the part of governments, such institutions are unable to compete with centrally financed and strategically placed HEIs.

• 3. Struggle of State HEIs

- * Artificial intelligence, machine learning, blockchains, smart boards, portable computing devices, and other new technologies are proving difficult for state HEIs to embrace.
- * They also struggle to adapt to various types of educational software/hardware in order to stay current with the New Education Policy.

Conclusion:

- It is time for the NIRF to devise a framework for evaluating institutions' production and performance in light of their limits and resources.
- It is critical for policymakers to refocus resource allocation techniques toward state-run higher education institutions.



DISASTER MANAGEMENT

Disaster and disaster management

1. Infrastructure for Resilient Island States (IRIS)

- » Prelims: About IRIS, VEDAS
- » Mains: Role of IRIS in establishing disaster resilience

Context:

 ISRO has decided to extend its support to the Small Island Developing States in the Indian Ocean Region in order to promote disaster resilience.

IRIS:

- The Infrastructure for Resilient Island States was launched with an objective to assist infrastructure development in small island countries that face the continuous threat of natural disasters.
 - * It took its advent at the COP26 summit at Glasgow in November 2021 and it was launched by the Prime Minister.
- IRIS functions as a component of the Coalition for Disaster Resilient Infrastructure (CDRI). CDRI has been joined by 25 countries so far.
- This initiative will ensure access to financial mechanisms for resilient infrastructure development to 58 small island states across geographic regions.

Intervention by ISRO:

- ISRO will carry out prediction of track, intensity, landfall time and location of the cyclones that originate in the Indian Ocean.
- ISRO will work in collaboration with the Indian Meteorological Department (IMD) for cyclone forecast advisories.
- Improved prediction methodology with effective R&D output will be provided by ISRO.

Vulnerability Assessment by ISRO:

- ISRO has conducted a vulnerability assessment of certain regions in the vicinity of the Indian coast and identified the coastal stretch that is susceptible to sea-level rise.
- A real-time prediction of storm surge and surge induced inundation for the Indian coast has been carried out using satellite observations and numerical models.
- The maps of coral reefs of the Indian Ocean, Red Sea and the Gulf of Aden were published and regularly updated.
- A region-specific coral bleaching monitoring system based on sea surface temperature has been developed in ISRO's VEDAS geoportal.

 VEDAS is a geoprocessing platform that uses optical, microwave, thermal and hyperspectral data and can be applied in various fields. It provides mobile applications, solar and wind calculators which can be downloaded and used for computing, rooftop solar insolation and energy potential for individual households.

<u>Application of VEDAS (Visualization of Earth Observation Data Archival System)</u>

















Disaster and disaster management

2. PANEX - 21

- » Prelims: About PANEX 21, BIMSTEC
- » Mains: Role of Humanitarian Assistance and Disaster Relief exercise to tackle natural disasters.

Context:

 PANEX 21 is a Humanitarian Assistance and Disaster Relief exercise between the members of BIMSTEC countries. The inaugural ceremony was organized at DRDO Bhawan in New Delhi.

About the Event:

- The event witnessed the presence of subject matter experts on Disaster Management and delegates from Bangladesh, India, Nepal, Bhutan, Myanmar, Sri Lanka and Thailand.
- The intention is to tackle the implications of disasters like the pandemic which requires the intervention of different agencies involving transnational coordination.
- The emergence of the Omicron variant has contributed to rising tensions across the globe.



 The exercise will also focus on the disastrous effect of cyclones in the Bay of Bengal due to rising sea surface temperatures.

Areas of Focus:

- Climate change
- Unplanned urbanization
- Underdevelopment
- Poverty
- Threat of pandemic
- Increasing frequency and complexity of disasters



HISTORY

Modern Indian History, Significant Personalities

1. Aurobindo Ghose

- » Prelims: About Sri Aurobindo
- » Mains: Philosophy of Sri Aurobindo and his contributions as a spiritual leader
- Born Aurobindo Ghose in Calcutta on 15 August 1872, Sri Aurobindo was drawn to the Indian freedom movement as a revolutionary leader.
- His father Krishna Dhun Ghose was a surgeon in Rangpur, Bengal and had sought to provide his five children English education considering British culture to be superior to Indian culture.
- Aurobindo was schooled at the Loreto House Boarding School in Darjeeling.
- In 1879, the whole family moved to England as Krishna Dhun Ghose wanted his sons to pursue the Indian Civil Service (ICS). There, Aurobindo was taught History, French, Latin, Arithmetic and Geography.
- He passed the ICS examination securing the 11th rank out of 250 candidates. He joined King's College for the training but had himself disqualified for an exam by arriving deliberately late as he had no interest in the ICS.
 - * He returned to India and secured employment in the Baroda State Service with the help of an acquaintance.
 - * He joined the Baroda service in 1893. He also did jobs like teaching grammar and composing speeches for the Maharaja of Gaekwad. In 1897, he joined the Baroda College as a French teacher. He also taught himself Sanskrit and Bengali during this time.
- By this time, he had started taking an interest in politics and associated with resistance groups in Madhya Pradesh and Bengal. He travelled throughout Bengal to establish resistance groups. Although in public, he favoured passive non-cooperation, in private he prepared for an aggressive revolution in case the passive revolt did not yield results.
 - * He was much influenced by the American Revolution, revolts in Italy and the medieval French revolts against England.
 - * He attended Congress sessions and at the same time, helped establish the Anushilan Samiti of Calcutta in 1902.

- * He and his brother revolutionary Barin Ghose contributed articles to the magazine Jugantar which inspired many young people to take up revolutionary work.
- In 1905, Aurobindo started an English newspaper called Bande Mataram.
- In May 1908, Aurobindo was arrested in connection with the Alipore Conspiracy Case or Alipore Bomb Case.
- This was in the wake of the attempt to assassinate the Chief Presidency Magistrate Douglas Kingford by Khudiram Bose and Prafulla Chaki.
- Aurobindo was released after a year of solitary confinement in prison owing to the case collapsing when the chief prosecution witness was murdered.
- It was during his incarceration in Alipore Jail that Aurobindo's life started transforming into one of spirituality and self-realisation.
- He said that he heard the voice of Swami Vivekananda in prison. He became convinced of the truth of Sanatana Dharma.
- He started practicing Yoga and withdrew from political life as then, his life had a purpose that went beyond political liberation for the country.
- The British tried to arrest him for sedition for his writings, but he fled to Pondicherry in 1910 which was a French colony, and the arrest warrant against him was withdrawn.
- He lived in seclusion and practiced Yoga and pursued spirituality. In 1914, he started publishing a magazine Arya. He attracted many followers and this led to the founding of the Sri Aurobindo Ashram in 1926.
- He wrote copiously and his greatest literary achievement was 'Savitri', an epic poem with about 24000 lines.
- He developed a kind of Yoga called Integral Yoga. He believed that human beings can evolve further into something truly divine.
- He inspired scores of people both from India and abroad.
- Sri Aurobindo passed away on 5 December 1950 in Pondicherry aged 78.

Some of Aurobindo's many literary works:

- Bases of Yoga
- Bhagavad Gita and Its Message
- · The Future Evolution of Man



- · Rebirth and Karma
- Savitri: A Legend and a Symbol
- Hour of God

Post-Independence History

2. India marks 50 years of 1971 war

» Mains: Bangladesh liberation war and India's role in it.

Context:

 India commemorated 50 years of its victory in the 1971 Liberation War of Bangladesh.

Bangladesh Liberation war:

- The Bangladesh Liberation War refers to the armed uprising and revolution driven by Bengali nationalists in 1971 in a bid to gain independence and self-determination for Bangladesh, which was then under then called East Pakistan.
- The movement was against the exploitative and hegemonic rule of West Pakistan over the culturally and geographically separate East Pakistan, both part of Pakistan.
- Attempts to wipe out Bengali language from administrative and educational usage, the political thwarting of Bengali nationalist voices and overalls suppression of Bengali culture fuelled anger in Bangladesh, leading to calls for secession.
 - * Pakistan had declared Urdu as its national language and refused repeated calls to make Bengali the second national language. This helped mobilise the Awami League and gave further fillip to the Bengali nationalist movement.
 - * The 1970 elections were a key turning point in the history of Bangladesh. The Awami League led by Sheikh Mujibur Rahman swept the elections but his party was not allowed to form the government and West Pakistan imposed martial law in Bangladesh.
- Bangladeshi nationalists, fought the Pakistani and Islamist militia with its guerilla army led by the Mukti Bahini.

India's role in the war:

- Throughout the Bangladesh Liberation War, India lent economic, military as well diplomatic support to the Bengali nationalists.
 - * The Border Security Force of India played a major role in arming, training and supporting the Mukti Bahini, especially in guerrilla war techniques.

- * In the face of the genocidal campaign launched by the Pakistani forces against the people of Bangladesh in 1971, about 10 million refugees had come to India and they were accommodated in camps in border area.
- * It also fought for Bangladesh on the diplomatic front. India used Track 1 and Track 2 diplomacies to internationalize the Bangladesh issue and promote international sympathy and support for Bangladesh

India's 1971 war:

- The Bangladesh Liberation War, also known as the Bangladesh War of Independence, marks 50 years of the 1971 Indo-Pakistan War.
- India formally joined the Bangladesh war after the Pakistani Air Force carried out pre-emptive strikes on Indian Air Force bases. The Pakistani strikes were the beginning of armed hostilities between India and Pakistan which culminated in the fall of Dhaka on December 16 and the liberation of Bangladesh.
- On December 16-17, 1971, over 92,000 West Pakistani soldiers, sailors, airmen, paramilitary personnel, policemen and civilians surrendered to India in East Pakistan after 13 days of the war.



GOVERNANCE

Important aspects of Governance

1. Good Governance Index 2021

- » Prelims: About the Index
- » Mains: Significance of Good Governance index in assessing holistic development of the country

Context:

 The Good Governance Index 2021 was launched on the 25th of December, which is observed as Good Governance Day every year.

About Good Governance Index (GGI):

- This index is prepared by the Department of Administration Reforms and Public Grievances (DARPG).
- The GGI 2021 assessed the performance of states and union territories by using ten sectors and 58 indicators.
- A citizen centric administration serves as the major objective of good governance and the GGI offers a proper understanding of the status of governance in the states and union territories.

Sectors of GGI 2020-21:

- Agriculture and allied sectors
- Commerce & Industries
- Human Resource Development

- Public Health
- Public Infrastructure
- Utilities
- · Economic Governance
- · Social welfare and development
- · Judicial and public security
- Environment
- · Citizen-centric governance

GGI 2021: Important Observations

- The Good Governance Index scores of 20 states have improved over the period of time.
- Gujarat topped the composite ranking in the 58 indicator index and it was followed by Maharashtra and Goa.
- Betterment in the index score of about 8.9 % has been observed in the state of Uttar Pradesh.
- Delhi has topped among the Union Territories in the composite ranking category.
- Gujarat has determined progress in the sectors such as economic governance, human resource development, judiciary and public safety.

| Sectors | Group A | Group B | NE & Hill States | UTs |
|-------------------------------------|----------------|----------------|------------------|--------------|
| Agriculture & Allied Sector | Andhra Pradesh | Madhya Pradesh | Mizoram | D & N Haveli |
| Commerce and Industry | Telangana | Uttar Pradesh | J & K | Daman & Diu |
| Human Resource Development | Punjab | Odisha | Himachal Pradesh | Chandigarh |
| Public Health | Kerala | West Bengal | Mizoram | A & N Island |
| Public Infrastructure and Utilities | Goa | Bihar | Himachal Pradesh | A & N Island |
| Economic Governance | Gujarat | Odisha | Tripura | Delhi |
| Social Welfare and Development | Telangana | Chhattisgarh | Sikkim | D & N Haveli |
| Judiciary and Public Safety | Tamil Nadu | Rajasthan | Nagaland | Chandigarh |
| Environment | Kerala | Rajasthan | Manipur | Daman & Diu |
| Citizen Centric Governance | Haryana | Rajasthan | Uttarakhand | Delhi |
| Composite | Gujarat | Madhya Pradesh | Himachal Pradesh | Delhi |

Important aspects of governance, transparency and accountability

2. SAMPANN Project

- » Prelims: Important facts about the Project
- » Mains: Government intervention to settle issues related to pension

Context:

 Over 1 lakh people have received pensions directly in their bank accounts through the SAMPANN project.

About the SAMPANN (System for Accounting and Management of Pension) Project:

- This is an ambitious project of the Government of India and implemented by the Ministry of Communications (Controller General of Communication Accounts, Department of Telecommunications) introduced in the year 2018.
- It is an online pension processing system and payment system for pensioners.
- The direct credit of pension into the bank accounts of the beneficiaries is ensured.
- This also assisted the department to resolve pension cases and enabled ease of accounting.

Benefits of SAMPANN:

- SAMPANN provides e-Pension payment orders which make the payment process easier and hassle-free.
- Timely settlement of pension cases.
- Every pensioner gets access to key information like payment history along with a login option.

Covernment Polities and Interventions and issues arising out of their Design and Implementation

3. Making a case for decriminalisation

- » Prelims: NDPS Act Provisions
- » Mains: Arguments for shifting from a punitive framework towards decriminalisation and rehabilitation

Context

- The Central Government convened an interdepartmental meeting to re-evaluate the Narcotic Drugs and Psychotropic Substances Act (NDPS Act).
- Based on the recommendations of the Ministry of Social Justice and Empowerment, the Centre is considering amending the NDPS Act to decriminalise the possession and consumption of small quantities of drugs.

Arguments in favour of amending the law:

 Despite stringent provisions in the NDPS Act, the number of people dependent on drugs has exponentially increased over the past few years. This can be considered as indicative of the ineffectiveness of the criminal deterrence policy.

- * Under the NDPS Act, any person who consumes or possesses a narcotic substance can be sentenced to imprisonment and the imposition of fines.
- * According to the 'Magnitude of Substance Use in India' report, as of 2019, there were about 6 crore drug users in India (from an earlier estimated 1.1 crore users in 2004).
- The amendment to the NDPS Act will shift the focus from punishments to a focus on public health. The amendment will allow substance use to be tackled as a public health concern. This will help promote alternative strategies such as deaddiction and rehabilitation.
 - * Many of the drug addicts in India require professional help to reduce their dependence on drugs.
- The criminalisation of drug usage by the NDPS Act has only enhanced societal stigma, isolation, and hindered access to treatment.
- Countries like Portugal which took a positive step of moving away from a punitive framework and towards the decriminalisation of possession or consumption of small quantities of drugs and emphasis on suitable rehabilitation have noticed positive outcomes. In recognition of the success of the Portuguese model, the UN and the WHO have advocated for nations to repeal punitive laws relating to the use and possession of drugs for personal use.
- Decriminalisation will also help reduce the burden on the Indian criminal justice system, currently clogged with cases involving small quantities of drugs.
- The move will also allow the State to focus its resources on the prosecution of persons involved in large-scale trafficking and manufacture of drugs.

Covernment Polities and Interventions and Issues arising out of their Design and Implementation.

4. Facial recognition tech in Indian airports

- » Prelims: Digi Yatra initiative; Functioning of FRT
- » Mains: Concerns with biometric-based technology and suggestions to overcome these concerns

Context

 Under the Digi Yatra initiative, Varanasi, Pune, Kolkata and Vijayawada airports are going to implement a facial recognition technology (FRT)based boarding system for passengers.



Digi Yatra initiative:

- Digi Yatra initiative aims to make air travel paperless and hassle-free in the country, and proposes to simplify passenger-related processes at various checkpoints at the airport by using FRT-based biometric scanning.
- Under this system, a camera scans the passenger's face, and takes measurements of their facial features to build a biometric profile of them.
- Air travellers won't have to show their tickets, boarding passes, or physical identity cards at several points at the airport. This in turn would reduce queue waiting time and accelerate processing time.
- As part of the initiative, the Ministry of Civil Aviation would build an identity management platform – 'Common Digi Yatra ID' platform that will enable biometric-based scanning across all airports in India.

Concerns surrounding the biometric technology:

- The adoption of FRT raises concerns related to the possibility of the technology's potential to undermine the right to privacy.
- Notably, India's recently adopted Personal Data Protection Bill (PDPB), 2019, falls short of the standards set by the Justice Srikrishna Committee and also fails to build a legal structure on the landmark Justice K.S. Puttaswamy vs Union of India judgment on the right of digital privacy.
- The growing body of research shows that biometric scanning technologies coupled with Al have an inherent bias and are found to discriminate based on classes like race and gender.

<u>Safety measures proposed for passengers' data privacy:</u>

- Data shared by the passenger is to be used for the purpose defined and would not be shared with any other external stakeholders.
- Passengers' biometric information will be deleted 24 hours after flight departure.
- The FRT deployed will comply with India's data privacy and protection practices.

Development processes and the development industry —the role of NGOs

5. Foreign funds and the Missionaries of Charity

- » Prelims: Foreign Contribution (Regulation) Act and its provisions
- » Mains: Evaluation of the Foreign Contribution (Regulation) Act and its impact on the NGO ecosystem.

Context:

 The rejection of the application for renewal of the Foreign Contribution (Regulation) Act registration of Missionaries of Charity by the Ministry of Home Affairs (MHA) on grounds of not meeting eligibility conditions and the presence of adverse inputs on its functioning has brought to light the issue of regulation of Non-Governmental Organizations (NGO) under the FCRA.

Foreign Contribution (Regulation) Act:

Ambit:

- The Foreign Contribution (Regulation) Act, 2010 regulates foreign donations to individuals, associations, groups and NGOs.
 - * As per available data, there are 22,762 FCRA-registered NGOs currently in India.
- As per the law, even members of the legislature, political parties, government officials, judges, media persons are prohibited from receiving any foreign contribution. However, in 2017, an amendment to the law now allows political parties to receive funds from the Indian subsidiary of a foreign company or a foreign company where an Indian holds 50% or more shares.

Purpose:

- The Act seeks to regulate foreign contributions that could pose a danger to national interest or internal security by curbing foreign contributions motivated by political or religious objectives.
 - * In 2017, the MHA suspended the FCRA of the Public Health Foundation of India (PHFI) on grounds of using 'foreign funds' to lobby with parliamentarians on tobacco control activities.
 - * There have been Intelligence Bureau inputs showing the utilization of incoming foreign funds for activities that destabilize national peace and security. There were reports of such contributions being used to train and equip naxals.
- The Act aims at keeping a check on foreigners influencing the Indian electoral politics, journalists, public servants, etc.

Regulations:

- It is mandatory for all such NGOs receiving foreign funding to register under the FCRA. This registration is initially valid for five years and needs to be renewed subsequently.
- Registered associations can receive foreign contributions for stated social, educational, religious, economic and cultural purposes only.



- Filing of annual returns on the financial aspects is compulsory.
- Under the new rules notified in 2015, NGOs are required to give an undertaking that the acceptance of foreign funds is not likely to prejudicially affect the sovereignty and integrity of India or impact friendly relations with any foreign state and does not disrupt communal harmony.
- As per the Foreign Contribution Regulation Act (Amendment), Act, 2020:
 - * Aadhaar registration is made mandatory for people or organizations to receive foreign funds.
 - * The foreign contribution must be accepted only through an FCRA account in the State Bank of India, New Delhi branch.
 - * Only 20% of the foreign funds can be used for administrative purposes as against the earlier limit of 50%.
 - * It prohibits persons authorized under FCRA from transferring the received foreign contributions to any person/organization.

Powers under the Act:

- The Act empowers the Ministry of Home Affairs to suspend the licence of any entity not following the regulations set forth under the FCRA.
- The MHA on inspection of accounts and upon receiving any adverse input against the functioning of an association can suspend the FCRA registration initially for a period of 180 days.
- When the FCRA registration is suspended, the association cannot receive any fresh donation and cannot utilise more than 25% of the amount in the bank account without prior permission from the MHA.
- The MHA can also cancel the registration of an organisation which will not be eligible for registration or grant of 'prior permission' for three years from the date of cancellation.

Concerns:

Large number of cancellation of registrations:

- Since 2011 the registrations of 20,664 associations have been cancelled for violations such as misuse of foreign contribution, nonsubmission of mandatory annual returns and for diverting foreign funds for other purposes.
- This includes prominent ones like Amnesty International, Greenpeace India, People's Watch, European Climate Foundation, Compassion International and the Gates Foundation-backed Public Health Foundation of India, that work in sensitive areas like pollution and climate change issues, human rights, child labour and human slavery and health.

Ambiguous terms:

 The Act mandates that registered NGOs have to prove the source of funding and their utilization is appropriate and is not a threat to the "public interest" or "national security". Given that these terms are not clearly defined in the Act, there is the possibility of misuse of this.

Delay in the processing of applications:

- Thousands of applications of NGOs are yet to be scrutinized and renewed, as the deadline of 31st December to renew the registration of NGOs under the FCRA is reached.
 - * Only about 5000 applications have been processed so far out of the 22000 odd applications registered with FCRA.
- This could lead to a scenario where such NGOs may lose their eligibility to accept funds from abroad.

Effect on the NGO ecosystem:

- The stringent provisions under the Act have resulted in an estimated 30% drop in international non-profit contributions.
- This could impact the functioning of NGOs which will only hurt the poorest and most vulnerable recipients of philanthropic efforts, particularly those by NGOs working in areas where government aid fails to reach.

Recommendations:

- While the need to regulate foreign funding and to ensure transparency and accountability in the receipt and utilisation of foreign contribution is non-negotiable, the regulations should not stifle the functioning of genuine non-governmental organizations or associations, who are working for the welfare of society.
 - * Ever since independence, NGOs have played a crucial role in helping the needy in India, providing aid to the distressed and elevating the socio-economic status of millions in the country. Utilising funds raised through donations, NGOs in India work for a wide range of causes.
 - * NGOs have acted as a bridge between the government and the common people. They have reached out to the marginalised communities and far off areas in India in multiple ways. Even during the ongoing COVID-19 pandemic, the relief work done by the NGOs is laudable.
- The Government must give a more transparent account of its actions against NGOs.



GEOGRAPHY

Distribution of key natural resources across the world (including South Asia and the Indian subcontinent)

1. Integrated Bamboo Project

- » Prelims: Important Facts about the Project
- » Mains: Significance of the Project in promoting Bamboo trade, Importance of bamboo

Context

 With the objective to redefine the Bamboo Mission, the integrated bamboo project has been launched at Tamenglong in Manipur and it is funded by the North Eastern Council (NEC) which operates under the Ministry of Development of North Eastern Region.

About the Bamboo Project:

- The project will be implemented by the North East Cane and Bamboo Development Council (NECBDC) which is a designated Bamboo Technical Support Group under the National Bamboo Mission.
- This project intends to promote bamboo technology and up-gradation.
- The NECBDC has trained more than 7000 officials, army men, farmers, artisans, bamboo workers in the bamboo trade.
- This project facilitates the industrialisation of bamboo and cane setting up networks that can be augmented as bamboo clusters resulting in employment generation in rural areas.
- The project comprises the following for better bamboo and cane processing:
 - * Cane and Bamboo Nursery
 - * Bamboo Treatment Plant
 - * Common Facility Centre

Importance of Bamboo:

- Bamboo is considered to be a versatile crop with multiple uses.
- It can be used as a food, a substitute of wood, biofuel, incense sticks, construction material and also for handicrafts and paper.
- India is the second-largest cultivator of bamboo with 136 species and 23 genera spread over millions of hectares.
- Despite having a considerable bamboo resource India's commercial share in terms of bamboo is a mere 4% globally.

- Several initiatives like the bamboo mission and the integrated bamboo project aim at increasing the trade and commerce in bamboo and cane along with the incorporation of better species of bamboo by employing tools of biotechnology.
- Therefore bamboo reserves enormous potential to transform the entire set-up of the rural economy.



SOCIAL JUSTICE

Welfare schemes for vulnerable seations of the population by the Centre and States and the performance of these schemes

1. Child Protection Services Scheme

- » Prelims: The Child Protection Services Scheme and its objective; Constitutional provisions for child protection.
- » Mains: Significance of the scheme

Context

 In order to deliver services to children in difficult situations, the Ministry of Women and Child Development has decided to implement a centrally sponsored scheme called the Child Protection Services Scheme.

A look at numbers

 The census of 2011 revealed that there are 472 million children under the age of 18 and they occupy 39% of the total population.

Objectives of the Scheme

- The Child Protection Services Scheme aims at ensuring age-appropriate education of children
 - * Nutrition of children
 - * Access to vocational training
 - * Recreation
 - * Proper delivery of healthcare services
 - * Counselling

Implementation

- The Child Care Institutions operating under the Ministry of Women and Child Development will look after the objectives of the scheme and its equal implementation among rural and urban children.
- The National Commission for Protection of Child Rights (NCPCR) has been entrusted with the directive of monitoring the laws, policies and administrative mechanisms that are in agreement with the Constitution and the United Nations Convention on the Rights of the Child (UNCRC).

Significance of the scheme:

 The NCPCR will work in association with the State Commissions for the protection of Child Rights through consultation, webinars, and planning important awareness programmes. This will exemplify an excellent instance of cooperation between the centre and state towards a noble purpose.

How the Indian Constitution protects child rights

- Article 21 A This provision of Part III of the Constitution guarantees the Right to free and compulsory education for all children within the age group of 6-14.
- Article 24 Ensures the Right to be protected against employment in hazardous industries till the age of 14.
- Article 45 This Directive Principle of State Policy promotes early childhood care and education to children below the age of six years.

Welfare schemes for vulnerable sections of the population

2. Samajik Adhikarita Shivir

- » Prelims: About the scheme
- » Mains: Role of the scheme in helping the Divyangjan and Senior Citizens

Context

- The Samajik Adhikarita Shivir is a programme that will be organized to distribute the aids and assistive devices to the Physically Disabled persons and Senior Citizens at Kanpur.
- The event will be organized by ALMICO which is a public sector enterprise under the administrative control of the Department of Empowerment of Persons with Disabilities (Divyangjan).

About the Event:

- The assistive devices and aids will be distributed under ADIP (Assistance to disabled persons for purchase) scheme of the Ministry of Social Justice and Empowerment to Divyangian.
- There will be assessment camps for the Senior Citizens under the Rashtriya Vayoshri Yojana.

Issues relating to poverty and hunger

3. Global (and Indian) trends in inequality (World Inequality Report (WIR))

- » Prelims: About World Inequality Report (WIR); Published by
- » Mains: Rising inequality; consequences of inequality on human rights, opportunities, and quality of life



World Inequality Report (WIR)

- It is a report released by the Paris School of Economics.
- The report measures income and wealth inequality in a systematic and transparent manner
- The report highlights the important roles that national policies and institutions play in shaping inequality and equips various actors of society with the necessary facts to engage in informed public debates on inequality.

Need for such report

- Governments world over release annual data which gives us an idea about Gross Domestic Product (GDP) and growth rate.
- However, it does not tell us how growth is distributed across the population, which section of the society is reaping the benefits and who is at loss.
- The WIR studies different kinds of financial data to find out how a country's (and the world's) income and wealth are distributed.
- The information is vital in democracies because in all likelihood if not monitored by the regulating agencies the wealthy may use their economic might to win political power indirectly further aggravating the inequality.
- Availability of accurate data about levels of inequality can help generate public opinion in favour of policy measures that can mitigate them.

Context

2022 World Inequality Report (WIR) was released.

Global Trends

- In 2021, after three decades of trade and financial globalization, global inequalities remain extremely pronounced: they are about as great today as they were at the peak of Western imperialism in the early 20th century.
- In addition, the Covid pandemic has exacerbated even more global inequalities.
- It has further pointed out that inequality between countries was narrowing while inequality within countries was increasing.
- The report also found that the share of privately owned wealth in national wealth was rising, while that of public wealth (buildings, universities, roads, hospitals, etc.) was shrinking. This meant that countries are growing richer, governments are becoming poorer.

A look at numbers

- The richest 10% of the global population takes home 52% of the global income, whereas the poorest 50% got only 8.5% of it.
- While the poorest 50% own just 2% of the global wealth, the richest 10% own 76% of all the wealth.
- Europe was the region with the least amount of inequality (the income share of the top 10% was 36%), inequality was highest in the MENA (Middle East and North Africa (MENA) region, where the share of the top 10% was 58%.
- It points out that while the gap between the average incomes of the richest 10% of countries and the average incomes of the poorest 50% of countries has dropped from 50x to less than 40x, the gap between the average incomes of the top 10% and the bottom 50% of individuals within countries has almost doubled, from 8.5x to 15x.

Income inequality in India

- According to the report, India is one of the world's most unequal countries, with the top 1% getting 21.7% of the national income.
- The top 10% of Indians capture 57% of the national income, whereas the share of the bottom 50% is only 13%. While the average national income of the bottom 50% stood at ₹53,610, the top 10% earned more than 20 times more, ₹11,66,520.
 - * For comparison, this ratio in the case of France and Germany was 7 and 10 respectively.

The report reveals that income inequality in India today is worse than it was under Colonial British rule.

- Under the British (1858-1947), the top 10% got about 50% of the national income (lower than today's 57%).
- In the decades after India got independence, socialistic economic policies reduced income inequality, bringing the share of the top 10% to 35-40%.
- But starting from the 1980s, the report states, "deregulation and liberalisation policies have led to one of the most extreme increases in income and wealth inequality observed in the world."



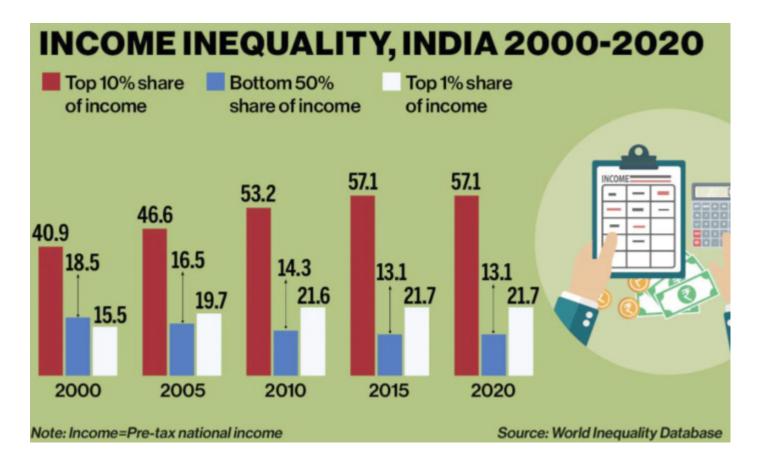


Image source: www.businesstoday.in

Wealth inequality and gender

- Wealth means a stock of valuable possessions: cash shares and bonds, house, car, etc.
- Income is a flow of money such as wages for employment.

Wealth inequality in India is even worse than income inequality.

- The bottom 50% own "almost nothing", with an average wealth of ₹66,280, while the middle class was also "relatively poor", with an average wealth of ₹7,23,930.
- However, the top 10% and 1% owned on average ₹63,54,070 and ₹3,24,49,360 respectively.
- The top 1% owned 33% of national wealth in India



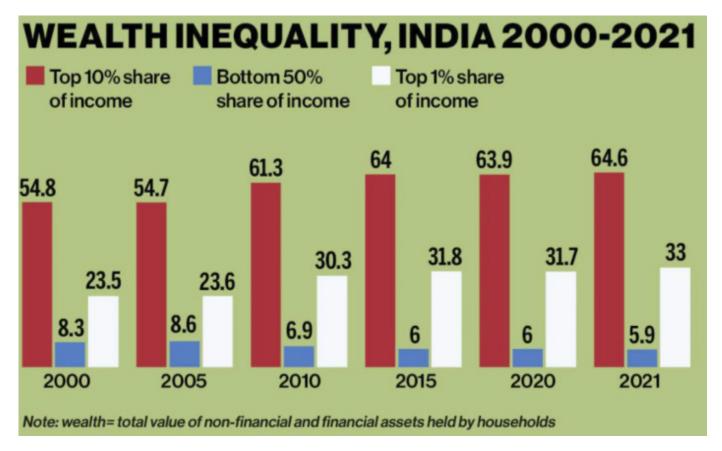


Image source: www.businesstoday.in

Gender

- The report also notes that the female labour income share in India is 18%, one of the lowest in the world.
- This is lower than both the Asian average (21%) and barely above the average in the Middle East (15%), pointing to high gender inequality in India.

Recommendation

- Wealth taxes should be imposed on the superrich.
- Policy initiatives have to be taken by the government to arrest this trend of rising inequality.

Welfare schemes for vulnerable sections of the population by the Centre and the States

4. Livelihood Opportunities for Transgenders

» Mains: Initiatives of the government for the wellbeing of the Transgenders

Context

 The Ministry of Social Justice and Empowerment has formulated the SMILE (Support for Marginalized Individuals for Livelihood and Enterprise) scheme which will include the subscheme, Comprehensive Rehabilitation for Welfare of Transgender Persons.

Objectives of the Scheme:

- 1. Facility of rehabilitation to the transgenders
- · 2. Medical care and interventions
- · 3. Counseling
- 4. Education
- 5. Skill development
- 6. Economic linkages for transgenders

Important Facts:

- The Ministry of Social Justice and Empowerment has built 12 pilot shelter homes named 'Garima Greh' for the transgenders and provided financial support to community-based organizations for setting up shelter homes in Maharashtra, Gujarat, Delhi, West Bengal, Rajasthan, Bihar, Chattisgarh, Tamil Nadu and Odisha.
- Skill Development Training has been conducted through PM DAKSH which is a skill development programme of the ministry.

PM - DAKSH:

 The Ministry of Social Justice and Empowerment initiated an action plan for the socially, educationally and economically backward sections of the society that include SC, ST,



OBC, senior citizens, victims of alcoholism and substances abuse, Denotified tribes, Safai karamcharis, waste pickers and transgenders. PM-DAKSH operates as a portal under the ministry.

- It is being implemented from the year 2020-21.
- The training programmes are operated by the Ministry of Skill Development and Entrepreneurship and other skill development institutes and councils.
- The scheme is implemented by three key corporations under the Ministry of Social Justice and Empowerment:
 - * National Scheduled Castes Finances and Development Corporation
 - * National Backward Classes Finance & Development Corporation
 - * National Safai Karamcharis Finance & Development Corporation
 - * It aims to offer in situ training and the trainers will approach the artisans in their work locations.
- Vocational training would be given on pottery, weaving, clay and bamboo, metal work, carpentry, waste segregation, financial and digital literacy. The trainers will have to be a master who is well associated with the vocation.
- The major aim is to enhance the skills of the vulnerable sections which would make them employable and double their income.



MISCELLANEOUS

1. BILCHAM

Context:

 In order to provide financial assistance to the rural community of the North-East region, the Ministry of Development of North Eastern Region (DoNER) funded the Banking Institute & Learning Centre of Excellence for Holistic Aspiration of Mothers (BILCHAM).

Details:

- BILCHAM was established in 2006 under the Societies Registration Act.
- It acts as an apex federation at the district level under West Garo Hills Community Resource Management.
- It is funded by the International Fund for Agricultural Development (IFAD), DoNER/North Eastern Council (NEC), the Government of India.

Importance:

- BILCHAM is now an effective women independent organization that caters to the livelihood and credit needs of the poorest of the poor.
- It offers services to the West Garo Hills and some parts of East and South Garo Hills through SHG federations that are also members of the board responsible for scrutinizing, sanctioning and recovery of the loans.
- Over the years BILCHAM has gathered enormous popularity among the rural poor due to easy access to credit and a feeling of ownership resulting in a positive response.

2. Conformity Assessment Scheme

- » Prelims: Important Facts related to the scheme
- » Mains: Government initiatives to increase the quality of dairy products

Context:

 The Prime Minister launched a portal and logo to determine the quality of milk products that show conformity with the compliance norms.

Important Facts:

 The portal and logo for dairy products have been developed by the Bureau of Indian Standards (BIS) with the help of the National Dairy Development Board.

- The NDDB and BIS have been engaged in the certification of processes and products related to the dairy industry.
- The NDDB awards the 'Quality Mark' to the dairy plants of cooperatives that obey the standard procedures ensuring the safe consumption of the products. This establishes a dairy value chain that enhances consumer confidence.
- BIS offers a product certification scheme for manufacturers of dairy products allowing the license holders to use the ISI mark on their products.



3. India Mobile Congress (IMC)

- It is the largest telecom, media and technology forum in South Asia, jointly organised by the Department of Telecommunications (DoT) and Cellular Operators Association of India (COAI).
- IMC has established itself as a leading forum for bringing together industry, government, academia and other ecosystem players to discuss, deliberate, demonstrate and display the latest in the world of TMT and ICT.



 Not only is the India Mobile Congress the biggest technology event in South East Asia, but it is also the biggest networking event in India in the technology space. The trainees would be called Oxygen Stewards in each district across the country.

Objectives



Image source: www.indiamobilecongress.com

4. Log4j vulnerability

- Log4j is a widely used software logging library for Java software which was recently found to have serious security vulnerabilities. An attacker exploiting the vulnerability could potentially execute arbitrary, malicious code on an affected system.
- A Oday (or zero-day vulnerability) refers to a security flaw that has not been publicly disclosed and for which a software patch or remediation technique is not available.

5. National Oxygen Stewardship Programme

- » Prelims: About the programme
- » Mains: Initiatives of the government in the improvement of healthcare

Context:

 In order to establish a sustainable capacity building programme pertaining to the supply of Oxygen, the National Oxygen Stewardship Programme has been initiated by the Union Health Ministry and it was inaugurated at AIIMS, New Delhi.

Aim of the Initiative:

 This programme intends to strengthen the healthcare workers who indulge in oxygen management and administration with knowledge and skills to ensure proper usage of oxygen without any wastage.

- The trained professionals will lead the training on Oxygen therapy and management in their respective districts and assist in audits of oxygen delivery.
- The program emphasises increasing the oxygen availability with a sanction of 1500 Pressure Swing Adsorption Oxygen plants.

Significance:

- This initiative gains significance in the wake of the oxygen shortage that was witnessed during the pandemic.
- The National Oxygen Stewardship program is a welcoming step towards the capacity building of oxygen and reflects India's conscious efforts to achieve self-reliance.
- This will lead to the enhancement of skilled workers in the healthcare sector and improve oxygen efficiency.

6. Network Readiness Index (NRI) 2021

» Prelims: About Index; Released by

Context:

 The Network Readiness Index 2021 was released in December 2021.

Aim:

 It aims to measure the degree of readiness of countries to exploit opportunities offered by information and communications technology

Who releases the NRI?

The index was developed by the World Economic Forum.



India's position on the index:

- India jumped 21 ranks, from 88 in 2020 to 67th position in 2021 in the NRI.
- India ranked 3rd among lower-middle-income countries and 12th among Asia & Pacific countries. The number of countries being evaluated is 130.

7. Prashasan Gaon ki Aur

Context:

 The Department of Administrative Reforms and Public Grievances (DARPG) launched Prashasan Gaon ki Aur.

Prashasan Gaon ki Aur:

- Prashasan Gaon Ki Aur is a Nation-wide campaign for Redressal of Public Grievances and Improving Service Delivery.
- Guidelines have been issued by DARPG and the State Governments on the activities that will be taken by the District Collectors at Tehsil/ Panchayat Samiti Offices.

8. Swachh Technology Challenge

Context:

• Swachh Technology Challenge launched.

About the Challenge:

- The challenge was launched by the Swachh Bharat Mission-Urban 2.0 (SBM-U 2.0), under the aegis of the Ministry of Housing and Urban Affairs (MoHUA).
- TheChallengeseekstoharnesstheentrepreneurial potential of the waste management sector in India and promote an enabling environment for enterprise development under Swachh Bharat Mission-Urban 2.0.
- The challenge seeks solutions in four thematic areas:
 - * Social inclusion
 - * Zero dump (solid waste management)
 - * Plastic waste management
 - * Transparency through digital enablement
- The challenge invites solutions not just from start-ups but also individual entrepreneurs, educational institutions, local businesses, research and development organisations, NGOs, and other citizen groups.
- The top three solutions in each of the four thematic categories from across the country will be felicitated at the Swachh Survekshan award ceremony hosted by MoHUA.

 Also, the top three state-level solutions will be rewarded with a cash prize by respective State governments.

9. Vernacular Innovation Programme

Context:

 The NITI Aayog within the ambit of its Atal Innovation Mission (AIM) created an innovation ecosystem in 22 languages mentioned in the 8th Schedule of the Constitution.

Objectives:

- This programme aims at empowering entrepreneurs and innovators across the country by introducing ease of communication without any language barriers.
- It aims to enrich the local, regional, national and global innovation pipeline by enabling learning in vernacular languages.

About the Vernacular Innovation Program:

- Under this programme, the AIM will train a vernacular task force (VTF) in the scheduled languages.
- Each task force will have vernacular language teachers, subject experts and technical writers.
- Additionally, there will be the launch of the 'Train the Trainer' programme which would be in association with the design department of IIT Delhi to coach the task force.
- The task force would be trained in design thinking, entrepreneurship and adaptation of the subjects in vernacular languages and cultures. This training platform would also be accessible to vernacular innovators.

Significance:

- The vernacular innovators represent 90% of the population and this initiative of the NITI Aayog opens up opportunities for learning and innovation and acknowledges creativity without language barriers.
- This will be a boost to local artisans and local and regional entrepreneurs to assimilate knowledge and technical materials as believed by the experts.
- A strong network of innovators and design experts will be created along with the exchange of innovative ideas.
- Such initiatives are steps to recognise the huge potential hidden in this vibrant nation.



10. World AIDS Day

- » Prelims: About World AIDS Day (when and why is it celebrated?); About AIDS; About NACO
- » Mains: Prevention of discrimination against AIDS patients

Context:

 World AIDS Day celebration was organised on the 1st of December 2021 by the National AIDS Control Organization (NACO) which emphasized important aspects of the global theme for 2021 which is "End inequalities. End AIDS".

About World AIDS Day:

- World AIDS (Acquired Immunodeficiency Virus)
 Day is celebrated to tackle the deadly HIV
 (Human Immunodeficiency Virus) and spread
 awareness and prevent discrimination against
 those who suffer from this detrimental disease.
- This day also commemorates the individuals who lost their lives due to HIV related illnesses.
- This day, in history, was celebrated as the first health day in the year 1988.
- Every year on the 1st of December, several communities of the world come together and celebrate World AIDS Day. The year 2021 marks 40 years since the onset of the disease.
- The theme for every year is chosen by the Global Steering Committee of the World AIDS Campaign.

Preventive Measures Discussed:

- It was highlighted in the event that there has been a considerable improvement in the number of individuals diagnosed with HIV in terms of their free access to antiretroviral treatment.
- Special attention will be given to eliminating the transmission of HIV from mother to child.
- The three zero targets to eliminate the pandemic were mentioned:
 - * Zero infections
 - Zero deaths
 - * Zero discrimination
- The Digital India campaign has played a remarkable role in assisting NACO to revamp its monitoring units with the help of an IT-enabled system. The NACO mobile application was launched for better management of modules for AIDS which would benefit the private practitioners.
- For the establishment of a comprehensive approach to tackling AIDS, the Government of India is trying to engage the public and private entities, NGOs, pharma industries to mobilize their support and remove the social stigma attached to AIDS.

11. How is hallmarking being implemented?

- » Prelims: Hallmark Unique Identification (HUID)
- » Mains: Hallmark Unique Identification (HUID)-Benefits and concerns for the Gold Industry in India.

Context:

 The Government of India has made hallmarking of gold jewellery mandatory which is being implemented by the Bureau of Indian Standards (BIS) in a phased manner.

Hallmark Unique Identification (HUID): -

- The Hallmark Unique Identification (HUID) code is a six-digit alphanumeric code.
- It is given to each item of jewellery during the hallmarking process and is unique to that piece.
- The unique number is physically imprinted on jewellery at the Assaying & Hallmarking Centre (AHC).
- The hallmark is made up of three symbols that provide information about the item of jewellery.
- The BIS logo is the first symbol; the purity and fineness sign is the second; and the HUID is the third symbol.
- For 14, 18, and 22-carat gold jewellery hallmarking and HUID are mandatory.

Need of the HUID:-

- Each item of jewellery is given a unique HUID number, allowing for traceability.
- It is crucial to the legitimacy of hallmarking and to the resolution of adulteration accusations.
- Its goal is to build consumer trust by bringing openness to the jewellery industry.
- Registration of jewellers is an automated procedure with no human intervention in HUIDbased hallmarking.
- In addition to its role in authentication, it also aids in the detection of trade malpractice.

Benefits for the consumer:-

- The goal of requiring gold hallmarking is to safeguard the interests of consumers.
- Consumers can get 'third-party assurance' on the quality of gold jewellery by having it hallmarked.

Concerns: -

- There are suspicions raised over problems people could face in selling jewellery. Some fear that lack of hallmarking will affect the sales of the jewellery they hold.
- There are problems with the software and hallmarking has been launched without adequate preparation



 Both AHCs and the jewellers have to upload the HUID. Since it is a cumbersome, time-consuming process, there is delay in hallmarking at AHCs, which is further disrupting the entire supply chain and causing delays in the delivery of goods to consumers

Conclusion: -

- The HUID system has the potential to be implemented internationally to improve gold confidence at the retail level and eliminate a significant barrier to gold purchases.
- This is a digitally backed project that will increase openness in the ecosystem and provide a winwin solution for both customers and the Indian gold industry.

12. Anti-apartheid icon Desmond Tutu dies

- Archbishop Desmond Tutu was a South African anti-apartheid icon and Nobel Peace Prize laureate.
- He was a global human rights activist who worked tirelessly to uphold human dignity and equality.

13. 6G Technology Innovation Group

Context:

 The Department of Telecommunications (DoT) has constituted a 6G Technology Innovation Group (TIG).

About the TIG:

- The objective of the TIG is to co-create and participate in the development of the 6G technology ecosystem through increased participation in capability description, standards development at international standard-setting bodies.
- This would aid in preparing India's manufacturing and services ecosystem to capitalise on the 6G opportunity.
- 6G TIG comprises members from the government, academia, industry associations and TSDSI (Telecom Standards Development Society of India).



PRACTICE QUESTIONS

- 1. Located in the Idukki district of Kerala, the Mullaperiyar dam is under the control of which of the following states or UTs?
 - A. Karnataka
 - B. Tamil Nadu
 - C. Kerala
 - D. Puducherry
- 2. Which amongst the following is not one of the criteria to be eligible for reservation under the EWS category?
 - A. Your family should not own agricultural land of size 5 acres or more.
 - B. Your family should not own a residential flat of area 1000 square feet or more.
 - C. Your family should not own a residential plot (in notified municipalities) of an area 100 square yards or more.
 - D. Your family should not own a residential plot (other than in notified municipalities) of area 250 square yards or more.
- 3. Which of the following is incorrect with regards to the voluntary renunciation of Indian citizenship?
 - A. If an Indian citizen wishes, who is of full age and capacity, he can relinquish citizenship of India by his will.
 - B. When a person relinquishes his citizenship, every minor child of that person also loses Indian citizenship.
 - C. However, when such a child attains the age of 18, he may resume Indian citizenship.
 - D. None of the above
- 4. Amongst the eight core sectors in the Index of Industrial Production, which sector has the lowest weightage?
 - A. Cement
 - B. Coal
 - C. Fertilizers
 - D. Steel

- 5. Why is there a great concern about the 'microbeads' that are released into the environment?
 - A. They are considered harmful to marine ecosystems.
 - B. They are considered to cause skin cancer in children.
 - C. They are small enough to be absorbed by crop plants in irrigated fields.
 - D. They are often found to be used as food adulterants.
- 6. Consider the following statements with regards to the allocation of Election symbols in India:
 - 1. The Election Symbols (Reservation and Allotment) Order, 1968 empowers the Election Commission to recognize political parties and allot symbols.
 - 2. EC can decide disputes among rival groups or sections of a recognized political party staking claim to its name and symbol.
 - 3. The EC is the only authority to decide issues on a dispute or a merger under the order.

Choose the correct statements.

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above
- 7. Which amongst the following is not correct with regards to the GIFT City?
 - A. It will not have any residential facilities.
 - B. It will be India's first greenfield city.
 - C. The central government is offering a range of tax exemptions for setting up international operations at the GIFT city.
 - D. Singapore Arbitration Centre has been set up at the GIFT city for dispute resolution.
- 8. Recently seen in the news, 'Southern Birdwing' and 'Grass Jewel' are-
 - A. Largest and smallest butterflies found in India respectively.
 - B. Species of butterflies that recently became extinct from India.



- C. Migratory birds that are hunted in Nagaland.
- D. Recently discovered frog species from the Western Ghats.

9. With reference to the G20, which amongst the following correctly defines 'Troika'?

- A. Three-member nations with the largest GDP sizes
- B. Three-member nations that will hold the presidency in the next three years
- C. Three-member nations comprising current, previous, and upcoming presidencies of G20
- D. Top three resolutions adopted after the G20 meeting

10. With reference to land reforms in independent India, which one of the following statements is correct?

- A. The ceiling laws were aimed at family holdings and not individual holdings.
- B. The major aim of land reforms was providing agricultural land to all the landless.
- C. It resulted in the cultivation of cash crops as a predominant form of cultivation.
- D. Land reforms permitted no exemptions to the ceiling limits.

11. With reference to extra-tropical cyclones, which of the following statements is/are correct?

- 1. They have a clear frontal system which is not present in tropical cyclones.
- 2. They can originate over both land and sea.
- 3. They move from west to east.

Options:

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

12. Consider the following statements:

- 1. The Central Institute of Indian Languages (CIIL), Mysore works on the protection, preservation and documentation of all the mother tongues/languages of India spoken by less than 1,00,000 people.
- 2. UNESCO operates with four levels of language endangerment between "safe" and "extinct".

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both
- D. None

13. Which of the following pairs is/are correctly matched?

| Festival | | State | |
|-------------|--------------|-----------|--|
| 1. Hornbill | | Nagaland | |
| 2. Wangala | | Meghalaya | |
| 3. Myoko | | Assam | |
| Options: | | | |
| A. | 1 and 2 only | | |
| B. | 2 and 3 only | | |
| C. | 1 and 3 only | | |
| D. | 1, 2 and 3 | | |

14. Donbas conflict is a dispute between

- A. Greece and Turkey
- B. France and United Kingdom
- C. Russia and Ukraine
- D. Belarus and Poland

15. With reference to Indian freedom struggle, consider the following events: (UPSC 2017)

- 1. Mutiny in Royal Indian Navy
- 2. Quit India Movement launched
- 3. Second Round Table Conference

What is the correct chronological sequence of the above events?

- A. 1-2-3
- B. 2-1-3
- C. 3-2-1
- D. 3-1-2

16. With respect to the word 'Democratic' mentioned in the Preamble, which of the following statements is/are correct?

- 1. Democratic polity stipulated in the Preamble is based on the doctrine of popular sovereignty.
- 2. Independence of Judiciary can be considered as the manifestation of the democratic character of the Indian polity.
- 3. The term used in the Preamble embraces political democracy and not social and economic democracy.



Options:-

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

17. Which of the following words were added to the Preamble by the 42nd Constitutional Amendment Act?

- 1. Integrity
- 2. Liberty
- 3. Secular
- 4. Socialist

Options:

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

18. Consider the following statements with respect to Private Member's Bill:

- 1. A member of the ruling dispensation who is not a minister or that of the opposition can be said to be a 'Private Member'.
- 2. No private member's Bill has been passed by Parliament since 1970.

Which of the above statements is/are incorrect?

- A. 1 only
- B. 2 only
- C. Both
- D. None

19. With respect to Lesser florican, which of the following statements is/are correct?

- 1. It is endemic to the Indian Subcontinent.
- 2. The bird is listed as "critically endangered" on the International Union for Conservation of Nature's Red List of Threatened Species.

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

20. Consider the following statements:

- 1. National Payments Corporation of India (NPCI) helps in promoting financial inclusion in the country.
- 2. NPCI has launched RuPay, a card payment scheme.

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. Which amongst the following is the string puppet native to the state of Rajasthan?

- A. Kalasutri Bahulya
- B. Sakhi kandhei
- C. Putala Natch
- D. Kathputli

22. Consider the following statements with respect to the ICON mission:

- 1. It is a collaboration between the European Space Agency (ESA) and its Russian equivalent Roscosmos
- 2. Its objective is to help understand the origin and evolution of the Solar System

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both
- D. None

23. With respect to Antarctic Fur Seals, which of the following statements is/are correct?

- 1. Antarctic Fur Seals are widely distributed in the Southern Ocean near the Antarctic Convergence.
- 2. Its IUCN status is Vulnerable
- 3. They do have any natural Predators

Options:

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



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24. Colony collapse disorder an abnormal phenomenon is associated with

- A. Marine mammals, where underwater noise interferes with key life functions
- B. Birds, unable to trace their migratory paths
- C. Corals, resulting in Coral bleaching
- D. Honey Bees, where majority of worker bees disappear

25. It is possible to produce algae based biofuels, but what is/are the likely limitation(s) of developing countries in promoting this industry?

- 1. Production of algae-based biofuels is possible in seas only and not on continents.
- 2. Setting up and engineering the algae based biofuel production requires a high level of expertise/technology until the construction is completed.
- 3. Economically viable production necessitates the setting up of large scale facilities which may raise ecological and social concerns.

Select the correct answer using the code given below:

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

26. Consider the following statements with respect to Vice- President of India:

- 1. He/she is elected by the members of an electoral college consisting of only elected members from both houses of Parliament
- 2. An election to fill a vacancy in the office of Vice- President occurring by reason of his death, resignation or removal, or otherwise shall be held as soon as possible after, and in no case later than six months from, the date of occurrence of the vacancy

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both
- D. None

27. With respect to Mithi River, which of the following statements is/are correct?

- 1. It is a River flowing through the city of Mumbai
- 2. It is a confluence of tail-water discharges of the Tulsi and Vihar lakes

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

28. Mount Semeru recently seen in news is in which country?

- A. Japan
- B. Philippines
- C. Indonesia
- D. Solomon Islands

29. Consider the following statements:

- 1. They are one of the major Naga ethnic groups
- 2. They are known in Arunachal Pradesh as the Wanchos
- 3. They were the last to give up the practice of head-hunting severing heads of enemies after attacking rival tribes

The above statements describe which amongst the following tribes?

- A. Abor
- B. Jaintia
- C. Konyak
- D. Rengma

30. With reference to 'Indian Ocean Dipole (IOD)' sometimes mentioned in the news while forecasting Indian monsoon, which of the following statements is/are correct? (UPSC-2017)

- 1. IOD phenomenon is characterised by a difference in sea surface temperature between tropical Western Indian Ocean and tropical Eastern Pacific Ocean.
- 2. An IOD phenomenon can influence an El Nino's impact on the monsoon.

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

31. Which amongst the following correctly describes an 'invasive species'?

- A. It is an introduced organism that becomes overpopulated and negatively alters its new environment.
- B. It is an organism that helps define an entire ecosystem.
- C. These are species selected for making conservation-related decisions, typically because protecting these species indirectly protects many other species.
- D. None of the above

32. Consider the following statements with regards to OBC reservation in Maharashtra:

- 1. The Maharashtra government set up a 27 percent quota in local bodies for OBCs in 1994.
- 2. The 27 percent reservation was applicable to all urban (Municipal Corporations, Councils and Nagar Panchayat) and rural bodies (Zilla Parishad, Panchayat Samiti and Gram Panchayat) across the state.
- 3. 73rd and 74th constitutional amendment acts make it compulsory to provide OBC reservation in local bodies of the state.

Which of these statements is/are correct?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

33. Consider the following statements with regards to the AFSPA law:

- 1. It was first introduced by Viceroy Linlithgow in the form of an Ordinance in the wake of the Quit India Movement of 1942.
- 2. Post-Independence, AFSPA was first enacted to deal with the Naga insurgency in the Assam region.
- 3. Section 4 gives the Army powers to search premises and make arrests without warrants, to use force even to the extent of causing death, destroy arms/ammunition dumps, fortifications/shelters/hideouts and to stop, search and seize any vehicle.

Which of these statements is/are correct?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

34. India observes 'Maitri Divas' with reference to which of the following nations?

- A. Bhutan
- B. Bangladesh
- C. Sri Lanka
- D. Nepal

35. With reference to the management of minor minerals in India, consider the following statements:

- 1. Sand is a 'minor mineral' according to the prevailing law in the country.
- 2. State Governments have the power to grant mining leases of minor minerals, but the powers regarding the formation of rules related to the grant of minor minerals lie with the Central Government.
- 3. State Governments have the power to frame rules to prevent illegal mining of minor minerals.

Which of the statements given above is/are correct?

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

36. Which of the following statements is/are correct?

- 1. The Model Code of Conduct is a set of guidelines issued by the Election Commission to regulate political parties and candidates during elections.
- 2. It is operational from one month prior to elections to the date of result announcement.
- 3. These guidelines are legally enforceable.

Options:

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



37. Which of the following statements is/are incorrect?

- 1. The International Institute for Democracy and Electoral Assistance (International IDEA) is an intergovernmental organization that works to support and strengthen democratic institutions and processes around the world, to develop sustainable, effective and legitimate democracies.
- 2. It is based out of Stockholm and is an official United Nations Observer.
- 3. India is seeking membership in this organization.

Options:

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

38. What are the key objectives of the new restructured scheme of Rashtriya Gram Swaraj Abhiyan (RGSA)?

- 1. Developing and strengthening the capacities of Panchayati Raj Institutions (PRIs) for rural local governance to become more responsive towards local development needs.
- 2. Preparing the participatory plans for PRIs that leverage technology and ensure efficient and optimum utilization of available resources.
- 3. Realizing sustainable solutions to local problems at the panchayat level to achieve the Sustainable Development Goals (SDGs).

Options:

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

39. What is the significance of NASA's LCRD mission?

- A. It aims to deflect an asteroid by intentionally crashing a spacecraft into it.
- B. It is NASA's first-ever laser communications system that will help the agency test optical communication in space.
- C. It is aimed at understanding the concentration of greenhouse gasses in the earth's atmosphere.
- D. It is designed to robotically expand the existing International Space Station.

40. Consider the following:

- 1. Calcutta Unitarian Committee
- 2. Tabernacle of New Dispensation
- 3. Indian Reform Association

Keshab Chandra Sen is associated with the establishment of which of the above?

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

41. Consider the following statements with regards to the Ken-Betwa river interlinking project:

- 1. Ken and Betwa rivers originate in MP and are the tributaries of Yamuna.
- 2. The Ken-Betwa Link Project (KBLP) is the river interlinking project that aims to transfer surplus water from the Betwa in UP to Ken River in MP to irrigate the drought-prone Bundelkhand region.
- 3. Ken River passes through Panna tiger reserve.

Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

42. Which amongst the following appliances must have the BEE energy rating label mandatorily under Indian law?

- 1. Colour TV
- 2. Electric Geyser
- Tubular fluorescent
- 4. Room Air-conditioners

Choose from the codes given below:

- A. 1 & 2 only
- B. 1, 2 & 3 only
- C. 3 & 4 only
- D. All of the above

43. Consider the following statements with regards to the recently passed Assisted Reproductive Technology (Regulation) Bill, 2020:

- 1. The Bill provides that every ART clinic and bank must be registered under the National Registry of Banks and Clinics of India.
- 2. The registration will be valid for five years and can be renewed for a further five years.



- 3. A bank can obtain semen from males between 21 and 55 years of age, and oocytes from females between 23 and 35 years of age.
- 4. The woman can donate oocyte only once in her life and not more than seven oocytes can be retrieved from her.

Which of these statements is/are correct?

- A. 1 & 2 only
- B. 2 & 4 only
- C. 1, 3 & 4 only
- D. All of the above

44. Which of the following is not true with regards to Unified Payments Interface (UPI)?

- A. It is an advanced version of Immediate Payment Service (IMPS) round-the-clock funds transfer service to make cashless payments faster, easier and smoother.
- B. UPI is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood.
- C. RBI launched UPI with 21 member banks in 2014.
- D. The user doesn't have to pay any fee for UPI transactions.

45. Under which Schedule of the Constitution of India can the transfer of tribal land to private parties for mining be declared null and void? (PYQ 2019)

- A. Third Schedule
- B. Fifth Schedule
- C. Ninth Schedule
- D. Twelfth Schedule

46. Consider the following statements with respect to Zero Hour:

- 1. It is not mentioned in the Rules of Procedure.
- 2. It is an informal device available to the members of the Parliament to raise matters without any prior notice.
- 3. The idea was imported from Japan.

Which of the above statements is/are correct?

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

47. With respect to State Legislative Council, which of the following statements is/are incorrect?

- 1. An Indian citizen who is at least 25 years of age can become a member of the Legislative Council.
- 2. The Chairman of Council is nominated by the Governor.
- 3. Currently, seven states in India have a legislative council.

Options:

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

48. Which of the following are the Point sources of water pollution?

- 1. Oil refineries
- 2. Paper and pulp mills
- 3. Agriculture Run off
- 4. Sewage treatment plants

Options:

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

49. With respect to Payments Bank, which of the following statements is/are correct?

- 1. Payments banks can issue Debit cards and not credit cards.
- 2. They are given a provision to lend to small businesses.
- 3. They are not allowed to accept time deposits/fixed deposits (FDs).

Options:

- A. 2 only
- B. 1 and 3 only
- C. 3 only
- D. None

50. Which one of the following objectives is not embodied in the Preamble to the Constitution of India?

- A. Liberty of thought
- B. Economic liberty
- C. Liberty of expression
- D. Liberty of belief



51. Which of the following statements is/are correct with respect to the Soil Health Card Scheme?

- 1. The card will contain an advisory based on the soil nutrient status of a farmer's holdings.
- 2. It will provide insurance coverage and financial support to the non-loanee small and marginal farmers in case of Soil erosion.
- 3. It aims to expand cultivable area under assured irrigation to maintain soil fertility.

Options:

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

52. With reference to Atmanirbhar Hastshilpkar Scheme, which of the following statements is/ are correct?

- 1. It is an initiative of the Ministry of Culture to promote development of new talents in the field of music and dance, folk and tribal art forms.
- 2. Under this scheme artisans are provided with a credit facility that is collateral-free and carries a subsidized interest rate of 6% p.a., which is repayable in 24 months.

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

53. Which amongst the following ministries is/are associated with the Beti Bachao, Beti Padhao scheme?

- 1. Ministry of Women and Child Development
- 2. Ministry of Law and Justice
- 3. Ministry of Health and Family Welfare
- Ministry of Education
- 5. Ministry of Social Justice and Empowerment Options:
- A. 1, 2 and 4 only
- B. 2, 3, 4 and 5 only
- C. 1, 3 and 4 only
- D. 1, 2, 3 and 5

54. Royal Gold Medal is an award given to individuals who have made significant contributions to the field of

- A. Architecture
- B. Medicine
- C. Mathematics
- D. Journalism

55. What is/are the most likely advantages of implementing 'Goods and Services Tax (GST)'?

- 1. It will replace multiple taxes collected by multiple authorities and will thus create a single market in India.
- 2. It will drastically reduce the 'Current Account Deficit' of India and will enable it to increase its foreign exchange reserves.
- 3. It will enormously increase the growth and size of economy of India and will enable it to overtake China in the near future.

Select the correct answer using the code given below:

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

56. Which of the following statements with regards to the Pinaka missile system is not correct:

- A. The DRDO has teamed up with the France Military Industries to develop the Trajectory Correction System on Pinaka.
- B. The Pinaka is a Multi-Barrel Rocket Launcher.
- C. It is completely automatic and uses microprocessor-based positioning and fire control
- D. Each battery of Pinaka consists of six launcher vehicles and each launcher vehicle has twelve rockets.

57. Consider the following statements with regards to the Buxa Tiger Reserve:

- 1. It is located in the state of Assam.
- 2. Its northern boundary runs along the international border with Bhutan.
- 3. The Buxa Tiger Reserve has been identified for the tiger augmentation programme by the National Tiger Conservation Authority (NTCA).

Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only



- C. 1 & 3 only
- D. All of the above

58. The well-renowned Sri Ranganathaswamy temple in Srirangam is dedicated to

- A. Lord Shiva
- B. Lord Krishna
- C. Lord Vishnu
- D. Goddess Laxmi

59. The Chakma-Hajong community are the usual inhabitants of which of the following states in India?

- A. Assam
- B. Meghalaya
- C. Nagaland
- D. Arunachal Pradesh

60. The word 'Denisovan' is sometimes mentioned in media in reference to

- A. Fossils of a kind of dinosaurs
- B. An early human species
- C. A cave system found in North-East India
- D. A geological period in the history of Indian subcontinent

61. Noumea Accord is a promise by the French Republic to grant political power to

- A. Reunion
- B. Guadeloupe
- C. New Caledonia
- D. Mayotte

62. Consider the following statements with respect to Tornadoes:

- 1. They occur most often in association with thunderstorms in both the Northern and Southern Hemispheres
- 2. Tornadoes have been observed on every continent except Antarctica.
- 3. They occur mostly in tropical warm areas Which of the above statements is/are correct?
- A. 1 and 2 only
- B. 2 and 3 only

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

63. The Governor of a State is the Chancellor of

- A. State Universities
- B. State and Central Universities
- C. State and Private Universities
- D. State, Central and Private Universities

64. Which of the following statements with respect to Parliament House is/are correct?

- 1. The building was designed by the British architects Sir Edwin Lutyens and Sir Herbert Baker.
- 2. The foundation stone was laid by Prince Arthur, Duke of Connaught and Strathearn, in 1921.
- 3. It is said to have been based on Chausath Yogini Temple in Rajasthan.

Options:

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

65. With reference to the religious history of India, consider the following statements:

- 1. Sautrantika and Sammitiya were the sects of Jainism.
- 2. Sarvastivadin held that the constituents of phenomena were not wholly momentary, but existed forever in a latent form.

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

66. Consider the following statements with regards to India's Republic Day parade:

- 1. No Central Asian leader has ever been the chief guest at India's Republic Day parade.
- 2. 10 leaders from ASEAN nations were invited to India's Republic Day parade as guests in 2016.
- 3. A beating retreat ceremony signifies the beginning of the parade.



Which of these statements is/are not correct?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

67. Consider the following statements with regards to the UNCLOS:

- 1. UNCLOS is the only international convention that stipulates a framework for state jurisdiction in maritime spaces.
- 2. The territorial sea extends seaward up to 24 nautical miles (nm) from its baselines.
- 3. Exclusive Economic Zone does not give a coastal state the right to prohibit or limit freedom of navigation or overflight, subject to very limited exceptions.

Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

68. Who amongst the following is/are not a part of the collegium that recommends the appointment of judges in the Supreme Court to the President?

- 1. Prime Minister
- 2. Chief Justice of India
- 3. Union Law Minister
- 4. 4th senior-most judge of the Supreme Court

Choose the correct code:

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

69. Which amongst the following motions are moved against a member of Parliament for disregarding their rights and immunities granted to them so that they can effectively discharge their duties?

- A. Calling attention motion
- B. Privilege motion
- C. Adjournment motion
- D. Cut motion

70. The Chairmen of public sector banks are selected by the

- A. Banks Board Bureau
- B. Reserve Bank of India
- C. Union Ministry of Finance
- D. Management of concerned bank

71. Consider the following statements with regards to the Sixth Schedule of the Indian Constitution:

- 1. The Sixth Schedule of the Constitution provides for the administration of tribal areas in Assam, Meghalaya, Tripura and Mizoram to safeguard the rights of the tribal population in these states.
- 2. The Sixth Schedule establishes Tribal Advisory Councils in these states.
- 3. The Sixth Schedule was originally intended for the predominantly tribal areas (tribal population over 90%) of undivided Assam, which was categorised as "excluded areas" under the Government of India Act, 1935 and was under the direct control of the Governor.

Which of these statements is/are correct?

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

72. Consider the following statements with regards to Hypersonic technology:

- 1. Hypersonic speeds refer to 3 or more times the Mach or speed of sound.
- 2. Most hypersonic vehicles primarily use scramjet technology, which is a type of Air Breathing Propulsion System.
- 3. DRDO has successfully flight-tested the Hypersonic Technology Demonstrator Vehicle (HSTDV), with a capability to travel at 6 times the speed of sound.

Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

73. Who amongst the following was the Chairman of the Advisory Committee on Fundamental Rights, Minorities and Tribal and Excluded Areas of the Constituent Assembly?

- A. Jawaharlal Nehru
- B. Dr. Rajendra Prasad



- C. Vallabhbhai Patel
- D. GV Mavlankar

74. Consider the following statements with regards to the Draft Food Safety and Standards (Labelling And Display) Regulations:

- 1. The front of all packaged food items will have to display the total number of calories, saturated and trans fats, salt, and added sugar content as well as the proportion of the daily energy needs fulfilled by the food item.
- 2. FSSAI has changed the symbol of vegetarian food from a green circle to a green triangle to help colour blind people distinguish it from the brown circle denoting non-vegetarian food.
- 3. If the total amounts of calories, fats, transfats, sugar, and sodium per serving exceed the stipulated limits, it would be indicated in red colour.

Choose the correct code:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

75. Which of the following is issued by registered foreign portfolio investors to overseas investors who want to be part of the Indian stock market without registering themselves directly?

- A. Certificate of Deposit
- B. Commercial Paper
- C. Promissory Note
- D. Participatory Note

76. The famous Sri Ramna Kali temple is in which of the following nations?

- A. Pakistan
- B. Nepal
- C. Bangladesh
- D. Cambodia

77. Consider the following traditions and choose the ones which have been recognized by UNESCO as part of India's intangible cultural heritage:

- 1. Yoga
- 2. Kumbh Mela
- 3. Tradition of Vedic chanting
- 4. Nowruz
- 5. Durga Puja

Choose the correct statements:

- A. 1,2 & 5 only
- B. 2, 4 & 5 only
- C. 1 & 3 only
- D. All of the above

78. Rustom II, developed by the DRDO is

- A. A hypersonic missile system
- B. An unmanned aerial vehicle or Drone
- C. A tank suitable for high altitude warfare
- D. A sonar system for identifying underwater mineral nodules

79. Which of these schemes is/are correctly matched with the States where they are operating?

| Scheme | State |
|--------------------------|--------------|
| 1. SAHAY | Chhattisgarh |
| 2. KALIA | Odisha |
| 3. Saras Suraksha Kavach | Rajasthan |
| Choose the correct code: | |

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above
- 80. Which one of the following suggested that the Governor should be an eminent person from outside the State and should be a detached figure without intense political links or should not have taken part in politics in the recent past? (UPSC 2019)
 - A. First Administrative Reforms Commission (1966)
 - B. Rajamannar Committee (1969)
 - C. Sarkaria Commission (1983)
 - D. National Commission to Review the Working of the Constitution (2000)

81. Consider the following statements:

- 1. Removal proceedings against a Judge of the Supreme Court or the High Court can be initiated in either House of Parliament
- 2. A Judge may be removed from office through a motion adopted by Parliament on grounds of 'proven misbehavior or unsound mind'.



Which of the above statements is/are incorrect?

- A. 1 only
- B. 2 only
- C. Both
- D. None

82. With reference to Silverline Rail Project, which of the following statements is/are correct?

- 1. The project would be a vital link between Mumbai and Thiruvananthapuram
- 2. It is exclusively for transporting freight at higher speed with increased load-carrying capacity Options:
- A. 1 only
- B. 2 only
- C. Both
- D. None

83. Which of the following statements is/are correct with respect to Protection of Children from Sexual Offenses (POCSO) Act?

- 1. Burden of proof in POCSO cases lies on the accused.
- 2. POSCO is a gender-neutral law

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

84. With respect to National Career Services (NCS) Project, which of the following statements is/are correct?

- 1. It is a Mission Mode Project launched by the Ministry of Education to bridge the gap between those who need jobs and those who want to hire them
- 2. NCS does not charge any fees for registration on the portal and its services

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

85. Which of the following is geographically closest to Great Nicobar?

- A. Sumatra
- B. Borneo
- C. Java
- D. Sri Lanka

86. Which amongst the following writs can be issued against a private individual?

- 1. Habeas corpus
- 2. Mandamus
- 3. Prohibition

Options:

- A. 1 only
- B. 2 and 3 only
- C. 1, 2 and 3
- D. None

87. The writ of habeas corpus cannot be issued in which of the following cases?

- 1. When the detention is outside the jurisdiction of the court
- 2. When the proceeding is for the contempt of a legislature or a court
- 3. When the detention is lawful

Options:

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

88. The Order of the Druk Gyalpo was conferred to PM Modi by which amongst the following countries?

- A. Japan
- B. Bhutan
- C. South Korea
- D. Mongolia

89. Which of the following countries are not parties to United Nations Convention on Biological Diversity (UNCBD)?

- 1. USA
- 2. China
- 3. India



- 4. Somalia
- 5. Mexico

Options:

- A. 1 only
- B. 4 and 5 only
- C. 1, 2 and 3 only
- D. 2, 4 and 5 only

90. Who amongst the following require the approval of National Biodiversity Authority to undertake Biodiversity related activities?

- 1. Non-resident Indian
- 2. A body corporate, association or organisationnot incorporated or registered in India
- 3. A body corporate, association or organisation incorporated or registered in India under any law for the time being in force which has any non-Indian participation in its share capital or management.

Options:

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

91. Consider the following statements with respect to the Biological Diversity Act:

- 1. The offences under this Act shall be cognizable and non-bailable.
- 2. Any person aggrieved by any determination of benefit sharing or order of the National Biodiversity Authority or a State Biodiversity Board under this Act can directly approach the Supreme Court of India.

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both
- D. None

92. Local self-government can be best explained as an exercise in

- A. Federalism
- B. Democratic decentralisation
- C. Administrative delegation
- D. Direct democracy

93. Which one of the following is India's first Indigenous Aircraft Carrier?

- A. INS Arihant
- B. INS Vikrant
- C. INS Vikramaditya
- D. INS Viraat

94. Consider the following statements with regards to the India–Central Asia dialogue:

- 1. India-Central Asia Dialogue is a ministerial-level dialogue between India and the Central Asian countries namely Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.
- 2. The first India-Central Asia Dialogue was held in Samarkand, Republic of Uzbekistan.
- 3. All the countries participating in the dialogue are members of the Shanghai Cooperation Organization (SCO).

Choose the Correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

95. Consider the following statements with regards to Gharials:

- 1. Gharials are a type of Asian crocodilian distinguished by their long, thin snouts.
- 2. Their IUCN status is Critically Endangered.
- 3. They are a part of Appendix I of CITES and Schedule I of the Wildlife (Protection) Act, 1972.

Choose the correct code:

- A. 1 & 2 only
- B. 1 & 3 only
- C. 2 & 3 only
- D. All of the above

96. Nord Stream 2 pipeline, recently seen in the news, connects which of the following nations?

- A. Russia Ukraine
- B. Russia Germany
- C. Russia China
- D. Russia Poland



97. Which one of the following is not a subindex of the World Bank's 'Ease of Doing Business Index'?

- A. Maintenance of law and order
- B. Paying taxes
- C. Registering property
- D. Dealing with construction permits

98. Which of the given statements with respect to UN Convention to Combat Desertification is/are INCORRECT?

- 1. It is the only convention stemming from a direct recommendation of the Rio Conference's Agenda 21.
- 2. It is the sole legally binding international agreement linking environment and development to sustainable land management.
- 3. The Global Environment Facility (GEF) serves as a financial mechanism for UNCCD.

Options:

- A. 2 only
- B. 3 only
- C. 1, 2 and 3
- D. None of the above

99. Which among the following was the first military exercise between Indian and Vietnamese armies?

- A. INVITEX
- B. LAMITIYE
- C. VINBAX
- D. Ekuverin

100. Which of the following statements best describes "Operation Vijay"?

- A. A codename assigned to the Indian Air Force's strike to support the ground troops in an Indian operation to push back the infiltrators from the Kargil sector.
- B. A codename given to the operation by the Indian Peace Keeping Forces to wrest control of Jaffna from the Liberation Tigers of Tamil Eelam (LTTE)
- C. A code name assigned to the military operation by which Republic of India took control of Portuguese Indian territories of Goa, Daman and Diu.
- D. A code name for the police operation in which the Indian Armed Forces invaded the state of Hyderabad and annexed the state to the Indian Union.

101. There has been a persistent deficit budget year after year. Which action/actions of the following can be taken by the Government to reduce the deficit? (UPSC 2016)

- 1. Reducing revenue expenditure
- 2. Introducing new welfare schemes
- 3. Rationalizing subsidies
- 4. Reducing import duty

Select the correct answer using the code given below.

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

102. Which of the given statements with respect to Integrated Child Development Services (ICDS) Scheme is/are correct?

- 1. The beneficiaries of the programme are children in the age group of 0-6 years, pregnant women and lactating mothers.
- 2. It is a centrally sponsored scheme under the Ministry of Women and Child Development.
- 3. It aims to provide pre-school non-formal education to children between the age group of 3-6 years.

Options:

- A. 1, 2 and 3
- B. 2 only
- C. 1 and 3 only
- D. None of the above

103. The Aral Sea is situated between which of these 2 countries?

- A. Turkmenistan and Uzbekistan
- B. Uzbekistan and Kazakhstan
- C. Kyrgyzstan and Kazakhstan
- D. Uzbekistan and Turkmenistan

104. PANEX-21 is being held among the member countries of which of the following organisations?

- A. Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)
- B. South Asian Association for Regional Cooperation (SAARC)
- C. Association of Southeast Asian Nations (ASEAN)
- D. BRICS nations



105. The KAPILA Campaign was launched by the government of India to:

- A. Ensure Universal Availability of COVID-19 Vaccines, especially to vulnerable and low-income countries.
- B. Increase awareness regarding the protection and exploitation of Intellectual Property (IP) and provide funding support to promote the filing of IP in Higher Education Institutions.
- C. Prevent and stop the growing incidence of cyber violence and sexual abuse faced by women in India.
- D. Ensure integrated water resource management helping to conserve water, minimize wastage and ensure more equitable distribution.

106. Consider the following statements: [UPSC 2017]

- 1. In tropical regions, Zika virus disease is transmitted by the same mosquito that transmits dengue.
- 2. Sexual transmission of Zika virus disease is possible.

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

107. Consider the following statements with respect to the Indian flapshell turtle (*Lissemys punctata*):

- 1. It is only found in India, Bangladesh and Pakistan.
- 2. Its IUCN status is Vulnerable.
- 3. These turtles are omnivores.

Which of the above statements is/are correct?

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

108. The World Press Freedom Index (WPFI) is an annual ranking of countries compiled and published by

- A. World Economic Forum (WEF)
- B. Amnesty International
- C. Economist Group
- D. Reporters Without Borders

109. Which of the following statements about compassionate employment is/are correct?

- 1. Compassionate appointment is not a matter of right.
- 2. Dependent family of missing government employees can be considered for compassionate appointment.

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

110. Which of the following are the functions of the Enforcement Directorate (ED)?

- 1. Investigating violations of Foreign Exchange Management Act (FEMA) laws and provisions.
- 2. Investigating offences of Prevention of Money Laundering Act, 2002 (PMLA) laws and provisions.
- 3. Processing cases of fugitive/s from India under the Fugitive Economic Offenders Act, 2018.
- 4. ED is India's officially designated single point of contact for liaison with Interpol.

Options:

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

111. What is the application of Somatic Cell Nuclear Transfer Technology? (UPSC 2017)

- A. Production of biolarvicides
- B. Manufacture of biodegradable plastics
- C. Reproductive cloning of animals
- D. Production of organisms free of diseases

112. Consider the following statements with regards to the CRPF:

- 1. Originally constituted as the Crown Representative Police in 1939, it is one of the oldest central paramilitary forces.
- 2. After Independence, the force was renamed as Central Reserve Police Force by an Act of Parliament on December 28, 1949.
- 3. The force played a significant role during the amalgamation of the Princely States into the Indian Union since it helped the Union Government in disciplining the rebellious princely states of Junagarh and the small principality of Kathiawar in Gujarat.



Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

113. Consider the following statements with regards to the qualifying age for different purposes in India:

- 1. The 61st Constitution Amendment Act of 1988 defines the voting age for elections to Parliament and Legislative Assemblies as 18.
- 2. The Child Labour (Prohibition and Regulation) Act, 1986, which prohibits the engagement of children in all occupations and bans adolescents in hazardous occupations defines a child as "a person who has not completed his 16th year of age".
- 3. Protection of Children from Sexual Offences (POCSO) Act, 2012 recognises a child as someone under the age of 18 years and thereby implies that the age of consent for sex is also 18 years.

Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

114. Which of these is/are not correctly matched? International border – Guarded by

- 1. India Pakistan BSF
- 2. India China Sashastra Seema Bal
- 3. India Myanmar BSF
- 4. India Nepal Indo-Tibetan Border Police

Choose the correct code:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 2, 3 & 4 only
- D. None of the above

115. Which of these given statements with regards to parliamentary proceedings is not correct?

- A. The President of India can prorogue the session of the Parliament
- B. The declaration of 'adjournment sine die' can be made by the President of India
- C. The presiding officer of the house can adjourn the proceedings of the house
- D. The Parliament is summoned for the session by the President

116. Among the following, which one is the largest exporter of rice in the world in the last five years? [UPSC 2019]

- A. China
- B. India
- C. Myanmar
- D. Vietnam

117. Which of the following statements about Lala Lajpat Rai is/are correct?

- 1. He was elected President of the Indian National Congress at the Calcutta session.
- 2. He was also elected as the President of the All India Trade Union Congress.
- 3. In England, he became a member of the British Labour party.

Options:

- A. 2 only
- B. 1 and 3 only
- C. 1, 2 and 3
- D. None

118. Special Commissioner appointed to contain the rise of Manyam Rebellion is

- A. Augustus Abbott
- B. Thomas Adams
- C. TG Rutherford
- D. Robert Hope

119. Pralay recently seen in news is a/an

- A. Indigenously-developed second generation, Anti-Tank Guided Missile
- B. Air-to-Air Beyond Visual Range (BVR) missile
- C. Surface-to-surface tactical Short-range Ballistic Missile (SRBM)
- D. All-weather multi-target tracking radar

120. With respect to National Dope Testing Laboratory (NDTL), which of the following statements is/are correct?

- 1. It is a premier analytical testing & research organization established as an autonomous body under the Ministry of Youth Affairs and Sports
- 2. It is the only laboratory in the country responsible for human sports dope testing.

Options:

- A. 1 only
- B. 2 only



- C. Both
- D. None

121. With reference to 'Quality Council of India (QCI)', consider the following statements:

- 1. QCI was set up jointly by the Government of India and the Indian Industry.
- 2. Chairman of QCI is appointed by the Prime Minister on the recommendations of the industry to the Government.

Which of the above statements is/are correct? [UPSC 2017]

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

122. Consider the following statements with regards to the Right to Education:

- 1. The Act mandates that non-minority private unaided schools should reserve at least 25% of seats in entry-level grades for children from economically weaker and disadvantaged backgrounds.
- 2. In 1993, the Supreme Court's landmark judgment in the Unnikrishnan JP vs State of Andhra Pradesh & Others held that Education is a fundamental right flowing from Article 21.
- 3. Tapas Majumdar Committee (1999) was set up, which encompassed the insertion of Article 21A.

Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

123. Which of the following statements with regards to NASA's James Webb Space Telescope is not correct?

- A. It is the most powerful infrared telescope of the National Aeronautics and Space Administration (NASA).
- B. It is also considered a successor of the Hubble Telescope and will extend and complement its discoveries.
- C. It was launched into low Earth orbit in 1990, and has made more than 1.4 million observations, including tracking interstellar objects, capturing a comet colliding with Jupiter, and discovering moons around Pluto.

D. The telescope is the result of an international collaboration between NASA, the European Space Agency (ESA) and the Japan Aerospace Exploration Agency (JAXA).

renowned revolutionary leaders of the Indian National Movement. He passed the ICS examination securing the 11th rank out of 250 candidates and joined King's College for the training but had himself disqualified for an exam by arriving deliberately late as he had no interest in the ICS. He joined the Baroda service in 1893. He also did jobs like teaching grammar and composing speeches for the Maharaja of Gaekwad. In 1905, he started an English newspaper called Bande Mataram.

Who is 'he' in this above passage?

- A. Rash Behari Bose
- B. Sri Aurobindo Ghosh
- C. Barindra Kumar Ghosh
- D. Jatindranath Mukherjee

125. Who amongst the following decides on the election schedule for the state assembly elections?

- A. Election Commission of India
- B. State Election Commission
- C. Governor in consultation with State Election Commission
- D. President of India

126. Consider the following statements:

- 1. The Petroleum and Regulatory Board (PNGRB) is the first regulatory body set up by the Government of India.
- 2. One of the tasks of PNGRB is to ensure competitive markets for gas.
- 3. Appeals against the decisions of PNGRB go before the Appellate Tribunals for Electricity.

Which of the statements given above are correct? [UPSC 2019]

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



127. Consider the following statements with respect to Chilika Lake:

- 1. It is the largest coastal lagoon in the world
- 2. It was designated the first Indian wetland of international importance under the Ramsar Convention
- 3. It is the largest wintering ground for birds in the Indian subcontinent

Which of the above statements is/are correct?

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

128. Chillai-Kalan, a weather phenomenon, is related to

- A. Dreaded evening thunderstorms in Bengal and Assam
- B. Dry and oppressing winds blowing in Northern Plains
- C. Period of harsh cold conditions in Kashmir
- D. Violent dust squalls that occur after monsoon in the north-western parts of the Indo-Gangetic Plain

129. With respect to financial powers of the Governor, which of the following statements is/ are correct:

- 1. Money bills can be introduced in the State legislature only with his prior recommendation.
- 2. He can make advances out of the Consolidated Fund of the State to meet any unforeseen expenditure.

Options:

- A. 1 only
- B. 2 only
- C. Both
- D. None

130. Which of the following statements about the Right to Information Act is/are incorrect?

- 1. The act orders that public authorities have to publish the information to the public on regular intervals voluntarily
- 2. If information sought concerns the life or liberty of a person, it shall be supplied within 72 hours.
- 3. If information is required from intelligence organizations, alleging corruption or human rights violation, these organizations are bound to provide such information

Options:

- A. 1 only
- B. 1 and 3 only
- C. 2 only
- D. None

131. The terms 'Event Horizon', 'Singularity', 'String Theory' and 'Standard Model' are sometimes seen in the news in the context of

- A. Observation and understanding of the Universe
- B. Study of the solar and the lunar eclipses
- C. Placing satellites in the orbit of the Earth
- D. Origin and evolution of living organisms on the Earth

132. Which of the following statements are correct?

- 1. Toda people are a Dravidian ethnic group who live in the Nilgiri Mountains of Tamil Nadu.
- 2. They traditionally live in settlements called 'mund'.
- 3. Their economy was primarily pastoral.

Options:

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

133. Changu glacial lake is located in -

- A. Jammu & Kashmir
- B. Sikkim
- C. Arunachal Pradesh
- D. Uttarakhand

134. Which of the following statements are correct with regard to 'Mission Sagar' of the Indian Navy?

- 1. It is an extension of the SAGAR doctrine of India's foreign policy.
- 2. Under the mission, India has been providing humanitarian, medical and defence assistance to countries in the Indian Ocean and Eastern Africa.
- 3. It involves extensive military exercises in the Indian Ocean with the navies of US and France.

Options:

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



- D. 1, 2 and 3
- 135. It is a protectionist tariff that a domestic government imposes on foreign imports that it believes are priced below fair market value. This tariff is known as -
 - A. Counter Vailing Duty
 - B. Anti-Dumping Duty
 - C. Import Duty
 - D. Customs Duty

136. Which project is India looking to develop at Trincomalee along with Sri Lanka?

- A. Nuclear power plant
- B. Solar and wind power projects
- C. Housing for displaced Tamils
- D. Oil tank farms

137. Consider the following statements: (UPSC-2019)

- 1. The United Nations Convention against Corruption (UNCAC) has a 'Protocol against the Smuggling of Migrants by Land, Sea and Air'.
- 2. The UNCAC is the ever-first legally binding global anti-corruption instrument.
- 3. A highlight of the United Nations Convention against Transnational Organized Crime (UNTOC) is the inclusion of a specific chapter aimed at returning assets to their rightful owners from whom they had been taken illicitly.
- 4. The United Nations Office on Drugs and Crime (UNODC) is mandated by its member States to assist in the implementation of both UNCAC and UNTOC.

Which of the statements given above are correct?

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

138. Which of the following statements is/are incorrect?

- 1. India's 'Annual Health Index' has been developed by NITI Aayog, with technical assistance from the World Bank, in consultation with the Ministry of Health and Family Welfare.
- 2. Kerala has consistently topped the index.

Options:

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

139. Sabar tribe can be mainly found in

- 1. Madhya Pradesh
- 2. Odisha
- 3. West Bengal

Options:

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

140. Which of the following statements is/are correct?

- 1. Under the Foreign Contribution Regulation Act (FCRA), registration is mandatory for any NGO or association to receive foreign funds or donations.
- 2. The act is enforced by the Ministry of Finance. Options:
- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

141. Which of the following statements is/are correct?

- 1. Flex-fuel vehicles are capable of running on a combination of 100% petrol or 100% bioethanol and their blends.
- 2. Ministry for Road Transport and Highways is working with automobile manufacturers to manufacture flex-fuel vehicles complying with BS-6 norms.

Options:

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



- 142. The experiment will employ a trio of spacecraft flying in formation in the shape of equilateral triangle that has sides one million km long, with lasers shining between the craft. The experiment in the question refers to? (UPSC 2020)
 - A. Voyager-2
 - B. New Horizons
 - C. LISA Pathfinder
 - D. Evolved LISA

143. Consider the following statements with regards to the famous Sun temple of Odisha:

- 1. It was built in the 13th century by King Narasimhadeva I of the Eastern Ganga Empire.
- 2. It was declared a UNESCO world heritage site in 1984.
- 3. Sailors once called this Sun Temple of Konark the Black Pagoda because it was supposed to draw ships onto the shore and cause shipwrecks.

Choose the correct statements:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

144. Who amongst the following decides the date of the election for the speaker of the State Legislative Assembly?

- A. Governor
- B. President
- C. Chief Minister
- D. State Election Commission

145. Which of these products has/have been conferred a GI tag in India?

- 1. Manipuri Black Rice from Manipur
- 2. Rasagola from Odisha
- 3. Bhagalpur Silk from Bihar
- 4. Feni from Goa
- 5. Patan Patola from Rajasthan

Choose the correct code:

- A. 1 & 2 only
- B. 2, 3 & 4 only
- C. 1, 2, 3 & 4 only
- D. 3 & 5 only

146. Which of these given statements with regards to the Indian Council for Cultural Relations is not correct?

- A. It is an autonomous organisation of the Government of India, involved in India's external cultural relations (cultural diplomacy), through cultural exchange with other countries and their peoples.
- B. It was founded in 1950 by Maulana Abul Kalam Azad, independent India's first Culture Minister.
- C. It has been assigned the responsibility of facilitating the celebration of the International Day of Yoga by Indian Missions/Posts abroad since 2015.
- D. ICCR has instituted several awards, which are conferred upon foreign nationals for their contributions in different fields, such as Distinguished Indologist Award and Gisela Bonn Award.

147. For the measurement/estimation of which of the following are satellite images/remote sensing data used? (UPSC-2019)

- 1. Chlorophyll content in the vegetation of a specific location
- 2. Greenhouse gas emissions from rice paddies of a specific location
- 3. Land surface temperatures of a specific location.

Select the correct answer using the code given below:

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

148. Which of the following nations in India's neighbourhood recently constituted a Hindu Temple Management Committee to look after the nation's temples?

- A. Sri Lanka
- B. Pakistan
- C. Myanmar
- D. Bangladesh

149. Consider the following statements with regards to the Goods and Services Tax Council:

- 1. It is a statutory body, established under an Act of Parliament.
- 2. The GST Council is chaired by the Union Finance Minister and other members are the Union State Minister of Revenue or Finance and Ministers in charge of Finance or Taxation of all the States.



3. The members of the Council from the states have to choose one amongst themselves to be the Vice-Chairperson of the Council.

Choose the correct code:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

150. Which of these nations is not a member of the New Development Bank?

- 1. Egypt
- 2. Bangladesh
- 3. Saudi Arabia
- 4. Ukraine
- 5. India
- 6. China

Choose the correct code:

- A. 1 & 3 only
- B. 1, 3 & 4 only
- C. 3 & 4 only
- D. 1,5 & 6 only

151. Consider the following statements with regards to India's dairy sector:

- 1. India consistently ranks among the top 5 milk exporting nations in the world.
- 2. Dairy farmers in India have been included in the Kisan Credit Card programme.
- 3. Though the value of milk produced outweighs the combined value of the output of wheat and rice in India, there is no official and periodical estimate of the cost of production and Minimum Support Price for milk.

Choose the correct code:

- A. 1 & 2 only
- B. 1 & 3 only
- C. 2 & 3 only
- D. All of the above

152. In India, the use of carbofuran, methylparathion, phorate and triazophos is viewed with apprehension. These chemicals are used as [UPSC 2019]

- A. pesticides in agriculture
- B. preservatives in processed foods
- C. fruit-ripening agents
- D. moisturising agents in cosmetics

153. Delft Island often seen in news is a part of:

- A. Vietnam
- B. Sri Lanka
- C. Maldives
- D. Australia

154. Considered as the second largest religious congregation in India after the Kumbh mela, the Ganga Sagar mela is hosted by which of the following states in India?

- A. Bihar
- B. Uttar Pradesh
- C. West Bengal
- D. Uttarakhand

155. Consider the following statements with regards to the Indian Pangolins:

- 1. Indian Pangolin is widely distributed in India, except the arid region, high Himalayas and the North-East.
- 2. The Indian Pangolins are listed under Schedule I, Part I of the Wildlife (Protection) Act, 1972.
- 3. Nandankanan Zoological Park (NZP) is the only conservation breeding centre for Indian pangolins in the world.

Choose the correct code:

- A. 1 & 2 only
- B. 2 & 3 only
- C. 1 & 3 only
- D. All of the above

156. Consider the following statements with regards to India-UAE negotiations on Comprehensive Economic Partnership Agreement (CEPA):

- 1. The UAE is currently India's third-largest trading partner after the US and China.
- 2. The UAE is also India's second-largest export destination after the US.
- 3. India has signed CEPAs with South Korea and Japan.

Choose the correct code:

- A. 1 & 2 only
- B. 1 & 3 only
- C. 2 & 3 only
- D. All of the above



157. Which of the following statements is not correct with regards to the GST compensation to be given to the states?

- 1. Under the GST (Compensation to States) Act, 2017, states are guaranteed compensation for loss of revenue on account of implementation of GST for a transition period of five years between 2017 and 22.
- 2. The compensation is calculated based on the difference between the states' current GST revenue and the protected revenue after estimating an annualised 10% growth rate from the base year of 2015-16.
- 3. The amount would be paid every two months based on provisional accounts, and adjusted every year after the State's accounts were audited by the Comptroller and Auditor General.

Choose the correct code:

- A. 1 & 2 only
- B. 1 & 3 only
- C. 2 only
- D. None of the above

158. Consider the following statements with regards to Bamboo in India:

- 1. The restructured National Bamboo Mission was launched in 2018-19 for the holistic development of the complete value chain of the bamboo sector and is being implemented in a hub (industry) and spoke model.
- 2. The Indian Forest Act 1927 was amended in 2017 to include bamboo for the category of trees.
- 3. The bamboo's calorific value is equal to that of coal.

Choose the correct code:

- A. 1 & 2 only
- B. 1 & 3 only
- C. 2 & 3 only
- D. All of the above

159. 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



ANSWER KEYS

| 1 | В |
|----|---|
| 2 | D |
| 3 | D |
| 4 | С |
| 5 | A |
| 6 | D |
| 7 | A |
| 8 | A |
| 9 | С |
| 10 | В |
| 11 | D |
| 12 | В |
| 13 | A |
| 14 | С |
| 15 | С |
| 16 | A |
| 17 | С |
| 18 | D |
| 19 | A |
| 20 | С |

| 21 | D |
|----|---------------------------------------|
| 22 | D |
| 23 | A |
| 24 | D |
| 25 | В |
| 26 | D |
| 27 | A |
| 28 | С |
| 29 | С |
| 30 | В |
| 31 | A |
| 32 | A |
| 33 | D |
| 34 | В |
| 35 | A |
| 36 | A |
| 37 | С |
| 38 | D |
| 39 | В |
| 40 | В |
| | · · · · · · · · · · · · · · · · · · · |



| 41 | С |
|----|---|
| 42 | D |
| 43 | D |
| 44 | С |
| 45 | В |
| 46 | В |
| 47 | D |
| 48 | С |
| 49 | В |
| 50 | В |
| 51 | A |
| 52 | В |
| 53 | С |
| 54 | A |
| 55 | A |
| 56 | A |
| 57 | В |
| 58 | С |
| 59 | D |
| 60 | В |
| | |

| 61 | С |
|----|---|
| 62 | A |
| 63 | A |
| 64 | С |
| 65 | В |
| 66 | D |
| 67 | С |
| 68 | A |
| 69 | В |
| 70 | A |
| 71 | С |
| 72 | В |
| 73 | С |
| 74 | D |
| 75 | D |
| 76 | С |
| 77 | D |
| 78 | В |
| 79 | В |
| 80 | С |



| 81 | В |
|-----|---|
| 82 | D |
| 83 | С |
| 84 | В |
| 85 | A |
| 86 | A |
| 87 | D |
| 88 | В |
| 89 | A |
| 90 | D |
| 91 | A |
| 92 | В |
| 93 | В |
| 94 | A |
| 95 | D |
| 96 | В |
| 97 | A |
| 98 | D |
| 99 | С |
| 100 | С |
| | |

| 102 A 103 B 104 A 105 B 106 C 107 B 108 D 109 C 110 A 111 C 112 D 113 C 114 C 115 B 116 B 117 C 118 C 119 C | 101 | С |
|---|-----|---|
| 104 A 105 B 106 C 107 B 108 D 109 C 110 A 111 C 112 D 113 C 114 C 115 B 116 B 117 C 118 C 119 C | 102 | A |
| 105 B 106 C 107 B 108 D 109 C 110 A 111 C 112 D 113 C 114 C 115 B 116 B 117 C 118 C 119 C | 103 | В |
| 106 C 107 B 108 D 109 C 110 A 111 C 112 D 113 C 114 C 115 B 116 B 117 C 118 C 119 C | 104 | A |
| 107 B 108 D 109 C 110 A 111 C 112 D 113 C 114 C 115 B 116 B 117 C 118 C 119 C | 105 | В |
| 108 D 109 C 110 A 111 C 112 D 113 C 114 C 115 B 116 B 117 C 118 C 119 C | 106 | С |
| 109 C 110 A 111 C 112 D 113 C 114 C 115 B 116 B 117 C 118 C 119 C | 107 | В |
| 110 A 111 C 112 D 113 C 114 C 115 B 116 B 117 C 118 C | 108 | D |
| 111 C 112 D 113 C 114 C 115 B 116 B 117 C 118 C | 109 | С |
| 112 D 113 C 114 C 115 B 116 B 117 C 118 C | 110 | A |
| 113 C 114 C 115 B 116 B 117 C 118 C | 111 | С |
| 114 C 115 B 116 B 117 C 118 C 119 C | 112 | D |
| 115 B 116 B 117 C 118 C 119 C | 113 | С |
| 116 B 117 C 118 C 119 C | 114 | С |
| 117 C 118 C 119 C | 115 | В |
| 118 C 119 C | 116 | В |
| 119 C | 117 | С |
| | 118 | С |
| 120 C | 119 | С |
| | 120 | С |



| 121 | С |
|-----|----|
| 122 | D |
| 123 | D |
| 124 | В |
| 125 | A |
| 126 | В |
| 127 | В |
| 128 | С |
| 129 | A |
| 130 | С |
| 131 | A |
| 132 | D |
| 133 | В |
| 134 | В |
| 135 | В |
| 136 | D |
| 137 | С |
| 138 | D |
| 139 | С |
| 140 | A |
| | n. |

| 141 | С |
|-----|---|
| 142 | D |
| 143 | D |
| 144 | A |
| 145 | С |
| 146 | В |
| 147 | D |
| 148 | В |
| 149 | В |
| 150 | С |
| 151 | С |
| 152 | A |
| 153 | В |
| 154 | С |
| 155 | D |
| 156 | D |
| 157 | С |
| 158 | В |
| 159 | С |
| | |



MAINS PRACTICE QUESTIONS

GS Paper 1

Social Issues

- 1. The answer to birth control lies in ensuring improved access to contraception and not in government-imposed restrictions. Do you agree? Comment. (250 words; 15 marks)
- 2. In light of the recent reports highlighting a high rate of suicide amongst females in India, suggest measures to curb the rising cases of suicides in the country. (250 words; 15 marks)
- 3. Would increasing women's marriageable age to 21 be beneficial? Critically Examine. (10 Marks, 150 Words)
- 4. 'One nation, One language' has always been a flawed idea with respect to India. Do you agree? Discuss. (250 words; 15 marks);
- 5. Proof of a truly developed country lies in the way it not only nurtures its young but also cares for its elders, equally. Comment. (250 words; 15 marks)

History

1. Discuss the similarities and dissimilarities between the Gandhian approach and the Ambedkar approach to emancipate the depressed classes.

GS Paper 2

Polity and Governance

- 1. Illustrate how the health allocation recommended by the 15th Finance Commission can fulfil a mandate on primary care at the level of local governments. (250 words; 15 marks
- 2. Suppression of free speech by yielding to threats has become an unfortunate norm. Discuss. (250 words; 15 marks)
- 3. The use of disruption of proceedings as a parliamentary tactic by opposition MPs and their suspension represents a worrying trend for parliamentary democracy. Critically evaluate. (250 words; 15 marks)
- 4. MGNREGA remains crucial for integrated resource management and livelihood generation. Comment. (250 words; 15 marks)
- 5. Does the Dam Safety Bill infringe upon the federal structure? Critically examine. (10 Marks, 150 Words)
- 6. What do you understand by Gold hallmarking? What are its benefits? (10 Marks, 150 Words)
- 7. The Chief Justice of India recently proposed the creation of a National Judicial Infrastructure Authority of India (NJIAI). Examine its need and how it can strengthen the Indian Judiciary? (250 words; 15 marks)
- 8. What is the Digi Yatra scheme under which Facial Recognition Technology is being implemented? What are the concerns surrounding biometric technology? (250 words; 15 marks)
- 9. The path to India's prosperity can't be complete unless it includes those who are living on the fringes. In light of this statement, suggest measures to bring inclusive development in the country. (250 words; 15 marks)
- 10. Urgent steps must be taken to offset the study loss that children faced during the Covid-19 pandemic. Suggest such measures that must be taken by the authorities at the earliest to bring students to their grade level. (250 words; 15 marks)
- 11. The Constitution does not impose the same burden of accountability on the Judiciary as the Executive and the Legislature. Substantiate. (10 Marks, 150 Words)
- 12. In India, the state's ritualistic attachment with the procedures of democracy has not been matched by an awareness of its implicit goal of a fulfilling life for Indians. Evaluate. (250 words; 15 marks)



13. Evaluate the status of the Smart Cities Mission. What is the Climate Smart Cities Assessment Framework? How far has the Smart Cities Mission progressed? (250 words; 15 marks)

- 14. Should our fundamental rights be linked with fundamental duties? Critically discuss. (250 words; 15 marks)
- 15. "Ensuring the freedom of media is an essential part of a successful democracy." Discuss the significance of this statement and the steps taken by the government of India to ensure the same. (250 words; 15 marks)
- 16. Has the Election Commission's independence been diluted? Critically Analyse. Also, suggest measures to insulate the commission from the influence of the political executive. (15 Marks, 250 Words)
- 17. The concept of federalism in India has evolved in different ways over the years. Discuss. (250 words; 15 marks)
- 18. What safeguards are provided to the states included in the 6th Schedule of the Indian Constitution? Would Ladakh's inclusion in this schedule help the region in preserving its unique culture and heritage? (250 words; 15 marks)
- 19. List out the significant provisions of the Forest Rights Act. Assess the success of the act in improving the lives of forest dwellers in India. (250 words; 15 marks)
- 20. Is the freedom of speech absolute under the Indian Constitution? Critically evaluate. (250 words; 15 marks)
- 21. High levels of criminality in politics could wreck India's democracy. Discuss. (250 words; 15 marks)
- 22. Linking Aadhaar to government projects and databases is hailed as a panacea for efficient governance. Critically evaluate. (250 words; 15 marks)
- 23. How does the Foreign Contribution (Regulation) Act regulate donations? Critically examine the issues related to foreign donations received by NGO's. (250 words; 15 marks)

Health

- 1. We must give as much importance to the mental health of an individual as we do to physical health. In light of this statement, bring out the initiatives taken by the government to support the mental well-being of Indian citizens. (250 words; 15 marks)
- 2. List out the challenges faced by the AYUSH system with respect to its integration with the mainstream healthcare framework. Suggest ways to overcome such challenges. (250 words; 15 marks)
- 3. Examine the threat posed by the Omicron variant of SARS-COV-2. What measures could help India and the world overcome the challenges? (250 words; 15 marks
- 4. The recently released 5th edition of the National Family Health Survey (NFHS-¬5) has encouraging news but addressing discriminatory social norms must remain our top priority. Critically evaluate. (250 words; 15 marks)
- 5 What kind of data is captured in the National Family Health Survey? How can such data be helpful in Government's policymaking? (250 words; 15 marks)

International Relations

- 1. Tensions have flared in Eastern Europe and on the Belarus-Poland border with thousands of asylum seekers attempting to enter EU territory. In this context, examine the complex geopolitical issues that underlie this manufactured refugee crisis. (250 words; 15 marks)
- 2. India-Russia relations have withstood the test of time and the ever-shifting nature of national interests. In the light of this statement, examine India's expanding engagement with Russia. (250 words; 15 marks)
- 3. Explain the underlying issues that are inhibiting the growth of India-Russia relations. What steps can be taken to overcome such issues? (250 words; 15 marks)
- 4. What is the Global Gateway strategy of the European Union? How can India partner with the EU's global gateway for creating links and not dependencies? (250 words; 15 marks)



5. "India has ignored the Central Asian economies for far too long." Do you agree with this assessment? In which sectors can India forge better relations with these nations? (250 words; 15 marks)

- 6. What are the main challenges India is facing in its neighbourhood? Is it time for India to go back to the ideals of 'Gujral doctrine' to win over the trust of its neighbours? (250 words; 15 marks)
- 7. Evaluate the significance of the India-Myanmar relationship and its importance in ensuring peace in India's Northeast region. (250 words; 15 marks)
- 8. Myanmar is a key strategic neighbour for India. In the light of this statement, examine the current state of bilateral relations and the challenges that lie ahead. (250 words; 15 marks)
- 9. Examine the geopolitics surrounding the Nord Stream 2 pipeline. (250 words; 15 marks)

GS Paper 3

Economy

- 1. In the absence of a robust mediation framework, it would be difficult for India to explore its potential of being an attractive investment destination. Do you agree? Suggest measures to improve the situation. (250 words; 15 marks)
- 2. Critically examine the National Monetisation Pipeline. Can it be the panacea for growth in India? (250 words; 15 marks)
- 3. What is Zero Budget Natural Farming? What are the pros and cons of this method? (250 words; 15 marks)
- 4. Do you think the Government of India has been spending enough money on infrastructure development in the country? Comment. Also list the advantages of increasing capital expenditure. (250 words; 15 marks)
- 5. Discuss the main features of the UDAN scheme. What are the challenges faced by the Government in connecting tier-2 & tier-3 cities with the metros? (250 words; 15 marks)
- 6. Evaluate how the Indian economy fared this year? Is it out of the post-pandemic depression? (250 words; 15 marks)
- 7. Anti-dumping duties can be an effective trade weapon to protect domestic industries but could also have adverse consequences when applied unwisely. Examine in the context of the India-China trade relationship. (250 words; 15 marks)

Environment and Ecology

- Throw some light on the lessons that India can learn from China's fight against air pollution. (250 words; 15 marks)
- 2. Elephant deaths due to train collisions and electric fences are avoidable with effective policy and implementation. Suggest such policies. (250 words; 15 marks)
- 3. What steps are being taken by the Government of India to realize the complete potential of biofuels in the country? Also discuss the potential of such policy measures. (250 words; 15 marks)
- 4. The attempt to securitise the climate change agenda could have unintended consequences. Discuss. (10 Marks, 150 Words)
- 5. Examine the recently published draft regulations on Extended Producer Responsibility (EPR) with regard to plastic waste management. (250 words; 15 marks)
- 6. Why has India's performance in the field of Solid Waste Management been less than satisfactory in the past decades? Explore all the possible reasons. (250 words; 15 marks)

Internal Security

- 1. Armed Forces (Special Powers) Act is said to have contributed to human rights violations in India's conflict zones. Discuss with emphasis on its impact in North-East insurgency affected areas. (250 words; 15 marks)
- 2. Armed Forces (Special Powers) Act of 1958 (AFSPA) has often been criticised as being a "draconian Act" for the unbridled power it gives to the armed forces. In your opinion, should the law be repealed? Comment. (250 words; 15 marks)



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Science & Technology

1. Discuss the potential of India's semiconductor mission in reviving India's manufacturing sector. (250 words; 15 marks)

2. Despite India having the potential to become technological powerhouse, it is beset with challenges. Discuss the steps to be undertaken to foster an environment for innovation. (15 Marks, 250 Words)



INTERVIEW TRANSCRIPT

Candidate Details:

· Name: Abhilash Mishra

• AIR: 05 (CSE-2016

· Chairman of the Interview Board: Shri Vinay Mittal

Personal Details:

• Hobbies: Playing Cricket

· Education: B. Tech in Mechanical Engineering

Work-experience: Indian Oil Corporation Limited (Four Years)

· Home town: Allahabad, Uttar Pradesh

Optional Subject: Public Administration

- · Why Public Administration over Mechanical Engineering as an optional?
- · What were the favorite subjects in Mechanical Engineering?

Economy

- Food Security Act and its implementation
- · Farm Loan Waiver. Is it the right decision?
- · Question on Railways:
 - * Merger of Rail Budget with Union Budget- merits and demerits
 - * Is there a need to infuse capital in Indian Railways?
 - * How do we promote freight in Railways?
 - * How do we accelerate Environmental Clearance for Railways?

International Relations

- Do countries have the right to restrict immigration? (USA)
- Why is India bothered about the H1B visas?

Culture

- Why was Jallikattu banned?
- Are there any other similar cultural practices in the world?

Social Issues

• What is Gender? What are the issues associated with it?



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On Hobbies

- What was your role while playing Cricket?
- What is Chinaman bowling? Are there any Chinaman bowlers from India?

Interview Guidance Program

- A detailed roadmap for Interview Preparation with a special focus on Detailed Application Form (DAF).
- Mock interview sessions with highly experienced panellists including retired Civil Servants and Senior Bureaucrats.
- Well simulated ambience akin to the UPSC Personality Test.
- Performance analysis and evaluation of strengths and weaknesses.

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