

# Monthly Current Affairs

## FEBRUARY-2020

### Contents

#### 1. POLITY

01

- 15th Finance Commission's interim report
- Criminalization of politics
- Custodial Deaths
- Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power
- International Judicial Conference
- None of the Above (NOTA)
- National Security Act (NSA)
- Prison Reforms
- Tripura tribal laws to be codified
- 'Unparliamentary' — What MPs cannot say in the House
- Benched by the Bar
- Batting for the downtrodden
- Course correction for the Speaker's office
- Mizoram asks Centre to review border with Assam
- Rights, duties and the Constitution
- Trust formed for Ram temple construction: PM
- Upholding the fairness of the sentencing process
- When can a judge opt out of a case?
- When to call in the Army

#### 2. ECONOMY

31

- Apiary on Wheels
- AskDISHA
- Bus Rapid Transit (BRT) Project
- Four Balance Sheet Challenge
- KALA KUMBH – Handicrafts Exhibitions
- Kisan Rail
- LIC stake sale
- Market Intelligence and Early Warning System (MIEWS) Portal
- Mission Purvodaya
- MuktoShri -West Bengal growing arsenic resistant rice
- National Organic Festival
- National Technical Textiles Mission
- North East Sustainable Development Goals Conclave 2020
- Pesticides Management Bill, 2020
- Restructured Weather Based Crop Insurance Scheme (RWBCIS)
- SPICe+

- Steel-India becomes second largest steel producer of Crude Steel
- Sustainable Alternative Towards Affordable Transportation (SATAT)
- Web Portal Launched for Star Rating of Mines
- World Pulses Day
- Board for aligning RBI's fiscal year with govt.'s FY
- India out of US' Developing Nations List
- Listening to the call of the informal
- Telcos asked to pay AGR dues immediately
- The high cost of raising trade walls
- Why have LPG prices seen a sharp rise?
- Youth can be a clear advantage for India

### 3. INTERNATIONAL RELATIONS

55

- Ajeya Warrior
- Donald Trump's visit to India
- FATF Grey and Black List
- Hafiz Saeed conviction
- Munich Security Conference (MSC)
- Sampriti
- India to study air corridors for trade with Central Asian countries
- India, African countries resolve to fight terror
- India ticks off Turkish President Recep Tayyip Erdogan for his remarks on Kashmir
- India inks 14 MoUs with Russia for defence support, spares

### 4. ART AND CULTURE

67

- Basaveshwara
- Bhakta Ramadasu
- Chindu Bhagavatam
- International Mother Language Day
- Kaka Hathrasi
- Kambala
- Konark Sun Temple
- Sammakka Saralamma Jatara/ Medaram Jatara
- Surajkund International Crafts Mela

### 5. SCIENCE AND TECHNOLOGY

72

- GISAT-1 (Geo Imaging Satellite)
- National Science Day
- Technology Group
- Yaravirus

## 6. SECURITY AND DEFENCE

74

- Bodo Accord
- Clause 6 of Assam Accord
- Conference on Combating Drug Trafficking
- Light Utility Helicopter (LUH)
- Operation 'Dolphin Nose'
- Sharang
- Maharashtra tops list of States hit by global medical data leak
- Odisha plans projects in Naxal stronghold
- Should women be given command posts in the Army?

## 7. ENVIRONMENT AND ECOLOGY

87

- Arth-Ganga
- Cauvery delta to be declared a protected agriculture zone
- Climate Change Adaption-North Eastern Region (CCA-NER)
- Convention on Migratory Species (CMS)/ Bonn Convention
- Cyrtodactylus Urbanus
- Highway threatens tiger territory in Arunachal Pradesh
- Indian Pangolin
- Indian Tent Turtle
- Malai Mahadeshwara Wildlife Sanctuary
- Olive Ridleys- Rushikulya rookery all set to welcome
- POLYCRACK
- State of India's Bird Report 2020
- World's largest cave fish discovered in Meghalaya

## 8. HEALTH ISSUES

99

- COVID-19 (Basics)
- COVID-19(Combat Strategy)
- COVID-19(Economic Angle)
- Coldbest-PC 'toxic' syrup
- ICoSDiTAUS
- Lorcaserin
- Medical devices now under Drugs and Cosmetics Act
- National Deworming Day (NDD)
- Pigmentary disorders
- Reverse Osmosis (RO) water filters
- School Health Ambassador Initiative
- Uniform Code of Pharmaceuticals Marketing Practices, ("UCPMP Code")
- A bleak winter for Kota's children

9. SOCIAL ISSUES	123
<ul style="list-style-type: none"> <li>• 1000 Springs Initiative</li> <li>• Asur Tribe</li> <li>• Surrogacy (Regulation) Bill, 2020</li> <li>• TrackChild</li> <li>• A marriage story for everyone</li> <li>• Lok Sabha clears Bill to include more tribes in Karnataka in ST category</li> <li>• Most missing women from Maharashtra, M.P.</li> <li>• No country is doing enough to protect children's health, finds study</li> <li>• Only 7 in 100 anganwadi beneficiaries are in cities</li> <li>• Panel suggests steps to curb child porn</li> </ul>	
10. GEOGRAPHY	133
<ul style="list-style-type: none"> <li>• Ujh Multipurpose Project</li> <li>• Urban heat islands in India</li> <li>• Vadhavan port</li> </ul>	
11. EDUCATION	137
<ul style="list-style-type: none"> <li>• Indian Institutes of Information Technology Laws (Amendment) Bill, 2020</li> <li>• National Means-cum-Merit Scholarship Scheme</li> <li>• Saakshar Bharat Mission</li> </ul>	
12. DISASTER MANAGEMENT	139
<ul style="list-style-type: none"> <li>• BIMSTEC Disaster Management Exercise – 2020</li> </ul>	
13 HISTORY	140
<ul style="list-style-type: none"> <li>• Kota Rani</li> <li>• Poompuhar: Scientists to digitally recreate Tamil Nadu port city</li> </ul>	
14. GOVERNANCE	142
<ul style="list-style-type: none"> <li>• Aadhaar, no standout performer in welfare delivery</li> <li>• Financial Secrecy Index (FSI)</li> <li>• National e-Governance Awards</li> <li>• Riding on data for mobility</li> </ul>	
15. MISCELLANEOUS	149
<ul style="list-style-type: none"> <li>• 'Darknet' Narcotics Operative Held</li> <li>• HK Firodia awards</li> <li>• International Gandhi Awards for Leprosy</li> <li>• Mirza Asadullah Khan Ghalib</li> <li>• Paraquat Poisoning</li> <li>• RAISE 2020</li> </ul>	



- Tyler Prize
- IVRI releases Live attenuated Classical Swine Fever (CSF) cell culture vaccine
- 4,000 year old crafts village unearthed

16. PRACTICE QUESTIONS	154
17. ANSWER KEYS	183
18. MAINS PRACTICE QUESTIONS	186
19. INTERVIEW TRANSCRIPT	191

# POLITY

## ***15th Finance Commission's interim report***

### **Context**

- The report of the 15<sup>th</sup> Finance Commission headed by N K Singh was tabled in Parliament

### **The Finance Commission and its purpose**

- The Finance Commission is a body set up under Article 280 of the Constitution, primarily to recommend measures and methods on how revenues, which the government earns through various taxes, need to be distributed between the Centre and states.
  - The First Finance Commission was constituted in 1951 headed by KC Neogy.
- With this the framers of the Constitution were seeking to address the vertical imbalance between the taxation powers and expenditure, and responsibilities of the federal government and the states, and the horizontal imbalance or inequality, between states that were at different stages of development.
- Ensuring inclusiveness is, therefore, a key mandate of the Finance Commission. That means assigning weights to things like population, the fiscal distance between the top ranked states and the others, etc.

### **Who appoints the Finance Commission and what are the qualifications for Members?**

- The Finance Commission, which is headed by a Chairman and has four other members, is appointed by the President under Article 280 of the Constitution.
- As per the provisions contained in the Finance Commission [Miscellaneous Provisions] Act, 1951 and The Finance Commission (Salaries & Allowances) Rules, 1951, the chairman of the Commission is selected from among persons who have had experience in public affairs.
- The Finance Commission Rules, 1951, lay down the criteria for being members of the constitutional body: those having special knowledge of finance and accounts of government with wide knowledge and experience in financial matters and in administration, or with special knowledge of economics, and those who have been qualified to be appointed as a judge of a High Court.

### **Interim Report of 15<sup>th</sup> FC**

- The interim report of the 15th Finance Commission has largely preserved the devolution of its predecessor
- As part of an effort to balance the principles of fiscal needs, equity and performance as well as the need to ensure stability and predictability in transfers, the criteria for the horizontal sharing of taxes among States have been rearranged.
  - A crucial new parameter, demographic performance, has been added to the mix.
- Having been mandated to adopt the population data from the 2011 Census, the commission has incorporated the additional criterion to ensure that States that have done well on demographic management are not unfairly disadvantaged.
  - And since the norm also indirectly evaluates performance on the human capital outcomes of education and health, it has been assigned a weight of 12.5%.

- This should address the concerns voiced by several States over the switch to the 2011 Census from the 1971 data.

### **Changes introduced by 15<sup>th</sup> FC**

- The 15th Finance Commission has recommended reducing states share by 1% from Centre's divisible pool to 41% in 2020-21 as against 42%
  - The one percentage point cut has come on account of the re-organisation of the erstwhile State of Jammu & Kashmir.
  - While the former State's estimated share based on the parameters for horizontal devolution would have been about 0.85%, the commission has cited the security and other special needs of the two territories to enhance their aggregate share to 1%, which would be met by the Centre.

In its report, the FC has tweaked the criteria and weights under which funds are allocated to States.
- Population of a State: 15 per cent weight (*down from 17.5 per cent allocated by the 14th Finance Commission*) has been assigned
- Weight for demographic performance: It has been increased to 12.5 per cent (*as against 10 per cent allocated by the 14th Finance Commission*).
- Income Distance (*difference of a state's per capita income from that of the state with the highest per capita income*): It has reduced the weight for income distance from 50% to 45%.
- "Tax Effect": The 15<sup>th</sup> FC report has introduced a new criteria, the "tax effect", for states, with 2.5% weightage

### **Local Bodies**

The commission's effort to improve the granularity in devolution to local bodies has generated some interesting results.

- Urban local bodies, especially municipalities in cities with populations of more than one million, are set to get a larger share of the pie.

### **Other Recommendations**

- The Commission also suggested that the country needs an overarching fiscal framework for Centre as well as states, on the lines of the FRBM Act, which would lay down accounting, budgeting and auditing standards to be followed at all levels of the government.
- The commission has also been critical of the Union and State governments' tendency to finance spending through off-budget borrowings and via parastatals.
- It has done well to ask that such extra-budgetary liabilities be clearly earmarked and eliminated in a time-bound manner.

### **Formula used by 14th FC**

The formula had five elements:

- Population as of 1971 with a weight of 17.5%;
- Demographic Change reflecting population shifts between 1971 and 2011 with a weight of 10%;
- Fiscal Capacity measured by the income distance method with a weight of 50%; and
- Area with a weight of 15%;
- Forest cover with a weight of 7.5%.

Criteria	13th Commission Weight(%)	14th Commission Weight (%)
Population 1971	25	17.5
Population 2011	0	10
Income Distance	47.5	50
Fiscal Discipline	15	0
Area	10	15
Forest Cover	0	7.5
Sum	100	100

## ***Criminalization of politics***

### **Context:**

- Supreme Court Judgment on the contempt petitions regarding the criminalization of politics in India and the non-compliance of the directions of the Supreme Court in *Public Interest Foundation v/s Union of India case*.

### **Background:**

- Criminalization of Politics implies criminals entering the election fray and contesting elections and even getting elected to the Parliament and state legislature.
  - The criminals need the patronage of politicians to continue their criminal activities and the politicians need the money and muscle power of the criminals in their elections. In course of time, this nexus led the criminals themselves to contest elections.
- Over the last four general elections, there had been an alarming increase in the election of candidates with criminal history.
  - In 2004, 24% of the Members of Parliament had criminal cases pending against them.
  - In 2009, that number went up to 30%.
  - In 2014 it further rose to 34% and in 2019 as many as 43% of MPs had criminal cases pending against them.
  - Worryingly, 13% of the candidates who contested the election in 2019 are accused of heinous crimes that include murder, attempt to murder, kidnapping, rape and other crimes against women.

### **Previous attempts to cleanse the electoral system:**

#### **1. Supreme Court Judgments:**

- The Supreme Court has come up with a series of landmark judgments to address the issue of criminalization of politics.
  - In 2002, Supreme Court ruled in *Union of India (UOI) vs. Association for Democratic Reforms case*, that every candidate, contesting an election to the Parliament, State Legislatures or Municipal Corporation, has to declare their criminal records, financial records and educational qualifications.
  - Under Section 8 of the Representation of the People (RP) Act, 1951, lawmakers cannot contest elections only after their conviction in a criminal case. SC removed this statutory protection of convicted legislators from immediate disqualification via the *Lily Thomas v. Union of India case* in 2013.
  - The incorporation of the 'None Of The Above' (NOTA) option in the voting machines was a landmark step in empowering the voters to force the political parties to field better candidates, even though there are associated concerns with NOTA. This was done via the

2013 judgment in *People's Union for Civil Liberties vs. Union of India* case. Supreme Court asked Election Commission to provide 'none of the above' choice to voters to exercise their right to express no confidence against all candidates in fray.

- Observing the long delays in the cases involving the politicians, the SC in 2014 directed the completion of trials involving elected representatives within a year.
- In 2017, the SC asked the Centre to frame a scheme to appoint special courts to exclusively try cases against politicians, which would ensure speedy justice.
- In 2018 the SC directed the political parties to publicize pending criminal cases faced by their candidates. This was considered necessary in the light of the right of the voters to know any criminal antecedents of the candidates.
- The Supreme Court, in spite of its long list of judgments, has still not been able to avoid criminalization of politics.

Election Commission efforts:

- The Election Commission too has tried several measures to curb criminalization of politics but to no avail.
- The Election Commission of India (ECI) has always voiced the need for a legislation that excludes candidates against whom charges had been framed by a court of law for heinous offences punishable by imprisonment of five years and more.
- However the Parliamentary Committee that had been set up to examine the proposal unanimously ruled against the ECI recommendation. Political parties and candidates have often voiced their concern that cases tend to be foisted on them by political opponents.

Public Interest Foundation & Others Vs Union of India case:

- Given the fact that previous attempts by the SC and the ECI had no effect on reducing the criminalization of politics, a petition was filed in the SC asking the Apex Court whether disqualification for membership of candidates with criminal antecedents can be laid down by the Court.
- In September 2018, Constitution Bench of the Supreme Court directed political parties to publish online the pending criminal cases against their candidates. The Court sought to enforce greater disclosure norms about electoral candidates.
- The five-judge Bench had held that the rapid criminalization of politics cannot be arrested by merely disqualifying tainted legislators but should also involve the cleansing of the political parties.
- The judgment had also urged Parliament to bring a strong law to cleanse political parties of leaders facing trial for serious crimes.
- A contempt petition has been filed in the SC, seeking action against the authorities and political parties for not complying fully with the September 2018 judgment.

**Details:**

- Noting the increasing criminalization of politics, the two judge bench invoking Article 129 and Article 142 of the Indian constitution has come out with some mandatory guidelines for the political parties.
  - Under the stated guidelines, It shall be mandatory for political parties [at the Central and State election level] to upload on their website detailed information regarding individuals with pending criminal cases (including the nature of the offences, and relevant particulars

- such as whether charges have been framed, the concerned Court, the case number etc.) who have been selected as candidates.
- The political party will also have to state the reasons for selection of such a candidate and also as to why other individuals without criminal antecedents could not be selected as candidates.
    - The reasons as to selection shall be with reference to the qualifications, achievements and merit of the candidate concerned, and not mere winnability at the polls.
    - This information should be published in a local and a national newspaper as well as the party's social media handles.
    - These details shall be published within 48 hours of the selection of the candidate or not less than two weeks before the first date for filing of nominations, whichever is earlier.
    - The political party concerned shall then submit a report of compliance with these directions with the Election Commission within 72 hours of the selection of the said candidate.
    - If a political party fails to submit such compliance report with the Election Commission, the Election Commission shall bring such non-compliance by the political party concerned to the notice of the Supreme Court as being in contempt of this Court's orders/directions.
  - The Election Commission of India proposes to implement the guidelines issued by the SC with suitable modifications in its processes.

#### **Concerns:**

- Though the latest judgment is in line with a series of judgments aimed at preserving the purity of the election process, there are doubts over the effectiveness of the judgment given the previous experiences.
- Although the recent judgment has decreed that political parties will give much wider publicity to the criminal antecedents of their candidates, it is possible that this alone may not suffice.

Criminalization is a structural problem in Indian democracy:

- The voters, political parties and the law and order machinery of the state are all equally responsible for this.

Lack of intent on the part of political parties:

- Researchers have found that candidates with criminal records seem to do well despite their public image, largely due to their ability to finance their own elections and bring substantive resources to their respective parties. This tends to give rise to a patronage system.
- The ADR analysis shows that candidates facing criminal charges had double the chances of winning as compared to those with a clean record. Winnability of candidates is an important factor for the political parties in choosing its candidates.
- Hence, political parties which ought to be cleansing the system with legislation and internal organizational reforms have done little.

Lack of interest among the voters:

- Given the relatively weak state institutions and lackadaisical attitude in governance and delivery of public goods, cynical voters tend to elect candidates with criminal antecedents, as the voters tend to view such candidates as being able to represent their interests better and getting work done.

- Voter behavior is most often conditioned by their own immediate needs.
- These unhealthy tendencies in the democratic system reflect a poor image of the nature of India's state institutions and the quality of its elected representatives.

### **Way forward:**

Amending the Representation of the People Act, 1951:

- There is the need for a rule that disallows candidates facing charges for serious offences from contesting in elections. The parliament needs to consider such an amendment to the Representation of the People Act, 1951.

General citizenry's role:

- While several Supreme Court judgments make it difficult for criminal candidates to contest, only enhanced awareness among the citizens and increased democratic participation could create the right conditions for the decriminalization of politics.
- The electors have to take up a greater responsibility by resisting the lure of money for votes, pushing aside the caste as well as religious factors, increasing the participation with higher turn-out at the polling stations, and thereby exert enormous pressure on the political parties to field candidates with clean image.

Political party's role:

- It must be underscored that de-criminalization of politics cannot be achieved by judicial fiat alone. The political class has to respond to the challenge. A more effective option would be for parties to refrain from giving ticket to such candidates.

Role of the judiciary:

- Given the fact that undue delay in the criminal justice system is helping candidates with criminal antecedents with a longer time frame to establish themselves electorally, there is the need to address this lacunae. It takes on an average 15 years for a criminal case to be finally disposed of by the courts.
- Notably, not more than 6 per cent of the criminal cases against Indian MPs and MLAs ended in a conviction, as per the data submitted by the Centre to the Supreme Court. This when compared with the conviction rate of crimes under the Indian Penal Code in the country which stands at 46% at the national level, points to the possibility of the elected representatives misusing their positions.
- Fast-track courts should decide the cases of tainted legislators faster within set deadlines.

Broader reforms:

- Ensuring greater transparency in election funding will make it less attractive for political parties to encourage candidates with criminal antecedents.
- Broader governance reforms should be targeted to ensure lesser reliance of voters *on criminal politicians*.

### **Conclusion:**

- So far whatever significant electoral reforms have taken place have emanated from the Supreme Court. It remains to be seen how the recent judgment will affect the choices of the political

establishment and whether it will have the desired effect in eliminating or significantly purging criminality from future legislatures.

## **Custodial Deaths**

“No one can truly know a nation until one has been inside the jail. A nation should not be judged by how it treats its highest citizen but its lowest ones” - Nelson Mandela

“Independent India must choose whether we will have a people’s police or a ruler appointed police, or in other words whether the people should rule or whether the parties should rule. The Constitution has laid down that the people should rule, so the police must also be the people’s police” - Khosla Commission

### **Definition**

- Custodial death is the demise of an individual when he is detained or when he is under the custody of the Police Authorities

### **Background**

- Pradeep Tomar a resident of Uttar Pradesh was called to the Police station for questioning in connection with a murder case. He died hours later after the policemen allegedly assaulted him.
- He was accompanied by his son to the police station who claimed that Tomar was repeatedly kicked, punched, hit with planks of wood, given electric shocks and pierced with a screwdriver.

### **Law in India**

- As per Seventh Schedule, 'Police' and 'Public Order' are State subjects under the Constitution
  - So the primary responsibility of prevention, detection, registration, investigation and prosecution of crimes, lies with the State Governments
- Most of the states in India have separate legislations dealing with the control of police in that state.

### **Stats**

- According to the National Crime Records Bureau, Custodial deaths have been on the increase in recent years. They increased by 9% from 92 in 2016 to 100 in 2017.

### **Concerns**

Custodial deaths is amongst the worst crimes in any civilized society. It is a flagrant violation of human dignity. It strikes at the very roots of the rule of law.

- These incidents have brought into sharp focus the way Indian policemen torture and interrogate suspects in their custody leading to death
- The policemen responsible for custodial deaths rarely get punished, they feel emboldened to continue using torture as the tool to get to the truth.

### **Why the issue Persists?**

- The police play a major role in the administration of criminal justice. One of the reasons for custodial death is that the police feel that they have the power to manipulate evidence as the investigation is their prerogative and with such manipulated evidence, they feel they can bury the truth
- Lack of accountability reflects failure of Government to keep a check on police forces



- Close nexus between Political masters and Police helps them escape trial
- There is the huge structural imbalance of power between the police and those who are tortured. The social and economically vulnerable status of most of the victims affects the chances of justice.
- In most cases even where there is evidence of custodial deaths, FIRs are not registered.
- Even if the FIR is filed and investigation takes place, since these enquiries are carried out by police officers after the custodial deaths, the results mostly favor the Police.

### **Way forward**

- The Supreme Court in Prakash Singh v. Union of India had issued an order in 2006 on Police Reforms.
  - It said that every State Government should set up an independent Police Complaints Authorities at the State and district levels to look into public complaints against police officers in cases of serious misconduct, including custodial death, grievous hurt or rape in police custody
  - However, only a few States such as Kerala, Jharkhand, Haryana, Punjab and Maharashtra have implemented the order. Others have not taken the matter seriously.
- Judicial Enquiry has to be conducted and if charges of violation are proved, maximum punishment as prescribed by law has to be imposed on the Police Officers.
- Scientific tools along with proper legitimate interrogation techniques have to be used to reduce custodial deaths rather than using practices of third degree and torture.
- The government must re-educate the police, sensitize them and inculcate values of respect for the human being
- Finally, to ensure that custodial deaths are avoided CCTV cameras must be installed inside the lock-ups, which should be monitored by the senior police officials.

### **Conclusion**

- Therefore changes have to be introduced in the way the police operate by winning the support and confidence of the public and also by reorienting their style of functioning from brute force to one of service.

## ***Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power***

- The UN Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power was adopted by the UN General Assembly in 1985.
- It is not a legally binding document, but the Declaration can be used as a benchmark for measuring State practice in relation to victims' rights.
- The Declaration requires that the views and concerns of victims should be allowed and considered at all appropriate stages without prejudice to the accused.
  - It sets out basic principles of treatment for crime victims, based on compassion and respect for human dignity.
  - The Declaration urges access to judicial and administrative processes, restitution, compensation and assistance for victims.
- India is a signatory

### Victims

- "Victims" means persons who, individually or collectively, have suffered harm, including physical or mental injury, emotional suffering, economic loss or substantial impairment of their fundamental rights, through acts or omissions that are in violation of criminal laws operative within Member States

## ***International Judicial Conference***

- It was organised by the Supreme Court of India.
- The aim of the International Judicial Conference is to facilitate cross-fertilisation of ideas between judges of India and those from abroad.
- The theme chosen for the conference was "Judiciary and the Changing World".
- The conference will serve as a marketplace of ideas

### Topics discussed included:

- Gender Justice,
- Contemporary Perspectives on Protection of Constitutional Values,
- Dynamic Interpretations of the Constitution in a Changing World,
- Harmonisation of Environment Protection vis-à-vis Sustainable Development and
- Protection of Right to Privacy in the Internet Age are issues that influence every member of the global community.

These five distinctly defined topics cover the matrix of challenges faced by the judiciary across the world.

### Context

- Prime Minister Narendra Modi addressed the International Judicial Conference in New Delhi

## ***None of the Above (NOTA)***

### Background:

- A writ petition was filed by People's Union for Civil Liberties (PUCL) in the Supreme Court. The Supreme Court of India directed the Election Commission to provide the option of the "None of the Above" (NOTA) vote in EVMs so that the voters, who come to the polling booth and decide not to vote for any of the candidates in the fray, are able to exercise their right not to vote while maintaining their right of secrecy.
- NOTA was first used in India in 2009. Chhattisgarh was the first State in the country to give this right to the voters in the local government elections.
- NOTA button made its debut in Assembly elections in 2013 in four States — Chhattisgarh, Mizoram, Rajasthan and Madhya Pradesh and the National Capital Territory, Delhi.
- India became the 14th country to institute negative voting through NOTA.

### Significance of NOTA:

- NOTA provides a democratic means to express resentment anonymously rather than boycotting the polls outright. By expressing a preference for none of the above, a citizen can choose not to vote for any candidates who are contesting the elections.
- Given the fact that it is essential that people of high moral and ethical values are chosen as people's representatives for proper governance of the country, NOTA option is critical in this respect because it can compel political parties to nominate a sound candidate.

- The 2017 book, “The Dramatic Decade: Landmark Cases of Modern India’ by Indu Bhan quotes several positive examples of NOTA.
  - A group of women activists in Kerala had run road campaigns urging people not to elect any candidate if no woman was present in the fray.
  - A youth group in Tamil Nadu that campaigned for NOTA as a protest vote against corruption.

#### **Lacunae in NOTA:**

- NOTA in the Indian context is not a “right to reject” given the fact that the NOTA vote does not hold any electoral value as even if a majority of votes were cast for NOTA, the candidate with the largest vote share would still be the winner.
- NOTA in India remains a toothless option as noted by former Chief Election Commissioner of India S.Y. Quraishi.

#### **Attempts to improve:**

- In 2018, the former CEC, T.S. Krishnamurthy, recommended holding elections again in those constituencies where the victory margin was less than the total numbers of NOTA.
- A PIL has been filed in Madras High Court seeking the full right to reject in place of NOTA.
- The Maharashtra State Election Commission (SEC) in 2018 issued an order stating that in a scenario where the NOTA had received the highest number of valid votes, the said election for that particular seat shall be countermanded and a fresh election shall be held for such a post.
- In 2018, the SEC of Haryana further improvising, issued an order that from December 2018, NOTA would be treated like a “fictional candidate” in municipal polls.
  - If NOTA gets the maximum vote, the elections will be cancelled and held afresh.
  - The candidates securing votes less than NOTA would be barred from contesting in that re-election.

#### **Concerns with respect to the effectiveness of NOTA:**

- While introducing NOTA, the Supreme Court anticipated that there would be a systemic change and the political parties would be forced to accept the will of the people and field candidates who are known for their integrity.
- Accordingly, the NOTA vote percentage should either increase to enforce the political parties to field candidates with integrity or should consistently decrease if the electorates feel that the system has achieved the desired level of cleansing.
- However, the share of NOTA votes in India has remained around a meagre level of 1% on an average. It was 1.11% in the 2014 Lok Sabha, and is 1.08% in 2019, considering constituency-wise averages.
- These statistics perhaps represents a confused state of mind of the Indian electorate.

#### **Way forward:**

- If the ECI empowers NOTA with more powers in the lines of the moves of the State Election Commission of Haryana, it could help make the NOTA more effective in securing its intended outcome.
- There is a psychological issue of placing the NOTA as the last button of all EVMs in the country. According to noted academicians of political science it would be better using NOTB (‘none of the below’) option instead of NOTA.

# ***National Security Act (NSA)***

## **Context**

- The Uttar Pradesh government has slapped the National Security Act (NSA) on Dr. Kafeel Khan of Gorakhpur for his alleged inflammatory and provocative comments against the Citizenship (Amendment) Act (CAA) at Aligarh Muslim University recently.

## **About NSA**

It is a stringent law that allows preventive detention for months, if authorities are satisfied that a person is a threat to national security or law and order. It was promulgated in 1980, by the Indira Gandhi government and its purpose is “to provide for preventive detention in certain cases and for matters connected therewith”.

As per the National Security Act, the grounds for preventive detention of a person include:

- Acting in any manner prejudicial to the defence of India, the relations of India with foreign powers, or the security of India.
- Regulating the continued presence of any foreigner in India or with a view to making arrangements for his expulsion from India.
- Preventing them from acting in any manner prejudicial to the security of the State or from acting in any manner prejudicial to the maintenance of public order or from acting in any manner prejudicial to the maintenance of supplies and services essential to the community it is necessary so to do.

The order can be issued by the District Magistrate or a Commissioner of Police under their respective jurisdictions, but the detention should be reported to the State Government along with the grounds on which the order has been made.

## **How does it work?**

- Under the National Security Act, an individual can be detained without a charge for up to 12 months; the state government needs to be intimated that a person has been detained under the NSA.
- A person detained under the National Security Act can be held for 10 days without being told the charges against them.
- The detained person can appeal before a high court advisory board but they are not allowed a lawyer during the trial.

## **Concerns**

- One must note that preventive detention was a tactic of the colonial order to suppress the activities of nationalists fighting for freedom.
- A detainee under preventive detention doesn't enjoy any of the personal liberties granted by Articles 19 or 21 of the Indian Constitution.
- In the normal course, if a person is arrested, he or she is guaranteed certain basic rights.
  - These include the right to be informed of the reason for the arrest. Section 50 of the Criminal Procedure Code (CrPC) mandates that the person arrested has to be informed of the grounds of arrest, and the right to bail.
  - Sections 56 and 76 of the Cr. PC also provides that a person has to be produced before a court within 24 hours of arrest.
  - Additionally, Article 22(1) of the Constitution says an arrested person cannot be denied the right to consult, and to be defended by, a legal practitioner of his choice. But none of these rights are available to a person detained under the NSA.

- The Act crushes dissenting voices and targets “political activists and trade unionists”.
- Even when providing the grounds for arrest, the government can withhold information which it considers to be against the public interest to disclose.
- It is being used by our democratic government against the people who fight for their right to live a life free from pollution, e.g.: anti-Sterlite protests in Tuticorin.

### **Conclusion**

- Justice D.Y. Chandrachud of the Supreme Court had said that protest and criticism directed at government policy do not amount to being anti-national, officials should pause before they are seen as enablers of the excesses of an authoritarian dispensation.
- Thus, NSA should not be invoked in cases where sections of the IPC would suffice and given the bias in the political executive, the Supreme Court must step in and issue guidelines to check the NSA’s misuse.

## ***Prison Reforms***

### **Context:**

- A Supreme Court-appointed committee to reform prisons has given out several recommendations.

### **Background:**

- The court in September 2018, appointed the Justice Roy Committee to examine the various problems plaguing prisons, from overcrowding to lack of legal advice to convicts to issues of remission and parole.
- Besides Justice Roy, a former Supreme Court judge, the members include an IG, Bureau of Police Research and Development, and the DG (Prisons), Tihar Jail.
- The decision was in reaction to a letter written by former Chief Justice of India R.C. Lahoti highlighting the overcrowding of prisons, unnatural deaths of prisoners, gross inadequacy of staff and the lack of trained staff.

### **Recommendations:**

- Every new prisoner should be allowed a free phone call a day to his family members to see him through his first week in jail.
- The court said overcrowding is a common bane in the under-staffed prisons. Both the prisoner and his guard equally suffer human rights violations.
  - The undertrial prisoner, who is yet to get his day in court, suffers the most, languishing behind bars for years without a hearing.
  - Speedy trial remains one of the best ways to remedy the unwarranted phenomenon of overcrowding.
- It said that the Prison Department has a perennial average of 30%-40% vacancies. The shortage has lingered over the years.
- Another recommendation is for the use of video-conferencing for trial.
  - “Physical production in courts continued, which however remains far below the aspired 100% in several States, mainly because of unavailability of sufficient police guards for escort and transportation,” it said.
- The report described the preparation of food in kitchens as primitive and difficult. The kitchens are congested and unhygienic and the diet has remained unchanged for years now.

## ***Tripura tribal laws to be codified***

### **Context:**

- The Tripura Tribal Areas Autonomous District Council (TTAADC) has moved resolutions to codify the customary laws of three tribal clans.
- The council introduced separate bills to adopt the law of the Mizo, the Kaipeng and the Malsom communities to redress their long-standing demands.

### **Details:**

- Several clans have been approaching the TTAADC, which was constituted under the Sixth Schedule of the Constitution, to codify their respective customary law.
  - The main objective of forming the District Council under Schedule VI is to remove within a short time the material disparities between the advanced and backward sections of the societies, to strengthen the bonds of unity between the tribal and non-tribal masses, to emancipate not only tribal people but all the deprived people from all types of injustice and exploitation.
  - The objective behind setting up the Autonomous District Council is to hand over certain administrative and legal authority to the Council in order that it may devote concerted attention to all aspects of cultural, social and economic improvement of the tribal people who for historical reasons presently belong to the weaker sections of society and thereby to free them from all kinds of social injustice.
- Most of the customary laws of the numerous tribal groups in the northeast India are not in written structure.
- The TTAADC introduced the bills to codify the customary law of the Mizo, the Kaipeng and the Malsom communities in its current session.

### **Jamatia Customary laws**

- Move to codify all customary laws of all the tribes began in 1995. But the TTAADC could codify only the customary laws of Jamatia— which has a four hundred years-long tradition of practicing certain laws through their highest body called JamatiaHoda.
- The Jamatia customary laws were codified through legislation in the TTAADC in 2017.
- The Jamatia Customary Law passed by the TTAADC deals with almost all aspects of the society, including inheritance of property, marriage and divorce, et al.
- It also included some harsh provisions, making the drinking of liquor by minor a punishable offence.
- Even after the codification, the customary law has limited jurisdiction and can only deal with elected civil law matters.

### **Jamatia**

- It is a tribal group of Mongoloid origin
- They speak in Kok-borok which is a language of Tibeto-Burman family.
- Jamatias are Hindus and have embraced Sakti-cult and Vaishnavism.
- Jamatias are fond of their traditional folk culture like Drama, Garia festival and other common dances of Kok-Borok speaking tribes. They have special form of Garia Dance which depict their Hindu based religious culture.

### **Customary law**

- It may be defined as those rules of human action established by usage and regarded as legally binding by those to whom the rules are applicable, which are adopted by the courts and applied as source of law, because they are generally followed by the political society as a whole, or by some part of it.
- It is an expression of positive will of the people handed over from one generation to another
- Varies from community to community and is usually area specific.
- The biggest advantage of a customary law is that it comes from the community and is therefore simple and easy to understand. Moreover, it is friendlier to the locality or community from where it has emerged. Hence, it receives better compliance from the local people.

### ***‘Unparliamentary’ — What MPs cannot say in the House***

#### **Context**

- Parliament has witnessed heated arguments. This has brought back questions of what is “unparliamentary” speech and conduct.

#### **What is Unparliamentary language?**

Debates and discussions are the essence of Parliamentary democracy. The Members of Parliament (MPs) and the Members of Legislative Assembly (MLAs) have the right to put across their views with respect to a law or a policy. But there are rules that are laid to prevent Legislators from using offensive and aggressive words.

Words and statements that are contrary to rules, regulations placed by the Parliament and the state Legislature that are deemed inappropriate are called “Unparliamentary Language”.

- The Presiding Officers — Speaker of Lok Sabha and Chairperson of Rajya Sabha — have the job of keeping these bad words out of Parliament’s records.

#### **Example**

The Lok Sabha Secretariat has brought out report titled ‘Unparliamentary Expressions’. The list contains several words and expressions that would probably be considered rude or offensive in most cultures; however, it also has stuff that is likely to be thought of as being fairly harmless or innocuous.

The state legislatures too are guided mainly by the same book, which also draws heavily from unparliamentary words and phrases used in the Vidhan Sabhas and Vidhan Parishads of India.

- If the Presiding Officer is a “lady”, no MP can address her as “beloved Chairperson”.
- Among the words and phrases that have been deemed unparliamentary are “scumbag”, “shit”, “badmashi”, “bad” (as in “An MP is a bad man”), and “bandicoot”.
- The government or another MP cannot be accused of “bluffing”, “bribe”, “blackmail”, “bribery”; “thief”, “thieves”, “dacoits”, “bucket of shit”, “damn”, “deceive”, “degrade”, and “darling”, are all unparliamentary.
- The government can’t be called “andhi-goongi”, or one of “Ali Baba aur 40 chor”. An illiterate MP can’t be called “angoothachhaap”, and it is unparliamentary to suggest that a member should be sent to the “ajayabghar” (museum).

#### **Constitutional Angle**

Article 105 (2) of the Constitution of India provides that no member of Parliament shall be liable to any proceedings in any court in respect of anything said by the member in the Parliament or any committee

thereof. What they say is subject only to the discipline of the Rules of Parliament, the good sense of the members and the control of proceedings by the Speaker.

- Freedom of speech enjoyed by members in Parliament may thus be said to be absolute; however, it does not give unrestricted freedom to a member to say anything against any individual or to use defamatory or indecent or undignified or unparliamentary words.

#### **Power to expunge defamatory, indecent or unparliamentary words**

- Under Rule 380 of the Rules of Procedure and Conduct of Business in Lok Sabha, the Speaker is vested with the power to order expunction of words which, in the opinion of the Speaker, are defamatory or indecent or unparliamentary or undignified from the proceedings of the House.
- Similarly, the Speaker may order expunction of words which are defamatory or insinuator in nature or levels allegation against a high dignitary or authority or organization.

#### **Why are these rules important?**

- It is required so as maintain decency and dignity of the house
- It helps one to focus on real issues at hand and not target other legislators personally leading to ruckus in the house, disrupting the functioning of the house.
- Offensive, provocative or threatening language in the House could be strictly forbidden

#### **Conclusion**

- Words which may seem unparliamentary today may not be considered so in the near future. Codification thus may prove impractical as this has to be decided on a case to case basis depending on the context.
- If the presiding officer decides that words are indeed offensive suitable action as prescribed by law has to be initiated.

## **Benched by the Bar**

#### **Context**

- Increasing instances of Bar Associations issuing directives to the Advocates not to take up cases.

#### **Advocates' associations in Karnataka have passed resolutions preventing any legal representation**

- First, was in Mysuru, when a student who was participating in an anti-CAA protest, holding a poster stating "Free Kashmir", and many others were charged with sedition.
  - The Mysuru District Bar Association, passed a resolution directing all lawyers not to file a vakalath and appear for this student, labelling her as "anti-national".
  - The Bar Association went even further and attached a copy of the resolution at multiple locations in the Mysuru City Court Complex and sent messages through print/electronic media to all its member advocates not to represent her.
- Second, when Kashmiri students were charged with sedition
  - The Hubli Bar Association passed a resolution ordering lawyers not to appear for these students and represent them.
  - Despite directions from the Karnataka High Court permitting lawyers to represent them and directing that there should be police protection provided

#### **What does the law say?**



- Under the rule of law, no citizen can be denied the right to consult and to be defended by a legal practitioner of her choice.
- As per the code of conduct framed by the Bar Council of India, every advocate, on his/her being approached by a litigant, is bound to offer his/her services to him/her unless he has justifiable reason to refuse his/her services.
  - An advocate has to justify the special circumstances for refusing a particular brief.
- Further, the Supreme Court of India has restrained the advocates' associations from interfering with the decision of an advocate to appear before the courts and the advocates who violate such calls could not be removed from their membership of that association.

### **Cab Rank Rule**

- The rule generally followed in Indian courts is what is called the "Cab Rank Rule". This, simply put, states that a lawyer cannot deny any person legal assistance who approaches him or her.
- The "Cab Rank Rule" finds mention in the Bar Council of India Rules.
  - The inherent logic behind providing representation to every person is based on the standard rule of thumb that every person is presumed innocent until proven guilty.
- If a person is not provided legal representation and is not allowed to present his case in the court of law, then his right to fair hearing is impeded and the entire judicial system suffers as a result.

### **Violation of Fundamental Right**

Such actions are not only illegal, it is also a violation of a fundamental right to legal representation guaranteed to all accused persons.

- Article 22 (1) of our Constitution guarantees that no person who is arrested shall be detained in custody without being informed, as soon as may be, of the grounds for such arrest nor shall he be denied the right to consult, and to be defended by, a legal practitioner of their choice.
- The Supreme Court has also held that it is only a lawyer who is conversant with law and can properly defend an accused in a criminal case and if a criminal case (whether a trial or appeal/revision) is decided against an accused in the absence of a counsel, there will be a violation of the accused's right to life and liberty under Article 21 of the Constitution.
- Hence, every accused has a fundamental right to legal representation.

### **Why advocates resist from taking cases if directives are issued by Bar Associations?**

- Bar associations passing resolutions asking lawyers to not represent the accused, coupled with violence in the court premises, is completely illegal.
- These resolutions have no binding effect of, but the violence in the court premises would deter any lawyer engaged by the accused to appear for them, or put such lawyers' life in danger.
  - It would certainly ensure that any local lawyer from the district bar would not dare to appear for them.
- The dilemma facing lawyers is that despite the Supreme Court and various high courts striking down such resolutions, lawyers who agree to represent the accused in high-profile cases are generally treated shabbily by their Bar colleagues as if they were criminals themselves.
- In number of cases in which advocates are victims, there have been instances of the local bar passing resolution banning advocates from appearing for the accused

### **Precedents**

- The Supreme Court in the case of *Mohd. Sukur Ali v. State of Assam (2011)* held that in a criminal case, even if the counsel engaged for the accused does not appear for any reason, the court

should not decide a criminal case against the accused in the absence of his/her counsel and in such a situation the court should appoint another counsel as amicus curiae to defend the accused.

- This is because the liberty of a person is the most important feature of our Constitution and it cannot be taken away without giving the accused a proper trial — which means a trial with legal representation.
- A hearing without a lawyer representing an accused would be one without due process in the constitutional sense.
- “Every person, however wicked, depraved, vile, degenerate, perverted, loathsome, execrable, vicious or repulsive he may be regarded by society has a right to be defended in a court of law and correspondingly it is the duty of the lawyer to defend him,” Justice Markandey Katju wrote in a 2010 judgment of the Supreme Court.
- In *A S Mohammed Rafi vs State Of Tamil Nadu*, the Hon'ble Supreme Court called the resolution passed by the Coimbatore Bar Council to not represent certain accused “wholly illegal and against all traditions of the Bar.”
  - Further, it is stated that the said resolution has resulted in the creation of an atmosphere of fear and intimidation due to which none of the Advocates feel safe and secure to appear before the Hon'ble Court and this has had a chilling effect on advocates coming forward to represent the accused.
- The courts in the past have interfered and even ordered the transfer of cases from one jurisdiction to another, so that the undue influence of the local bars would be erased and the trial of the case would go on without any hindrance and the rights of all the accused are protected.

### **Conclusion**

- Hence it is the duty of lawyers to uphold and protect the legal and constitutional rights of all.
- There can be no situation under any circumstance where the right to legal representation of any accused can be denied.

## **Batting for the downtrodden**

### **Context**

- The Supreme Court has recently ruled that quotas and reservations for promotions for government jobs are not a fundamental right.
- The apex court ruled that it was the discretion of the governments, either at the state or central level, to grant reservation in promotions.

### **What does the Constitution say on reservations?**

- Article 14 of the Constitution guarantees equality before law and equal protection of laws to everyone.
- Article 15(1) prohibits any discrimination against any citizen on the grounds of religion, caste, sex or place of birth.
- Similarly, Article 16(1) and 16(2) assure citizens equality of opportunity in employment or appointment to any government office.
- However, Articles 15(4) and 16(4) state that these equality provisions do not prevent the government from making special provisions in matters of admission to educational institutions or jobs in favour of backward classes, particularly the Scheduled Castes (SCs) and the Scheduled Tribes (STs).

- Article 16(4A) was introduced through the Constitution (Seventy-seventh Amendment) Act.
  - Article 16(4A) allowed the State to provide reservations to an SC/ST in matters of promotion, as long as the State believes that the SC/ST is not adequately represented in government services.

#### **What do the precedents say?**

- In 1962, in the *R. Balaji v. State of Mysore case*, the court had ruled that Article 15(4) is an “enabling provision”, meaning that “it does not impose an obligation, but merely leaves it to the discretion of the appropriate government to take suitable action, if necessary”.
- The position went on to be reiterated in several other decisions, including the nine-judge bench ruling in *Indra Sawhney v. Union of India (1992)* and the five-judge bench decision in *M Nagaraj v. Union of India (2006)*.

#### **How did the case reach the Supreme Court?**

- The controversy in the current case pertained to reservations to SCs and STs in promotions for the post of assistant engineer (Civil) in the Uttarakhand government’s Public Works Department.
- The reservation was initially provided for under the Uttar Pradesh Public Services (Reservation for Scheduled Castes, Scheduled Tribes and Other Backward Classes) Act, 1994.
  - Section 3(7) of this Act stated that the government orders providing for reservations in promotions, which were in force at the time of commencement of the Act in 1994 would continue to operate until modified or revoked.
- After the formation of Uttarakhand in 2001, the Act was made applicable to the new state, with a few modifications.
- Section 3(7) was, however, subsequently held unconstitutional by the Uttarakhand High Court in 2011.
- In 2012, the then state government decided that all posts in public services will be filled up without any reservations for SCs and STs.
  - All government orders providing for such reservations were also scrapped.
  - The government had decided against reservations.
  - This was once again challenged in the high court.
- The Uttarakhand High Court then struck down the State’s 2012 decision in 2019.
  - A review petition against this order was filed in the high court, which did acknowledge that Article 16 (4A) is an enabling provision.
  - But it directed the state government to collect quantifiable data regarding the inadequacy of representation of SCs and STs in state services, and then take a decision on providing reservations in promotions.
  - This decision was challenged in the Supreme Court.

#### **What SC ruled?**

- The apex court has now reiterated that Articles 16(4) and 16(4A) do not confer any fundamental rights to claim reservations in promotion. It is for the state government to decide whether reservations are required for appointments and promotions to public posts.
- However, if the state government does want to exercise this discretion and provide reservations, it would have to first collect quantifiable data showing the inadequacy of representation of that class in public services.
  - It observed that the state government has the absolute discretion to decide whether or not to provide for reservation in jobs or reservations in promotions.

- No mandamus can be issued by the Court directing the State Government to provide reservations.
- The top court also clarified that a state government is bound to collect data regarding the inadequacy of representation of SCs/STs in government services when it wants to provide reservation.
  - The State can form its own opinion on the basis of the material it has in its possession already or it may gather such material through a Commission/Committee, person or authority.
  - All that is required is that there must be some material on the basis of which the opinion is formed.

#### **A look at the practice of untouchability in the state of Uttarakhand**

- According to a recent survey by academician Amit Thorat, up to 47% of respondents in Uttarakhand admitted to practicing untouchability.
- More than half the forward caste people confessed to practicing untouchability.
- Further, nearly 68% Brahmins in rural and 77% Brahmins in urban areas of the State admitted to the practice.

#### **Concerns**

- The SCs suffer from low ownership of capital assets, illiteracy, and lack of access to civil rights. In 2013, of the total wealth in the country, the share of SCs was only 5% in rural areas against their population share of almost 17%.
  - In terms of their share in agricultural land, it was only 5% while in building assets it was 8%.
    - On the other hand, the high castes owned 39% of total natural wealth — 41% land and 39% building assets.
  - In urban areas, SCs own only 4% of total wealth: 6% land and 2.6% of buildings as against 45% of land and 76% of buildings by high caste, much in excess of their population share of about 21%.
  - In 2015, the enrolment rate in higher education was 20% for SCs compared to 43% for higher castes. Besides the massive backlog in government services, these are spheres where SCs are grossly under-represented.
  - Primary studies show extensive discrimination in employment, farming, enterprise/business against SCs. Based on NSS data, these studies indicate that in 2017-18, of the differences in access to employment between SCs and high castes, about 71% was due to discrimination in hiring.
  - Findings of another primary survey in 2013 in rural India show that SC entrepreneurs in grocery, eatery, and transport services faced discrimination, with the high castes reluctant to avail of their goods and services. Many SC farmers admit that they face discrimination in the buying of inputs and sale of outputs.
- The Court, while passing its order, remained silent on the sources of under-representation: namely data on caste discrimination in public employment and other spheres.
- With such a massive backlog in the condition of SCs, the top court should have been more sensitive in its observations.

#### **Conclusion**

- Unaccountability and caste slavery have completely crippled Dalits. They remain asset-less, illiterate and socially isolated with overt residential segregation in rural areas, and subtly in urban areas.

- Therefore, the reservation policy is necessary as a safeguard against discrimination and to secure their fair share.

## ***Course correction for the Speaker's office***

### **Article 93 of the Indian Constitution speaks about the Speaker and Deputy Speaker of the House of the People**

- The House of the People (Lok Sabha) shall, as soon as may be, choose two members of the House to be respectively Speaker and Deputy Speaker thereof and, so often as the office of Speaker or Deputy Speaker becomes vacant, the House shall choose another member to be Speaker or Deputy Speaker, as the case may be.

In the Lok Sabha, the Lower House of the Indian Parliament, both Presiding Officers—the Speaker and the Deputy Speaker – are elected from among its members by a simple majority of members present and voting in the House. As such, no specific qualifications are prescribed for being elected the Speaker.

### **Functions performed by the Speaker**

The speaker is guided by the provisions of the Constitution and the Rules of Procedure and Conduct of Business in Lok Sabha.

- The Speaker is benefitted from the Directions issued by the predecessors which are compiled periodically.
- The Speaker is assisted by the Secretary-General of the Lok Sabha and senior officers of the Secretariat on parliamentary activities and on matters of practice and procedure.  
The office of the Speaker occupies a pivotal position in our parliamentary democracy. It has been said of the office of the Speaker that while the members of Parliament represent the individual constituencies, the Speaker represents the full authority of the House itself.
- The Speaker is the head of the Lok Sabha.
- The Speaker is the guardian of the rights and privileges of the House, its Committees and members.
- The Speaker decides the duration of debates, can discipline members and even override decisions by committees.
- While facilitating the business of the House and to maintain decorum in the House, the Speaker has 'extensive functions to perform in matters regulatory, administrative and judicial, falling under their domain. The Speaker enjoys vast authority under the Constitution and the Rules, as well as inherently'.
- The Speaker is the ultimate interpreter and arbiter of those provisions which relate to the functioning of the House. The decisions taken by the Speaker is final and binding and ordinarily cannot be easily challenged.

Jawaharlal Nehru, one of the chief architects of India's freedom and a moving force behind its Constitution, describes the position as: "The Speaker represents the House. She represents the dignity of the House, the freedom of the House and because the House represents the nation, in a particular way, the Speaker becomes a symbol of the nation's freedom and liberty. Therefore, that should be an honored position, a free position and should be occupied always by persons of outstanding ability and impartiality."

The nature of duties of the Speaker, technically as an “arbiter” or a “quasi-judicial body” should not be limited exclusively to matters under the Tenth Schedule; rather, it extends to a range of its functions.

#### **Speaker's role has been questioned on the allegation of bias**

- The Supreme Court has observed in *Jagjit Singh versus State of Haryana* that, “...Without meaning any disrespect for any particular Speaker in the country, but only going by some events of the recent past, certain questions have been raised about the confidence in the matter of impartiality on some issues having political overtones which are decided by the Speaker in his capacity as a Tribunal.”
- As a minority view, Justice J.S. Verma in *Kihoto Hollohan vs Zachillhu* and Others observed: “The Speaker being an authority within the House and his tenure being dependent on the will of the majority therein, likelihood of suspicion of bias could not be ruled out.”

#### **Speakers as impartial and apolitical**

- The role and impartiality of the Speaker currently resonates with his personal image and character.
- Even if the speaker wants to stay neutral, be apolitical and non-partisan, the structural issues in the system, the manner of appointment of the Speaker and tenure in office, will not allow the Speaker to completely dissociate from the party considerations as the electoral system and conventions in India have ‘not developed to ensure protection to the office’.
- A member is appointed to the office of the Speaker if a motion nominating an individual is carried in the House.
  - Elections are not always by consensus and there have been cases when different parties have fielded their own candidates.
  - All political parties campaign in the constituency of the Speaker. Even if the Speaker is re-elected to the House, the office of the Speaker in India is still open for elections’.Therefore, what is required is not merely incidental changes in the powers of the Speaker; rather a major revamp in the structure of the office itself.  
It is suggested that a scheme should be brought wherein Speakers should renounce all political affiliations, membership and activity once they have been elected, both within the Assembly and in the country as a whole.

#### **UK Model**

- In the UK Model, the Speaker resigns from the party and remains politically neutral. He abstains from expressing any political views and he never voices an opinion on party issues.
- As a result, they have developed a convention in which the Speaker is elected unopposed.
  - Political parties do not field their candidates against the Speaker in the general poll.
  - The major political parties usually at the time of general elections as a matter of convention, support the Speaker as an independent candidate.
- Thus he is re-elected as the Speaker of the House on account of strict impartiality and nonalignment to party politics.
- But in India, usually, the Speaker is elected from the majority party. The Speaker’s continuation or re-election in Parliament depends on the existence of the Government. Hence, the speaker owes his allegiance to the political party from which he was elected.

#### **Conclusion**

- Impartiality, fairness and autonomy in decision-making are the hallmarks of a robust institution.
- It is the freedom from interference and pressures which provide the necessary atmosphere where one can work with an absolute commitment to the cause of neutrality as a constitutional value.
- At a time when India's fall in ranks in the latest Democracy Index has evoked concern, it is expected that Parliament will pay heed to the reasoning of the Supreme Court and take steps to strengthen the institution of the Speaker.

## ***Mizoram asks Centre to review border with Assam***

### **Context**

- The Mizoram Government has been making efforts to resolve the long-pending boundary dispute with Assam and has asked the Centre to review the inter-State border.

### **Regions claimed by Mizoram**

Mizoram was part of Assam till 1972, when it became a separate Union Territory. In 1987, it became a full-fledged state. The border dispute between Mizoram and Assam is a long-pending issue which remains unresolved.

- The three Mizoram districts of Kolasib, Aizawl and Mamit share about 123 km long border with south Assam's Cachar, Hailakandi and Karimganj districts.
- While Mizoram claimed that a 509 square-mile stretch of the inner-line reserve forest notified in 1875 under the Bengal Eastern Frontier Regulation of 1873 belongs to Mizoram, the Assam side agreed with the constitutional map and boundary drawn by the Survey of India in 1993.



### **Tensions in the past**

The border issue has remained relatively calm, except a few instances in 1994, 2007 and 2018 when tensions flared up. But because of timely intervention by the Central Government, a major crisis was averted.

- Several dialogues held since 1995 to resolve the border dispute have yielded little result.
- The last border stand-off between the two States had taken place at Zophai in March 2018 when members of a students' body of Mizoram attempted to construct a wooden resting shed there.
- The 2018 border dispute was put under control with the intervention of the Centre, which asked both the Mizoram and Assam governments to maintain status quo on the disputed land till issues are resolved.

### **Joint Committee**

- A joint committee was also constituted by both the state governments under the Union Home Ministry.
- The committee carried out an inspection of illegal structures in the inner line reserved forest area along the Mizoram-Assam border, which was suspended again following a dispute at zero point in Dholchera-Phaisen area in April 2018.
- The Mizoram Cabinet had in July 2019 declared that the inner-line reserve forest area belonged to Mizoram and is the actual boundary of the State.

## **Rights, duties and the Constitution**

### **Context:**

- In the recently held International Judicial Conference 2020, the Chief Justice of India drew attention to the Constitution's Fundamental Duties chapter and stressed on the importance of citizens' duties by citing Gandhi's Hind Swaraj, which quotes that "real rights are a result of [the] performance of duty."

### **Background:**

- During the 18-month period state of emergency declared between 1975 and 1977, the government of the time enacted sweeping changes to the Constitution, through the 42nd Amendment.
- The chapter on Fundamental Duties was introduced into the Indian constitution via the 42<sup>nd</sup> Amendment.
- The Amendment's Statement of Objects and Reasons stated that the amendments also proposed to specify the fundamental duties of the citizens and make special provisions for dealing with anti-national activities. One of the most notable aspects was that the government of the day tried to interlink two completely different aspects of Fundamental Duties and anti-national activities. The author of the article expresses concerns over the genesis of the idea of Fundamental Duties in such a condition.

### **Details:**

- The author of the article states that though on the outset the inter-relationship between duties and rights may seem reasonable, the merging of the ideas of rights and duties ought to be resisted. The author in the given article makes several arguments to justify his stand.

### **1. Portrays a negative image of the citizenry:**

- The idea that rights would only be granted subsequent to the performance of one's duty seems to portray the citizens as being ungrateful and selfish, intent on only enjoying the benefits and unwilling to contribute to the cause of nation-building.
- This stands contrary to the contributions of many Indians in nation-building. This negative image of the citizens needs to be guarded against.

### **2. Existing web of duties:**

- As citizens, there already exists a wide range of duties that bind everyone in everyday life. Citizens owe this duty to both the state, and to other individuals.



- Citizens are bound by the legal duty to pay their taxes; citizens are bound to follow the laws enacted by the Parliament. The criminal law of the land refrains the citizens from committing violence against the fellow-citizens.
- The breach of the legal duties triggers financial consequences in the form of fines, or even internment in serious cases.
- Hence, at any given point of time, the citizens are already following a number of duties, which guides and constrains how they behave. This is based on the principle that peaceful co-existence requires a degree of self-sacrifice, and that if necessary, this must be enforced through a set of legal and binding sanctions.
- There is no need for a separate chapter on fundamental duties.

### **3. The logic of rights:**

- Unlike duties, rights follow a different logic entirely. This could be best understood by understanding the evolution of the Fundamental Rights in the Indian context.
- During the framing of the Indian Constitution and its chapter on Fundamental Rights, there were two important concerns in the Constituent Assembly. The twin principles of anti-dehumanization and anti-hierarchy were the transformative purpose of the fundamental rights chapter in the Indian Constitution.

#### **Anti-dehumanization:**

- Under the colonial regime, Indians had been treated as passive subjects. The Indian interests did not count, their voices went unheard, and were treated inhumanely in many instances.
- The framers of the Constitution had firsthand experience of the long and brutal history of colonialism and had also witnessed the horrors of the Holocaust.
- The fundamental rights were therefore envisaged to stand as a defence against the dehumanization of the citizens.
- Every human being irrespective of one's gender, language, caste, religion, region, class have a claim to basic dignity and equality that the state cannot take away even in extreme situations. The non-performance of one's duty could not be grounds for rejection of rights.

#### **Anti-hierarchy:**

- At the time of independence, India was inheriting a deeply divided society along the lines of religion, caste, language and class. Apart from the oppression of the colonial regime, the people had also to bear the oppression imposed by the axes of gender, caste and religion over a long period of time. This oppression had kept large masses of individuals in subordinated and degraded conditions.
- The fundamental rights were also envisaged to stand against the existing hierarchy in Indian society at the time of its independence.
- Hence the fundamental rights chapter had exclusive provisions against forced labour, untouchability, against discriminatory access to public spaces.
- The fundamental rights were meant to play an equalizing and democratizing role in society and aimed to guard the individuals against the discriminations.

Fundamental rights were based on the understanding that ensuring basic dignity and equality to all individuals alone could ensure true democracy. Only with these basic guarantees could an individual rise

from the status of a subject to that of a citizen. The question of duties could arise only after the fulfilment of these basic rights.

**The problem with interlinking rights and duties:**

- It is worth noting that the argument that rights should precede duties does not in any way mean that duties are unimportant.
- The major issue is when there is interlinking between rights and duties.
- The noted professor of History, Samuel Moyn observes in his article in 'The Boston Review' that the rhetoric of duties has often been deployed by some with the intention to ensure the societies return to old traditions which are based primarily on the interests of the collective and on limiting the rights of individuals. In this context, it is very critical to remember Dr B.R. Ambedkar's words in the Constituent Assembly where he held that the fundamental unit of the Constitution remains the individual.
- There are concerns that the emphasis on duties over rights may lead to unpleasant consequences. The unnecessary emphasis on duties over rights can end up further deepening the existing power structures. The already vulnerable and marginalized sections will have to bear the heavier burden of having to fulfil one's duties without access to basic rights.

**Conclusion:**

- While determining the precedence of duties or rights it is very important to consider the position of the individual in the constitutional scheme of things and the Constitution's commitment to combating hierarchy.
- The author of the article believes that since the Indian Constitution is looked upon as a charter of liberation, it is fundamentally about rights.
- Only the full guarantee of humanity, dignity, equality, and freedom promised by the Constitution will enable the state to question the citizens on the fulfilment of their duties.
- The author calls for the rephrasing of the quote used by the CJI from the Hind Swaraj to make it more suitable for the constitutional age. "Real duties are the result of the fulfilment of rights."

## **Trust formed for Ram temple construction: PM**

**Context:**

- The Cabinet has approved a scheme for the construction of a grand Ram temple in Ayodhya by setting up an autonomous trust, the Shri Ram Janma bhoomi Teerth Kshetra, to take forward the process as per the Supreme Court's orders.
- The Supreme Court-mandated three-month deadline to set up a trust was to end on February 9, 2020.

**Details:**

- It has been decided that the whole of the approx 67.703 acres acquired land will be transferred to the newly created Sri Ram Janma bhoomi Teerth Kshetra trust.
- The Uttar Pradesh government has given its approval for 5 acres to be allotted to Sunni Waqf Board, as ordered by the Supreme Court.
- There will be 15 trustees in Shri Ram Janma bhoomi Teerth Kshetra Trust out of which one trustee will always be from Dalit society.
- The trust will also be an independent body, capable of taking all decisions regarding the construction of the temple.

- Two prominent practising Hindus will be nominated by the board of trustees. Two Hindu IAS officials below the rank of Joint Secretary to the government will be appointed by the Centre and the U.P. government. Ayodhya District Collector will be the ex-officio trustee.

## ***Upholding the fairness of the sentencing process***

### **Introduction**

- This article discusses the manner in which public opinion and “society’s cry for justice” have played a huge role in the sentencing process at the trial as well as appellate levels of the judiciary, and the implications of this on the fair trial rights of the convicts.

### **Bachan Singh v/s State of Punjab**

- A Constitution Bench of the Supreme Court in Bachan Singh v/s State of Punjab (1980) said, while imposing Capital Punishment on the offender the courts should consider the aggravating and mitigating circumstances of the offence and the offender when deciding the question of punishment.
- Aggravating circumstances refers to factors that increases the severity or culpability of a criminal act.
  - Heinous nature of Crime, brutal Killing of people, prior convictions of the accused, pre-planned cold blood murder.
- A mitigating factor is the opposite of an aggravating circumstance, as a mitigating factor provides reasons as to why punishment for a criminal act ought to be lessened.
  - Not a pre-planned murder, act of crime committed in sudden rage and no criminal past of the accused.
- Death penalty could be imposed as a last option only when the court feels it would be travesty of Justice if death penalty is not awarded.
- The death sentence can only be imposed in exceptional cases involving extreme culpability.

### **Trail and High court Judgment in Nirbhaya case**

- The trial court commented upon the “extreme mental perversion of the accused”, which was “not worthy of human condonation” and also reiterated elements of the crime to highlight their “bestly behaviour”.
- The High Court elaborately discussed the exceptional nature of this case given the brutality involved to conclude that expecting society to demand anything other than the death penalty for the convicts would be “unnatural and ludicrous”.
- A plain reading of the sentencing orders makes it very clear that the public clamour for “hanging the rapists” made its way into the judicial decision-making.

Irrespective of the brutal nature of the crime, the circumstances of the convicts are crucial to the sentencing exercise and have to inform the punitive outcome. Recognising these deficiencies in the sentencing hearings by lower courts, the Supreme Court took it upon itself to appreciate mitigating evidence.

- The Court allowed defence counsels access to the convicts and directed the defence counsel to file “necessary separate affidavits and documents on mitigating circumstances”.
- The evidence on mitigation that was presented before the Court in the form of affidavits included material on the socio-economic circumstances of the convicts, their family background and some information on their previous occupation.

- The uncanny similarity between the mitigation affidavits of the defendants is itself a matter of concern, as it does not meaningfully present individual circumstances of the convicts, raising questions about the quality of legal representation.
  - However, of graver concern is the manner in which the court dismissed these circumstances as irrelevant, given the circumstances of the crime in the case.

#### **Why life imprisonment as an option was not considered?**

- Confirming the death sentences for all, two concurring opinions remarked that the crime was bound to “shock the collective conscience” and any punishment lesser than the death penalty would “shake the confidence of the public” in the criminal justice system.
- After an unreasoned dismissal of individual circumstances of the convicts, the Supreme Court also failed to sufficiently answer why life imprisonment was unquestionably foreclosed.
- The Court failed to discharge any of these burdens.
- At its core, imposition of death sentence to satisfy “collective conscience” is vengeance couched as retributive justice, captured by the phrase “an eye for an eye”.
  - Modern penal systems consider this an outmoded concept, and even Bachan Singh had observed that retributive justice means punishment based on blameworthiness of the convict, and cannot be equated to “vindictiveness” (revenge).
  - However, the judgments in this case indicate a strong influence of collective conscience on the outcome.
- In fact, the Supreme Court’s approach suggests that society’s cry for the death penalty justifies the imposition of the death penalty, without adequately dealing with the question of life imprisonment.

#### **Conclusion**

- The execution of the four convicts after exhaustion of their legal remedies may give their case a semblance of due process.
- While the public has very little patience to appreciate such nuances of the law, courts are duty-bound to maintain a high degree of fidelity to these processes.

### **When can a judge opt out of a case?**

#### **Context**

- Justice Mohan M Shantanagoudar, Supreme Court judge, recused from hearing the petition filed by Sarah Abdullah Pilot, sister of former J&K Chief Minister Omar Abdullah, challenging his detention under the J&K Public Safety Act.
- The case was finally heard by another bench.

#### **Definition**

- Recusal is to remove oneself as a judge in a particular proceeding, usually because of conflict of interest or has a prior association with the parties in the case.

#### **What are the rules on recusals?**

- There are no written rules on the recusal of judges from hearing cases listed before them in constitutional courts. It is left to the discretion of a judge. The reasons for recusal are not disclosed in an order of the court.
  - Some judges orally convey to the lawyers involved in the case their reasons for recusal, many do not.

- Some explain the reasons in their order.
- The decision rests on the conscience of the judge.

### **When can the Judge recuse?**

- Bias of prejudice
  - It typically means the judge has acted/ taken a stand or publicly spoken in a way that prevents him or her from treating the party in a fair and impartial manner.
- Where a judge has appeared for one of the litigants at some stage in the same dispute.
  - A judge's fairness and impartiality may be compromised when he or she has had a business or professional relationship with a party.
  - In cases where the judge was a party's business partner or attorney, as well as in cases where the judge was a member of a law firm representing a party, the potential for bias or prejudice is almost always too great to permit the judge to preside over the case.
- In disputes where a judge has a financial interest in the litigation, where a judge owns shares in a company which is party to the case, the judge can recuse.
- Judge's family member's economic interest in the case.
  - The judge is related to a party or spouse of either party (usually) within three degrees of kinship.
  - Sometimes a judge or one of his or her immediate family members will have an economic interest in the subject matter of the case, one that could be significantly impacted by the outcome of the proceedings

### **Judges who excused oneself from hearing a case**

- Chief Justice Ranjan Gogoi disqualified himself, purportedly because he was set to be a part of the selection committee tasked with choosing a new CBI Director. He then assigned a bench presided by Justice A.K. Sikri to hear the case.
- Justice U.U. Lalit recused himself from hearing the dispute over land in Ayodhya after senior advocate Rajeev Dhavan pointed out that the judge had appeared for former Uttar Pradesh Chief Minister Kalyan Singh in a related contest.

### **Recusal can harm rule of law**

- Refusing to recuse himself from the Constitution Bench hearing a question of law on the Indore Development Authority v. ManoharLal (the issues involved in the case related to a reading of Section 24(2) of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013), Justice Arun Mishra said acquiescing to the wishes of parties to recuse himself would sound the death-knell for judicial independence.
  - The petitioners had objected to Justice Mishra leading the Constitution Bench which was hearing a question of law challenging his own earlier judgment in the case.
- In 2019, in the middle of a hearing of a PIL filed by activist Harsh Mander about the plight of inmates in Assam's detention centres, the then-Chief Justice Ranjan Gogoi was asked to recuse himself. In an order, Justice Gogoi said a litigant cannot seek recusal of the judge.
  - "Judicial functions, sometimes, involve performance of unpleasant and difficult tasks, which require asking questions and soliciting answers to arrive at a just and fair decision. If the assertions of bias as stated are to be accepted, it would become impossible for a judge to seek clarifications and answers," the court observed.
- In the Judge Iyengar Case, Recusal, the court observed, would mean abdication of duty.

- Judiciary should not allow recusals to be used as a tool to manoeuvre justice, where parties decide the benches ultimately evading judicial work.
  - To withdraw from a case merely because a party suggests that a judge do so impairs judicial fairness. It allows parties to cherry-pick a bench of their choice.

#### **Should the reasons be put on record?**

- In his separate opinion in the National Judicial Appointments Commission judgment in 2015, Justice Kurian Joseph, who was a member of the Constitution Bench, highlighted the need for judges to give reasons for recusal as a measure to build transparency.
  - “It is the constitutional duty, as reflected in one’s oath, to be transparent and accountable, and hence, a judge is required to indicate reasons for his recusal from a particular case,”
- In Supreme Court Advocates-on-Record Association v. Union of India (2015), Justice Chelameswar said “Where a judge has a pecuniary interest, no further inquiry as to whether there was a ‘real danger’ or ‘reasonable suspicion’ of bias is required to be undertaken, but in other cases, such an inquiry is required, and the relevant test is the ‘real danger’ test.”

#### **Conclusion**

- Judicial impartiality is a significant element of justice. Judges should decide legal disputes free of any personal bias or prejudice. As a result of a conflict of interest, a judge may be unable to maintain impartiality in a case and thus should be disqualified.
- Even where a judge is impartial, but appears not to be, recusal is necessary and this should be structured.

## **When to call in the Army**

#### **Context:**

- Riots in North-East Delhi and the statements by the Chief Minister of Delhi requesting the Home Ministry to bring in the Army to control the situation.

#### **Details:**

- The Armed Forces are generally called in by the civil power when public security is in manifest danger from an unlawful assembly which is refusing to disperse despite the efforts of the local police forces.

#### **1. Code of Criminal Procedure (CrPC):**

- Section 129 deals with the dispersal of a violent mob using civil forces.
- The Sections 130 to 132 of the Code of Criminal Procedure (CrPC) of 1973 provides for the procedure for use of Armed Forces in such instances.
  - Chapter 10 of the CrPC under the title ‘Maintenance of Public Order and Tranquility’ provides the process for calling in the Armed Forces for help.
- In the event of failure of the local police forces, Section 130 can be used.
  - The provision empowers the Executive Magistrate of the highest rank, in situations of gravest danger to public security, to seek help from the armed forces to disperse the assembly.
- Rioters can also be arrested or confined in order to either disperse the mob or punish them in accordance with the law.

- The provision allows the Armed Forces officer-in-command concerned to comply with the Magistrate's requisition for aid in a manner as he deems fit. But in dispersing the unlawful assembly and restoring calm, the Armed Forces should use as little force as possible and cause as little damage as possible.
- Section 132 protects the officers and members of the Armed Forces from prosecution for acts done in good faith in the course of their duties to contain the riot.

**2. The Defence Service Regulations:**

- The Defence Service Regulations provide extensive guidelines regarding the procedure for calling in the Armed Forces.
- The Defence Service Regulations specify that requisition for help from the civilian power to the Armed Forces Officer should either be in writing or by telegram. The Forces should immediately come to the aid of the civil power for the maintenance of law and order.
- The strength and composition of the force, the amount of ammunition, arms and equipment to be taken and the manner of carrying out the operations are matters for the Armed Forces alone.
- The regulations also deal with the aspect of operational guidelines while on duty, especially in instances where the forces would have to use firepower to restore peace.

# ECONOMY

## **Apiary on Wheels**

### **Context**

- 'Apiary on Wheels', a unique concept designed by Khadi and Village Industries Commission (KVIC) for the easy upkeep and migration of Bee Boxes having live Bee colonies, was flagged off by the Union Minister of MSME

### **Details**

- Apiary is a place in which a colony or colonies of bees are kept, as a stand or shed for beehives or a bee house containing a number of beehives.
- Apiary on Wheels is a platform which can carry 20 Bee Boxes from one place to another without any difficulty.
- It is like an attachment which can be easily connected with a Tractor or a Trolley and may be pulled to any suitable destination.

### **Significance**

- Apiary on wheels is a holistic approach to address the challenges faced by the beekeepers.
- It is designed so as to reduce the labour and cost of maintaining and upkeeping Bee Boxes and live bee colonies across India.

## **Honey Mission**

- Under the Honey Mission, KVIC distributes bee-boxes to farmers and unemployed youths across the country to increase honey production and farmers' income.
- Under this, KVIC provides training, awareness and also bee boxes along with bee colonies to farmers.
- It was launched in 2017.

## **AskDISHA**

### **Context**

- The Indian Railway Catering and Tourism Corporation Limited (IRCTC) launched a chatbot for improving customer services.
- AskDISHA (Digital Interaction to Seek Help Anytime), a chatbot powered by artificial intelligence (AI), will answer queries pertaining to various services offered by IRCTC.

### **Details**

- A chatbot is a special computer programme designed to simulate conversation with users, especially over the internet.
- The essential features of AskDisha include ability to quickly answer customer queries, ability to multitask, ability to provide round-the-clock customer support, zero waiting time for the query to be answered, and overall an ability to provide customers with a stress-free experience and overall customer satisfaction.
- The ASKDISHA Chatbot was initially launched in English language but in order to further enhance the customer services rendered and to further strengthen the services of the chatbot, IRCTC has



now powered voice enabled ASKDISHA to converse with customers in Hindi language also in the e-ticketing site [www.irctc.co.in](http://www.irctc.co.in). The customers can now ask queries to ASKDISHA in Hindi language by voice as well as text.

- The AI-powered chatbot has been jointly developed by IRCTC and a Bengaluru-based startup CoRover Pvt. Ltd.
- IRCTC becomes the first and only government corporation in India to launch a chat-enabled helpdesk service program AskDisha.

### **Bus Rapid Transit (BRT) Project**

- Bus Rapid Transit (BRT) delivers fast, comfortable, and cost-effective services at metro-level through the provision of dedicated lanes.
  - Unlike conventional bus services that operate on streets with the rest of vehicular traffic, the BRT system includes roadways that are dedicated to buses.

#### **The advantages of BRT systems include:**

- Lower capital, and operation and management costs compared with rail-based Light Rail Transit (LRT) (i.e., tram) and Mass Rapid Transit (MRT) (i.e., metro) systems, which medium-sized cities in developing countries usually cannot afford.
- Bus-only lanes make for faster travel and ensure that buses are not delayed by mixed traffic congestion.
- Higher capacity compared with conventional bus services.
- Reduce delays caused by passengers boarding or leaving buses or purchasing fares.
- Also, BRT systems can be implemented in a relatively short period of time (typically 1–3 years after conception) and can be easily augmented and/or adjusted in phases.

#### **Examples from the world**

- Throughout the world, more than 35 cities already have BRT systems, including successful model cases in developing countries such as Curitiba (Brazil), Bogotá (Colombia), and Jakarta (Indonesia).
- The first BRTS was launched in Curitiba in 1974.

#### **Context:**

- The Vice President inaugurated the Hubballi-Dharwad Bus Rapid Transit (BRT) Project.
- The Hubballi-Dharwad Bus Rapid Transit System (BRTS) is ferrying close to one lakh passengers between the twin cities in its trial run.

### **Four Balance Sheet Challenge**

- In the paper named 'India's Great Slowdown', Arvind Subramanian mentions the new 'Four balance sheet challenge'.
- The Four Balance Sheet challenge includes the original two sectors - infrastructure companies and banks, plus NBFCs and real estate companies.

#### **Twin-Balance Sheet (TBS)**

- Subramanian, in his role as the CEA, had argued in the Economic Survey of 2017-18 that the economy was facing a TBS problem.

- The two balance sheets he referred to belonged to the Indian banks (especially public sector banks or the government-owned banks) and the corporate sector, respectively.
- He pointed out that the balance sheets of Indian banks were burdened by a high proportion of non-performing loans and the balance sheet of corporates were clogged because they had over-borrowed and were unable to pay.
- This essentially meant that neither the Indian companies were in position to invest nor were the Indian banks in a position to lend.

## ***KALA KUMBH – Handicrafts Exhibitions***

### **Context:**

- With an objective to promote Geographical Indication (GI) crafts and heritage of India, the Ministry of Textiles is organising Kala Kumbh – Handicrafts Thematic Exhibition in various parts of the country through the Office of Development Commissioner (Handicrafts).

### **Details:**

- The exhibitions are sponsored by the Export Promotion Council for Handicrafts (EPCH).
  - EPCH was established under Companies Act in the year 1986-87 and is a non-profit organisation, with an object to promote, support, protect, maintain and increase the export of handicrafts.
  - It is an apex body of handicrafts exporters for the promotion of exports of handicrafts from the country and projecting India's image abroad as a reliable supplier of high quality of handicrafts goods & services.

## ***Kisan Rail***

- The Indian Railways will set up 'Kisan Rail' through Public-Private Partnership (PPP).
- Under this service, refrigerated coaches will be added in Express and Freight trains for the transportation of perishable goods from the producer to the market.

## ***LIC stake sale***

### **Context**

- Union Minister of Finance announced that the government plans to sell a part of its holding in Life Insurance Corporation (LIC) by way of an Initial Public Offering (IPO).
- The government owns 100 per cent of LIC.

### **Establishment**

- The Life Insurance Corporation of India was established by the Parliament by passing the Life Insurance Corporation Act in 1956.
- The objective was to spread life insurance much more widely and in particular to the rural areas with a view to reach all insurable persons in the country, providing them adequate financial cover at a reasonable cost.

### **Why did the Govt initiate this?**

- The Govt believes that listing would bring discipline while giving retail investors an opportunity to participate in wealth creation.
- Listing of companies provides access to financial markets and unlocks its value.

**To bring this into action the Govt will have to ensure that it amends the LIC Act**

- LIC is currently under the supervisory oversight of the Insurance Regulatory Development Authority of India (IRDAI), but it is governed by the LIC Act of 1956 which enables the state-owned insurer to obtain a special dispensation in several areas including higher stakes in companies beyond the limit set by the IRDAI.
- Under Section 37 of the LIC Act, the government has guaranteed the sum assured with bonus in all LIC policies to ensure the availability of financial security to the family of the deceased.
- LIC Chairman M.R. Kumar however has confirmed that: "There is no implication for policyholders. The Finance Minister has clarified that sovereign guarantee will continue. That being the case I don't think there is anything to worry for the customer."
  - Sovereign guarantee means that the sum assured in your policy, including bonuses, shall be guaranteed by the government.
  - This means it's a surety or an undertaking from the government that it will pay you the assured sum (including bonus) on your policy.

**The Finance Ministry is in talks with the Law Ministry to amend the Act.**

Will listing change LIC's operational approach or investment policies?

- LIC is the biggest institutional investor in the Indian equity markets. According to media reports, LIC's gross investments in equity are set to touch an all-time high of ₹72,000 crore in the financial year 2019-20.
- In FY19, LIC had invested a little less than ₹69,000 crore in equities. The numbers clearly show the clout that LIC enjoys in the equity market. The government has used LIC on many occasions to stabilise the markets.

**Example**

- The offer for sale of Oil and Natural Gas Corporation Limited (ONGC) was initiated by Govt in 2012
- LIC was allotted 4.41 per cent stake in ONGC, part of the 5% sold by the government through the auction route.
- With the acquisition of 4.41 per cent, LIC's stake in ONGC has gone up to 9.48 per cent
- As per the Insurance regulator IRDA guidelines, an insurance firm's holding should not exceed 10 per cent in any company.

Questions were raised in the market at the time about its investment policies, as this was a classic example of an LIC bailout.

**Merits**

- The listing would usher in benefits including increased accountability, transparency and due process.
- Listing of LIC will bring in greater governance and unlock more value for the life insurer, which could in turn benefit policyholders.
  - Listing a company will lead to its service standards going up.
- There would be independent directors on board who could question the rationale for investments.
- Further, shareholders too could question the company on its investments.

- The government then cannot use LIC as a bank for acquisitions like IDBI, IL&FS, etc.
- It will stop adverse investment decisions because once listed, SEBI and IRDA will have to be convinced.
- Market observers are also of the opinion that listing LIC will give it more marketing muscle and make it competitive, which will mean that private players will now have to invest more and bring out more innovative products.

### **Concerns**

- LIC employee unions say that listing LIC will adversely affect policyholders.
  - They believe that for a company performing so well, there is no need for disinvestment, just because the government needs money.
- Once LIC is listed, there will be more 'owners' of the company in the form of shareholders, which will mean that a portion of profits will have to go to them as well.
  - It may reduce the bonuses that policyholders currently receive.

### **Could listing change the payout structure at LIC?**

- Currently, LIC pays 5% of its surplus to the government and the balance 95% to policyholders.
- This makes it possible for the state-owned insurance company to give a higher bonus on the policies compared to private players, who typically give 10% of their surplus to shareholders and the balance 90% to policyholders.
- With outside investors becoming shareholders, with a few even gaining seats on the insurer's board, there could be a demand to tweak the mix between shareholders and policyholders.
- Further, the norms of the Securities and Exchange Board of India (SEBI) on corporate governance would require the insurance company to make timely and quick disclosures about defaults among other things.
- LIC is a significant player in the debt segment as well and would have to make additional disclosures to retail shareholders.

### **Does LIC have bad loans?**

- The banks are currently reeling under the pressure because of bad loans, there is intense speculation on LIC's Non-Performing Assets (NPAs) too.
- Media reports have speculated that LIC has about 6% gross NPAs.
- But the chairman of LIC, clarified that on an overall basis, it was not even 1%.
  - The 6% is possibly in corporate debt.

## **Market Intelligence and Early Warning System (MIEWS) Portal**

- The MIEWS Dashboard and Portal is a 'first-of-its-kind' platform for 'real time monitoring' of the prices of tomato, onion and potato (TOP).
- It generates alerts for intervention under the terms of Operation Greens (OG) scheme.
- The portal would disseminate all relevant information related to TOP crops such as prices and arrivals, area, yield and production, imports and exports, crop calendars, crop agronomy, etc. in an easy to use visual format.
- As per the terms of the OG Scheme, during a glut situation, evacuation of surplus production from producing areas to consumption centres will be undertaken.

- The MIEWS system is designed to provide advisories to farmers to avoid cyclical production as well as an early warning in situations of gluts. For decision-makers, the MIEWS system will help in:
  - Monitoring of supply situation for timely market intervention,
  - Assist in rapid response in times of glut to move produce from glut regions to deficit/consuming regions and
  - Providing inputs for export/import decision making.

#### **Context:**

- The Union Minister of Food Processing Industries launched the Market Intelligence and Early Warning System (MIEWS) Web Portal.

### **Mission Purvodaya**

- Purvodaya in steel sector is aimed at driving accelerated development of Eastern India through establishment of integrated steel hub.
- The objective of this hub would be to enable swift capacity addition and improve overall competitiveness of steel producers both in terms of cost and quality. The Integrated Steel Hub would focus on 3 key elements:
  - Capacity addition through easing the setup of Greenfield steel plants
  - Development of steel clusters near integrated steel plants as well as demand centres.
  - Transformation of logistics and utilities infrastructure which would change the socio-economic landscape in the East

#### **Key facts**

- Eastern states of India (Odisha, Jharkhand, Chhattisgarh, West Bengal) and Northern part of Andhra Pradesh collectively hold ~80% of the country's iron ore, ~100% of coking coal and significant portion of chromite, bauxite and dolomite reserves.
- There is presence of major ports such as Paradip, Haldia, Vizag, Kolkata etc., with >30% of India's major port capacity.

#### **Significance**

- The proposed Integrated Steel Hub, encompassing Odisha, Jharkhand, Chhattisgarh, West Bengal and Northern Andhra Pradesh, would serve as a torchbearer for socio-economic growth of Eastern India.
- In India's march towards a \$5 trillion economy, the 5 Eastern states can play a major role where steel sector can become the catalyst.
- Growth of steel industry through such a hub would lead to significant employment opportunities across the entire value chain and will play a significant role in overall socio-economic growth of Eastern India, thus reducing the disparity between the East and other regions of the country.

### **Muktoshri - West Bengal growing arsenic resistant rice**

#### **Context:**

- Development and commercialization of rice resistant to arsenic.

#### **Details:**

- The new rice variety, Muktoshri, also called IET 21845 is resistant to arsenic.

- It was developed jointly by the Rice Research Station at Chinsurah, coming under West Bengal's Agriculture Department and the National Botanical Research Institute, Lucknow.
- Post-development and multi-locational trials and validation across different seasons, the seeds have been made available for cultivation.
- Since numerous scientific studies have shown that arsenic from groundwater and the soil can enter the food chain through paddy, the development of arsenic resistant rice variety marks a significant development in addressing arsenic poisoning in India.
- During the trials, it was found that this variety absorbs a lesser amount of arsenic from soil and water than the other varieties of rice. The yields across the seasons have also found to be satisfactory. Additionally, the rice was also aromatic making it attractive even in areas where arsenic contamination is not a problem.

### **Background:**

Arsenic poisoning:

- Arsenic is a naturally occurring trace element found in rocks, soils, and water.
- World Health Organization's provisional guideline value for arsenic in drinking water is 0.01 mg/l (10 µg/l). The permissible limit of arsenic in India in the absence of an alternative source is 0.05 mg/l (50 µg/l).
- Absorption of arsenic through the skin is minimal and thus hand-washing, bathing, laundry, etc. with water containing arsenic do not pose human health risks. According to the World Health Organization, long-term exposure to arsenic occurs mainly through drinking water and food.
- Arsenic beyond permissible levels has been recognized as a toxic element and is considered a human health hazard.
  - Long-term intake of arsenic-contaminated water leads to arsenic poisoning or arsenicosis, with cancer of skin, bladder, kidney or lung or diseases of the skin (colour changes, and hard patches on palms and soles), or blood vessels of legs and feet.
  - Fresh evidence indicates a possible association between the intake of contaminated water to the onset of diabetes, hypertension and reproductive disorders.

Affected areas:

- West Bengal has a high concentration of arsenic in groundwater, with 83 blocks across seven districts having higher arsenic levels than permissible limits.
- Apart from West Bengal, Arsenic contamination in groundwater has been recorded in the states of Assam, Bihar, Chhattisgarh, Haryana, Jharkhand, Karnataka, Punjab and Uttar Pradesh. The occurrence of Arsenic in the states of Bihar, West Bengal and Uttar Pradesh is in alluvial formations but in the state of Chhattisgarh, it is in the volcanic rocks.
- According to government sources, about 239 million people across 153 districts in 21 states drink water that contains unacceptably high levels of arsenic, adding up to 19% of India's population.
- The occurrence of Arsenic in groundwater is mainly in the aquifers up to 100 m depth. The deeper aquifers are free from Arsenic contamination.

## **National Organic Festival**

### **Context**

- The Ministry of Food Processing Industries organised National Organic Festival with a special focus on women entrepreneurs.

- More than 150 women entrepreneurs and Self Help Groups (SHGs) from all over the country participated exhibiting their organic products in various segments such as fruit & vegetables, ready to eat products, spices and condiments, honey, cereals, dry fruits, etc

#### **Details**

- The festival cum exhibition that was held under the theme “Unleashing India’s Organic Market Potential”
- The aim was to boost the organic products and promote women entrepreneurship in the area of production and processing of organic products
  - The event also focused on facilitating business linkages and empowering women entrepreneurs through pre-arranged B2B and B2G meetings.

#### **India’s Organic Market Potential**

- With 9th largest World’s Organic Agricultural land and largest number of producers India is fast growing in the organic food segment.
- On the demand side, increasing disposable incomes, increasing awareness around health and wellness and increasing acceptability are driving the growth in the organic food segment.
  - The demand for Indian organic food products is on constant increase worldwide
- The major demands under the organic product category are for oil seeds, cereals & millets, sugar, fruit juice concentrates, tea, spices, pulses, dry fruits, medicinal plant products etc.

### **National Technical Textiles Mission**

#### **Technical textiles**

- Technical textiles are material and products manufactured primarily for their technical properties and functional requirements rather than for aesthetic characteristics.
- The scope of use of technical textiles encompasses a wide range of applications such as agro-textiles, medical textiles, geo-textiles, protection-textiles, industrial-textiles, sports-textiles and many other usages.

#### **Context**

- The Union Minister for Finance had announced a proposal to set up a National Technical Textiles Mission in the budget.

#### **Details**

- India imports a significant quantity of technical textiles.
- The objective is to position India as a global leader in technical textiles.
- To achieve this, the mission has an estimated outlay of Rs. 1480 crore.
- It has a four-year implementation period from 2020-21 to 2023-24.

#### **Significance**

- In India, technical textiles hold immense growth opportunities both for the industry as well as across various applications.
- Use of technical textiles have benefits of increased productivity in agriculture, horticulture and aquaculture fields, better protection of military, para-military, police and security forces, stronger and sturdier transportation infrastructure for highways, railways, ports and airports and in improving hygiene and healthcare for the general public.

## ***North East Sustainable Development Goals Conclave 2020***

### **Context**

- NITI Aayog organised Sustainable Development Goals (SDG) Conclave 2020: Partnerships, Cooperation and Development of North Eastern states- in Guwahati, Assam with the goal of identifying solutions as well as accelerators for the implementation of SDGs in the North Eastern Region (NER).

### **Details**

- NITI Aayog has the mandate of overseeing the adoption and monitoring of SDGs at the national and sub-national level.
- The Conclave was organized by NITI Aayog, in partnership with the North Eastern Council, Govt. of Assam and Tata Trust, the conclave is supported by UNDP and Research and Information System for Developing Countries (RIS).
- It included sessions pertaining to SDG localisation in the northeast, economic prosperity and sustainable livelihoods, climate adaptive agriculture, health and nutrition, education, skill development and entrepreneurship, connectivity and infrastructure development & inequality and exclusion.
- Progress in the northeast region is crucial in this decade of action for the country to achieve the SDGs by 2030 and this conclave is part of NITI Aayog's continuous efforts towards fostering partnerships at the sub-national level.

## ***Pesticides Management Bill, 2020***

### **Context**

- The Union Cabinet has approved the Pesticides Management Bill, 2020.

### **Details**

- The bill seeks to replace the existing Insecticide Act, 1968, which the government said is "age-old and needs immediate re-writing".
- It comes against the backdrop of rising concern over the need to protect farmers from spurious and sub-standard pesticides, along with the need to assess their potential effects on the health of people and that of the environment.
- The bill also intends to promote organic pesticides.
- All pesticide manufacturers have to be registered and bound by the new Act, once it is passed. Even their advertisements will be regulated that there should be no confusion or no cheating in any way of the farmers.

### **Key Stats**

- India is among the largest producers of pesticides in the world. According to a report by database Research and Markets, the Indian pesticides market was worth Rs 197 billion in 2018.
- Total pesticide consumption is the highest in Maharashtra, followed by Uttar Pradesh, Punjab and Haryana. On the other hand, per hectare consumption of pesticides was the highest in Punjab (0.74 kg), followed by Haryana (0.62 kg) and Maharashtra (0.57 kg) during 2016-17.

### **Significance**



- The bill seeks to regulate business of pesticides and compensate farmers in case of losses from usage of spurious agro-chemicals

### **Way forward**

- Today, there are enough well-proven, successful alternative agro-ecological methods of pest management without using any chemical pesticide in India and globally. Such methods must be mainstreamed and promoted among farmers.
- Lessons learnt from successful farming community initiatives like KeetSakshatraPathshala, Jind, Haryana and Non Pesticide Management Programme implemented by Andhra Pradesh and other successful alternative approaches should be identified and mainstreamed.
- Further, research and innovations must be made to phase out the usage of chemical pesticides completely as soon as possible.

### **Restructured Weather Based Crop Insurance Scheme (RWBCIS)**

- RWBCIS aims to mitigate the hardship of the insured farmers against the likelihood of financial loss on account of anticipated crop loss resulting from adverse weather conditions relating to rainfall, temperature, wind, humidity etc.
- RWBCIS uses weather parameters as “proxy” for crop yields in compensating the cultivators for deemed crop losses.
- Payout structures are developed to the extent of losses deemed to have been suffered using the weather triggers.

### **Benefits**

- With these changes it is expected that farmers would be able to manage risk in agriculture production in a better way and will succeed in stabilizing the farm income.
- Further, it will increase coverage in north eastern region enabling farmers of NER to manage their agricultural risk in a better way.
- These changes will also enable quick and accurate yield estimation leading to faster claims settlement.

### **SPICe+**

- As part of the Government of India’s Ease of Doing Business (EODB) initiatives, the Ministry of Corporate Affairs has notified a new Web Form christened ‘SPICe+’ (pronounced ‘SPICe Plus’) replacing the existing SPICe form.



### **Significance**

- It will help in saving many procedures, time and cost for Starting a Business in India and would be applicable for all new company incorporations.

### **Context:**

- The Secretary, Ministry of Corporate Affairs (MCA) inaugurated the SPICe+ web form.

## ***Steel-India becomes second largest steel producer of Crude Steel***

- As per World Steel Association data, India became the second-largest steel producer of crude steel after China in 2018 and 2019, by replacing Japan.
- India's crude steel production in 2018 increased by 7.7 per cent when compared to 2017.
- Steel being a deregulated sector, the Government does not set any annual targets for steel production.
  - The decision on the quantity of steel production is taken by individual companies based on commercial considerations and market requirements.

### **Deregulation**

- It means reduction or elimination of government control in a sector or various sectors of the economy.
- The basic idea behind deregulation is to give more space for market forces to increase competition and efficiency.

### **Ranking**

- Japan ranks third globally with 104.3 million tonnes of crude steel production in 2018 and 99.3 million tonnes in 2019.
- The United States and South Korea rank fourth and fifth respectively.

## ***Sustainable Alternative Towards Affordable Transportation (SATAT)***

- It is an initiative aimed at setting up of Compressed Bio-Gas production plants and make it available in the market for use in automotive fuels as a developmental effort that would benefit both vehicle-users as well as farmers and entrepreneurs.
- The initiative was launched by the Ministry of Petroleum & Natural Gas in association with Public Sector Undertaking (PSU) Oil Marketing Companies (OMC) Indian Oil Corporation Ltd., Bharat Petroleum Corporation Ltd. and Hindustan Petroleum Corporation Ltd.

### **Biogas**

- It is produced naturally through a process of anaerobic decomposition from waste / bio-mass sources like agriculture residue, cattle dung, sugarcane press mud, municipal solid waste, sewage treatment plant waste, etc.
- After purification, it is compressed and called CBG, which has pure methane content of over 95%.
- Compressed Bio-Gas is exactly similar to the commercially available natural gas in its composition and energy potential.
- With calorific value and other properties similar to CNG, Compressed Bio-Gas can be used as an alternative, renewable automotive fuel.

### **Implementation**

- Compressed Bio-Gas (CBG) plants are proposed to be set up mainly through independent entrepreneurs.
- CBG produced at these plants will be transported through cascades of cylinders to the fuel station networks of OMCs for marketing as a green transport fuel alternative.

### **There are multiple benefits from converting agricultural residue, cattle dung and municipal solid waste into CBG on a commercial scale:**

- Responsible waste management, reduction in carbon emissions and pollution
- Additional revenue source for farmers
- Boost to entrepreneurship, rural economy and employment
- Support to national commitments in achieving climate change goals
- Reduction in import of natural gas and crude oil
- Buffer against crude oil/gas price fluctuations

## **Web Portal Launched for Star Rating of Mines**

### **Context**

- In order to promote green, safe and sustainable mining practices using technology as a tool, Ministry of Coal (MoC) has launched a web portal for star rating of coal mines.

### **How does it work?**

- It enables all operational coal mines across India for self-rating, their subsequent validation by Coal Controller's Organization (CCO), further evaluation and finally award of star rating.
- Based on the star ratings obtained through a well-defined mechanism on this web portal, the highest scoring mines in the country will be awarded in a public ceremony.
- Besides, all the mines will be given an official certificate by the CCO mentioning their star rating and the particular reporting year. The mines that score from
  - 91 to 100% will get 5 star,
  - 81 to 90% 4 star,
  - 71 to 80% 3 star,
  - 61 to 70% 2 star,
  - 41 to 60% 1 star
  - 0 to 40% will get No star
- on the portal as per laid down procedures of the Star Rating Policy for Coal Mines in India

## **World Pulses Day**

- World Pulses Day is a designated United Nations global event to recognize the importance of pulses (chickpeas, dry beans, lentils, dry peas and lupins among others) as a global food.
- It has been proclaimed on February 10 of each year since 2019 by the General Assembly of the United Nations on December 20, 2018.
- This celebration is in recognition of the decisive role that pulses can play in achieving the comprehensive, far-reaching and people-centred set of universal and transformative goals and targets of the United Nations' 2030 Agenda for Sustainable Development, a plan of action that seeks to strengthen universal peace.
- The purpose of World Pulses Day is to raise awareness of the importance of Pulses in contributing to sustainable food production aimed towards food security.

- The event in New Delhi was organized this year by NAFED in collaboration with Global Pulse Confederation (GPC).

#### **National Agricultural Cooperative Federation of India Ltd. (NAFED)**

- NAFED is the Central Nodal agency of the Government of India for procurement of Pulses & Oilseeds, Copra and Cotton under PM Aasha at Minimum Support Price (MSP), in every crop season.
- It was established in 1958 with the objective of promoting cooperative marketing of agricultural produce to benefit the farmers.

#### **About GPC:**

- The Global Pulse Confederation (GPC), established in 1963 in France, is now headquartered at Dubai since 2009.
- It is a non-profit confederation to promote production, consumption, awareness and trade of pulses, representing every component of supply chain related to the pulse industry such as growers, traders, government bodies, trade promotion entities, processors and consumers.
- It is a confederation of 26 national associations and thousands of corporates engaged in pulses trade in over 50 countries.

#### **Pulses and their importance:**

- Pulses, also known as legumes, are the edible seeds of leguminous plants cultivated for food. Dried beans, lentils and peas are the most commonly known and consumed types of pulses.
- Pulses do not include crops that are harvested green (e.g. green peas, green beans)—these are classified as vegetable crops. Also excluded are those crops used mainly for oil extraction (e.g. soybean and groundnuts) and leguminous crops that are used exclusively for sowing purposes (e.g. seeds of clover and alfalfa).
- Pulses are packed with nutrients and have high protein content, making them an ideal source of protein particularly in regions where meat and dairy are not physically or economically accessible.
- Pulses are low in fat and rich in soluble fibre, which can lower cholesterol and help in the control of blood sugar.
- Because of these qualities they are recommended by health organizations for the management of non-communicable diseases like diabetes and heart conditions. Pulses have also been shown to help combat obesity.
- For farmers, pulses are an important crop because they can both sell them and consume them, which help farmers maintain household food security and create economic stability.

#### **Environmental benefits:**

- The nitrogen-fixing properties of pulses improve soil fertility, which increases and extends the productivity of the farmland. By using pulses for intercropping and cover crops, farmers can also promote farm biodiversity and soil biodiversity, while keeping harmful pests and diseases at bay.
- Furthermore, pulses can contribute to climate change mitigation by reducing dependence on the synthetic fertilizers used to introduce nitrogen artificially into the soil. Greenhouse gases are released during the manufacturing and application of these fertilizers, and their overuse can be detrimental to the environment.

### **Context:**

- India hosts the UN World Pulses Day celebrations in New Delhi.

## ***Board for aligning RBI's fiscal year with govt.'s FY***

### **Context**

- The Reserve Bank board has recommended that the financial year of the central bank align with the government's fiscal year from the current financial year.
- The RBI, which was established in 1935, used to follow January-December as its accounting year before it was changed to July-June in 1940.

### **Details**

- The Central Board of Directors of the RBI reviewed the current economic situation, global and domestic challenges and various areas of operations of the Reserve Bank.
  - It recommended aligning the financial year of RBI, currently July-June, with the government's fiscal year (April-March) from the year 2020-21
  - It approved forwarding a proposal to the government for its consideration
- For this financial year, 2020-21, it will start on July 1, 2020, and be for nine months up to March 31, 2021.
- Thereafter, all financial years will start on April 1 every year, aligned with that of the government.

The decision to align RBI's financial year with the government's fiscal year was recommended by the Bimal Jalan committee
- The Jalan committee in its report had said the alignment of the fiscal years of the RBI and the government would ensure that the central bank was "able to provide better estimates of the projected surplus transfers to the government for the financial year for budgeting purposes".
- The committee had noted that the need for interim dividend to be paid by the RBI would be reduced and would be restricted to "extraordinary circumstances", and the move brought "greater cohesiveness in the monetary policy projections and reports published by the RBI, which mostly use the fiscal year as the base".

### **Significance**

- Once implemented, the interim dividends and dividends will be aligned with the government's fiscal year of April-March.
  - RBI gives interim dividends in February and final pay-outs in August currently.

## ***India out of US' Developing Nations List***

### **Context**

- The office of the United States Trade Representatives (USTR) has updated its list of developing and least-developed countries, removing India from the list of countries that are designated as developing.
- These countries will now be classified as "developed" economies, thus stripping them of various trade benefits.

### **Background**

- In the Uruguay Round Agreements Act (URAA), the US Congress had amended the Countervailing Duty (CVD) law in order to confirm US obligations under the World Trade Organisation (WTO) Agreement on Subsidies and Countervailing Measures (SCM).
  - Under this SCM agreement, countries that had not yet reached the status of a developed country were entitled to special treatment for purposes of countervailing measures.
- This meant that imports from the member countries included in the list by USTR were subject to different thresholds for determining if countervailing subsidies are “de minimis” and whether import volumes are negligible.
- Further, as per the Tariff Act of 1930, Congress delegated the responsibility to designate those WTO members whose imports would be subject to these special thresholds to the USTR.

#### **What is the USTR list of Developed, Developing and least-developed countries?**

- The office of USTR maintains a list of countries that it classifies as “developing”, “developed”, and “least-developed”.
  - Countries that are classified as “developing” are allowed to export certain goods to the U.S. without being hit by punitive tariffs that are usually imposed on goods from “developed” countries.
- USTR is required to publish this list of designations and update it if necessary in the Federal Register.
- To determine these designations, the USTR relies on data such as World Bank’s data on Gross National Income (GNI) and trade data obtained from the Trade Data Monitor.
- This also contains official data from national statistical bureaus, customs authorities, central banks and other such government agencies.

#### **Is such a classification justified?**

- Any classification of whether a country is “developing” or not is bound to be arbitrary. While the economic progress that India and China have achieved over the last few decades is seen by some as reason enough to get rid of their special status, others point to the various development indicators in which India and China still lag behind the rich world.
- The global community is further divided on its opinion on whether such a classification is required in the first place.

#### **Why is India being stripped of this status?**

- The U.S. administration under President Trump has repeatedly accused fast-growing countries such as India and China of wrongly claiming trade benefits that are reserved only for the truly developing countries.
- In support of its actions, the Trump administration has argued that countries like India and China have witnessed significant growth in the last few decades. This, it believes, is enough reason to scale back the various trade benefits.
- It has further cited the share of global trade enjoyed by India and China and their membership in the G20 club to argue that they enjoy significant economic power.
- Moreover, many developed countries also classify themselves as “developing” in order to escape tariffs.
- Therefore, Mr. Trump has sought to renegotiate trade deals with countries like China, essentially trying to make these deals more “fair” to the interests of the U.S.

The revocation of India's developing country status does not mean we have moved up the development ladder but it defines India's future trade relationship with the US.

#### **How does the revocation of developing nation status impact India?**

- India has traditionally been one of the largest beneficiaries under the GSP, with over 2,000 goods having been exempted from import tariffs. The GSP status was suspended in 2019. With the current change in India's status under the USTR's classification, the task of reclaiming the lost GSP benefits now becomes even harder.
- Indian export has remained under pressure due to increasing competition from other countries. With this move the exports might decrease.
- Apart from that, the CVD laws also allow the US to hold an investigation into the trade policies of other countries to determine whether they are harming the US trade. With India no longer in the list of beneficiaries, the US can now hold an investigation.
  - If the investigation finds that India's policies allow exporters to sell their products in the US at a lower rate and consequently harm the domestic traders there, the US can impose counter-vailing duty, a form of import tax, to make the Indian goods more expensive in the US markets.

#### **How will the U.S. decision affect global trade?**

- Any move to end duty-free access for foreign goods into the U.S., which becomes more likely after the change in trade status, will increase the overall tax burden on goods crossing international borders.
- This will add further pressure on the global economy, which has already witnessed a slowing of growth.
- Tariff war could rise further if countries that are stripped of their "developing" economy status decide to retaliate by imposing tariffs on goods that they import from the U.S.

#### **Conclusion**

- Thus India won't get special preference from US leading to drop in the exports and the global economy could witness tensions of trade war.

## **Listening to the call of the informal**

### **Introduction**

- This article discusses the formal sector and the informal sector in the economy.
- It speaks about how the Govt is focusing more on the formal sector and also plans to bring the chain of informal sector participants into the fold of the formal sector.
- This idea of formalizing the informal could impact the growth, reveals papers published by
  - Economist Seema Jayachandran for National Bureau of Economic Research.
    - She argues that there is no strong evidence from studies conducted in many developing countries that formalisation improves business outcomes.
  - Economist Santosh Mehrotra for the International Labour Organisation (ILO).
    - He calls formalisation an evolutionary process during which small, informal enterprises learn the capabilities required to operate in a more formal, global economy. He says they cannot be forced to formalise.

### **Advantages of Formalization**

- Formalisation reduces the last-mile expenses for the banks.
  - It also leads to more money in the banking sector which lower interest rates and brighten prospects of more lending by banks.
- With formality, tax collection and monitoring of firms become easy.
  - Thus it increases revenue for the Govt.

However, the process can also produce adverse outcomes for informal sector firms.

#### **Disadvantages of excessive formalization**

- A forced shift from the informal to the formal sector can lead to job losses.
  - This sector accounts for 40 per cent of the Indian economy and provides employment to 75 per cent of its labour force.
  - Any attempt to squeeze the sector is fraught with unwelcome consequences because this is where the bulk of our low skilled workers find employment.
- The unemployment crisis which we are currently witnessing in India can be reduced, as opportunities are provided in the informal sector to earn their wages.
- Rules laid by the Govt for formalization has helped the Govt but has increased the cost of operation for the informal sector that outweighs the benefits of formalisation.
  - If firms actually comply with all the regulation, their costs are too high to offer competitive prices to the customers.
  - Customers look elsewhere and the firms go out of business.

In fact, informal firms are able to improve their ability to do business in various ways.
- For example, small entrepreneurs gain from forming effective associations with their peers.
  - They benefit greatly from 'mentoring'.
- Skills of small entrepreneurs and their employees are best developed on-the-job. This is because they cannot afford the loss of income by taking time off for training.
- 'Soft' skills, to form associations, manage enterprises, matter as much for the success of the enterprises as 'hard' resources of finance and facilities. In fact, the productivity of enterprises depends on their soft skills.

#### **Future course of action**

- First, the government and its policy advisers must stop demeaning the informal sector and resist the temptation to reduce its size.
- Second, the development of an economy, from agriculture to the production of more complex products in the industry, is a process of learning.
  - Informal enterprises provide the transition space for people who have insufficient skills and assets to join the formal sector.
  - Large schemes to provide enterprises with hard resources such as money and buildings, which the government finds easier to organise, are not sufficient for the growth of small enterprises.
    - Policymakers must learn how to speed up the process of learning within informal enterprises.
- Third, policymakers must learn to support informal enterprises on their own terms. And they should not impose their own versions of formality on them for their own convenience.
  - Making it easy for MNCs and large companies to invest will not increase the growth of the economy if enterprises and incomes at the bottom of the pyramid do not grow.
  - Voice of rural entrepreneurs should also be considered by the Govt for drafting policies.
- Fourth, networks and clusters of small enterprises must be strengthened.



- They improve the efficiency of small firms by enabling sharing of resources;
- They give them more clout to improve the terms of trade in their favor within supply chains;
- They reduce the 'last mile costs' for agencies and providers of finance.
- Fifth, there is an urgent need for labour reforms where
  - Laws should be simplified.
  - Administration improved.
  - Improve the conditions of workers.
  - The purpose of 'labour reforms' must be changed to provide safety nets, rather than make the workers' lives even more precarious with misdirected attempts to increase flexibility.
- Finally, the social security framework for all citizens must be strengthened, especially for those who have to scramble for work in the informal sector.
  - Health insurance and availability of health services must be improved, and disability benefits and old-age pensions must be enhanced.

### **Conclusion**

- The thrust of the Indian government's policies should not be to reduce the size of the informal sector. Rather, it must be to improve working conditions for the citizens who earn incomes in the sector.
- Their safety at work, their dignity, and their fair treatment by employers must be the thrust of any reform.
- Indeed, even in developed industrial countries, the informal sector is growing with advances in technologies, the emergence of new business models, and growth of the gig economy.

## **Telcos asked to pay AGR dues immediately**

### **Background**


### Missed call

**2005:** Govt.'s definition of Adjusted Gross Revenue (AGR) calculation challenged by firms. Govt. says AGR includes all revenues while companies argue that it includes only revenue from core services

**2015:** Telecom Disputes Settlement and Appellate Tribunal rules that the companies' definition is right

**Oct. 24, 2019:** SC sets aside the tribunal's judgment saying govt.'s definition is right. Orders telecom firms to pay ₹1.47 lakh crore

**Feb. 14, 2020:** SC threatens telecom firms with contempt proceedings, slams officials for failing to enforce ruling



### **Context**

- The Supreme Court has pulled up telecom companies like Bharti Airtel and Vodafone Idea for not paying their Adjusted Gross Revenue (AGR) dues to the government.

### **Details**

- The SC had earlier directed that all AGR related dues had to be paid by January 23, 2020.
- A three-judge Bench, called the non-compliance with the judgment a "very disturbing scenario".

- It also initiated contempt proceedings against the telecom companies for not paying the AGR dues.
- The court also asked DoT to immediately withdraw the notification which said that there would be no coercive action against telcos.

#### **What exactly did the government notification say?**

- The Licensing Finance Policy Wing of the DoT on January 23, 2020 directed all government departments to not take any action against telecom operators if they failed to clear AGR-related dues as per the Supreme Court's order.
- The order came as a huge relief for operators — mainly Bharti Airtel and Vodafone Idea — that would have otherwise faced possible contempt action for not paying dues by the deadline.
- While there was no change in the amount they had to pay, it did buy them time as they hoped for relief from the Supreme Court, which was to then hear their plea seeking permission to negotiate the timeline for payment of dues with the DoT.

#### **Where does the government stand in this situation?**

- The payout by telecom and non-telecom companies is likely to lead to windfall gains for the central government, which could help it close some of the fiscal deficit gap for the current financial situation.
- At the same time, the government will be under pressure to ensure that the telecom market does not turn into a duopoly if Vodafone Idea does indeed decide to shut shop.

#### **Duopoly**

- It is a situation in the market where two service providers/ suppliers, of service/commodity, dominate or have exclusive control.
  - Vodafone Idea chairman Kumar Mangalam Birla had warned the struggling telco would be forced to shut shop if no government relief is coming forth on its AGR-linked statutory dues.
- At present there are three private players in the Indian mobile market – BhartiAirtel, Vodafone Idea and Reliance Jio – besides the state-owned operators BSNL/MTNL.
  - If the Vodafone Idea does exit, an Airtel-Jio duopoly will be created.
- But the Govt of India can ill afford a Vodafone Idea collapse, as it would badly hurt India's image among foreign investors and lead to huge job losses.

#### **Vodafone Idea exit may not be an issue**

- First, telecom tends to be a natural monopoly, and in most major markets, there are only two or three big players. In the US, AT&T and Verizon control more than 70 per cent of the wireless market, and the two weaker players – T Mobile and Sprint – are considered to be potential merger partners.
  - In short, the US may be headed for a three-player market in the foreseeable future.
- Second, the scenario in India has changed after the Modi government decided to pump Rs 56,000 crore to revive and revamp a large state sector player for strategic reasons.
  - Bharat Sanchar Nigam Limited (BSNL) and Mahanagar Telephone Nigam Limited (MTNL) are to be merged.

- The merged entity will be given spectrum for a 4G rollout. If BSNL becomes a strong third player, India will continue to have three large players even if Vodafone Idea exits.

#### **What does this situation mean for customers and lenders?**

- It could lead to bigger bills, considering it was the cut-throat competition in the sector that made mobile telephony and Internet almost universally affordable.
- The AGR issue has triggered panic in the banking industry, given that the telecom sector is highly leveraged. Vodafone Idea alone has a debt of Rs 2.2 lakh crore that it has used to expand infrastructure and fund spectrum payments over the years.
- The mutual fund industry has an exposure of around Rs 4,000 crore to Vodafone Idea.

## ***The high cost of raising trade walls***

### **Introduction**

India has recently sent out two indications which reflects, it turning inward and becoming protectionist.

- One, recent steps taken in the Budget
  - The Finance Minister spoke about the problems with Free Trade Agreements and Preferential Trade Agreements (FTAs and PTAs).
  - Tariffs on the import of more than 50 items were raised, and the Customs Act provisions were suitably amended to penalize imports suspected to originate from third countries.
  - The decision was taken to keep a check on growing imports which would have negative impact on Indian domestic Sector.
  - The Government through this move intends to devise stringent checks on the import.
- Two, India did not attend the Association of Southeast Asian Nations (ASEAN)-led Regional Comprehensive Economic Partnership (RCEP) trade agreement meeting held at Bali.
  - The government says it will now review all those agreements, in particular Trade Agreements (TAs) signed with the 10-nation ASEAN grouping, Japan (Comprehensive Economic Partnership Agreement, or CEPA) and South Korea (CEPA), and wants to “correct asymmetry” in negotiations with new partners.

### **Bilateral and multilateral Agreements**

- With India’s absence in the Bali meeting, it has sent a clear signal that it does not want to engage on the multilateral front but deal with countries bilaterally.
  - But for other countries, since they are part of multilateral grouping, any bilateral meeting with India could take place only after the multilateral process is completed. This also means that the other countries may not offer anything substantial on the bilateral level to India as they would be bound by multilateral RCEP agreement.
- India and Australia began Comprehensive Economic Cooperation Agreement (CECA) talks in 2011 but negotiations since then has not reached any consensus.
- India-United Kingdom have initiated the FTA talks too. However, it is unlikely that the U.K. will actually be able to proceed with a dialog until U.K.’s full withdrawal from the European Union (EU) is completed.
- India’s talks with the EU for a Bilateral Trade and Investment Agreement (BTIA) is unlikely to make much headway.

The motive may be to protect Indian markets from dumping but the consequence of the changes will put Indian importers on notice and discourage imports in general.

### **Should Government reconsider its decision?**

- The government has invoked the massive \$57-billion trade deficit with China to explain protectionist measures, but it forgets its own trade surpluses with smaller economies, particularly in the neighbourhood, where Indian exports form more than 80% of total trade with Nepal, Bangladesh, Bhutan and Sri Lanka, respectively.
- The world is now divided into regional FTAs, including
  - the North American Free Trade Agreement (NAFTA) for North America,
  - the Southern Common Market (MERCOSUR for its Spanish initials) for South America,
  - the Eurasian Economic Union (Russia and neighbours), the EU,
  - the African Continental Free Trade Agreement (AfCFTA),
  - the Gulf Cooperation Council (GCC) FTA in West Asia, and
  - The biggest of them all, RCEP, which minus India, represents a third of the world's population and just under a third of its GDP.
- With the door to RCEP all but closed, and the South Asian Association for Regional Cooperation (SAARC) virtually abandoned, India is not a part of any regional FTA.
- The trend across the world does not favor trade in services the way it does in goods, as most countries have turned migration-averse. India's strength in the services sector and its demand for more mobility for Indian employees, is thus becoming another sticky point in FTA negotiations.
- The debate over trade is as much about India's leadership ambitions in the world, and the factors that could inhibit its rise. It would be hard to argue that India can rise in Asia without closer trade links with the East or the backing of South Asia.

### **Conclusion**

- India's demographic might is certainly attractive for international investors, but only if that vast market has purchasing power and is not riven by social unrest and instability.
- Historically, the decline of colonial powers and more ancient empires can be traced to times when they turned inward and disengaged from foreign trade.
- Therefore in this modern, economically interconnected and technologically inseparable world, India should have an open mind on trade.

## **Why have LPG prices seen a sharp rise?**

### **Context**

- Liquefied Petroleum Gas (LPG) prices have been substantially raised

### **What influences LPG prices in India?**

- Domestic prices of LPG are based on a formula — the Import Parity Price (IPP), which is based on international LPG prices.
  - IPP represents the price that importers would pay in case of actual import of product at the respective Indian ports and includes the elements of Free on Board (FOB) price + Ocean Freight + Insurance + Custom Duties + Port Dues, etc.
  - Saudi Aramco's LPG price acts as the benchmark for the IPP
  - This dollar-denominated figure is converted into rupees before local costs — such as local freight, bottling charges, marketing costs, margins for oil marketing firms and dealer commissions and the Goods and Services Tax — are added.

- This helps the government arrive at the retail selling price for LPG.
- The government resets the LPG price every month, the decision being influenced by international prices and how the rupee has behaved against the dollar in the immediately preceding weeks.
- International LPG prices tend to move in tandem with the price of crude oil, the key raw material.

#### **What are the implications for the broader economy?**

- At a time when consumer demand, in general, for goods and services in the country has slumped, more cash in the hands of the retail consumer may have helped spur demand. It is ironic that the government has raised LPG prices now.
- It takes away disposable income from those consumers who pay market rates for LPG. As a result, household budgets are bound to go up, especially for those not availing the subsidy.
- The increase in LPG price could spur headline inflation even further.

#### **What is the outlook?**

- With international crude prices on the downtrend, it is plausible the LPG prices too would see a slump.

## **Youth can be a clear advantage for India**

### **Introduction**

- India's population is among the youngest in an ageing world.
- By 2022, the median age in India will be 28 years; in comparison, it will be 37 in China and the United States, 45 in Western Europe, and 49 in Japan.
- India's working-age population has numerically outstripped its non-working age population.
- A demographic dividend, said to have commenced around 2004-05, is available for close to five decades. This is an extraordinary opportunity.

### **There are however, two caveats**

- First, India's population heterogeneity ensures that this window of demographic dividend becomes available at different times in different States.
  - While Kerala's population is already ageing, in Bihar the working age cohort is predicted to continue increasing till 2051.
  - By 2031, the overall size of our vast working age population would have declined in 11 of the 22 major States.
- Second, harnessing the demographic dividend will depend upon the employability of the working age population, their health, education, vocational training and skills, besides appropriate land and labour policies, as well as good governance.
  - India will gain from its demographic opportunity only if policies and programmes are aligned to this demographic shift.

### **Demographic dividends**

- Demographic dividend refers to the growth in an economy that is the result of a change in the age structure of a country's population.
- There is consensus now that among other factors, it was the demographic dividend that powered respectively the Asian economies of Japan, China, and South Korea to spectacular growth.

- More significantly, in each case, the underlying pattern was fairly similar i.e., countries will benefit from the economic potential of their youth bulge when and where they succeed in providing good health, quality education, and decent employment to their entire population.

### **Need for skills**

- The Economic Survey 2019 calls for additional jobs to keep pace with the projected annual increases in working age population. We need a workforce that is well educated, and appropriately skilled.
- UNICEF 2019 reports that at least 47% of Indian youth are not on track to have the education and skills necessary for employment in 2030.
- The projected demographic dividend would turn into a demographic disaster if an unskilled, under-utilised, and frustrated young population undermines social harmony and economic growth.

### **Measures to improve quality education**

- National Family Health Surveys (completed up to 2015-16) confirm that poor infrastructure in government schools, malnutrition, and scarcity of trained teachers have ensured poor learning outcomes.
- High quality education achieves gender parity and propels people forward into more productive lives.
- A coordinated incentive structure prompting States to adopt a broadly uniform public school system focusing on equity and quality will yield a knowledge society faster than privatising school education can accomplish.
- Irrespective of rural or urban setting, the public school system must ensure that every child completes high school education, and is pushed into appropriate skilling, training and vocational education in line with market demand.
- Deploying new technology will help accelerate the pace of building human capital by putting in place virtual classrooms together with Massive Open Online Courses (MOOCs).
- It will help prepare this huge work force for next-generation jobs.
- The Govt. should invest on open digital universities which would further help yield a higher educated workforce.

### **Helping women**

- Growing female literacy is not translating into relevant and marketable skills. A comprehensive approach is needed to improve their prospects vis-à-vis gainful employment.
- Flexible entry and exit policies for women into virtual classrooms, and into modules for open digital training, and vocational education would help them access contemporary vocations.
- A mushrooming of job portals and organisations are providing employment for trained women, even from home. Equal pay for women will make it worth their while to stay longer in the workforce.

### **On health care**

- In India, population health is caught between the rising demand for health services and competition for scarce resources.
- The National Sample Survey Office data on health (75th round, 2018), shows that a deep-rooted downturn in the rural economy is making quality health-care unaffordable.

- People are availing of private hospitals less than they used to, and are moving towards public health systems.
- That is all very well except for the fact that the central budget 2020-21 lays emphasis on private provisioning of health care which will necessarily divert public investment away from public health infrastructure.
- The Ayushman Bharat Yojana links demand to tertiary in-patient care.
- This promotes earnings of under-utilized private hospitals, instead of modernizing and up-grading public health systems in each district.

#### **Improving Healthcare facilities**

- We need to assign 70% of health sector budgets to integrate and strengthen primary and integrated public health-care services and systems up to district hospital levels, include out-patient department and diagnostic services in every health insurance model adopted.

#### **Conclusion**

- The policies that we adopt, and their effective implementation will ensure that our demographic dividend, a time-limited opportunity, becomes a boon for India.

# INTERNATIONAL RELATIONS

## **Ajeya Warrior**

- It is Joint Military Exercise between India and the United Kingdom
- The joint military exercise will comprise of Indian and United Kingdom Army who would be sharing their experiences gained during conduct of various counter insurgency and counter terrorist operations in the past.
- The aim of this exercise was to conduct company level joint training with emphasis on counter terrorists operation in urban and semi-urban areas. Training on modern weapon systems, equipment and simulator training have also been planned.
- The exercise is conducted alternatively in the United Kingdom and India.
- The first edition of the exercise was conducted in 2013 at Belgaum, Karnataka.

### **Context:**

- The fifth edition of the Joint Military Exercise AJEYA WARRIOR – 2020 was conducted at Salisbury Plains, United Kingdom in February 2020.

## **Donald Trump's visit to India**

### **Context**

- U.S. President's first official visit to India.
- During his maiden visit to India President Trump and First Lady Melania were given a rousing welcome in the presence of more than one lakh people at the Motera stadium in Gujarat's Ahmedabad city.

### **India-U.S. trade**

- The world's oldest and largest democracies have been, by and large, stable trading partners to each other.
- At a broad level, U.S.-India trade in goods and services has grown at a steady clip from \$16-billion to \$142-billion during 1999-2018.

### **Details:**

- During this visit India and the United States have strengthened their partnership with agreements on healthcare and energy, and have issued a joint statement that designated the two countries as "Comprehensive Global Strategic partners" encompassing cooperation on maritime and space domain awareness, enhanced military exchanges and training, defense industry collaboration, secure 5G networks, sustainable infrastructure investments and efforts to combat terrorism and drug trafficking.
- Both sides also called upon Pakistan to rein in cross-border terror threats.
- Both sides also took note of the efforts of the ASEAN region to create a code of conduct in the South China Sea region.
- U.S. President Donald Trump invited Indian industry leaders to invest billions in America and promised reduced regulations to enhance the ease of doing business in the country.
- In support of global efforts to prevent, detect and respond to disease outbreaks such as novel COVID-19, Prime Minister Modi and the US President Donald Trump committed to continue their successful efforts in the areas of prevention, early detection and rapid outbreak response.



- The two hailed a bilateral Memorandum of Understanding (MoU) that seeks to promote access to high-quality, safe, effective and affordable medications for Indian and the US consumers.
- They also welcomed the conclusion of a MoU which will help both countries address mental health challenges through innovative approaches.

### **Positives:**

The U.S. President's recent visit to India has catalyzed progress on outcomes in defence, security and energy cooperation.

- Both sides have signaled more cooperation in defence, military exercises and technology sharing.
  - India would be purchasing \$3-billion worth of U.S. military equipment in the form of Apache and MH-60 Romeo helicopters.

## Deal done

India and the U.S. concluded agreements for the purchase of 24 MH-60R Seahawk and six AH-64E attack helicopters


### MH-60R SEAHAWK HELICOPTERS


- The procurement is through the Foreign Military Sales (FMS) route of the U.S. government and is worth **\$2.12 bn**
- MH-60R is the mainstay of the U.S. Navy's Anti-Submarine Warfare (ASW) capability
- These helicopters are being procured as replacement for 15 Sea King Anti-Submarine Warfare (ASW) helicopters de-inducted in 1991 and one Sea King 42B MRH lost in an accident. The current MRHs in service, Sea King 42Bs, were inducted in the 1980s and are in need of replacement
- They are capable of carrying out anti-ship, anti-submarine, electronic warfare, net-centric over-the-horizon offensive and defensive roles

### APACHE

- These will be operated by the Army and deployed with its strike Corps in the western sector
- In September 2015, India contracted 22 AH-64E attack helicopters at a cost of **₹13,951.57 crore** for the IAF and the entire fleet will be in service in 2020
- In August 2017, the government approved the procurement of six Apaches under the optional clause for the Army
- On June 12, 2018, the Defence Security Cooperation Agency notified the U.S. Congress of the possible sale to India
- Apache is a heavy attack helicopter and the most advanced craft currently in service globally
- India is the 16th nation to select the Apache and the AH-64E is its most advanced variant, Boeing said
- The Apache is the most advanced multi-role heavy attack helicopter in the world

The six Apaches and associated equipment will cost about **\$800 million**





- On security cooperation, the countries have stated the desire to improve coordination between the two in terms of joint military exercises and interoperability, as well as in fighting international crimes such as drug trafficking, narco-terrorism, human trafficking, organized crime and violent extremism.
- India is also set to significantly increase its energy imports from the U.S., particularly LNG after ExxonMobil signed a deal to improve India's natural gas distribution network.

Cynics are apt to downplay such visits as "all optics, low on substance". But high-level visits are not always about big agreements, particularly when relationships have matured and things are generally ticking along. "Optics" also serve their purpose: Leaders are human beings and appreciate a warm welcome, a large turnout, courtesy shown to their family, the effort that goes into a special event. Trump's personality lends itself eminently to such gestures. As he said during the Namaste Trump rally: "From this day on, India will always hold a very special place in our hearts."

### **Concerns:**

Though the visit has aided U.S.-India ties, there have been some concerns over the fact that the visit's concrete outcomes have not been substantive.

- The External Affairs Ministry had earlier claimed that at least five MoUs would be ready for signing during the visit. However, only three were ready by the visit. The signed MOUs dealt with health care and cooperation on LNG pipeline infrastructure in India.
- A few of the major deals that had been expected could not be completed during the visit.

- This included the conversion of a MoU for Petronet to invest in American gas company Tellurian into an agreement, as well as a commercial agreement for Westinghouse to build six nuclear reactors in Andhra Pradesh.
- Though both the leaders of India and the U.S. have time and again expressed concerns over China's hegemony in the South China Sea as well as China's Belt and Road Initiative, both have failed to outline the future course of action in their Indo-Pacific partnership.
- On the trade front, despite the long term negotiations, even a limited trade deal could not be finalized.

### **Conclusion**

- Several noted economists have noted that more economic openness would be to the benefit of not only India's trading partners but India also. The Indian government needs to acknowledge this and take appropriate steps.
- Given the ongoing slowdown in the Indian economy, meaningful reforms that improve the efficiency of land and labour allocation, that make investments in infrastructure attractive, and emphasize job creation, will help keep India on a strong footing vis-à-vis its strategic partners.
- The often tried and successful approach which involves a steady upward trajectory in mutual engagement by capitalizing on synergies and cleverly sidestepping roadblocks needs to be employed.
- The two governments must now strive to complete the unfinished agreements and set the course for their newly designated 'Comprehensive Strategic Global Partnership'.

## ***FATF Grey and Black List***

### **Context:**

- Financial Action Task Force's (FATF) Plenary session.

### **Background:**

- Pakistan was placed on the Grey List by the FATF in June 2018 and was given a plan of action to be completed by October 2019. It was meant to pressurize Pakistan to take action to curb terror financing and money laundering.
- The major aspects of the 27-point action plan involved the following.
  - The major aim was to shut down all access to funding of United Nations Security Council-designated terrorist groups, including the Taliban, al-Qaeda, the Lashkar-e-Taiba, and the Jaish-e-Mohammed.
  - Pakistan was also required to prosecute the leadership of the groups for any access to finance.
  - The Pakistan administration was required to tighten laws and banking security norms.
- In November 2019, Pakistan was judged to have complied with only four points of the plan. Subsequently, the FATF extended the deadline to February 2020.
- FATF had also warned that Pakistan would be put on the Black List if it did not comply with the provisions of FATF.

### **Asia Pacific Joint Group meeting:**

- The Paris-based Financial Action Task Force's (FATF) Asia Pacific Joint Group met in Beijing in January 2020 to scrutinize Pakistan's efforts to curtail terror financing and money laundering.
- The session noted that Pakistan had progressed in its efforts to avoid blacklisting.

- This observation was very important for Pakistan as it led to a plenary meeting in Paris in February 2020, where FATF would decide whether Pakistan remains on the grey list or is taken off.

#### **Details:**

- Pakistan has been retained on the 'grey list' of the FATF till June 2020.
  - Pakistan is one of the 18 countries on the grey list that are being reviewed for actions to stop terror financing and money laundering.
- FATF has stated that Pakistan had failed to comply with the deadlines in the action plan set by the FATF.
- The FATF report notes that Pakistan needs to improve in eight specific areas. The major concerns include:
  - Pakistan needs to demonstrate that it is identifying and investigating all terror-financing activities in the country.
  - It needs to freeze the funds of all the designated terrorists.
  - The prosecutions must result in effective, proportionate and dissuasive sanctions against all terror entities operating in its territory.
- In light of the terror financing risks emanating from Pakistan's jurisdiction, FATF has warned Pakistan to complete the 27-point action plan it has been given, by June 2020, failing which it risks being placed in the blacklist.
  - The blacklist refers to countries for whom there has been a call to action or are placed under strict banking and international financial sanctions. The blacklist of FATF presently includes Iran and North Korea.

#### **Significance:**

Pakistan's compliance:

- The grey listing of Pakistan has led to Pakistan meeting some demands placed by the FATF.
- Hafiz Saeed, head of the Jamaat-ud-Dawa (JuD) and the alleged mastermind of the 2008 Mumbai terror attacks, has been sentenced to jail in Pakistan for five-and-a-half years on terror finance charges.
- The conviction of Hafiz Saeed is a watershed movement, as this is the first time that he has been convicted despite the evidence against him being present for a long time. He is an UN-designated terrorist.
- The sentencing came days ahead of the crucial plenary meeting of the FATF. The conviction of Hafiz Saeed is the direct result of the intensifying pressure of the FATF.
- Saeed's conviction could also be a reflection of Pakistan's changing approach towards its treatment of terror groups, given the FATF's actions and warnings.

Upholding Indian interests:

- LeT is accused of operating with impunity from Pakistani soil to attack Indian security and government targets in Kashmir.
  - LeT has been involved in the 2001 shootout at Parliament.
  - The 2016 attack on the military headquarters in Uri was also planned by LeT.
- The conviction of Hafiz Saeed upholds India's long term argument of Pakistan supporting terrorist organizations.

#### More pressure on Pakistan:

- Pakistan is currently in a precarious financial situation.
  - Pakistan's inflation rate is in double figures. The country's macroeconomic position is under pressure due to a widening trade deficit and falling foreign exchange reserves.
- Being retained in the grey list could indicate further economic troubles for Pakistan.
  - It will be difficult for Pakistan to get foreign loans from the IMF, World Bank or Asian Development Bank. It would cause multilateral lenders such as IMF, the World Bank to hesitate before giving Pakistan a loan, which would further worsen its economic situation.
  - Grey-listing could also lead to a downgrade in Pakistan's debt ratings, making it more difficult to tap into the international bond markets.
  - No country or company would want to be doing business with a country that has possible ties with terrorist funding activities or lacks a process that prevents such activities. Hence, the cost of doing business in the country would increase manifold, besides drying up foreign investment in Pakistan.
- Inclusion in the grey list is not good for any country especially a country like Pakistan whose global reputation continues to suffer. Pakistan's inclusion in the terror financing list portrays a negative image to the world.
- If Pakistan is not removed off the grey list by April 2020, Pakistan may be moved to the 'black' list of countries. These countries are subjected to severe economic sanctions.
  - A FATF blacklisting would put in place barriers that would serve to isolate Pakistan's economy from the international banking system, introducing stricter checks and safeguards on transactions involving the country.

#### **Concerns:**

##### Lack of effectiveness:

- This is not the first time Pakistan has found itself on FATF's grey list. The country had faced a similar situation in 2008 and from 2012 to 2015. Despite this, there are reports of terrorist organizations existing in Pakistan with state support.
  - Pakistan has enabled the Lashkar-e-taiba, Taliban, Haqqani group, Al-Qaeda, and other terror groups to easily raise finances inside and outside the country. Despite international pressure, Pakistan has failed to act against it.
- Pakistan has not done anything about their banking system, which is very prone to money laundering.

##### Lack of intent on the part of Pakistan:

- Though Pakistan has acted against Hafeez Saeed, it is blamed for being selective in its actions. Some high profile steps seem to be orchestrated by Pakistan to avoid being downgraded to the blacklist.
- Pakistan has informed global terror financing watchdog Financial Action Task Force (FATF) that Masood Azhar, founder of terror outfit Jaish-e-Mohammad (JeM), and his family are missing bringing to light the double standards being employed by Pakistan and showing its lack of real intent in curbing terrorism.
- Important questions remain on whether Pakistan's actions are half-hearted steps aimed at avoiding the wrath of the international community or part of a genuine drive against terror.

#### Geopolitics at play:

- Although the FATF is a technical organization, there is no doubt that geopolitics and bilateral deals play a part in deciding outcomes. Members are politically influenced based on their respective interests.
- The recent changes in geopolitical equations might give Pakistan a breather from the FATF sanctions and might save Pakistan from going into the blacklist.
  - The larger geopolitical nature has changed, this is due to multiple factors such as withdrawal of the US troops from Afghanistan, Pakistan is the mediator between the USA and Taliban, for which the US President has voiced his appreciation.
  - Pakistan has also gathered the support of Turkey, Malaysia, and China. These countries agree that Pakistan should work towards reducing terror-financing, however, they also look at Pakistan as a strategic ally for their respective interests. These geopolitical dynamics will affect decision making at the FATF.
  - China has assumed the position of President of the FATF, and this might influence the decision of the FATF too.
- With China in the president's chair and the backing of Turkey and Malaysia, Pakistan could escape being blacklisted, as it needs only three to avoid falling into the FATF blacklist.
- Such a development may be a cause of worry for India. India has always taken a firm stand on Pakistan's efforts at curbing terror financing, while the other countries, although they agree with India, would still look at Pakistan from their strategic prism.

#### **Way Forward for India:**

- India has suffered at the hands of terrorists who were funded by Pakistan on multiple instances, so India should ensure that Pakistan is not removed from the grey list, by continuing to expose terrorism emanating from its land.
- India has done reasonably well in diplomatically isolating Pakistan on the international fora and exposing its links to terror funding and should continue trying to isolate Pakistan through diplomatic pressures. India should focus on emphasizing the urgency to control terror-financing and its related activities by Pakistan for the prevalence of world peace.
- India should keep adapting to the changing situation while trying to be an active member of all the international fora.

#### **Conclusion:**

- The international community shouldn't let up its pressure on Pakistan. Pakistan should be asked to take not just legal action against terror financing, but also hard measures against terror groups and infrastructure.
- Given the limitations of FATF sanctions, alternative ways have to be adopted to encourage Pakistan to take action against terrorism.

#### **Additional information:**

- The Financial Action Task Force (on Money Laundering) (FATF) is an intergovernmental organization founded in 1989 on the initiative of the G7 to develop policies to combat money laundering.
- The FATF Secretariat is housed at the OECD headquarters in Paris.
- As of 2019, FATF consists of thirty-seven member jurisdictions and two regional organizations. The FATF also works in close cooperation with many international and regional bodies involved in combating money laundering and terrorism financing.

- Since 2000, to fight money laundering and terror financing, the FATF maintains the current list of nations: FATF blacklist (formally called the “Call for action”) and the FATF grey list (formally called the “Other monitored jurisdictions”).
- Grey list includes those countries that have deficiencies in their Anti-money laundering and Countering terror financing regimes but they commit to an action plan to address these loopholes.
  - Countries in Grey list include Albania, The Bahamas, Barbados, Botswana, Cambodia, Ghana, Iceland, Jamaica, Mauritius, Mongolia, Myanmar, Nicaragua, Pakistan, Panama, Syria, Uganda, Yemen, and Zimbabwe.
- Blacklist countries are those which are judged to be non-cooperative in the global fight against money laundering and terrorist financing, calling them “Non-Cooperative Countries or Territories” (NCCTs)
  - The blacklist includes Countries like North Korea and Iran.

### **Mauritius FPIs can continue to invest in India, says SEBI**

#### **Context:**

- Mauritius was placed on the “grey list” by the Financial Action Task Force (FATF).

#### **Background:**

Mauritius in grey list:

- Mauritius has been a tax haven for foreign investors for the past three decades to invest in Indian stocks.
  - A significant percentage of foreign portfolio investors (FPIs) investing in the Indian market are registered in Mauritius.
  - Mauritius accounts for the second-largest chunk of foreign investments (after the United States), as per data from the National Securities Depository Limited (NSDL).
- For several years, there have been apprehensions about Mauritius being a money-laundering route for FPIs due to its limited regulatory oversight.

Concerns among investors:

- Mauritius being placed in the grey list led to apprehensions that the Mauritius-based FPIs will not be able to trade in the Indian capital market.
- Following the FATF notice, some fund managers approached SEBI, raising concerns over the validity of FPI registration done through the tax haven.

#### **Details:**

- In the backdrop of Mauritius’s greylisting, the Securities and Exchange Board of India (SEBI) has clarified that foreign portfolio investors (FPIs) from Mauritius will continue to be eligible for registration as foreign investors in India but subject to increased monitoring.
- Mauritius will henceforth work actively with the FATF to address strategic deficiencies in the regime to counter money laundering, terrorist financing, and proliferation financing.

### **Hafiz Saeed conviction**

#### **Context**

- Lashkar-e-Taiba founder (LeT) and Jamat-ud Dawa (JuD) chief Hafiz Saeed was convicted by a Pakistan court in two terror-financing cases and sentenced to five-and-a-half years in prison.
- Saeed and other leaders of his outfits were booked under charges of terror financing.

#### **Who is Hafiz Saeed?**

- Hafiz Saeed is the founder and leader of the Islamist terrorist organisation Lashkar-e-Taiba (LeT)
- The organisation was founded in 1990. Some of its goals are aligned with that of Pakistan, including the liberation of Kashmir from India.
- He is an UN-designated terrorist.
- He has a \$10 million bounty on his head by the U.S. government. Moreover, the US Department of the Treasury has marked Saeed as a Specially Designated Global Terrorist since 2012.

#### **Attacks by LeT**

- LeT has been involved in the 2001 shootout at Parliament
- Saeed is the mastermind of the 2008 Mumbai terrorist attacks.
- 2016 attack on the military headquarters in Uri was also planned by LeT.

#### **Previous Arrests**

- In 2017, he was arrested by the Pakistani government for raising funds for JuD, thereby violating UN sanctions.
  - He was, however, released in November 2017, when the courts refused to extend the duration of his house arrest due to lack of evidence.
- Saeed was put under house arrest several times, only to be released once the international attention turned away.

#### **Why does Hafiz Saeed conviction matter?**

- The conviction of Hafiz Saeed by an anti-terrorism court in Pakistan is the direct result of the intensifying pressure of the Financial Action Task Force
  - It was the FATF's placement of Pakistan in the "grey list", and repeated warnings that Pakistan's non-compliance with commitments to clean up its act could result in a blacklisting, that led to a crackdown against Saeed
- Saeed's conviction could also be a reflection of Pakistan's changing approach towards its treatment of terror groups, given the FATF's actions and warnings.

#### **Conclusion**

- This is the first time Pakistan has been forced to convict a man running a proxy army for its military and nurtured as a VIP for years, as a terrorist under its own law. India should welcome the sentencing. But question remains whether its actions are half-hearted steps aimed at avoiding the wrath of the international community or part of a genuine drive against terror.
- So, the international community shouldn't let up its pressure on Pakistan. Islamabad should be asked to take, not just legal action against terror financing, but also hard measures against terror groups and infrastructure.

#### **Munich Security Conference (MSC)**

- It is an annual conference which debates international security policy.
- It has been held in Munich, Germany since 1963.

- The objective is to build trust and to contribute to the peaceful resolution of conflicts by sustaining a continuous, curated and informal dialogue within the international security community.
  - It provides a platform for official and non-official diplomatic initiatives, bringing together leaders and security experts from across the world and their ideas to address the world's most pressing security concerns.
- The conference assembles more than 450 senior decision-makers and thought leaders including heads of state, ministers and personalities from international and non-governmental organisations, industry, media, academia and civil society, to engage in intensive debate.
- It publishes Munich Security Report, an annual digest of relevant figures, maps, and research on crucial security challenges.

#### **Context**

- External Affairs Minister attends Munich Security Conference

### ***Sampriti***

- It is a Joint military exercise between India and Bangladesh
- It is hosted alternately by both countries. The exercise was first held in Assam in 2011.
- The exercise is aimed to strengthen and broaden the aspects of interoperability and cooperation between the Indian and Bangladesh Armies.
- The exercise involves tactical level operations in a counter insurgency and counter terrorism environment under the UN mandate.
- In addition to understanding each other in tactical level operations, emphasis is also laid for greater cultural understanding to strengthen military trust and cooperation between the two nations.

#### **Context:**

- Sampriti concluded at Umroi, Meghalaya.

### ***India to study air corridors for trade with Central Asian countries***

#### **Context:**

- The External Affairs Minister has said that, apart from developing trade via the Chabahar port in Iran, India would like to explore setting up “air corridors” between India and five Central Asian nations.

#### **Details:**

- The air corridors — similar to what India established in 2018 with Afghanistan — would include regular cargo flights with special clearing and customs facilities to expedite the movement of goods, especially fresh fruit and other agricultural produce.
- The air corridors are currently being discussed. The India Central Asia Business Council has brought together Indian businessmen and diplomats from five Central Asian countries: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.
- The India Central Asia Business Council is being set up by the Federation of the Indian Chambers of Commerce and Industry (FICCI).

#### **Current Scenario:**



- At present, most of the trade between Central Asia goes via Bandar Abbas in Iran, northern Europe or China.
- In recent years, the government has been seeking to develop more direct routes from Chabahar, a trilateral arrangement with Iran and Afghanistan, the International North South Transport Corridor (INSTC) and becoming a part the Ashgabat Agreement.
- However, the rail-link between Chabahar and the crossover into Afghanistan is yet to be developed, which would be an important part of growing regular trade.

#### **Importance of air corridors with the five Central Asian countries:**

- It is believed that it is a matter of concern that a lack of overland connectivity (a reference to barriers to transit trade through Pakistan) has kept the total trade between India and Central Asia quite low at approximately \$2 billion per year.
- India has made progress in overcoming this challenge through the Chabahar route.
- India, Iran and Afghanistan believe that Chabahar will become the fulcrum of connectivity for Indian goods to reach Afghanistan and further north to Central Asian states, and for the landlocked Central Asia to find access to the ocean through this port.
- Union budget 2020-21 has announced a Rs. 100 crore investment to develop the Iranian port.
  - While flying time from Delhi for most of the Central Asian destinations is two hours, it may take two months for containers sent overland from India to reach these places.
  - The availability of air corridors can boost trade in perishable goods, agricultural and food products.

#### **Way forward:**

- Apart from connectivity, visa procedures need to be streamlined further in order to grow services, especially medical tourism that brings hundreds of patients from Central Asia to India each year.
- Efforts are needed to further boost trade in energy, agro and food processing, tourism and pharmaceuticals.

### **India, African countries resolve to fight terror**

#### **Context:**

- India and several African countries have pledged to deepen cooperation to combat the growing threat of terrorism and preserve maritime security by sharing information, intelligence and surveillance, in a joint declaration adopted at the first India – Africa Defence Ministers’ conclave at the Defexpo 2020.
- The dialogue was attended by 12 Defence Ministers and 38 countries were represented at the Conclave.

#### **Details:**

- The Lucknow Declaration said “We condemn, in the strongest terms, the growing threat of terrorism and acknowledge that it constitutes a major threat to peace and security in the region. We urge all countries to take resolute action in rooting out terrorism in all forms and manifestations, terrorist safe havens and infrastructure, disrupting terrorist networks and eliminating financing channels and halting cross-border movement of terrorists. We understand the need for all countries to ensure that all territory under their control is not used to launch terrorist attacks on other countries in any manner,” emphasizing the need for stronger

international partnership in countering terrorism and violent extremism, including through increased sharing of information and intelligence.

- The Declaration also called for strengthening the UN Counter-Terrorism mechanisms and to ensure strict compliance with the UN Security Council sanctions regime on terrorism.
- The Declaration said that it seeks to increase cooperation in securing sea lines of communication, preventing maritime crimes, disaster, piracy, illegal, unregulated and unreported fishing through sharing of information and surveillance.

## **India ticks off Turkish President Recep Tayyip Erdogan for his remarks on Kashmir**

### **Context**

- Speaking to MPs at a joint session of Pakistan's Parliament, Turkey's President Recep Tayyip Erdogan expressed Turkey's affection for Pakistan and strongly backed its position on Kashmir.

### **Turkey-Pakistan: Traditional good ties**

- Turkey and Pakistan have historically had good relations. This was the fourth time that Erdogan addressed Pakistan's Parliament in Islamabad
- The Turkey-Pakistan friendship goes back to the days of the Cold War, when both countries were American allies.

### **Kashmir and terror-financing**

- India's relations with Turkey have been deteriorating steadily in recent times. This is linked primarily to Turkey's support for the Pakistani position on Kashmir, as well as its backing of Pakistan at the FATF.

### **India's Stand**

- India urged Turkey to not interfere in its internal affairs and reminded Ankara of the threat of terrorism emanating from Pakistan.
- It has also rejected all references to Jammu and Kashmir as J&K is an integral and inalienable part of India

## **India inks 14 MoUs with Russia for defence support, spares**

### **Context**

- In the 5th India Russia military industry conference held during the Defexpo 2020 in Lucknow, 14 MoUs were signed between Indian and Russian companies.

### **Details**

- Much of Indian military equipment is sourced from Russia. There is a lack of timely spares and support for such equipment. The MoU will address the issue of regular spares and support for Russian military equipment which are currently being used by the armed forces in India.
- It will cover joint ventures covering a range of equipment from modern T-90 tanks to legacy Pechora air defence systems (surface-to-air missile system).

- Under the proposed Indo-Russian Joint Venture ICT Center of Excellence, there are also agreements on emerging technologies like Artificial Intelligence, Internet of Things, block chain and robotics based on Russian technologies.
- One important MoU was signed between the Bharat Dynamics Limited (BDL) and the Almaz Antey of Russia for exploring the feasibility of establishing a joint venture in India for the production of various subsystems of “air defence missile systems like Tunguska, Kavadrat, the OSA-AKA, Pechora air defence system as well as the Shilka self-propelled air defence gun system”.
  - The MoU also covered refurbishment and life extension of the missiles.

# ART AND CULTURE

## **Basaveshwara**

- He is also known as Bhaktibhandari/ Basavanna.
- Basava was a 12th century Indian philosopher, Kannada poet in the Shiva-focussed Bhakti movement and a social reformer during the reign of the Kalachuri-dynasty king Bijjala I in Karnataka.
- His life and ideas are narrated in the sacred text of the south Indian Hindu Lingayat community, the Basava Purana.
- Basava spread social awareness through his poetry, popularly known as Vachanaas.
- Basava rejected gender or social discrimination, superstitions and rituals such as the wearing of sacred thread, but introduced Ishtalinga necklace, with an image of the Shiva Linga, to every person regardless of his or her birth, to be a constant reminder of one's bhakti (devotion) to Shiva.
- Vachana is a prosaic form well known in the Kannada literature which propagates values of universal brotherhood.

### **Contribution to society**

- He had promoted a culture of collective discussion which was called 'Anubhav Mantapa'. This is remembered as one of the world's first parliaments where people were encouraged to speak their mind irrespective of their social status.
- This was also a unique experiment of gender equality as women were also encouraged to take part in discussions and express their views.
- He discarded his brahminical identity and argued for a non-hierarchical society. His message was inclusive and argued for a diverse society and rejected an exclusive State favouring one caste or one religion.
- Basavanna encouraged men and women from the lowest of the lower castes to practice social equality and actively participate in building and contributing to a healthy society.

### **Context**

- Hon'ble President of India speaks about Basaveshwara at the Hindu 'Huddle' event at Bengaluru

## **Bhakta Ramadasu**

- He was a 17th-century Indian devotee of Lord Rama and a composer of Carnatic music
- He is famous for his soul-stirring devotional lyrics on Lord Rama and constructing Sri Sitaramachandra Swamy temple in Bhadrachalam in the 17th century.
- He is a famous Vaggeyakara (classical composer) from the Telugu classical era.
- His contemporaries include the stalwarts of Telugu literature such as Tallapaka Annamayya, Tyagaraja, Kshetrappa, and Shyama Sastri.

### **Context**

- An 11-foot imposing bronze statue of Bhakta Ramadasu, the renowned saint composer of the 17th century, was unveiled at his birthplace, Nelakondapalli

## ***Chindu Bhagavatam***

- The Chindu Bhagavatam also called as Chindu Yakshaganam is a drama type art which is widely performed in Telangana.
  - Most of the stories narrated are from 'Bhagavatam'.
- It is similar to Yakshaganam, a traditional theatre form particular to Karnataka State.
- Chindu is derived from the artistes' caste Chindu Madiga, a sub-caste of Madiga among SCs.
  - The word 'Chindu' in Telugu means 'jump', as their presentation is interspersed with leaps and jumps
  - The Chindu artistes lead a nomadic life, hence the low literacy rate among them.
- The art form dates back to second century BC.

### **Context**

- Metro trains in Hyderabad will be designed with images related to Telangana's art and culture, including festivities such as Bathakumma, visuals of indigenous folk and classical dances and art like silver filigree ware.
- Under folk and tribal art Chindu Yakshaganam was included.

## ***International Mother Language Day***

- International Mother Language Day is celebrated on February 21.
- In 1999, the United Nations Educational, Scientific and Cultural Organization (UNESCO) had declared February 21 as International Mother Language Day, and this was formally recognised in 2008 by the United Nations General Assembly (UNGA) as well.
- It has been observed since 1999 to promote "linguistic and cultural diversity and multilingualism"

### **A look at key stats**

- Of the world's 6,000 languages, 43% are estimated as endangered, according to the UN.
- On the other hand, just 10 languages account for as many as 4.8 billion speakers — over 60% of the world population.

#### **WORLD TOP 10, 2019 (mn)**

English	1,132
Mandarin	1,117
Hindi	615
Spanish	534
French	280
Standard Arabic	274
Bengali	265
Russian	258
Portuguese	234
Indonesian	199

Source: Ethnologue

#### **INDIA TOP 12, 2011 (mn)**

Hindi	528
Bengali	97
Marathi	83
Telugu	81
Tamil	69
Gujarati	55
Urdu	51
Kannada	44
Odia	37
Malayalam	35
Punjabi	33
Assamese	15

Source: Census 2011

### **Why February 21?**

- UNESCO declared International Mother Language Day in 1999, to commemorate a 1952 protest against West Pakistan's imposition of Urdu as the official language of East Pakistan (present-day Bangladesh).
- In 1948, the government of Pakistan, based in the western part of the new country, announced that Urdu would be its only state language.
- This sparked protests among the Bengali-speaking people of East Pakistan (now Bangladesh; then East Bengal), who saw the Bangla language as intrinsic to their national identity.
- To demolish the protest, the government of Pakistan outlawed public meeting and rallies. The students of the University of Dhaka, with the support of the general public, arranged massive rallies and meetings.
  - On 21 February 1952, police opened fire on rallies. Salam, Barkat, Rafiq, Jabbar and Shafiur died, with hundreds of others injured.
  - This is a rare incident in history, where people sacrificed their lives for their mother tongue
- In Bangladesh, since 1953, February 21 is observed as Ekushe Day, after the Bengali word for twenty-one.

### **India**

- It is celebrated as Matribhasha Diwas by the HRD Ministry across the country.
- MHRD along with educational institutions and language institutions have been celebrating the Matribhasha Diwas for the past three years.
- Educational institutions organize activities like elocution, debating, singing, essay writing competitions, painting competitions, music and dramatic performances, exhibitions, online resources and activities as well as events exploring the cognitive, economic, social and cultural activities of a multilingual society, exhibitions depicting the linguistic and diverse wealth of India in at least two languages and also more.
- The theme for 2020 is "Celebrating our Multilingual Heritage".

### **Kaka Hathrasi**

- Kaka Hathrasi is counted among the foremost poets of 'haasya' (humour) and 'vyanga' (satire) in Hindi literature.
- Born Prabhulal Garg, he took the name 'Kaka Hathrasi' based on his hometown, Hathras in Uttar Pradesh, and on the popular character of a 'Kaka' (uncle) he had essayed in a play.
- Hathrasi was honoured with the Padma Shri in 1985 for his contributions to Hindi literature.
- Apart from humour, he wrote on classical dance and music under the pen name 'Vasant'. Kaka Hathrasi was also an accomplished painter.

### **Context**

- Replying to the Motion of Thanks to the President's address in Rajya Sabha on Thursday (February 6), Prime Minister Narendra Modi quoted Hindi poet Kaka Hathrasi

### **Kambala**

- It is an annual buffalo race held in Karnataka

- The contest generally takes place between two pairs of buffaloes.
- It is a popular sport among the farming community of the State.
- In this traditional race the jockey runs along with the buffaloes he is shepherding
- The kambala racetrack is a slushy paddy field.



## ***Konark Sun Temple***

- Konark Sun Temple is located in East Odisha near the sacred city of Puri.
- It is a 13th century temple and was declared a UNESCO world heritage site in 1984.
- The temple is designed in the shape of a colossal chariot. Dedicated to the sun god, the temple marks the highest point of achievement of Kalinga architecture.
- The temple is attributed to king Narasinga Deva I of the Eastern Ganga Dynasty
- This temple was called the "Black Pagoda" in European sailor accounts as early as 1676 because its great tower appeared black.
  - Similarly, the Jagannath Temple in Puri was called the "White Pagoda".
- It remains a major pilgrimage site for Hindus, who gather here every year for the Chandrabhaga Mela around the month of February

### **Context**

- A plan to restore and preserve the nearly 800-year-old Konark Sun temple in Odisha would be drawn up soon.

## ***Sammakka Saralamma Jatara/ Medaram Jatara***

- It is a tribal festival of honoring the goddesses celebrated in the state of Telangana
- It commemorates the fight of a mother and daughter, Sammakka and Saralamma, with the reigning rulers against an unjust law.
- It is held every two years (biennially)
- The Sammakka Sarakka Jatra is a State Festival of Telangana.
- The rituals related to the Goddesses are entirely conducted by Koya tribe priests, in accordance with Koya customs and traditions.
- Medaram is a remote place in the Eturnagaram Wildlife Sanctuary, a part of Dandakaranya

- Eturnagaram Wildlife Sanctuary is a wildlife sanctuary located in Eturnagaram village in Telangana
- It is believed that after Kumbha Mela, the Medaram jatara attracts the largest number of devotees in the country.

## ***Surajkund International Crafts Mela***

### **Context**

- The President of India, inaugurated the 34th Surajkund International Crafts Mela in Surajkund, Haryana.

### **Details**

- Every year from 1–15 February, a colourful traditional craft festival of India is held in the precincts of Surajkund.
- This fair was first started in 1987
- Traditional craftsmen (artists, painters, weavers and sculptors) from all parts of the country participate in this annual celebration named as the “Surajkund Crafts Mela” or “Surajkund designer’s Village”
- The mela is organized by the Surajkund Mela Authority & Haryana Tourism in collaboration with Union Ministries of Tourism, Textiles, Culture and External Affairs.

### **Aims and Objectives**

- To identify languishing and lesser-known crafts and to introduce them to patrons
- To display crafts and loom techniques by organising demonstration sections in the Mela grounds
- To undertake the promotion of export of handlooms and handicrafts

### **Significance**

- The Surajkund Mela has saved India’s various remarkable craft traditions from extinction.
- For many craftsmen, artisans and weavers, this fair is major source of their annual income.



# SCIENCE AND TECHNOLOGY

## ***GISAT-1 (Geo Imaging Satellite)***

- It is Indian Earth Observation (EO) satellite, to be placed in a geostationary orbit of around 36,000 km.

### **Application**

- With this satellite, which has high-resolution cameras, we can keep a constant watch on our borders, monitor any changes in the geographical condition of the country
- The EO sats are apparently for benign uses such as land and agriculture watch.
- But their images also have a very important use for the military, for keeping an eye on the borders.

### **Context**

- ISRO making preparations to launch GISAT1 in March 2020.

## ***National Science Day***

- India celebrates National Science Day on February 28 every year to commemorate the discovery of the Raman Effect.
- Sir CV Raman discovered the effect in 1928 and was awarded the Nobel Prize in Physics in 1930.
- National Science Day is celebrated across schools and other educational institutes to spread the message of the importance of science in daily life.
- On this day, light is shed on efforts and achievements in the field of science and dialogue is held on implementing new technologies

### **Context**

- National Science Day (NSD) was celebrated at Vigyan Bhawan on February 28 with women in science as the focal theme of the programme.

## ***Technology Group***

### **Context:**

- The Union Cabinet has approved the constitution of an empowered “Technology Group”.

### **Details:**

- It is a 12-member Technology Group with the Principal Scientific Adviser to the Government of India as its Chair.
- This Group is mandated to render timely policy advice on the following:
  - Latest technologies.
  - Mapping of technology and technology products.
  - Commercialisation of dual use technologies developed in national laboratories and government R&D organisations.
  - Developing an indigenisation road map for selected key technologies.
  - Selection of appropriate R&D programs leading to technology development.

The Group has been formed to overcome the challenges that were seen in the Indian technology domain:

- Silo-centric approaches to the development of technology.
- Technology standards were either not developed or applied, leading to sub-optimal industrial development.
- Dual use technologies were not being optimally commercialised.
- R&D programs were not aligned with efforts at technology development.
- There was a need for the mapping of technologies important for applications in society and industry.

#### **Impact**

- The Group will render the best possible advice on technology to be developed for a technology supplier and the technology procurement strategy.
- It will develop in-house expertise in aspects of policy and the use of emerging technologies.
- It will also ensure the sustainability of public sector technology developed/being developed at PSUs, national labs and research organisations.

#### **The three pillars of the Technology Group:**

- Policy support
- Procurement support
- Support on R&D proposals

### **Yaravirus**

- It is named after Yara – or Iara, a water-queen figure in Brazilian mythology.
- The virus was discovered from Lake Pampulha, an artificial lake in the Brazilian city of Belo Horizonte.
- Scientists have identified a virus whose genome seems to be almost entirely new to science, populated by unfamiliar genes that have never before been documented in viral research.
  - They found that most of them had never been seen in any other viruses.
- The Yaravirus infects amoeba.
  - In other viruses that affect amoeba, the researchers say that there are some similarities in their characteristics that are missing in the Yaravirus.

#### **Inference**

- The amount of unknown proteins composing the Yaravirus particles reflects the variability existing in the viral world and how much potential of new viral genomes are still to be discovered.

# SECURITY AND DEFENCE

## **Bodo Accord**

### **1. Background**

#### **Who are the Bodos?**

- They are an ethnic and linguistic group speaking Tibeto-Burman languages, residing in the Brahmaputra valley in the northeast of India.
- The Bodos are the largest plains tribe in Bodoland Territorial Autonomous District (BTAD) straddling four districts – Kokrajhar, Chirang, Baksa and Udalguri – of western Assam.
- The word 'Bodo' has been derived from the word 'Bod' which means Tibet. The Bodos speak the Bodo language.
- Bodos traditionally practise Bathouism, which is the worshiping of forefathers, known as Obonglaoree.

#### **British Rule and loss of economic and political freedom**

- A very complex economic situation had developed in the societies of Brahmaputra Valley of Assam with the taking over of power by the British imperialists.
- This new form of economy unfolded new complexities with serious socio-economic and political ramifications into the medieval society of the Valley.
- Much of the 19th century was a time of economic degradation, displacement and land alienation for the Bodo people. This may also perhaps be seen as loss of political power of the Bodos.

#### **Socio-economic grievances of the Bodos**

- The policies and developmental activities of the Government could not bring the desired socioeconomic development for the Bodo community. This impacted immensely on the Bodo psyche
- In the years, following independence, most of the Bodo grievances remained unattended to by the Government. As a result problems of land alienation, poverty, indebtedness, severe unemployment, economic exploitation and cultural and political neglect became increasingly acute among them.
- There were two prime reasons behind the Bodo demand for a separate state.
  - One was the matter of economic under development of the community
  - Other of course was the rising political aspirations of the Bodo leaders.

#### **Waves of Protests**

- The First trouble across the Bodo domain began in 1930s when Bodo leader Kalicharan Brahma submitted a memorandum to Simon Commission, demanding a separate political set-up for the indigenous and the tribals of Assam.
- The second wave of demand to 'divide Assam 50-50' in the late 1960s fizzled out like the first.
- The third movement turned violent in 1986 with the establishment of National Democratic Front of Bodoland (NDFB)

## **2. Birth of National Democratic Front of Bodoland (NDFB)**

- The Bodo movement had Ranjan Daimary, who in 1986, formed an armed organisation called the Bodo Security Force (BdSF).
- The BdSF was renamed as the National Democratic Front of Bodoland.
  - The NDFB under Daimary killed, kidnapped and extorted mercilessly—and had built a reputation of being brutally unrelenting towards anyone who didn't toe its line.

### **Objectives**

- The purported objective of this outfit is to secure a "Sovereign Bodoland" in the areas north of the river Brahmaputra.
- While the other Bodo groups, such as the Bodo Liberation Tigers (BLT), demanded a separate state within Indian Territory for the Bodo people, the NDFB wanted a separate country for itself.
- The NDFB was originally founded to protect the interests of the Bodos; but, over the years, this objective was diluted, and it joined hands with the ULFA (United Liberation front of Asom), which fights against the non-Assamese domination in the State.
- Their objectives did put the NDFB at logger heads with other Bodo outfits

### **Areas of Operation**

- During its active days, the areas in the north and north-west of the river Brahmaputra in Assam formed the main expanse of operation of the outfit.

### **Operations on NDFB**

- The army came down heavily on the NDFB in the '90s in a series of counter operations, forcing them to retreat to Bhutan.
- Bhutan did provide a safe haven, but not for too long.
- In the early 2000s, the Indian Army with the help of the Royal Bhutan Army launched a massive operation to eliminate NDFB militants hiding in Bhutan.
  - Operation All Clear was a military operation conducted by Royal Bhutan Army forces against Assam separatist insurgent groups in the southern regions of Bhutan
- NDFB realized their cadre strength was decreasing and was running out of options.
- Finally in 2005 tripartite agreement was signed between the government of India, the Assam government and NDFB for holding peace talks.

In 2008, the group submitted its demand of a separate Bodoland, and the talks didn't go far. The NDFB suffered a major split when founder chairman Ranjan Daimary was accused of being involved in serial blasts. In the immediate aftermath, Ranjan Daimary was expelled from the party.

## **National Democratic front of Bodoland-Progressive (NDFB-P)**

- Vice-president B. Sunthagra (alias Dhiren Boro) declared himself the new president and gave the organisation a new name: National Democratic front of Bodoland-Progressive (NDFB-P).
- It was just a splinter group, which wanted to talk with the government.
- The faction led by Ranjan Daimary was called the NDFB (R), after his name.

### **Arrest of Daimary**

- In 2010, Daimary was apprehended by the Bangladeshi security forces, who handed him over to their Indian counterparts. Daimary was released in 2013.
- Daimary, had given up his demand for a sovereign state and was willing to negotiate with the government without any pre-condition.

### **NDFB(S)**

- While Daimary was in jail though, his deputy, Ingti Kathar Songbijit, who was firmly against any kinds of peace talks and unwavering in his demand for a separate Bodoland, split from the outfit along with his supporters and formed the NDFB(S).
- Songbijit's quit the group in 2016 and formed the People's Democratic Council of Karbi Longri (PDCK)
- The outfit he left behind continued to be called the NDFB-S as B. Saoraigwra, a former leader of the All Bodo Students' Union, took over as chairman.

### **3.Bodo Accord 2020**

- The Central and Assam governments and the NDFB's Saoraigwra faction, or NDFB-S, signed a tripartite agreement for the cessation of operations.
  - The Saoraigwra faction agreed to shun violence and join the peace process.
  - The NDFB-S is the third and last faction of the outfit
- The All Bodo Students' Union (ABSU), which has been spearheading a movement for a Bodoland State since 1972, and another group called United Bodo People's Organisation were also signatories to the accord.
- The Memorandum of Settlement (MoS) said "All NDFB factions under SoO [Suspension of Operations] shall abjure path of violence, surrender their weapons and disband their armed organisations within one month of signing this MoS,"
- The 2020 agreement says the Government of Assam "will notify Bodo language in Devanagiri script as the associate official language in the state".

### **What is the Bodoland Territorial Council (BTC)?**

- It is an autonomous body under the Sixth Schedule of the Constitution. There have been two Bodo Accords earlier, and the second one led to the formation of BTC.
- The ABSU-led movement from 1987 culminated in a 1993 Bodo Accord, which paved the way for a Bodoland Autonomous Council (BAC), but ABSU withdrew its agreement and renewed its demand for a separate state.
- In 2003, the second Bodo Accord was signed by the extremist group Bodo Liberation Tiger Force (BLTF), the Centre and the state. This led to the BTC.

### **What was agreed on territory?**

- The area under the jurisdiction of BTC, formed under the 2003 Accord, was called the Bodo Territorial Autonomous District (BTAD). The BTAD will now be renamed Bodoland Territorial Region (BTR).
- The new Accord provides for "alteration of area of BTAD" and "provisions for Bodos outside BTAD". A commission appointed by the state government will examine and recommend if villages contiguous to BTAD and with a majority tribal population can be included into the BTR while those now in BTAD and with a majority non-tribal population can opt out of the BTR.

- The government will set up a Bodo-Kachari Welfare Council for focused development of Bodo villages outside BTAD — which opens up a way to potentially address the needs of Bodos outside BTAD.

### BTAD NOW, BTR TOMORROW



### **Rehabilitation Program**

- The Cadres of NDFB will be rehabilitated by Centre and Assam Government. They will be assimilated in the mainstream and will surrender
- The generous terms promise an expanded area to be renamed as BTR, a ₹1,500-crore development package, and greater contiguity of Bodo-populated areas.
- The MoS says that the criminal cases registered against members of the NDFB factions for “non-heinous” crimes shall be withdrawn by the Assam government and in cases of heinous crimes it “shall be reviewed case by case according to the existing policy”.
- Families of those killed during the Bodo movement will be given ₹5 lakh

### **How is the 2020 Accord different from the earlier Accords?**

- Unlike the 2003 Accord which clearly identified 3,082 villages to be included in Bodoland Territorial Council (BTC)
  - 2020 Accord ambiguously points to the inclusion of contiguous tribal majority villages outside BTC area within BTR while simultaneously excluding non-tribal majority areas that are not contiguous with the Sixth Schedule area within BTC.
    - It is thus clear that the Accord seeks to perpetuate Bodos’ “self-rule” and territorial control in BTR by exclusively privileging their political, social, cultural and identity interest over everything else.
- Again, unlike the two tripartite accords signed by the Bodo rebels in 1993 and 2003, the 2020 Accord specifically seeks to invest BTC with “legislative” power in addition to “executive, administrative and financial” powers on 12 additional subjects including trade and commerce, welfare and development of minorities/indigenous faith.
- The 2020 Accord also enlarges the scope of representation by increasing the strength of BTC from 40 to a maximum of 60 members.
  - However, unlike the 2003 Accord which clearly reserved 35 of the 40 elected seats for tribals (read as Bodos), this agreement does not specify the seat share of Bodos and other non-Bodo communities.

### **Advantages of Peace deal**

- It successfully brings together the leading stakeholders under one framework.
- Those who were previously associated with armed resistance groups will now be entering the mainstream and contributing to our nation's progress.
- The Accord with Bodo groups will further protect and popularise the unique culture of the Bodo people.
- They will get access to a wide range of development oriented initiatives.

### **Concerns**

- The failure to envision a power-sharing arrangement with non-Bodos makes the BTR a very weak "shared-rule" model of autonomy. This weakness could induce violence and deepen ethnic fractionalisation.
- The conspicuous absence of reference to legal safeguards to land extended by the 2003 Bodo Accord to non-Bodos on matters pertaining to, inter alia, land settlement, ownership and inheritance of property would make them more vulnerable

### **Other extremist organizations not part of Peace deal**

- The peace deal with NDFB-S leaves very few members of Kamtapur Liberation Organisation (KLO) still at large with their leader Jiban Singh, while the PDCK a group of miscreants is not a signatory to this pact.

### **Conclusion**

- If the accord delivers what it promises, it would lead to the end of one of Northeast's long running insurgencies.
- But for the Northeast to truly enjoy fruits of peace and development, and become a bridge between India and Southeast Asia under New Delhi's Act East policy, other insurgency movements too need a negotiated settlement.

## **Clause 6 of Assam Accord**

- It envisaged that appropriate constitutional, legislative and administrative safeguards, shall be provided to protect, preserve and promote the cultural, social, linguistic identity and heritage of the Assamese people.
  - "safeguards" as reservation of electoral seats, and land and political rights
    - safeguards also include rights over natural resources and protection of culture of the indigenous people
  - It also seeks to ascertain who fits into the definition of an Assamese.

### **Examples**

- The Srimanta Sankardeva Kalakshetra Society was established under clause 6 of the historic Assam Accord and committed to work for preservation, promotion and upliftment of culture of the people of Assam.
- For the construction of the complex, the Ministry of H.R.D. Govt. of India funded Rs. 18.85 crores and Govt. of Assam funded Rs. 1.50 crores the total construction cost being 20.35 crores.

- Rs. 21.00 Crore has been granted as financial assistance to 219 Nos. of Satras of Assam.
- Archaeological Survey of India has taken up the protection, preservation and development of important sites.

Although some steps have been taken in the past to fulfil the commitment given in this regard, state government and AASU have repeatedly stated that this clause remains to be implemented fully

#### **Context**

- The high-powered committee that the Centre constituted in July 2019 for the implementation of Clause 6 of the Assam Accord of 1985 submitted its report to the State's Chief Minister

#### **High Level Committee**

Its objectives included

- Examining the effectiveness of actions since 1985 to implement Clause 6 of the Assam Accord.
- It was supposed to hold discussions with all stakeholders and assess the required quantum of reservation of seats in Assam Legislative Assembly and local bodies for Assamese people.
  - The Committee was to assess the requirement of measures to be taken to protect Assamese and other indigenous languages of Assam
  - Quantum of reservation in employment under Government of Assam
  - Other measures to protect, preserve and promote cultural, social, linguistic identity and heritage of Assamese people.

## **Conference on Combating Drug Trafficking**

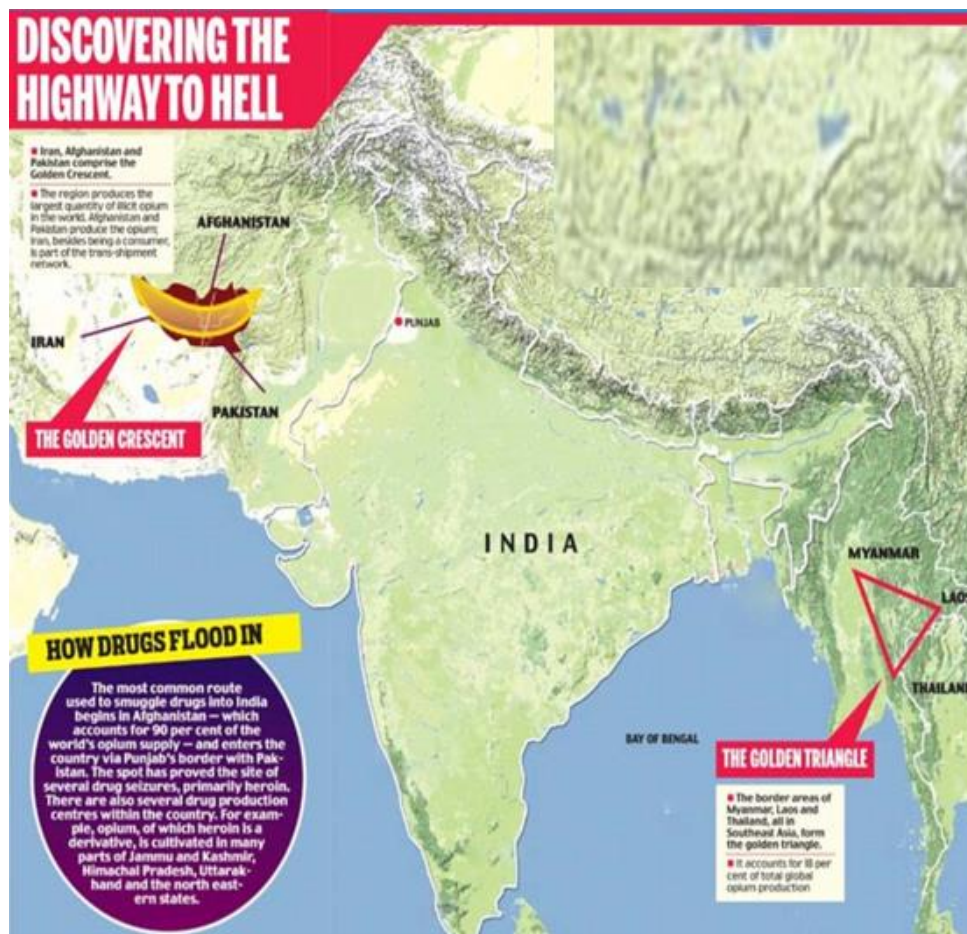
#### **Context**

- The BIMSTEC 'Conference on Combating Drug Trafficking' concluded in New Delhi

#### **Geographical Proximity to drug-producing region and concerns**

- The geographical vicinity to both Golden Crescent and Golden Triangle, major opium production regions of the world, puts all the BIMSTEC Partner Nations in a very precarious position.
- India's position is more vulnerable as we are sandwiched between Golden crescent and Golden Triangle.





- Another area of concern is drug trafficking through sea route that affects BIMSTEC Nations.
- Further, the BIMSTEC region is one of the most thriving centers of pharmaceutical manufacture and trade. It is also in very close proximity to China, which is another leading country in the Pharma sector. This has also made the BIMSTEC region very vulnerable to the diversion and trafficking in Pharmaceutical Drugs.

### Recommendations

- They envisaged a better intelligence/information sharing platform for the member Nations.
- Focus should be laid on the rehabilitation measures and community partnership approach which will require best practices to be shared by the members
- BIMSTEC Partner Nations will have to come together and work in a coordinated fashion to uproot the evils of the illicit drug trade and global terrorism by establishing infrastructure for training of drug enforcement officials, ensuring the interoperability of law enforcement agencies to take coordinated action for devising new strategies to prevent the use drugs
- The scientific community needs to engage in research and invest more in the R&D sector.

### Light Utility Helicopter (LUH)

- The indigenous Light Utility Helicopter (LUH) being developed by Hindustan Aeronautics Limited (HAL) has received the Initial Operational Clearance (IOC).

- The LUH is a 3-ton class helicopter is meant for reconnaissance and surveillance roles.
- It is powered by a Safran-HAL Shakti single turbo shaft engine capable of handling high altitude missions.
- The choppers will replace the aging Cheetah and Chetak helicopters along with the Russian Ka-226T helicopters.

## ***Operation ‘Dolphin Nose’***

### **Context:**

- Thirteen Navy personnel, were arrested on charges of espionage, as they had leaked highly sensitive information to the Pakistan intelligence operatives.

### **Details:**

- The National Investigation Agency (NIA), Naval Intelligence and the Counter Intelligence of Andhra Pradesh have arrested the sailors from different States and naval bases.
- The NIA’s investigations have found that huge sums of money were transferred to the Navy personnel who passed on crucial information.
- The investigating agencies are questioning bank officials on why suspicious transactions were not flagged and the concerned authorities alerted.

### **Concerns:**

- The arrested Navy personnel reportedly revealed the names of the ships and submarines, top-level officers, routes they operate and details of other colleagues recruited recently from various naval bases.
- They also disclosed some vital locations and movements of warships and submarines.
- The Naval Intelligence, NIA and the State and Central agencies, who collected the details of the bank transactions and the chats between the sailors and the women reportedly arranged by the Pakistani handler, confirmed that several transactions were made.

### **Operation ‘Dolphin Nose’:**

- The Intelligence wing in concert with Central Intelligence agencies and naval intelligence had launched Operation Dolphin’s Nose.
- They kept a vigil on the movements of suspects in the Navy of different bases, their mobile phones & social media contacts and unearthed the espionage racket.

### **Terror angle:**

- The National Investigation Agency is also probing whether any terror groups were involved and the plan behind gathering this intelligence.
- The investigating agencies are checking if terror groups were planning to target the Navy or carry out a major operation through the sea route.

### **Context**

- The Ordnance Factory Board (OFB) has handed over Sharang, the first 130mm M-46 artillery gun upgraded to 155mm to the Indian Army.

### **Details**

- The gun's range has now increased from 27km to over 36km with the upgrade.

### **Significance**

- It has more explosive capability and hence more damage potential.
- This step will reduce the logistic trail of the Army as it does away with the need to carry 130mm shells and support equipment as the mainstay of the Army's long range artillery is 155mm guns.

### **Other weaponries of Indian Army**

The Army inducted its first modern artillery guns system in 2018.

- M-777 Ultra-Light Howitzers (ULH) from the U.S.
- K9 Vajra-T self-propelled artillery guns.
- The Army has also in service Bofors 155mm guns.
- The 155mm Dhanush towed gun system, developed based on the Bofors guns, is under induction.

## ***Maharashtra tops list of States hit by global medical data leak***

### **Context:**

- According to a recent report published by Greenbone Sustainable Resilience, a German cybersecurity firm, medical details of over 120 million Indian patients have been leaked and made freely available on the Internet.

### **Details:**

- The first report was published in October 2019, in which Greenbone revealed a widespread data leak of a massive number of records, including images of CT scans, X-rays, MRIs and even pictures of the patients.
- The follow-up report, which was published in November, classifies countries in the "good", "bad" and "ugly" categories based on the action taken by their governments after the first report was made public.
- India ranks second in the "ugly" category, after the U.S.

### **Issue:**

- Greenbone's original report says the leak was facilitated by the fact that the Picture Archiving and Communications Systems (PACS) servers, where these details are stored, are not secure and linked to the public Internet without any protection, making them easily accessible to malicious elements.
- The number of data troves containing this sensitive data went up by a significant number in the Indian context a month after Greenbone's initial report was published.
- The updated report also places Maharashtra at the top of the States affected by the leak.

### **Concerns:**

- The fact that PACS servers are vulnerable to attack or are accessible is not new information, and there have been a number of reports on this topic in the past.
- No report, however, has dealt with the breadth and depth of the problem associated with unsecured PACS servers.
- The leak is worrying because the affected patients can include anyone from the common working man to politicians and celebrities.
- In image-driven fields like politics or entertainment, knowledge about certain ailments faced by people from these fields could deal a huge blow to their image.
- The other concern is of fake identities being created using the details, which can be misused in any possible number of ways.

**Conclusion:**

- Any communication between a doctor and a patient was a privileged one. A doctor or a hospital is thus ethically, legally and morally bound to maintain confidentiality.

## ***Odisha plans projects in Naxal stronghold***

**Context:**

- Developmental work in Naxal strongholds.

**Background:**

- Maoist violence has killed nearly 12,000 in the last two decades and has severely affected developmental works in many regions.
- Recognizing the threat posed by Left Wing Extremism, the government has formulated a dual strategy to solve the problem of Naxalism. It involves using both force and development as a strategy to combat the Naxal influence.

**Details:**

1. Counter-Insurgency operations and Area Domination:

- Swabhiman Anchal in Odisha's Malkangiri district is considered a stronghold of the CPI (Maoist).
- The Odisha police claim to have established their domination in 70% of Swabhiman Anchal.
- Along with the Odisha police and their counterparts in Andhra Pradesh, paramilitary forces such as the BSF and the CRPF are deployed in the area consisting of 151 villages.

2. Developmental work:

- Swabhiman Anchal had remained outside the ambit of development for years due to its remoteness, poor connectivity, hilly and inhospitable terrain and the presence of Naxalites in the region who opposed any developmental work in the region.
- Avoiding a top-down approach in development, the government is considering taking decisions based on the needs and interests of the locals.
- The State government has planned many development projects to counter the Maoist influence in the region and build goodwill among the residents of the region.

*Livelihood programmes and irrigation facilities:*

- The administration would be promoting turmeric cultivation by replacing the prohibited cannabis cultivation which has been acting as a source of finance for the Naxalites. Integrated farming would be introduced in the area.
- The administration is contemplating taking up millet cultivation in the region given the suitability of the crop to the region. It is also planning on procuring the surplus produce from villages.
- To help agricultural activities and also ensure water availability, lift irrigation projects have been planned.
- The administration proposed to provide an 11-kV power line exclusively for irrigation projects.

*Critical road networks:*

- The Odisha government has managed to construct a bridge over the Gurupriya River despite stiff resistance from the extremists, ending its decades-old remoteness.

*Forest Rights Act (FRA):*

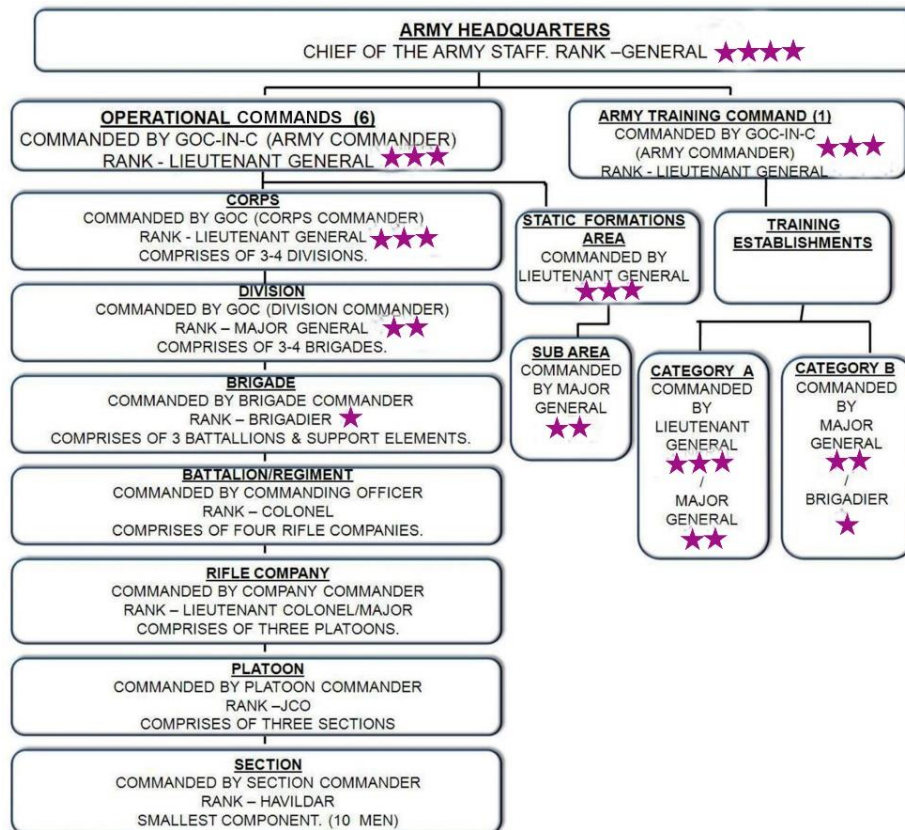
- Implementation of the Forest Rights Act (FRA) has been given priority.
- Approval and sanction of Community Forest Rights (CFR) and Individual Forest Rights (IFR) under the FRA have been prioritized as the prompt sanction of titles under the FRA is seen as a confidence-building measure in Swabhiman Anchal.
- The government will emulate the model of Maharashtra where CFR has been granted in an expeditious manner for making tribals partners in development.

## ***Should women be given command posts in the Army?***

**Background**

- The Supreme Court (SC) was hearing a petition which demanded permanent commission for women in the Army.

**Structure**



### What is the issue?

- The Indian Army is what is called a command-oriented Army. That is, anyone who has to be given further positions up the chain of command has to first be experienced in command at the level of a full Colonel, a unit command. So far, this was denied to women. That is the main issue.

### Arguments put forward by the Govt.

- The central government told the SC that “motherhood, childcare, psychological limitations” have a bearing on the employment of women officers in the Army.
  - Family separation, career prospects of spouses, education of children, prolonged absence due to pregnancy, motherhood were a greater challenge for women to meet the exigencies of service.
- Physical Standards: Soldiers will be asked to work in difficult terrains, isolated posts and adverse climate conditions. Officers have to lead from the front. They should be in prime physical condition to undertake combat tasks. The Govt. said women were not fit to serve in ground combat roles.
- Army units were a “unique all-male environment”. The presence of women officers would require “moderated behaviour”.
  - The male troop predominantly comes from a rural background and may not be in a position to accept commands from a female leader.
- The government further said it is also keeping in mind the “greater family demands and danger of them being taken as prisoners of war”.

- Both male and female prisoners are at risk of torture and rape, but misogynistic societies may be more willing to abuse woman prisoners.

### **Arguments in government affidavit against commanding posts for women in the Army are wrong and discriminatory**

- A quick look at the past records reveals, all the arguments put forth against giving women more responsibility have been answered by the armed forces by giving women greater responsibility in uniform — the IAF has allowed women to become fighter pilots, and the Army has sent them to tough UN peacekeeping missions globally.
- The current case in the Supreme Court is not about granting a role to women in combat arms but about the denial of equal opportunity in their existing roles for promotion to higher commands.
  - Women officers are already commanding platoons, companies and second in command successfully, with male soldiers accepting orders from them as part of a professional force.
  - Now they are being excluded from commanding a unit, only on the basis that they are women. This argument doesn't hold water.
  - A professional force does not discriminate on the basis of gender, it works because of training, norms and culture.
- Denying women the posts will be an “extremely retrograde step” and “will inflict irreparable injury” to their dignity.

### **Way forward**

- There is a board of officers to decide whether promotions to the rank of Colonel can take place or not for a particular officer. It's not as if all male officers get automatically promoted as Colonels.
  - In some cases, in some services, less than 30% of male officers are promoted to the rank of Colonel. The decision is made by a board of officers.
  - Let the same board of officers decide whether a woman officer is fit to command a unit.
- Women should be judged on the basis of their professionalism and on the basis of merit.

### **Conclusion**

- There is no need to give women any special dispensations but the government cannot promote discrimination on the basis of gender.
- It must move towards gender mainstreaming in the army, and further achieve gender equality by establishing professional standards and adhering to them without any bias.
- Whether man or woman, if someone has demonstrated capability and leadership qualities, their orders will have to be accepted. Soldiers respect professionalism, good leadership, irrespective of whether it is demonstrated by a male or a female officer. In the Army, soldiers are trained to do that.



# ENVIRONMENT AND ECOLOGY

## ***Arth-Ganga***

### **Context**

- During the first meeting of the National Ganga Council, the Prime Minister mentioned the Arth Ganga model. He said that 'Namami Gange' should gradually evolve into 'Arth Ganga'.

### **Details**

- It is a sustainable development model through economic activity.
- As part of this process, farmers should be encouraged to engage in sustainable agriculture practices, including zero budget farming, planting of fruit trees and building plant nurseries on the banks of Ganga.
- Priority could be given to women Self Help Groups and ex-servicemen organizations for these programs.
- Such practices, along with creation of infrastructure for water sports and development of camp sites, cycling and walking tracks etc., would help to tap the 'hybrid' tourism potential of the river basin area- for purposes of religious as well as adventure tourism.
- The income generated from encouraging eco-tourism and Ganga wildlife conservation and cruise tourism etc. would help to generate sustainable income streams for cleaning of Ganga.
- For monitoring the work progress and activities from various schemes and initiatives under Namami Gange and Arth Ganga, PM also gave directions for the setting up of a Digital Dashboard where data from villages and urban bodies should be monitored on a daily basis by Niti Ayog and Ministry of Jal Shakti.

### **Significance**

- Arth-Ganga project will boost economic development and inclusive growth for farmers, small traders and villagers

## ***Cauvery delta to be declared a protected agriculture zone***

### **Context:**

- Tamil Nadu Chief Minister stating the government's intention to declare the Cauvery Delta region as a Protected Special Agriculture Zone.

### **Details:**

- Tamil Nadu Chief Minister has announced that the Cauvery delta region comprising of eight districts would be declared as a Protected Special Agriculture Zone.
- The eight districts include Thanjavur, Tiruvarur, Nagapattinam, Pudukottai, Cuddalore, Ariyalur, Karur and Tiruchirapalli.
- The move is aimed towards preventing the implementation of oil exploration projects and other hydrocarbon projects in the Cauvery delta region and will help not only ensure food security of the State but also livelihood opportunities of the farmers and other agriculture-based labourers.
- The state government is also considering allowing only agro-based industries in the river Cauvery fed regions.



- The State government would hold consultations with legal experts, and steps would be taken to enact special legislation to implement the government's intention.

#### **Background:**

Hydrocarbon resources in the region:

- The Central government had stated in 2017 that two areas, Karaikal located in Puducherry and Neduvasal located in Tamil Nadu awarded under DSF (Discovered Small Field) bidding round have an in-place volume of 4,30,000 metric tonnes of oil and oil equivalent gas.
- Subsequently, more than 700 wells have been drilled for extraction of oil and gas in Tamil Nadu. Given the possibility of more reserves in the region, there have been exploratory drilling activities in the surrounding regions.

Amendment of the Environment Impact Assessment Notification of 2006:

- Recently, the Environment Ministry had issued a notification, amending the EIA rules. It dealt with granting exemption to oil and gas firms involved in exploratory drilling, from seeking environmental clearance.
- The notification would allow companies to carry out hydrocarbon exploration activities without applying for an Environmental Impact Assessment (EIA) and holding public consultations.
- Amid fears that the exploratory drilling would lead to the destruction of agricultural fields in the Cauvery delta, affect the fragile ecosystem of the region and have health hazards, there have been protests from environmentalists and farmers in the region.

Agricultural Protection Zoning:

- Agricultural Protection Zoning (APZ) is a practice followed in the United States.
- APZ refers to local zoning codes, which include provisions such as large lot size requirements and use limitations, to separate farming and related activities from other land uses.
- It helps preserve the availability of agricultural lands for farming and thus the agricultural base of the community, by constraining non-agricultural development and land uses in designated areas.
- The Cauvery delta region is an important agricultural region in Tamil Nadu and considered the rice bowl of the state. Also given the fact that the delta region is close to the sea, there is a need to safeguard the region.

#### **Significance:**

- The main intention behind the announcement is according recognition to farmer concerns about hydrocarbon exploration and according primacy to food security, given the fact that the Cauvery delta region produces 33 lakh tonnes of grains in 28 lakh acres.
- Agricultural scientists such as M.S. Swaminathan have for long mooted the idea of protected special agricultural zones. Uttarakhand and Kerala states have similar mechanisms in place.
- Kerala, as part of its agricultural development policy, introduced the concept of Special Agricultural Development Zones (SAZ) in 2017-18.
  - It envisages better convergence of governmental efforts and result oriented scheme preparation and implementation in identified potential zones.
  - Contiguous areas based on the minimum area under the selected crop, the potential for production, soil and climatic conditions, etc. are the criteria for the selection of zones.
  - Production, marketing, processing, value addition, storage, irrigation facilities would be provided in each zone.

- The facilities in the SAZ would also involve Agro Service Centres including soil testing labs, plant health clinics, weather stations, planting materials production units, processing and value addition units, irrigation support, credit interventions, extension services including ICT based initiatives, community Radio and farmers markets.

#### **Challenges:**

- In 2017, a state government notification delineated 45 villages covering about 23,000 hectares in Cuddalore and Nagapattinam districts in the delta, as a Petroleum, Chemical, and Petrochemical Investment Region. This was directed at attracting investments worth ₹90,000 crores into the region.
- The proposed PSAZ appears as a reversal from the previous stand of the government. This can lead to litigation from companies which have pumped in money for exploration activity in the region.
- Given the recent episode of the closure of the Sterlite Copper plant, the present decision may reduce the attractiveness of TN as an investment-friendly state. This might have implications for the State's investment climate.

#### **Climate Change Adaption-North Eastern Region (CCA-NER)**

- CCA-NER is an Indo-German development project financed by the German Ministry for Economic Cooperation and Development (BMZ).
- The program aims to strengthen adaptive capacities of target groups, therewith reducing their vulnerabilities to climate change in a target-oriented manner.
- The program is being implemented in the states of Meghalaya, Nagaland and Sikkim representing different geographical and bioclimatic zones of the eastern Himalayan Biodiversity Hotspot with rural population as the target group, which is being strengthened for adapting better to the likely consequences of climate change.
- Some key activities carried out are in the areas of Eri Silk value chain, Bamboo value chain, Spring-shed management, marketing linkages for organic products of North-Eastern region, Honey bee value chain and MDoNER-NEC Knowledge Management portal.

#### **Convention on Migratory Species (CMS)/ Bonn Convention**

- The Convention on Migratory Species (CMS) is an intergovernmental treaty, concluded under the aegis of the United Nations Environmental Programme (UNEP), concerned with the conservation of wildlife and habitats on a global scale and in particular terrestrial, aquatic and avian migratory species throughout their range.
  - Migratory species are those animals that move from one habitat to another during different times of the year, due to various factors such as food, sunlight, temperature, climate, etc.
  - The movement between habitats, can sometimes exceed thousands of miles/kilometres for some migratory birds and mammals. A migratory route can involve nesting and also requires the availability of habitats before and after each migration.
- CMS provides a global platform for the conservation and sustainable use of migratory animals and their habitats.
- CMS brings together the States through which migratory animals pass, the Range States, and lays the legal foundation for internationally coordinated conservation measures throughout a migratory range.

- CMS complements and co-operates with a number of other international organizations, NGOs and partners in the media as well as in the corporate sector.
- Its Secretariat is in Bonn, Germany.

### **India**

- India has been a Party to the CMS since 1983.
- India is temporary home to several migratory animals and birds. The important among these include Amur Falcons, Bar headed Gheese, Black necked cranes, Marine turtles, Dugongs, Humpbacked Whales, etc.

### **Appendix**

- Migratory species threatened with extinction are listed on Appendix I of the Convention.
  - CMS Parties strive towards strictly protecting these animals, conserving or restoring the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them.
  - Besides establishing obligations for each State joining the Convention, CMS promotes concerted action among the Range States of many of these species.
- Migratory species that need or would significantly benefit from international co-operation are listed in Appendix II of the Convention.

For this reason, the Convention encourages the Range States to conclude global or regional agreements.

### **Agreements and MoU**

- The agreements may range from legally binding treaties (called Agreements)
- Memoranda of Understanding are less formal instruments and can be adapted to the requirements of particular regions.

### **Context**

- Prime Minister inaugurated the 13th Conference of Parties on Conservation of Migratory Species of Wild Animals in Gandhinagar, Gujarat through videoconference.

### **Animal Culture Linked to Conservation for the first time at UN Wildlife Conference in India**

#### **What is Animal Culture?**

- It is the learning of non-human species through socially transmitted behaviors
- It is being linked to conservation action for the first time.

#### **Examples**

- There is evidence that whales, dolphins, elephants and primates acquire some of their knowledge and skills through social learning.
- In addition to individual learning, some animals may learn socially from adults or peers about various behaviours, including optimal migration routes.

#### **1. Nut-Cracking Chimpanzees**

- The species can crack open different types of nut by using stones and pieces of wood as a hammer and anvil.

- Despite nuts, stones and wood being commonly available, nut-cracking skills occur only in the most westerly parts of this subspecies' range spanning Guinea, Sierra Leone, Liberia and Côte d'Ivoire, and not in other populations across Africa.
- Scientists say this cultural capacity enables these Chimpanzees to survive dry seasons in their western habitats.
- Such behaviour could enhance survival prospects of chimpanzees in areas showing climate induced changes to vegetation.

### **Significance**

- Protecting cultural knowledge among peers and across generations may be vital for the survival and successful reproduction of certain species.
- Supporting individuals that act as 'repositories' of social knowledge such as elephant matriarchs, or groups of knowledgeable elders, may be just as important as conserving critical habitat.
- Understanding how Sperm Whales pass on valuable information to their offspring or why some groups of Chimpanzees have a culture of cracking nutritious nuts with stone tools while others do not, can be key to evaluating conservation challenges for such species.

### **Context**

- The Convention on the Conservation on Migratory Species of Wild Animals (CMS) has been spearheading efforts to use scientific knowledge on animal culture, to better protect endangered wildlife.
- Scientific research has made significant progress in animal culture.

## **Cyrtodactylus Urbanus**

- Guwahati has yielded a new species of lizard – the urban bent-toed gecko.
  - The new species of lizard is zoologically named *Cyrtodactylus urbanus*
- It is markedly different in molecular structure, blotch and colour from the *Cyrtodactylus guwahatiensis*, or the Guwahati bent-toed gecko
- Though the urban bent-toed gecko falls within the *khasiensis* group, it differs from other members of this group in mitochondrial sequence data as well as aspects of morphology such as the number and arrangement of certain pores in males, the number of mid-ventral scales and colour pattern.
- This is the second *Cyrtodactylus* endemic to the Guwahati region, the fourth from Assam and the twelfth from Northeast India.



## **Highway threatens tiger territory in Arunachal Pradesh**

### **Context**

- The State Government of Arunachal Pradesh intends to build a highway through the 862 sq km Pakke Tiger Reserve (PTR) in East Kameng district.

- The Government had in the past built a highway through the Namdapha National Park.

#### **Details**

- The project is named the East-West Industrial Corridor which is a proposed elevated corridor at the tiger reserve, to be constructed at an estimated cost of Rs.2,550 crore.
- The highway aims to connect Bhairabhunda in West Kameng district and Manmao in Changlang district along Arunachal Pradesh's border with Assam.
- The argument over an elevated corridor at the PTR was that it can ensure the free movement of wild animals.
- The state government felt the project would enhance connectivity and develop the state's foothill areas into economic and industrial zones.

#### **Issue Area**

- Trees may have to be felled and pillars erected from the ground. Petrol, diesel and other materials will be transported, leading to loss of natural habitat.
- This corridor will be a threat to the adjoining Nameri Tiger Reserve in Assam too.

#### **What should the Govt. do?**

- The Government, while building such a mega project, should consult renowned conservation organizations in the area and also bring all stakeholders who will be impacted by the project on to the negotiating table.

#### **Pakke Tiger Reserve (PTR)**

- It lies in the foothills of the Eastern Himalaya in the East Kameng district of Arunachal Pradesh.
- It falls within the Eastern Himalaya Biodiversity Hotspot.
- Pakke is also the only Hornbill sanctuary in India.
- The vegetation is predominantly tropical semi-evergreen forest.
- What makes PTR special are the brilliant efforts of the Forest Department and local communities like that of the Nyishi Tribe who inhabit the area around the park to protect the wildlife here.

#### **Indian Pangolin**

- IUCN Status: Endangered
- Out of the eight species of pangolin, the Indian Pangolin and the Chinese Pangolin are found in India. Both these species are listed under Schedule I Part I of the Wildlife (Protection) Act, 1972.
- It is an insectivore, feeding on ants and termites, digging them out of mounds and logs using its long claws.
- It is nocturnal and rests in deep burrows during the day.

#### **Unique Attributes**

- Its overlapping scales on its body act as armour.
- It can curl itself into a ball as self-defense against predators such as the tiger.
- The color of its scales varies depending on the color of the Earth in its surroundings.

#### **Threats**

- The Indian Pangolin is threatened by hunting for its meat and for various body parts used in traditional medicine.

- In traditional Chinese medicine, pangolin scales are also believed to treat a wide variety of conditions including Psoriasis and poor circulation.

#### **Context**

- Scientists have, for the first time, radio-tagged the Indian Pangolin.
- Tagging the animal will help them understand the habits of the reclusive, nocturnal animal.

#### **Radio-tagging**

- It involves attaching a transmitter to an animal to monitor its movements.
- Several wild animals — tigers, leopards and migratory birds — have been tagged over decades.

#### **Significance**

- It will curb wildlife poaching.
- It will ensure better survival rates and thus have a positive impact on the population of these endangered species.

### **Indian Tent Turtle**

- Indian Tent Turtle (*kachuga tecta tecta*) is a species of turtle that gets its name from its tent-like appearance.
- *Kachuga tecta* is found in parts of northern India, Pakistan, Nepal and Bangladesh, along the plains of Ganga, Indus, and Brahmaputra rivers.
- This omnivorous species inhabits slow-running rivers and stagnant water bodies such as ponds, puddles, tanks, roadside ditches.
- Possession of this species of turtles is strictly prohibited as it is a scheduled species as per the Wildlife Protection Act, 1972.

### **Malai Mahadeshwara Wildlife Sanctuary**

- It is a protected Wildlife sanctuary in the Eastern Ghats and is located in the state of Karnataka.
- The predominant forest type of the sanctuary is dry and moist deciduous forests.
- The sanctuary is contiguous with both BRT Tiger Reserve on the western side and Satyamangalam Reserve in Tamil Nadu on the southern side.



### **Context**

- M.M. Wildlife Sanctuary will be the new tiger reserve after approval from the National Tiger Conservation Authority (NTCA).

### **Why is it being granted the tiger reserve status?**

- It is because this is a unique geographical zone that acts as a bridge between the Western and Eastern Ghats.

### **Details**

- Once notified, Chamarajanagar district will have the rare distinction in the country of harbouring three tiger reserves.
  - It already has Bandipur and Biligiri Ranganatha Temple (BRT) Tiger Reserve within its territorial limits.
- Karnataka currently has 5 Tiger Reserves namely, Bandipur, Bhadra, Nagarahole, Dandeli-Anshi and BRT Tiger Reserves.
- The sanctuary will be renamed as Malai Mahadeshwara Hill Tiger Reserve (MMH TR) with a core area of 670.95 sq km spread across Malai Mahadeshwara Reserve Forest, Hanur Reserve Forest and Yediyarahalli Reserve Forest. The buffer will be spread over 235.19 sq km.

### **Measures that will be taken for their protection**

- There are 39 anti-poaching camps in MM Hills Wildlife Sanctuary and the plan is to double their number once it is elevated to the status of a tiger reserve.
- Implementation of strict wildlife management and protection measures will enhance the landscape value in increasing the tiger densities.

## **Olive Ridleys- Rushikulya rookery all set to welcome**

- The olive ridley turtle is named for the generally greenish color of its skin and shell or carapace.
- They are the smallest and most abundant of all sea turtles found in the world, inhabiting warm waters of the Pacific, Atlantic and Indian oceans.

- It is closely related to the Kemp's ridley.
- IUCN: Vulnerable

### **Egg Laying**

- These turtles are best known for their unique mass nesting called Arribada, where thousands of females come together on the same beach to lay eggs.
- They lay their eggs in conical nests about one and a half feet deep which they laboriously dig with their hind flippers.
- The coast of Odisha in India is the largest mass nesting site for the Olive-ridley, followed by the coasts of Mexico and Costa Rica.
- An Olive Ridley usually lays about 120 to 150 eggs from which hatchlings emerge after about 45 to 60 days.
  - It is estimated that approximately 1 hatchling survives to reach adulthood for every 1000 hatchlings that enter the sea waters. This may also be the reason why arribadas happen and a single female can lay 80 to 120 eggs and sometimes even twice in a season; to increase the hatchlings' survival rate.
- But not all eggs remain intact as predators devour it. Besides, eggs are also washed away by sea waves during high tide.

### **Threats**

- They get entangled in the nets for a prolonged period and die of asphyxiation.
- The turtles also perish in large numbers after getting hit by the fast-moving propeller of the fishing trawlers.
- They are still extensively poached for their meat, shell and leather, and their eggs.

### **Steps to protect Olive Ridley turtles**

- To provide security to mother turtles as well as the eggs from human and predator intervention, the forest department is erecting an over 5-km-long fence of metal net from Gokharkuda to Bateswar.
- The forest officials have already completed two to three rounds of awareness drive at all villages near the rookery.
- Debris and plastic waste, like pieces of fishing net, are being removed with the help of locals. There will be regular monitoring of the beach.
- The department has set up 11 onshore camps. Personnel at these camps regularly document beach conditions, inform about the debris deposited by the sea, prevent the entry of predators like stray dogs and search for turtle carcasses.
- The Odisha Government has made it mandatory for trawls to use Turtle Excluder Devices (TEDs), a net specially designed with an exit cover which allows the turtles to escape while retaining the catch.

## **POLYCRACK**

### **Context**

- Indian Railways has commissioned country's first governmental waste to energy plant at Bhubaneswar.



### **Details**

- The waste to energy plant uses a patented technology called POLYCRACK, is first-of-its-kind in Indian Railways and fourth in India.
- It is world's first patented heterogeneous catalytic process which converts multiple feed stocks into hydrocarbon liquid fuels, gas, carbon and water.
- Polycrack Plant can be fed with all types of plastic, petroleum sludge, un-segregated MSW (Municipal Solid Waste) with moisture up to 50%, e-waste, automobile fluff, organic waste including bamboo, garden waste etc., and Jatropha fruit and palm bunch
- The energy which will be produced at the plant, will be in the form of light diesel oil and this oil will be used to light furnaces.

### **Environmental Advantages**

- The process is a closed loop system and does not emit any hazardous pollutants into the atmosphere.
- The combustible, non-condensed gases are re-used for providing energy to the entire system and thus, the only emission comes from the combustion of gaseous fuels.
- The emissions from the combustion are found to be much less than prescribed environmental norms.
- This process will produce energy in the form of light diesel oil which is used to light furnaces.

## **State of India's Bird Report 2020**

### **Context**

- According to the state of India's bird report 2020, Bird population in India is on decline.
- The report was released at the 13th Conference of Parties of the Convention on the Conservation of Migratory Species of Wild Animals

### **Details**

- The 'State of India's Birds 2020' report is the first comprehensive assessment of the distribution range, trends in abundance, and conservation status for most of the bird species that regularly occur in India.
- The data for these birds was collected through the citizen science app 'eBird', which received a record ten million entries by approximately 15,500 citizen scientists.
  - Cornell University's Laboratory of Ornithology hosts the app, while its India-specific portal is curated and customised by Bird Count India, an informal group of birdwatching enthusiasts, ornithologists, naturalists and conservationists dedicated to documenting Indian birds.

### **Highlights**

- It categorises 101 species as 'High Conservation Concern for India' and suggests many urgent policy measures to be adopted immediately.
  - For these species, "Conservation action must be taken immediately to identify causes of decline and implement measures to halt and reverse the trend for these species," the report adds.
- 319 species are classified under the 'Moderate Conservation Concern' category.

- “These species must be carefully monitored to rapidly detect and act upon signs of continuing decline,” highlights the report.
- On the other hand, 126 species, including the peafowl, house sparrow, Asian Koel, rose-ringed parakeet and the common tailorbird, are expected to increase in numbers, primarily due to their ability to survive in human habitats.

### **Significance**

- The report, by noting the drastic decline in bird diversity in India, points towards the need for conservation activities.
- Bird diversity in India must be protected for cultural and ecological reasons.
  - Bird diversity makes India and Kerala in particular, a bird-watching destination, thus helping increase its tourism potential.
  - The conservation efforts directed towards birds will help improve the health of forests, wetlands, open country habitat and high mountains.

### **Concerns**

- According to the study, the populations of raptors (eagles, hawks, kites, etc.), migratory seabirds and birds that live in specialised habitats were the most affected in the past decades.
- The number of birds in the Western Ghats, which is considered one of the world’s foremost biodiversity hotspots, also declined by almost 75 per cent since 2000.
  - The abundance index of 12 endemic species including the Nilgiri Pipit, Nilgiri Thrush and several Sholakilis, of the Western Ghats, has dropped
- Some bird species previously assessed as ‘least concern’ by the IUCN, have been found to be under greater stress now.
- Out of the 261 species considered for full analysis, 52% of them are now classified as being of ‘high concern’.
- The report notes that the birds are under increasing pressure from human activity.
  - The issue of habitat loss, excessive use of pesticides, hunting and trapping of the birds for the pet trade have pushed many species towards extinction.
- Data inadequacies have led to the exclusion of many species whose status could be worse than expected.

### **The report offers several recommendations**

- It suggests that policymakers and managers update global and national priorities using conservation assessments from this report.
- More attention should be paid to fund conservation efforts on High Concern species and habitats where species have declined.
- The governments needs to support monitoring efforts by citizen scientists and researchers.
- It further asks researchers to promote collaborations between researchers and the public at large and to initiate efforts to better understand neglected species.
- The report also requests the public to document birds seen and upload to a public platform.

### **Way forward**

- The report taps into citizen science for good data and this should serve as a foundation for further collaborative work.

- Enhancing citizen participation not only entails better and more accurate studies but also helps improve awareness among the general citizenry.
- Each bird species is affected by different factors. Scientific studies should aim at understanding the underlying pressures and efforts should be directed at addressing these pressures more effectively.
- Determined efforts to protect forests and other habitats will confer multiple benefits apart from helping protect several bird species.

## **World's largest cave fish discovered in Meghalaya**

### **Context**

- A team of experts from the UK, Switzerland and India has discovered the world's largest species of cave fish in Meghalaya's Jaintia Hills.

### **Details**

- The cave fish, similar in anatomy to an endangered mahseer species, is around one and a half feet in length and was found inside a remote cave in Jaintia Hills.
- The fish has no eyes and is white due to a lack of melanin pigmentation.
- As they live in a nutrient-limited environment most of these species are small.



# HEALTH ISSUES

## **COVID-19 (Basics)**

- Coronaviruses are a large family of viruses with some causing less severe common cold to more severe diseases such as Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS).
- A coronavirus has many “regularly arranged” protrusions on its surface, because of which the entire virus particle looks like an emperor’s crown, hence the name “coronavirus”.

### **What do we know about the virus?**

- COVID-19 appeared in Wuhan, a city in China, in December 2019. Although health officials are still tracing the exact source of this new coronavirus, early hypotheses thought it may be linked to a seafood market in Wuhan, China.
- Some people who visited the market developed viral pneumonia caused by the new coronavirus.
- Much remains to be understood about the new coronavirus. Not enough is known about 2019-nCoV to draw definitive conclusions

### **Symptoms**

- Coronaviruses are transmitted between animals and people, according to the WHO.
- The agency said common signs of the new coronavirus infection include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties.
- In more severe cases, the infection can cause pneumonia, SARS, kidney failure and even death.
- Symptoms of COVID-19 appear within two to 14 days after exposure and include fever, cough, a runny nose and difficulty in breathing.

### **How does it spread?**

- It primarily spreads through the respiratory droplets of infected people.
- If a person touches a surface or object that has been infected by the virus and then touches his own mouth, nose, or eyes, he may get infected.

### **Some of the myths associated with the COVID-19**

- Hand sanitizers are more protective than washing hands.
- Everyone has to wear N-95 masks.
- Extremely high temperatures or extremely cold temperatures would prevent infection.
  - The activity of the virus is certainly reduced with decrease in moisture and temperature, however, it is not completely stopped.
- Coronavirus can be transmitted through mosquitoes.
- Ultraviolet disinfection lamps can kill the new coronavirus.
- Spraying alcohol or chlorine all over your body will kill the new coronavirus.
  - Spraying alcohol would not help if the virus has already entered the human system, and will only irritate the skin.
- `Antibiotics are effective in preventing and treating the new coronavirus.

## **1. COVID-19 (Naming)**

- World Health Organization (WHO) has given an official name to the disease caused by the novel coronavirus.
- The disease will be called “COVID-19”; the “CO” stands for coronavirus, “VI” for virus and “D” for disease.
- The coronavirus itself is called “nCoV-2019”.

### **How WHO names diseases?**

The WHO, in consultation with the World Organisation for Animal Health (OIE) and the Food and Agriculture Organization of the United Nations (FAO), has identified best practices for naming new human diseases. These best practices apply to a new disease:

- That is an infection, syndrome, or disease of humans;
- That has never been recognized before in humans;
- That has potential public health impact; and
- Where no disease name is yet established in common usage

### **Why do the virus and the disease have different names?**

- Viruses are named based on their genetic structure to facilitate the development of diagnostic tests, vaccines and medicines. Virologists and the wider scientific community do this work, so viruses are named by the International Committee on Taxonomy of Viruses (ICTV).
- Diseases are named to enable discussion on disease prevention, spread, transmissibility, severity and treatment.

## **2. COVID-19 a pandemic**

### **What is a pandemic?**

Global health crises tend to grow in phases.

- This chain of events starts with an “outbreak”—a sudden rise in confirmed cases of a disease that’s contained to a small geographic region like Wuhan.
- If the disease spreads just beyond that community—like how the novel coronavirus spread across China—then it becomes an epidemic.
- A pandemic is defined as the worldwide spread of a new disease.
  - Pandemics, are epidemics that cross international boundaries and affect a large number of people worldwide.

While the WHO looks for sustained outbreaks causing a larger-than-expected number of cases on multiple continents, there is no specific number of countries that a disease must touch for WHO to classify it as a pandemic.

Simply put, a pandemic is a measure of the spread of a disease. When a new disease spreads over a vast geographical area covering several countries and continents, and most people do not have immunity against it, the outbreak is termed a pandemic. It implies a higher level of concern than an epidemic, which the US Centers of Disease and Control Prevention (CDC) defines as the spread of a disease in a localized area or country.

There is no fixed number of cases or deaths that determine when an outbreak becomes a pandemic. The Ebola virus, which killed thousands in West Africa, is an epidemic as it is yet to mark its presence on other continents. Other outbreaks caused by coronaviruses such as MERS (2012) and SARS (2002), which

spread to 27 and 26 countries respectively, were not labelled pandemics because they were eventually contained.

### **So, what happens if COVID-19 is called a pandemic?**

- There is a view among many experts, that the categorisation as a pandemic can lead to more government attention
  - A pandemic signifies that authorities no longer believe they can contain the spread of the virus and must move to mitigation strategies, like closing schools and canceling mass gatherings.
- It will help improve funding by international organisations to combat coronavirus.

### **3. The coronavirus dictionary**

#### **Home quarantine**

- Quarantine, like isolation, separates some people from others during the outbreak of a contagious disease.
- While isolation separates sick people from people who are not sick, quarantine separates those who were exposed to a contagious disease, and who are then observed to see if they too become sick. Home quarantine means being quarantined at home.

#### **Incubation**

- The incubation period is the time it takes for symptoms to appear after a person is infected. This time can be critical for prevention and control, and it allows health officials to quarantine or observe people who may have been exposed to the virus.
- The new coronavirus has an incubation period of two to 14 days, according to the CDC, with symptoms appearing about five days after infection in most cases.
- During the incubation period, people may shed infectious virus particles before they exhibit symptoms, making it almost impossible to identify and isolate people who have the virus.

### **4. Stage by stage in a pandemic**

1. In the first stage of a disease epidemic that eventually takes the form of a pandemic sweeping the globe, cases are imported into a country in which the infection did not originate.
  - An infection whose spread is contained within the boundaries of one or a few countries is obviously not a pandemic.
  - The first case of COVID-19 outside China was reported in Thailand.
2. The second stage is when the virus starts being transmitted locally.
  - Local transmission means that the source of the infection is from within a particular area and the trajectory the virus has taken from one person to the next is clearly established.
3. The third stage is that of community transmission. According to the World Health Organisation (WHO), community transmission “is evidenced by the inability to relate confirmed cases through chains of transmission for a large number of cases, or by increasing positive tests through sentinel samples (routine systematic testing of respiratory samples from established laboratories)”.
  - In layman terms, it means that the virus is now circulating in the community, and can infect people with no history either of travel to affected areas or of contact with an infected person.

- If and when community transmission happens, there might arise the need for a full lockdown because in that situation it is theoretically possible for every person, regardless of where they are from and who they have been in contact with, to spread the disease.
- Among the countries where community transmission seems to be operating are China, Italy, Iran, South Korea and Japan.

#### **How does categorizing an outbreak in this manner help?**

- The stages of a pandemic are uniform the world over. This is so because in today's interconnected world, it is important to have a standardised phraseology that conveys the same thing to every person around the world, and helps countries prepare better.
- The categorisation helps countries take specific actions that are necessary to target just that particular scenario.

## **COVID-19(Combat Strategy)**

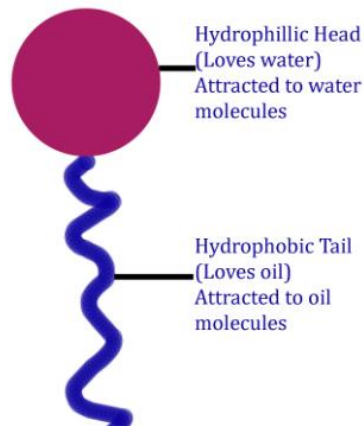
### **1. How does soap use help in tackling COVID-19?**

#### **Context**

- The WHO has issued guidelines to reduce the risk of infection. The most effective protective measures according to the WHO are:
  - Cleaning one's hands.
  - Covering the mouth properly while coughing and sneezing, and
  - Social distancing

#### **How does washing with soap help get rid of the coronavirus?**

- The dirt on our hands contains innumerable viruses and bacteria. Washing with water without using soap helps reduce the amount of microbes but does not remove most of the virus and bacteria completely. Using soap, therefore, becomes far more effective in removing microbes.
- Viruses such as coronavirus, influenza-causing viruses, Ebola, Zika have their genetic material encased in a layer of fat called the lipid envelop.
- Soap molecules are pin-shaped with a head that is water-loving (hydrophilic) and a tail that is oil-loving (oleophilic).
  - Being oleophilic, the tail portion of the molecule tends to have an affinity for and 'competes' with the lipids in the virus envelope.
- Since the chemical bonds holding the virus together are not very strong, the long oleophilic tail gets inserted into the envelope and tends to have a 'crowbar' effect that breaks the lipid envelope of the virus.
  - The tail also competes with the bond that binds the RNA and the lipid envelop thus dissolving the virus into its components which are then removed by water.
  - The oil-loving tail of the soap molecule thus disrupts the bond that binds dirt and non-enveloped viruses to the hand. The dirt and viruses are surrounded by several tails making them remain as suspended particles. Rinsing with water washes away the suspended particles leading to clean hands.



#### **Do all viruses have the lipid layer?**

- No, certain viruses do not have the lipid envelop and are called the non-enveloped viruses.
  - Rotavirus which causes severe diarrhoea, poliovirus, adenovirus that cause pneumonia and even human papillomavirus (HPV) do not contain the lipid envelop.

#### **How do alcohol-based hand sanitizers help get rid of coronavirus?**

- Like soap, the alcohol present in hand sanitizers dissolve the lipid envelop, thus inactivating the virus.
- In addition, the alcohol also tends to change the shape or denature the mushroom-shaped protein structures that stick out of the lipid envelop.
  - The mushroom-shaped protein structures help the virus to bind to special structures found on human cells and enter the cells.
- To be effective, the sanitisers should contain at least 60% alcohol.
- Unlike soap lather, the alcohol does not come in contact with all parts of the hand. So care needs to be taken to use sufficient amount of sanitiser to increase the coverage.
- While a sanitiser can quickly reduce the number of microbes, it does not get rid of all types of germs, and is “not as effective when hands are visibly dirty or greasy”.

#### **Should healthy people who are not taking care of COVID-19 patients use a mask?**

- Medical masks help prevent the spread of coronavirus infection. If worn properly, masks may be effective in preventing transmission of coronavirus.
- Transmission through droplets from coughing and sneezing is one of the major routes of virus spread. When worn correctly, a mask can reduce the risk of inhaling droplets containing the virus.
- With many studies showing that people infected with novel coronavirus transmit the virus even before symptoms show up, it may be prudent to wear a mask especially when the virus is spreading in the community.

#### **What other precautions should be taken when a mask is used?**

- WHO cautions that using a mask alone will be insufficient to provide an “adequate level of protection”. It should be combined with hand hygiene to prevent human-to-human transmission.
- So if an individual decides to wear a mask, care must be taken to regularly wash hands with soap or alcohol rub, and avoid touching the face with hands.



- Incorrect mask wearing might otherwise reduce the effectiveness in cutting the risk of transmission. It should be discarded once it gets wet or dirty, and care should be taken to safely dispose of used masks. The same mask should not be used for more than a couple of hours.

## **2. Role of technology**

- 'Close Contact Detector': It is a platform for the public to detect if someone has had close contact with a person confirmed or suspected to have been infected in the recent past.
  - It pays particular attention to public transport records, including trains and flights
  - It can be accessed via popular mobile apps including Alipay, WeChat and QQ
- Health QR code system: In Hangzhou, a city famous for its technology companies, e-commerce giant Alibaba's Alipay app has rolled out a health QR code system.
  - It assigns color codes to citizens marking their risk level, drawing on their travel history and contacts.
  - A green code means you can travel freely, yellow requires seven days of quarantine, while red requires a 14-day quarantine.
- Beijing-based Face++: It has come up with a sophisticated temperature screening tool that can work in crowded places and screen thousands of people.
  - It can detect an abnormal body temperature and alert authorities who can then do a second check on the person.
  - It is now deployed in some of Beijing's subway stations and government offices.
- China, which has invested billions of dollars in new Artificial Intelligence technologies, is deploying some of them in fighting the outbreak.
  - Drone with a camera are being operated to tell people to wear masks.
    - Drones are being used to transport medical samples and conduct thermal imaging.
    - Two other prominent AI players, Baidu and SenseTime, are helping police identify people who aren't wearing masks in public places and offices.
    - In northwestern Yinchuan, authorities have deployed drones armed with loudspeakers — reminding residents to keep a distance from each other and to wear masks — and to spray sanitisers.
- In Sichuan province, doctors are using a new 5G telecom network to help remote hospitals — as well as overburdened doctors in the Hubei province epicentre — promptly assess CT scans to detect COVID-19 cases.
- Food delivery app Meituan and e-commerce giant JD have deployed autonomous vehicles for "contactless" deliveries to hospitals and high-risk areas.
- COVID-19 app: It tells people whether they have been in close contact with anyone confirmed infected, based on flight and train records.

## **Schools shut but classes continue**

- Technology is also helping school children. Their schools remain closed but classes haven't stopped, with millions of students receiving lessons every day through live-streaming apps.

## **Concerns**

While these new tools may be considered efficient - and perhaps necessary during a health crisis - they have prompted concerns about privacy.

- Chinese media have reported of numerous cases of wrong codes being assigned, preventing many low-risk citizens from using public transport or going to work.

- Many of these health apps require users to register with their name, national identification number and phone number. Authorities have also sourced data from phone carriers, health and transport agencies and state-owned firms.
  - There is little transparency on how the government plans to cross-check the data, and there have been reports about personal health data being leaked on the internet.
- There's the added fear that it could exacerbate paranoia and lead to discrimination against coronavirus patients.
- Critics say China could use the health crisis as a justification to expand its already vast surveillance system

### **Conclusion**

- Thus, the new technologies are aiding in the fight to curb the transmission of coronavirus.

### **3. When will a COVID-19 vaccine be ready?**

At this time, there are no specific vaccines or treatments for COVID-19. However, there are many ongoing clinical trials evaluating potential treatments.

### **Immune System**

The immune system is made up of a specialized network of organs, cells, and tissues that all work together to protect us against disease. When a disease-causing germ (for example, a virus or bacteria) enters the body, the immune system:

- Recognizes the germ as being foreign (not belonging in the body).
- Responds by making special proteins (called antibodies) that help destroy the germ.
- Remembers the germ that made the person sick and to destroy it in the future.

### **What are vaccines?**

Vaccines are one of the most effective tools to prevent diseases.

- A vaccine is a substance that resembles the disease-causing agent (also called pathogen) but does not cause the disease.
- It stimulates immune system to recognize and kill the pathogen, and creates a memory for the future.
  - This is what makes vaccines such powerful medicine. Unlike most medicines, which treat or cure diseases, vaccines prevent them.
- Vaccines are available to protect us against many life-threatening diseases such as polio, influenza, meningitis, typhoid, tetanus, diphtheria, and certain types of cancers.
- Vaccines have also been responsible for eradication (or near eradication) of deadly diseases such as smallpox and polio.

### **How are Vaccines Made?**

There are multiple ways to make vaccines.

1. Live, Attenuated Vaccines: These vaccines contain a version of the living virus or bacteria that has been weakened.

- These wild virus or bacteria are weakened by repeated culturing in cells in which they do not reproduce very well. As they evolve to adapt to the new environment, they become weaker with respect to their natural host, human beings.

- Examples include measles, mumps, and rubella vaccine (MMR) and varicella (chickenpox) vaccine.

2. Inactivated Vaccine (Killed Vaccine): It is a vaccine consisting of virus particles, bacteria, or other pathogens that have been grown in culture. They have been killed through physical or chemical processes. These killed organisms cannot cause disease.

- Pathogens for inactivated vaccines are grown under controlled conditions and are killed as a means to reduce infectivity (virulence) and thus prevent infection.
- Inactivated vaccines are not active and cannot replicate, so there is always a need for multiple doses. In general, the immune response does not occur after the first dose, but usually after the second or third dose.
- Examples include polio vaccine, influenza vaccine.

Feature	Inactivated vaccine	Live attenuated vaccine
Stability	high	low
Shelf life	long	short
Reversion of virulence	not	possible
Safety	good	poor
Dose	high	low
No. of doses	multiple	single
Efficacy	poor effects; last a short time	good effects; last a long time
Need for adjuvant	yes	no
Duration of immunity	less	many years

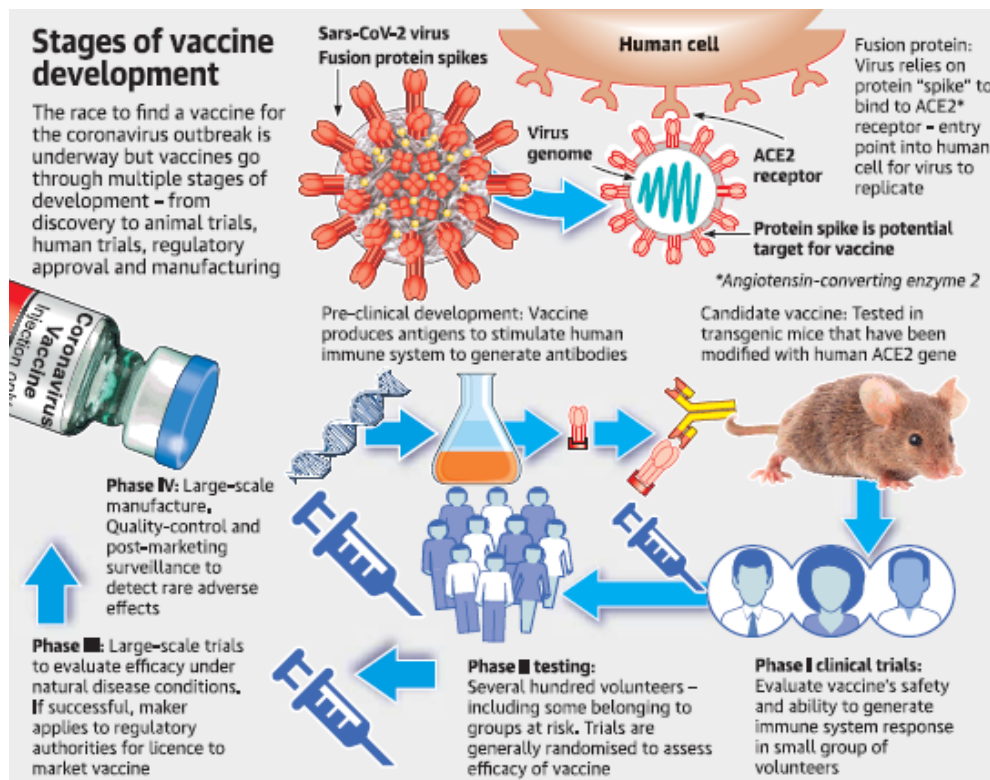
### **Is a virus needed to develop a vaccine against it?**

With modern molecular tools and technologies, isolating a virus is not required to make a vaccine against it.

- The genetic sequence can be obtained directly from infected patients and this can be converted into proteins using various platform technologies.
- This makes it possible to have vaccines ready for hundreds of pathogens that have not yet infected humans, but have the potential to do so in future.

### **Stages of Vaccine development**

- It can take years to develop vaccines — first in laboratories to show proof-of-concept, then developing a manufacturing process to make stable and a highly pure product to be tested in animals and humans, and finally for the market.



### **What vaccines are being developed against COVID-19?**

According to the World Health Organization, over 40 different candidate vaccines for COVID-19 are in development.

- These include an Inactivated Vaccine being developed in China (Sinovac) using purified COVID-19 virus killed with formaldehyde (a chemical).
- A Live Attenuated Vaccine being developed by Codagenix, a U.S.-based company in partnership with the Serum Institute of India (Pune), uses a genetically engineered COVID-19 virus that replicates very poorly.

### **One vaccine against COVID-19 is already in trials. What is it about?**

- An experimental COVID-19 vaccine called mRNA-1273 was developed by Moderna, a biotechnology company

### **What is the mRNA vaccine?**

- The genetic blueprint (or code) in living organisms is stored in a double-stranded molecule called DNA (deoxyribonucleic acid), which makes proteins that are responsible for nearly every function in the human body.
- The conversion of DNA code into proteins requires a single-stranded molecule called the mRNA (messenger ribonucleic acid).
- In an analogy with computers, one may think of the DNA as the hardware, the mRNA as the software and proteins as the applications.

The mRNA-1273 is a piece of RNA that carries the code to make the COVID-19 virus Spike protein when introduced into cells.

- This protein present on the virus surface is critical for its entry into cells.
- Immunity (antibodies) to the Spike protein can block virus entry and its multiplication, and thus ameliorate the disease.

- While simple to engineer, mRNA can degrade easily. Therefore, it has to be protected with a coating that can also target it to the cells of choice when injected into the body.

#### **How much does it cost to develop it? Who funds it?**

It takes millions of dollars to develop and test a vaccine. Either for-profit companies or philanthropic foundations and countries cover the costs.

- The mRNA-1273 vaccine is supported by the Coalition for Epidemic Preparedness Innovations (CEPI), a not-for-profit grouping of foundations and countries.
- India is a member of CEPI. Besides mRNA-1273, CEPI has funded the development of at least five other COVID-19 vaccines, with an overall commitment of \$23.7 million.

#### **4. Antibodies- Convalescent plasma therapy tested on critically ill COVID-19 patients**

##### **Context**

- As part of controlling the spread of novel coronavirus and to develop vaccines for the patients China's pharmaceutical company has turned to plasma taken from people who have recovered from the infection to treat critically ill patients.
- They have called people who had recovered from the new coronavirus to donate blood plasma, because it might contain valuable proteins that could be used to treat sick patients

##### **What are Antibodies?**

- Antibodies are proteins that the immune system makes to fight invaders such as viruses, bacteria or other foreign substances. Antibodies are specific to each invader. However, it takes time for the body to ramp up its production of antibodies to a completely new invader.
- If that same virus or bacteria tries to invade again in the future, the body will remember and quickly produce an army of antibodies.
- People who have recently recovered from COVID-19 still have antibodies to the coronavirus circulating in their blood.
- Injecting those antibodies into sick patients could theoretically help patients' better fight the infection.
- This treatment will transfer the immunity of a recovered patient to a sick patient, an approach that has been used previously in flu pandemics

##### **Examples from the past**

- This is not the first time that plasma from recovered patients has been used to treat people infected with certain viruses for which drugs are not available.
- When Ebola struck Guinea, Sierra Leone, and Liberia in 2014, the World Health Organization prioritised the evaluation of treatment with convalescent plasma derived from patients who had recovered from the disease.

##### **Issue Area**

- Antibodies in the plasma bind to the virus and prevent them from entering the cells. But by the time it is given, many cells would have been infected. Hence, convalescent plasma therapy is not very effective
- The New England Journal of Medicine had published an article which said convalescent plasma in a trial carried out in Ebola patients was not beneficial.

### **Treatment Options**

- Plasma infusions are just one of many ways experts are considering to treat COVID-19.
- Others include repurposing antivirals or looking for brand-new molecules that can block the binding of the virus into cells

### **5. A doctor's advice to the public:**

- Do not panic. Panic will only result in chaos.
- The public must focus on adopting and following the preventive measures.
- Crowded places and usage of public transportation must be avoided. Social distancing would be of immense help in containing the spread of the virus.
- People who are exhibiting the symptoms, and have a history of travel to the affected countries or have come in contact with an infected person must isolate themselves and inform their doctors regarding their symptoms. Only when the symptoms persist for an extended period of time (more than 14 days) should the person go to the hospital.
- The public should adopt healthy practises such as regular washing of hands.
- The public should stop spreading fake information obtained through various social media sites and they should also follow authentic websites which offer unbiased information regarding the COVID-19.
- Being responsible citizens is the need of the hour. The public should follow personal discipline in the best interest of the country.

## **COVID-19(Economic Angle)**

### **1. Pharma Industry**

The lockdown in China to control the outbreak has the potential to disrupt global supply chains of various essential products and consumer goods.

- According to government data from the Indian Govt, bulk drugs used to manufacture medicines were among the top 10 imports from China between 2015 and 2019.
  - India is vulnerable because it is heavily dependent on China for components used to make products across industries, including essential medicines.
- China supplies nearly 70% of the total bulk drugs and intermediates (raw materials) imported to make medicines in India. Some 354 drugs and drug ingredients were imported from China in 2017.
- Experts said that supplies of fermentation-based ingredients used to make most antibiotics and vitamins would be the most impacted in case a shutdown of operations in China continues, or if the infection spreads to major manufacturing hubs.

### **Impact**

- The Indian Pharma Industry, which depends on China for 70% of raw materials needed to manufacture drugs here, has seen input costs go up by 50%

### **2. Is the global economy headed for recession?**

#### **Context**

- A diverse set of industries have been impacted by the spread of the virus.

#### **What does it mean to the global economy?**

- Analysts fear that the global economy may tip into a recession unless the virus turns out to be seasonal.
- A recession sets in when the economy **shows two consecutive quarters of contraction**.

#### **Why should the economy be affected?**

- If individuals engage less with the outer world, and avoid work, education, fitness and entertainment, a lot less economic activity would occur.
- Businesses face the challenge of disrupted supply of components to make products, or of having to shut some of their factories temporarily, not to mention the workforce having to be quarantined.

#### **Which are the industries impacted?**

The Indian pharmaceutical, automobile and mobile phone industries, immediately trembled.

- The Pesticides Sector is another that has been affected as manufacturers depend on China for raw materials.
  - While there are comforting stock levels for now in India, farmers may soon face pesticide availability issues unless the situation resolves quickly.
- Even the Software Services Industry, which easily lends itself to working from remote locations, will have some issues as the decision-making is mostly in the West.
  - Since it is the key market for software services, it may be hit, with in-bound travel restricted and the U.S. declaring emergency.

#### **How will it hit the travel sector?**

Travel has been hit severely as countries issue advisories to eliminate unnecessary travel and go into lockdown mode.

- The U.S., for instance, has halted all in-bound travel from Europe.
- India has temporarily stopped grant of visas except for emergency situations.
- Operators and service providers suffer. The vendors in the airport who provide services suffer due to this restriction. It impacts the profits of — and jobs at — airlines, airport authorities and oil marketing companies
- Evidence has also shown that cab drivers cannot afford to have their cabs out of circulation for even as short a period as a week, if they have to provide comforts to their families. Curtailed travel and commutes can be devastating for them.

#### **Commercial Impact of Coronavirus on Sports and Entertainment**

##### **1. Sports**

- Indian Premier League has been postponed.
- The South Africa-India cricket series has been cancelled.
- In football, all Union of European Football Association (UEFA) competitions, including the Champions League and Europa League matches, have been postponed
- Formula 1 has called off the first race of the season, the Australian Grand Prix. In golf, the PGA has cancelled its Players' Championship.
- The U.S. basketball association, the National Basketball Association (NBA) suspended its season's events indefinitely

##### **2. Movies**

- Indian movie releases have been postponed indefinitely.
- The iconic Disneyworld has brought down its shutters temporarily to help prevent the spread of the virus

### **Is there a silver lining at all?**

- Sales of medical supplies, soaps, hand sanitisers and essentials to be stocked up at home will evidently rise.
- It is said that after the Severe Acute Respiratory Syndrome (SARS) epidemic in China in 2003, shoppers began to prefer buying online, to avoid crowded spaces and that e-commerce major Alibaba's fortunes zoomed after this.
- Digital shopping may get a boost.
- With schools shutting down temporarily, online learning platforms are likely to get a boost.

## **Coldbest-PC 'toxic' syrup**

### **Context:**

- About 12 children died in Udhampur district of Jammu after they consumed poisoned cough syrup (Coldbest-PC).

### **What led to death of Children?**

- The syrup is manufactured by Himachal Pradesh-based pharmaceutical company Digital Vision.
- The suspect product, although manufactured in H.P., has been sold across the country.
- A team of doctors at the Post Graduate Institute of Medical Education & Research, Chandigarh, attributed the deaths to the presence of Diethylene Glycol in the cough syrup which was consumed by all the dead children.

### **Diethylene Glycol**

- It is an anti-freezing agent that causes acute renal failure in the human body followed by paralysis, breathing difficulties and ultimately death.

### **Similar incidents**

- This is the fourth mass glycol poisoning event in India.
- In 1973- An incident at the Children's Hospital in Chennai led to death of many children.
- In 1986, poisoning at Mumbai's J.J. Hospital caused the deaths of 14 patients who were otherwise on the path to recovery.
- In 1998, 33 children died in two hospitals located in New Delhi due to similar poisoning.
- In all three cases, the deaths occurred due to negligence or human error, failure to detect and contain the level of diethylene glycol in the syrup, thereby causing poisoning of the patients who consumed it.

### **What does the law say?**

- Under the Drugs and Cosmetics Act, 1940, regulating the manufacture, sale and distribution of drugs is primarily the concern of state authorities.
- The Central Drug Standard Control Organisation (CDSCO), is responsible for laying down the standards of drugs, coordinating the activities of state regulatory authorities and providing them expert advice.



- The punishment for distributing spurious drugs that can cause death includes 10 years to life imprisonment and a fine of Rs 10 lakh or three times the value of drugs confiscated, according to Drugs and Cosmetics Act, 1940.

#### **Steps to be taken immediately**

- The negligence of the manufacturing company has led to death of innocent children. Therefore, legal action has to be initiated and all those responsible should be prosecuted, but the immediate response of doctors, pharmacists and the drug regulators should be to prevent deaths.
- The only way to do so, is to account for each and every bottle of the poisoned syrup that has ever been sold in the Indian market and stop patients from consuming this drug any further.
- Any patient who has consumed even a spoon of the syrup should then immediately be referred to a hospital for treatment.
- While a national recall of this adulterated medicine is the immediate need, the administration also needs to quickly identify which other pharmaceutical companies have received the spurious ingredient that was supplied to the manufacturer in H.P. from a trader in Chennai.
  - It is very likely that the trader in question marketed the same ingredient to other pharmaceutical companies, who, like the manufacturer at the centre of the present scandal, may have failed to test it for its identity and purity.
  - It is important for regulatory enforcement to raid and seize the records of the trader in Chennai and verify its sales.

#### **How United States Food and Drug Administration (USFDA) tackled the problem?**

- When the United States faced a similar situation with glycol poisoning in the year 1937, USFDA, its entire field force of 239 inspectors and chemists were assigned to the task of tracking down every single bottle of the drug.
- Even if a patient claimed to have thrown out the bottle, the investigators searched the street until they found the discarded bottle.
- This effort was accompanied by a publicity blitz over radio and television.

#### **Lack of information**

- Such public health measures are not being undertaken in Himachal Pradesh (HP).
- The authorities are simply not communicating the seriousness of the issue to the general public.
- At most, the authorities in Himachal Pradesh (H.P.), who are responsible for oversight of the manufacturer of this syrup, have made general statements that they have ordered the withdrawal of the drug from all the other States where it was marketed.
- However, there is no transparency in the recall process and information about recalls and batch numbers is not being communicated through authoritative channels.
- There is no public announcement by the Drug Controller General of India (DCGI), which is responsible for overall regulation of the entire Indian market.
  - The website of the DCGI, which is supposed to communicate drug alerts and product recalls, has no mention of Coldbest-PC as being dangerous.

#### **It could harm the exports**

- For more than three decades, India has been the largest supplier of generic medicines in the world. However, the country's pharma industry has never answered satisfactorily the questions that have been asked about the quality of its products.

- In 2015, the EU banned 700 drugs produced in the country.
- In 2019, Indian drug manufacturers received at least 20 letters of warning from the US FDA over the quality of their products.
- In 2019, the Bureau of Pharma PSUs of India, which implements the Pradhan Mantri Janaushadhi Pari yojana, found 25 batches of drugs supplied to the Centre's flagship affordable medicine programme to be substandard.
- Incidents like these, not meeting the standards as prescribed by the global community could harm the reputation of India and ultimately lead to fall in exports as well.

### **Need for a recall policy**

- The 59th report of the Parliamentary Standing Committee on Health as well as the World Health Organization (in its national regulatory assessment) had warned the DCGI on the lack of a national recall framework in India.
- A set of recall guidelines was drafted in 2012 but never notified into law.
- One of the key reasons why the DCGI and state drug authorities have been so sloppy is because unlike other countries, India has not notified any binding guidelines or rules on recalling dangerous drugs from the market.
  - There is scarcely any information-sharing between the Centre and the states and among states.
  - The Central Drugs Standard Control Organization (CDSCO) has not issued binding guidelines to state regulators for recalling medicines that are Not of Standard Quality (NSQ).
  - A batch of drugs that is deemed NSQ in one state could find its way to the market in another.
- So the Govt should notify guidelines for recalling spurious drugs.

### **Conclusion:**

- Thus, there is dire urgency of plugging loopholes in the country's drug regulatory regime.

## **ICoSDiTAUS**

### **Context**

- International Conference on Standardisation of Diagnosis and Terminologies in Ayurveda, Unani and Siddha Systems of Medicine (ICoSDiTAUS) concluded in Delhi.

### **Details**

- ICoSDiTAUS-2020 is the biggest ever international event dedicated to standardisation of Diagnosis and Terminologies of Traditional Medicine in terms of the broad level of participation covering virtually all the continents.
- It was jointly organized by the Ministry of AYUSH and the WHO
- The Conference adopted the "New Delhi Declaration on Collection and Classification of Traditional Medicine (TM) Diagnostic Data".
  - It emphasized the commitment of the countries to Traditional Medicine as a significant area of health care.
  - It further sought the opportunity for including traditional systems of medicine like Ayurveda, Unani and Siddha in the International Classification of Diseases of WHO which is the standard diagnostic tool for health management across the world.

## **Lorcaserin**

- Lorcaserin, marketed under the brand name Belviq is a weight-loss drug

### **Context**

- Indian doctors have cautioned against the use of lorcaserin (brandnameBelviq or Belviq XR), a weight-loss drug that the U.S. Food and Drug Administration (FDA) recently said is linked to a “possible increased risk of cancer.”

### **Details**

- The FDA approved lorcaserin in 2012 and made the medication available the following year, but continued clinical trials on the drug to evaluate cardiovascular risks. Instead, it found an increased cancer risk.
- FDA has now said that health care professionals should stop prescribing and dispensing the drug to patients.
- Eisai Co. has been asked to withdraw its weight loss drug

## **Medical devices now under Drugs and Cosmetics Act**

### **Context:**

- The Ministry of Health and Family Welfare (MoHFW) has brought medical devices within the regulatory ambit, treating them as a category of ‘drugs’ for the purpose of regulating them under the Drugs and Cosmetics Act (DCA).

### **Details:**

- The move implies that any product used to treat a patient – be it an implant like a cardiac stent or a knee implant, or devices like CT scan, MRIs, dialysis machines, or even the thermometer – will come under the ambit of the DCA. Simply put, the government will now have oversight on the medical devices industry and its activities in the country.
- The manufacturer or importer will have to upload the generic name, model number, intended use, class of medical device, material of construction, dimensions, shelf life and brand name on the online portal of the Central Drugs Standard Control Organisation, the notification states. Once the device is registered, the manufacturer or the importer will have to mention the registration number on the device.
- The MoHFW has specified that all such devices including instruments, apparatus, appliances, implants or other articles, whether used alone or in combination, including a software or an accessory, intended by its manufacturer to be used specifically on human beings or animals, will be considered for this purpose.
- The Central Drugs Standard Control Organization will be regulating the medical devices.
- The consumables/devices will be brought under regulation in a phased manner up till April 1, 2021.

### **Significance**

- It will ensure that all medical devices meet certain standards of quality and efficacy
- The consumer gets an assurance that the devices sold or used are of the proper quality due to the regulations imposed.
- Regulations will ensure the safety and equality of medical devices to the patients.

### **Concerns:**

- The latest notification paves the way for higher regulation of medical devices under the Drugs Price Control Order (DPCO).
  - Companies will now have to obtain approval to manufacture, import and sell medical devices in India.
- According to the credit rating agency ICRA, the Centre's decision is bound to push up the cost of medical devices in India.
  - The increased regulatory requirements will lead to higher input costs. It will increase the cost of compliance, lead time and also lead to higher expenses in launching new products, resulting in an overall increase in the cost of the product.

### **National Deworming Day (NDD)**

- It is an initiative of Ministry of Health and Family Welfare, Government of India to make every child in the country worm free.
- The objective of National Deworming Day is to deworm all preschool and school-age children (enrolled and non-enrolled) between the ages of 1-19 years through the platform of schools and Anganwadi Centers in order to improve their overall health, nutritional status, access to education and quality of life.
- NDD is observed bi-annually on 10th February and 10th August in all states and UTs followed by mop-up activities.

### **Implementation**

- The program is implemented with the Ministries of Women and Child Development and Human Resource Development, where the anganwadi workers and teachers administer the deworming medicine to children and adolescents at the anganwadis and schools.
- ASHA workers support the efforts through community mobilization and sensitization of communities about the ill effects of worm infestations.

According to World Health Organization 241 million children between the ages of 1 and 14 years are at risk of parasitic intestinal worms in India, also known as Soil-Transmitted Helminths (STH).

### **About STH**

- Helminths (worms) which are transmitted through soil contaminated with faecal matter are called soil-transmitted helminths (Intestinal parasitic worms).
- Roundworm (*Ascaris lumbricoides*), whipworm (*Trichuris trichiura*) and hookworms (*Necator americanus* and *Ancylostoma duodenale*) are worms that infect people.

### **STH transmission**

- Adult worms live in human intestines for food and survival and produce thousands of eggs each day.
- Eggs are passed in the faeces of infected person.
- Infected people who defecate outdoors spread worm eggs in the soil.
- Eggs contaminate the soil and spread infection in several ways: –
- Ingested through vegetables that are not carefully cooked, washed or peeled;
- ingested from contaminated water sources;

- Ingested by children who play in soil and then put their hands in their mouths without washing them.

### **STH infections**

- It can lead to anemia, malnutrition, impaired mental and physical & cognitive development, and reduced school participation.

### **STH Infections can be prevented by**

- Using sanitary toilets, not defecating outside
- Hand-washing, particularly before eating and after using toilets
- Wearing slippers and shoes
- Washing fruits and vegetables in safe and clean water
- Eating properly cooked food

### **Significance**

- The NDD program is a cost-effective program at scale that continues to reach crores of children and adolescents with deworming benefits through a safe medicine Albendazole.
- Deworming has shown to reduce absenteeism in schools; improve health, nutritional, and learning outcomes for children; and increase the likelihood of higher-wage jobs later in life as per global evidence.
- Using Albendazole tablet for deworming is an evidence-based, globally-accepted, and effective solution used to control worm infections in all children, regardless of socio-economic background.
- The convergence of NDD with the Swachh Bharat Mission is another step towards ensuring cleanliness and hygiene in our surroundings and towards prevention and control of worm infestation.
- Awareness generation activities have also been undertaken under this program to sensitize the public about the harmful effects of worm infestation due to open defecation and to promote healthy habits to keep worm infections under control.

## **Pigmentary disorders**

- Physiological pigmentation is a critical defense mechanism by which skin is protected against harmful UV radiations.
- Inefficient pigmentation predisposes to skin cancers, which are one of the leading causes of cancer-associated deaths worldwide.
- Further, pigmentary disorders (both hypo and hyper pigmentary) are considered a social stigma and therefore they impart long-term psychological trauma and tremendously hamper mental well-being of patients.
- The current therapeutic strategies are not efficient in alleviating pigmentary disorders.

### **Context:**

- A Rs. 3.6 crore grant has been given to promote research on pigmentary disorders.

### **Details:**

- The grant in the form of an Intermediate Fellowship Award was given to an Assistant Professor at Faridabad-based Regional Centre for Biotechnology by the Wellcome Trust/DBT India Alliance.

- The award consists of a grant of Rs 3.60 crore for a period of five years.
- The research project to be taken up under the award would seek to identify novel targetable molecular players that critically regulate pigmentation process.
- Further, the researchers would try to repurpose commercially available drugs for the treatment of pigmentary disorders.

#### **Significance**

- In the long run, this project is expected to have a two-pronged benefits for society – protection from UV-induced skin cancers and potential treatment options for pigmentary disorders.

## ***Reverse Osmosis (RO) water filters***

#### **Context**

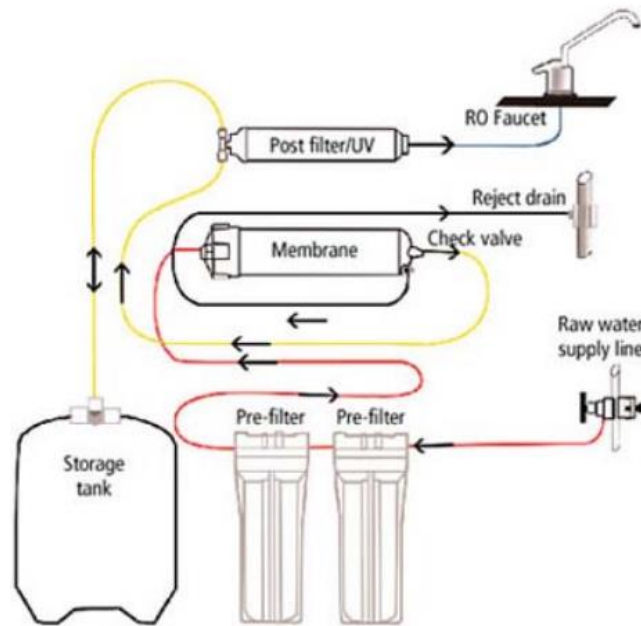
- The Central government has drawn up plans to ban the use of Membrane-based Water Purification Systems (MWPS) – primarily Reverse Osmosis (RO) systems in areas where the water supplied meets the Bureau of Indian Standards norms.

#### **Background**

- The National Green Tribunal (NGT) prohibited the use of RO purifiers in areas where Total Dissolved Solids (TDS) levels are below 500 mg per litre.
- NGT sought a ban on RO filters because they waste water and in the process of removing salts, “they often deprived drinking water of essential salts”.
  - Home filters waste nearly 80% of the water during treatment.
  - Some research has shown that the process can cut the levels of calcium and magnesium, which are vital nutrients.

#### **RO process**

- Reverse Osmosis (RO) is a water treatment process that removes contaminants from water.
  - It uses pressure to force water through a membrane that retains the contaminants on one side and allows the pure water to pass to the other side.
  - RO purification units involve two processes. The unit consists of two filters:
    - A carbon or sediment filter, also called Pre-Filter and
    - A semi-permeable membrane.
  - The Pre-Filter removes large particles from the water before it passes through the semi-permeable membrane.
  - The Membrane allows water to pass through but traps pollutants and bacteria in its porous surface.
- In RO, the TDS in water — which covers trace chemicals, certain viruses, bacteria and salts — can be reduced, to meet potable water standards.
- Issues with the system: The storage tank must be cleaned periodically.
  - Damaged membranes are not easily detected, so it is hard to tell if the system is functioning normally and safely.



### **Purpose of the draft**

The government's draft notification prohibits RO purifiers in areas where water quality meets BIS standards.

- The aim is to ensure that after 2022, no more than 25% of water being treated is wasted.
- For residential complexes to reuse the residual waste water for other activities, including gardening.
- Once the rules are finalized, RO machine manufacturers will have to tweak their designs to meet the new parameters so that the system does not discharge water beyond the prescribed limit during the purification process.
- As far as monitoring and enforcement are concerned, the draft left it for BIS to develop a system to monitor, assess and certify in consultation with the Central Pollution Control Board (CPCB) within six months of final notification.
- Enforcement will largely be the responsibility of CPCB and State Pollution Control Boards (SPCBs).

The notification thus implies these filters are only prohibited if the home gets water supply that conforms to the Bureau of Indian Standards (BIS) for drinking water.

### **Concerns**

- Although several State and city water boards claim BIS standards, the water at homes falls short of the test parameters.
  - The BIS in 2019, ranked several cities on official water supply quality.
  - Delhi was last on the list and only Mumbai met all the standards.
  - In the 28 test parameters, Delhi failed 19, Chennai 9, and Kolkata 10. The BIS norms are voluntary for public agencies that supply piped water but are mandatory for bottled water producers.
  - Moreover, most of the country does not have the luxury of piped water.
- The Composite Water Management Index (CWMI) of NITI Aayog says that 70% of water supply is contaminated. India is ranked 120th among 122 countries in an NGO, WaterAid's quality index.
- The case for restricting people's choices on the means they employ to ensure potable water is thus weak.

### **Conclusion**

- The government can come up with changes in the method of water purification but it must delay the crackdown on ROs in so-called “safe supply” areas until consistent evidence through regular and well-publicized water quality tests can convince the skeptical public.
- Therefore, the need is to first reassure public about water quality, then regulate the use of RO purifiers.

## **School Health Ambassador Initiative**

### **Context:**

- Union ministers release curriculum for School Health Ambassador Initiative under Ayushman Bharat.

### **Details:**

- Under this initiative, two teachers in every school will be made health and wellness ambassadors to spread awareness about health issues.
- These ambassadors will be supported by class monitors as Health and Wellness Messengers.
- Initially, the programme, under the Ayushman Bharat Mission, will be started in 200 districts.
- The first phase of implementation will be in all public upper primary, secondary, and senior secondary schools of aspirational districts.
- In this new initiative, health promotion and prevention activities programmes have been added in addition to on-going health screening programs through Rashtriya Bal Swasthya Karyakram (RBSK) teams and provision of services (IFA, Albendazole and sanitary napkins).
- The ambassadors are appointed under the aegis of the School Health Programme of the Central Government.

### **Objectives of the School Health Programme:**

- To provide age-appropriate information about health and nutrition to the children in schools.
- To promote healthy behaviors among the children that they will inculcate for life.
- To detect and treat diseases early in children and adolescents including identification of malnourished and anaemic children with appropriate referrals to PHCs and hospitals.
- To promote the use of safe drinking water in schools.
- To promote safe menstrual hygiene practices by girls.
- To promote yoga and meditation through Health & Wellness Ambassadors.
- To encourage research on health, wellness and nutrition for children.

### **Services under the School Health Programme are shown in the image below:**

<b>School Health Promotion Activities</b>	<ul style="list-style-type: none"><li>• Age appropriate incremental learning for promotion of healthy behavior and prevention of various diseases</li><li>• Delivered through school teachers/Health and Wellness Ambassadors trained in each school</li></ul>
<b>Health Screening</b>	<ul style="list-style-type: none"><li>• The screening of children for 30 identified health conditions for early detection, free treatment and management through dedicated RBSK mobile health teams. List enclosed as <b>Annexure I</b></li></ul>
<b>Provision of Services</b>	<ul style="list-style-type: none"><li>• Provision of IFA and Albendazole tablets by teachers through WIFS and NDD programme respectively.</li><li>• Provision of sanitary napkins</li><li>• Age appropriate vaccination</li></ul>
<b>Electronic Health Records</b>	<ul style="list-style-type: none"><li>• Electronic health record for each child</li></ul>
<b>Imparting skills of emergency care</b>	<ul style="list-style-type: none"><li>• Training of teachers on basic first aid</li></ul>



## ***Uniform Code of Pharmaceuticals Marketing Practices, ("UCPMP Code")***

- It is a voluntary code issued by the Department Of Pharmaceuticals relating to marketing practices for Indian Pharmaceutical Companies and as well medical devices industry.
- At present, the UCPMP Code is applicable on Pharmaceutical Companies, Medical Representatives, Agents of Pharmaceutical Companies such as Distributors, Wholesalers, Retailers, and Pharmaceutical Manufacturer's Associations.
- The UCPMP Code provides that no gifts, pecuniary advantages or benefits in kind may be supplied, offered or promised, to persons qualified to prescribe or supply drugs, by a pharmaceutical company or any of its agents.
  - In view of the judgment of the ITAT, Mumbai, in the matter titled "The Assistant Commissioner of Income Tax Circle 6 (3) vs. Liva Healthcare Limited"<sup>1</sup>, the definition of gifts under the UCPMP Code includes gifts for the personal benefit of HCPs and family members (such as tickets to entertainment events, etc.).

### **Context**

- Despite several instances of breach of the voluntary Uniform Code of Pharmaceutical Marketing Practices (UCPMP) by pharma companies, and the demand from the Indian Medical Association (IMA) and doctors to make it mandatory, the Department of Pharmaceuticals (DoP), which comes under the Ministry of Chemicals and Fertilizers, has yet again requested companies to abide by UCPMP.

### **Issue:**

- It is noted that rather than taking steps towards instituting statutory regulation of unethical marketing and promotion, the DoP is still requesting companies to abide by a toothless, unenforceable UCPMP.
- Pharma associations are requested to make sure that the pharma companies adhere to the provisions of UCPMP and no unethical promotion of pharma products be done during the conference.
- DoP is yet to make compliance under the UCPMP compulsory.

## ***A bleak winter for Kota's children***

### **Context:**

- The death of more than a hundred children in a span of one month in Kota, Rajasthan.

### **Details:**

- The deaths of 100 children in the Kota based hospital in December 2019 followed by more deaths in the first week of 2020 has brought a renewed focus on the country's maternal and child health care system.
- News of the children's deaths from mostly preventable causes and the bad state of the government hospital has sparked a nationwide furore.
- Though the children's families have blamed the staff of the hospital for negligence, various studies show that the government hospital is poorly equipped and understaffed.
- The failure of the healthcare system in India as a whole has led to the deaths of children in such large numbers.

### **Concerns:**

The high number of child mortalities:

- Though the infant mortality rates have been decreasing, the number of deaths due to preventable causes is still high.
- Figures from the National Family Health Survey depict a gradual decline in both infant and maternal mortality, but the pace has not been satisfactory.
- In the midst of outrage caused by the death of infants in Kota, disturbing figures of similar deaths emerged from Jodhpur and Bikaner as well as Gujarat's Rajkot and Ahmedabad.

Poor facilities:

- Most of the government hospitals lack sufficient facilities and beds to cater to the large patient numbers.
- The hospitals lack even basic systems like centralized oxygen system, ventilators, infusion pumps, nebulisers and warmers.
- The medical equipment available is also of inferior quality, which puts the children's health at risk.

Unhygienic surroundings:

- Extremely unhygienic and filthy surroundings have been reported from the government hospitals which eventually aids disease transmission and further worsens the health conditions of the patients.

Overworked staff:

- The government hospitals face a shortage of staff, and subsequently, the resident staff are generally overworked.

Out of pocket expenditure:

- The lack of a quality health system at government hospitals leads to people inadvertently moving towards private hospitals. This leads to higher out of pocket expenditure and often pushes families into poverty.

Political blame game:

- The Kota episode, followed by deaths reported from elsewhere, has unleashed a political blame game between the ruling government and the Opposition resulting in lack of efforts to correct the underlying causes.

Pressure on tertiary health care:

- It would be wrong to attribute the issue of infant deaths in Kota only to the failure of the tertiary segment. It is, in fact, the manifestation of the collapse of the public health system at all levels.
- Unless maternal health services, child health services and primary health care facilities are strengthened, we cannot expect lives to be saved only through treatment at the tertiary level.
- There is a need to reduce the patient load at the tertiary level. Tertiary health care is catering to a much higher number of patients than what it is meant to cater to, while primary care facilities are grossly underutilised.

Low budget, unutilised funds:

- The infant mortality is a consequence of poor budgetary allocation for medical and public health, combined with the problem of unspent capital funds. This impacts the infrastructure and maintenance of medical equipment in government-run hospitals.

**Way forward:**

- As a temporary measure, the hospitals should ensure regular visits of paediatricians to the maternity ward and plug the loopholes in the system.
- In the long run, the resources to the health system and infrastructure are to be strengthened.
- There is an urgent need to increase health and nutrition budgets, which are abysmally low, in order to get the mandated outcome from healthcare facilities.
- There is a growing call for revamping the entire public health system from bottom to up to emphasize more on primary health care systems.

# SOCIAL ISSUES

## **1000 Springs Initiative**

- It is an online portal on GIS-based Spring Atlas with the hydrological and chemical properties of the springs.
- The initiative aims at improving access to safe and adequate water for the tribal communities living in difficult and inaccessible part of rural areas in the country.
- It is an integrated solution around natural springs.
  - It includes the provision of infrastructure for piped water supply for drinking; provision of water for irrigation; community-led total sanitation initiatives; and provision for water for backyard nutrition gardens, generating sustainable livelihood opportunities for the tribal people.
- The online portal has been developed to make these data easily accessible from an online platform.
- Presently, data of more than 170 springs have been uploaded on the Spring Atlas.

## **Springs**

- They are natural sources of groundwater discharge and have been used extensively in the mountainous regions across the world, including India.

## **Implementation**

- Under this initiative, more than 70 young tribal youths from the rural belt of three districts of Odisha namely, Kalahandi, Khandamal and Gajapati have been trained as barefoot hydro geologists by combining traditional and scientific knowledge for identification and mapping of springs, and undertaking rejuvenation and protection measures in their habitations

## **Significance**

- The initiative will help in harnessing the potential of perennial springs' water to address the natural scarcity of water in tribal areas.

## **Capacity Building of Scheduled Tribe Representatives in Local Self Governments**

- This initiative is aimed at empowering tribal PRI (Panchayati Raj Institution) representatives by enhancing their decision-making capabilities at the local government level.
- Among other issues concerning tribal development, it also focusses on constitutional and legal provisions that protect and promote the rights and welfare of the tribal population.
- The programme will ensure greater participation of Scheduled Tribe PRIs representatives in planning, execution and monitoring of government policies and programmes.
- Their better participation in the development process would ensure better prioritization of the tribal development agenda.

## **Context**

- The Union Tribal Affairs Minister launched the “Programme for Capacity Building of Scheduled Tribe Representatives in Local Self Governments” and also the “1000 Springs Initiative”.

## **Asur Tribe**

- They are a particularly vulnerable tribal group living in Jharkhand.
  - Besides Jharkhand, members of the tribe live in pockets of Bihar and West Bengal.
- They belong to the Austroasiatic ethnic group.
- Asurs are traditionally iron-smelters. They were once hunter gatherers, having also involved in shifting agriculture
- Asuri language, is on the verge of extinction, with less than 8,000 people speaking it.
  - It figures in the list of UNESCO Interactive Atlas of the World’s Languages in Danger.

## **Sohrai**

- It is a harvest festival celebrated by this tribe
- It is celebrated after harvest and coincides with the festival of Diwali.
- The festival is celebrated on Amavasya (new moon) in the Hindu month of Kartik (October-November).

## **Context**

- The Asur tribe has been using mobile radio to transmit local news and songs which is helping them revive the dying tribal language

## **Surrogacy (Regulation) Bill, 2020**

### **Context**

- The Union Cabinet has approved the Surrogacy (Regulation) Bill, 2020.

### **Surrogacy**

- It is a practice where a woman gives birth to a child for an intending couple with the intention to hand over the child after birth to the intending couple.
- Altruistic surrogacy involves no monetary compensation to the surrogate mother other than the medical expenses and insurance coverage during the pregnancy.
- Commercial surrogacy includes surrogacy or its related procedures undertaken for a monetary benefit or reward (in cash or kind) exceeding the basic medical expenses and insurance coverage.

### **Demand for surrogacy has increased in India**

- The reasons are advanced age, problems with the uterus, pelvic tuberculosis, infections, etc., in couples who want to have a child.

### **Conditions**

- The Surrogacy Bill proposes to allow altruistic ethical surrogacy to intending infertile Indian married couples (both partners of Indian origin) in the age groups 23-50 years (women) and 26-55 years (men).

- They cannot have a surviving child, either biological or adopted, except when they have a child who is mentally or physically challenged or suffers from a life-threatening disorder with no permanent cure.

### **Features of the Bill**

- The Bill is aimed at banning commercial surrogacy and allowing altruistic surrogacy.
- It allows the person using a surrogate mother to only pay for her medical expenses to reduce commercialization of the act.
  - The proposed insurance cover for a surrogate mother has been increased from 16 months to 36 months.
- The 2020 Bill allows a “willing woman” and not just a “close relative” to become a surrogate mother and proposes that widows and divorced women can also benefit from its provisions, besides infertile Indian couples.
  - The reason for allowing any “willing woman” and not just a “close relative” is that as families are getting smaller these days, it is becoming difficult to find somebody among close relatives who would be willing.
  - So, altruistic surrogacy has been allowed where there is no element of coercion and is done in the spirit of helping somebody. This would ensure that all those who are needy can take advantage of science
- The Bill further proposes to regulate surrogacy by establishing a National Surrogacy Board at the central level and State Surrogacy Board and appropriate authorities in states and Union Territories respectively.
  - Surrogate clinics should also be established at the district level with a lady medical practitioner appointed full time.

### **Benefits**

- It will regulate the surrogacy services in the country.
- It will control the unethical practices in surrogacy, prevent commercialization of surrogacy and will prohibit potential exploitation of surrogate mothers and children born through surrogacy.
- It will prevent harassment and violence against surrogate mothers

### **Criticism**

- The new Bill is silent on the right to parenthood of LGBTQ couples.
  - The bill only allows surrogacy for heterosexual couples or single women who are unable to have a child
- Health experts have criticized the absence of monetary compensation for the surrogate.
  - While it is a good step to omit the "close relative" clause for a surrogate, it doesn't help to not include monetary compensation for the surrogate because not many women would be interested in carrying someone's child without being paid for it.

## ***TrackChild***

### **Context**

- The Ministry of Women and Child Development (WCD) is hosting a web portal “TrackChild” to track missing and found children.

### **About TrackChild**

- The 'TrackChild' portal has been designed and developed adhering to the guidelines provided in the Juvenile Justice (Care and Protection of Children) Act, 2000 and Model Rules 2007 and the provisions laid down in the Integrated Child Protection Scheme (ICPS).
- 'TrackChild' holds the live data base of 'missing' & 'found' children and tracks the overall progress of the children living in the Child Care Institutes (CCIs).

### **Objectives of TrackChild portal**

- To ensure timely tracking of “Missing Children”
- To ensure ultimate repatriation and rehabilitation of the missing children.
- To ensure proper care and development of the children of the Child Care Institutes (CCIs).
- To set up a framework for participating organizations involved in the process.

## ***A marriage story for everyone***

### **Introduction**

- Indian society has many religions and myriad castes. Most of the weddings in India are arranged on the basis of religion and caste as per the family norms and customs. People enter the sacred relationship of marriage within their communities. But with changing times and with constant changes in the social milieu, individuals would want to marry their loved ones from a different religion or caste. The Special Marriage Act deals with inter-caste and inter-religion marriages.
- The Special Marriage Act is, therefore, a special law enacted to provide for a unique form of marriage by registration wherein the parties to the marriage do not have to renounce their religion. It is a legislative tool for social change, an attempt to remove a social barrier to the exercise of individual autonomy.

### **Special Marriage Act of 1954**

- This Act covers marriages among Hindus, Muslims, Christians, Sikhs, Jains and Buddhists.
- This Act applies not only to Indian citizens who belong to different castes and religions but also to Indian nationals who live abroad.

### **Supreme Court judgments on individual autonomy**

Supreme Court has championed the cause of individual autonomy in matters of love, sex and marriage, in

- Shafin Jahan v. Asokan (2018) (Hadiya Case)
  - The SC said, “The right to marry a person of one’s choice is integral to Article 21 (right to life and liberty) of the Constitution”.

- The absolute right of an individual to choose a life partner is not in the least affected by matters of faith.
- **Shakti Vahini v. Union of India (2018)**
  - Any attempt by Khap Panchayats or any other assembly to scuttle or prevent two consenting adults from marrying is absolutely 'illegal'.
  - It said "Liberty, taking the word in its concrete sense consists in the ability to choose." When the ability to choose is crushed in the name of class honour and the person's physical frame is treated with absolute indignity, a chilling effect dominates over the brains and bones of the society at large.
- **Navtej Johar v. Union of India (2018).**
  - In Navtej Johar, not only did the Court hold Section 377 of the IPC to be unconstitutional, it explicitly recognised the rights of the LGBTQ+ community to express their individuality, sexual identity and love on par with heterosexuals, as fundamental to Articles 14 (right to equality), 19 (right to freedom), and 21 (right to life) of the Constitution.

### **Context**

- A petition was recently filed in Kerala High Court by a male same-sex couple.
- They challenged the constitutionality of the Special Marriage Act on the ground that it discriminates against same-sex couples who want to formalize their relationship through marriage.
- In their plea, the couple stated that they were aggrieved by the provisions of the Special Marriage Act, 1954 whereby the law only permits a heterosexual (opposite sex) couple to get married and a homosexual couple like them is denied equal access to the institution of marriage.
  - The text of the Act does not exclude homosexual unions from its ambit expressly, but carries a heterosexual undertone in its language.

### **Issues**

- The Supreme Court in Navtej Johar had recognised the right of same-sex couples to express their sexual identity, right to privacy and non-interference in the conduct of their personal affairs, and the right to be recognized as full members of society.
- To refuse their plea under the Special Marriage Act would cause them very real, tangible damage, considering that marriage carries a range of legal rights and protections, available during the marriage as well as on its dissolution by divorce (the right to seek maintenance) or death (the right to inherit property).

### **Why recognition matters?**

- Marriage continues to be the cornerstone of social legitimacy and family in India. It leads to human development and aspiration which give meaning to their personal lives.
- The social purpose of marriage is to provide stability; financial, physical or emotional care and support; sexual intimacy and love to individuals; and to facilitate procreation and child-rearing.
  - Whether the couple should have children or not, is for the couple to decide.
  - They may opt for biological children or they may adopt children.
  - When rules for normal couples are not laid why have these rules on the homosexual couple is another argument.



- Therefore, aside from procreation, none of these objectives are dependent on the gender of the parties concerned, so much as on the bond they share and their ability to make the relationship work.

### **Conclusion**

- The petition before the Kerala High Court represents a unique opportunity — a potential first step towards making marriage, as an institution, as a legal concept, more accessible and egalitarian, less arbitrary and exclusionary.
- It gives the High Court the chance to prioritize the fundamental and human rights of the petitioners over the abstract heteronormative tendency of the majority to deny legitimacy to relationships that challenge oppressive social structures and established hierarchies.
- In other words, its high time love and logic are given a chance to triumph over homophobic tradition.

### **Lok Sabha clears Bill to include more tribes in Karnataka in ST category**

The Lok Sabha has passed the Constitution (Scheduled Tribes) Order (Amendment) Bill, 2019 by voice vote.

- The Bill seeks to include the Parivara and the Talwara communities in the ST category to ensure they get reservation and other benefits provided by the government.
- The Siddi tribes of Belagavi and Dharwad would also be included in the category apart from those living in the Uttar Kannada districts.
  - Currently, the Siddi tribe of Uttar Kannada district alone is included in the list.
- The amendments had been made in the list of the STs in Karnataka.

### **Most missing women from Maharashtra, M.P.**

#### **Context:**

- A study by the National Crime Records Bureau (NCRB).

#### **Background:**

- In 2019, the Supreme Court had directed the NCRB to analyze the data on missing persons, mainly women and children, so that areas prone to persons being trafficked can be identified.

#### **Details:**

- The NCRB study was based on the annual Crime in India Reports of the years 2016, 2017 and 2018.
- The study states that the highest number of women and children who go missing in the country are from Maharashtra and Madhya Pradesh.
- The trend was observed for all the considered years of 2016, 2017 and 2018.
- According to the report, the States where the highest number of women went missing in the three years of the study are Maharashtra, West Bengal, and Madhya Pradesh.

#### **Significance of the study:**

- Considering the fact that incidents of missing women and children are not uniform across the country, the study aimed to identify the areas where registered cases of missing persons, specifically women and children, are higher than in other areas.
- Such areas could be one of the sources, transit or destination sites for child/women trafficking.

- This will help the state plan appropriate preventive measures for implementation in such areas.

## ***No country is doing enough to protect children's health, finds study***

### **Context**

- The report titled 'A Future for the World's Children' was released.
- It is a report on child health and well-being by an independent WHO-UNICEF-Lancet Commission.
  - It had more than 40 child and adolescent health experts from around the world who worked on the report.

### **Details**

- According to the report, no single country is adequately protecting children's health, their environment and their future.
- It says that the health and future of every child and adolescent worldwide is under immediate threat from ecological degradation, climate change and exploitative marketing practices that push heavily processed fast food, sugary drinks, alcohol and tobacco at them.
- According to the report, while the poorest countries need to do more to support their children's ability to live healthy lives, excessive carbon emissions — disproportionately from wealthier countries — threaten the future of all children.
- If global warming exceeds 4°C by 2100 in line with current projections, this would lead to devastating health consequences for children, due to rising ocean levels, heatwaves, proliferation of diseases like malaria and dengue and malnutrition.

### **Stats**

- The report says globally, the number of children and adolescents who are obese has increased from 11 million in 1975 to 124 million in 2016 — an 11-fold increase.

### **Global Picture**

- The index shows that children in Norway, the Republic of Korea and the Netherlands have the best chance at survival and well-being.
- Children in the Central African Republic, Chad, Somalia, Niger and Mali face the worst odds.
- The only countries on track to beat the CO2 emission per capita targets by 2030, while also performing fairly (within the top 70) on child flourishing measures are Albania, Armenia, Grenada, Jordan, Moldova, Sri Lanka, Tunisia, Uruguay and Vietnam.

### **On India**

- In the report assessing the capacity of 180 countries, India stands 77th (sustainability index) and is at the 131st position on a ranking that measures the best chance at survival and well-being for children.
- The report says although India has improved in health and sanitation, it has to increase its spending on health.

## ***Only 7 in 100 anganwadi beneficiaries are in cities***

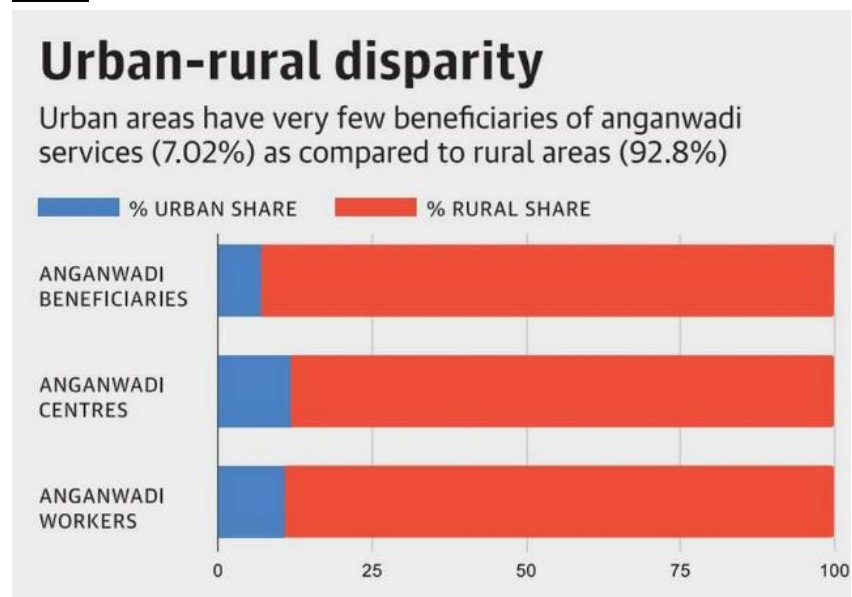
### **Context:**

- According to the government's response to a Right to Information (RTI) query, for every 100 anganwadi beneficiaries in the country, only seven are in urban areas.
- The disparity is primarily because of a severe lack of anganwadis in cities, leading to poor coverage of the government's flagship programme in early childhood development.

### **Anganwadis**

- Anganwadis or day-care centres are set up under the Integrated Child Development Services (ICDS) by the Women and Child Development Ministry to provide a package of six services.
- The services include supplementary nutrition; pre-school non-formal education; immunisation, nutrition and health education; as well as referral services.
- The aim of the scheme is to reduce infant mortality and child malnutrition.
- Beneficiaries include children in the age group of six months to six years, and pregnant women and lactating mothers.

### **Issues:**



- While there were a total 7.95 crore beneficiaries of the anganwadi scheme in the country as on September 30, 2019, only 55 lakh were registered at urban anganwadis.
  - This is primarily because of an acute paucity of anganwadi centres in urban areas.
- There are as many as 13.79 lakh anganwadis operational across the country, out of which 9.31 lakh centres are linked to the government's web-enabled data entry system called Rapid Reporting System.
  - Of those anganwadis that can be monitored online, 1.09 lakh centres are in urban areas and the remaining 8.22 lakh were in rural areas of the country.

- As per Census 2011, 32% of India's 1.2 billion population live in cities, though experts have said that if the definition of an urban settlement was broadened, the share of urban population will be much higher.
- A recent first-of-its-kind pan-India study on nutrition status, the Comprehensive National Nutrition Survey 2016-18, found that 35% of children under five were stunted and 17% were wasted.
  - It also said 22% of children in the age group of 5-9 years were stunted and 23% were thin for their age. Also, 20% of those in the 10-19 years age group were thin for their age.
- At the same time, 2% of under four-year-olds, 8% of children in the 5-9 years age group, and 6% of adolescents, were overweight. Data also showed that children in urban areas showed two to three times higher prevalence of obesity as compared to their peers in rural areas.

#### **Way forward:**

- The government's efforts in improving service delivery under the ICDS programme must involve the aspect of improving infrastructure and safety in the Anganwadi centres of the urban areas.

### ***Panel suggests steps to curb child porn***

#### **Context:**

- A parliamentary panel has recommended a code of conduct for Internet service providers (ISPs) and strengthening the National Commission for Protection of Child Rights to curb child pornography.

#### **Details:**

- The report was prepared by an ad hoc committee set up by the Rajya Sabha and led by Congress MP Jairam Ramesh.
- The committee has delved into great detail in using technology to curb circulation of child porn such as:
  - Breaking end-to-end encryption to trace its distributors of child pornography
  - Mandatory applications to monitor children's access to pornographic content
  - Employing photo DNA to target profile pictures of groups with Child Sexual Abuse Material (CSAM)
- The report recommends a multi-pronged strategy detailing technological, institutional, social and educational as well as State-level measures.
- Among its key recommendations is a code of conduct or a set of guidelines for ensuring child safety online.
  - It puts a greater onus on ISPs to identify and remove child sexual abuse material (CSAM) as well as report such content and those trying to access them to the authorities under the national cybercrime portal.
  - It has also called for strengthening the National Commission for Protection of Child Rights (NCPCR) so that it can serve as the nodal body for curbing child pornography. It is suggested that the capabilities required in the NCPCR should include technology, cyberpolicing and prosecution.

#### **Concerns:**

- Some of the recommendations are expected to lead to concerns over privacy and misuse.

- It is believed that asking ISPs to report content in addition to blocking and filtering may not be practical.
- It is opined that the suggestion to break encryption could also just lead to traffic moving to different platforms.

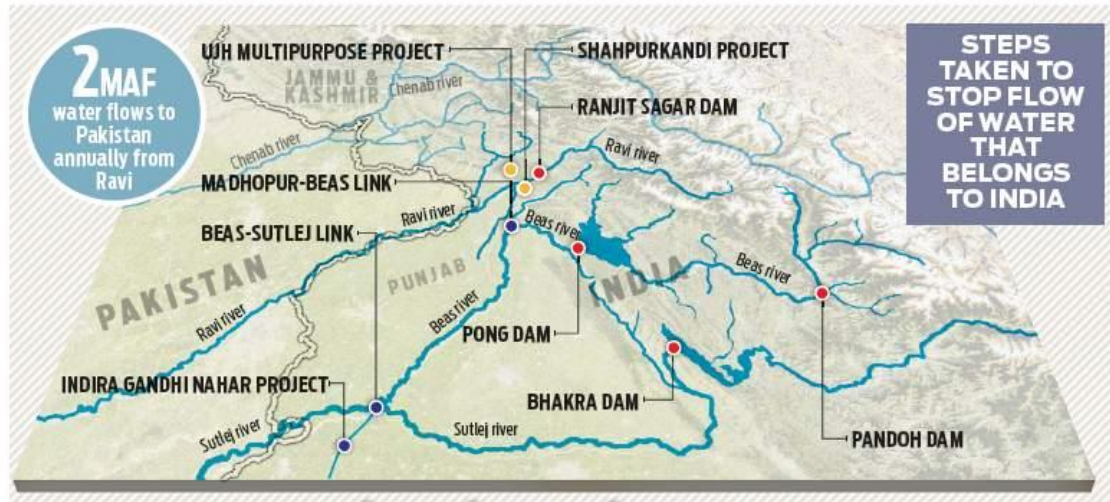
#### **Way Forward**

- There is a need to develop a victim-centric strategy instead of just focusing on prosecution.

# GEOGRAPHY

## ***Ujh Multipurpose Project***

- The project is planned to be constructed in Kathua District of Jammu and Kashmir on the River Ujh which is a major tributary of River Ravi.
- The project is a multipurpose project with intended benefits of hydropower, irrigation and drinking water.



### ***Significance***

- The project, after completion, will enhance the utilization of waters of Eastern Rivers allotted to India as per the Indus Water Treaty.

### ***Context***

- The Minister of State for Development of North Eastern Region chaired a meeting to fast-track the implementation of Ujh Multipurpose (National) Project, Jammu & Kashmir.

## ***Urban heat islands in India***

### ***Context***

- There was a study that was conducted by IIT Kharagpur called “Anthropogenic forcing exacerbating the urban heat islands in India”.
- According to the study the urban areas are comparatively warmer than the suburbs.

### ***Details***

- The research was a detailed and careful analysis of urban heat islands in India.
- It studied the difference between urban and surrounding rural land surface temperatures, across all seasons in 44 major cities from 2001 to 2017.

- The study found evidence of mean daytime temperature of surface Urban Heat Island (UHI Intensity) going up to 2 degrees C for most cities, as analyzed from satellite temperature measurements in monsoon and post monsoon periods.
- Researchers also noticed similar rise in daytime temperatures in Delhi, Mumbai, Bengaluru, Hyderabad and Chennai.

### **Urban Heat Island (UHI)**

- Temperatures in the urban areas are often a few degrees warmer than the rural areas surrounding it. This temperature discrepancy is the result of a phenomenon known as the urban heat island effect.
- The heat gets trapped near the earth's surface as a result of a decline in green cover, rapid urbanisation, energy-intensive activities, and concrete structures.

### **Reasons for UHIs**

The increased use of manmade materials and increased anthropogenic heat production are the main causes of the UHI.

- When houses, shops, and industrial buildings are constructed close together, it can create a UHI.
- Building materials are usually very good at insulating, or holding in heat. This insulation makes the areas around buildings warmer.
  - Materials used for pavements, roads and roofs, such as concrete, asphalt (tar) and bricks, which are opaque, do not transmit light, but have higher heat capacity and thermal conductivity than rural areas, which have more open space, trees and grass.
- Trees and plants are characterized by their 'evapotranspiration'—evaporation involves the movement of water to the surrounding air, and transpiration refers to the movement of water within a plant and the subsequent loss of water through the stomata (pores found on the leaf surface) in its leaves.
  - Grass, plants and trees in the suburbs and rural areas do this.
  - The lack of such evapotranspiration in the city leads to the city experiencing higher temperature than its surroundings.
- People and their tools, such as cars and factories, are always burning off energy.
  - UHI's thus decrease air quality in the cities, because of the pollution generated by industrial and automobile exhaust, higher extent of particulate matter and greater amounts of dust than in rural areas.
- Some species like lizards and geckos thrive in higher temperatures. Due to increase of temperatures in the urban set up, their number increases.
  - Insects such as ants are more abundant here than in rural areas; these are referred to as ectotherms.
- Nighttime temperatures in UHIs remain high. This is because buildings, sidewalks, and parking lots block heat coming from the ground from rising into the cold night sky. Because the heat is trapped on lower levels, the temperature is warmer.

### **Effects of Urban Heat Island**

- This might impact the health of people living in the urban areas due to heat waves apart from pollution.

- Cities tend to experience heat waves which affect human and animal health, leading to heat cramps, sleep deprivation and increased mortality rates.
- Water quality suffers. When warm water from the UHI ends up flowing into local streams, it stresses the native species that have adapted to life in a cooler aquatic environment.
- Increased temperatures during summer in cities amplify energy demand for air conditioning.
  - This means the increased demands for cooling or air condition during summer contributes to higher energy bills.
  - Also, during exacerbated periods of urban heat islands, the resulting demand for air conditioning can overload systems which can lead to power outages and blackouts

### **Control of UHIs and mitigation**

Industrialisation and economic development are vital to the country, but the control of UHIs and their fallouts are equally vital.

- The best way to make cities liveable is to contain sprawl and increase the amount of vegetation.
  - We need to plant as many trees and plants as possible
  - Trees provide shade, absorb carbon dioxide, release oxygen and fresh air, and provide a cooling effect.
  - Deciduous trees are the best for urban areas because they provide cooling effect in summer and they don't block warmth during winter.
- Building water-retentive pavements and installing reflective roofs can be adopted to combat surface heat.
  - Using light-colored concrete (using limestone aggregates along with asphalt (or tar) making the road surface greyish or even pinkish (as some places in the US have done); these are 50% better than black, since they absorb less heat and reflect more sunlight.
- Green roofs present a great method of lessening the impacts of urban heat island.
  - Green roofing is the practice of planting vegetations on a roof, just like they are planted in a garden.
- Conservation of water bodies in and around cities could be an effective strategy
- The construction of buildings and infrastructure with eco-friendly materials could also prove to be crucial to mitigate the effects of heat islands

### **Conclusion**

- The need of the hour is to control urban sprawl and put in place stringent policies for sustainable urbanization

## **Vadhavan port**

### **Context**

- The Union Cabinet approved a proposal to set up a major port at Vadhavan near Dahanu in Maharashtra

### **Details**

- Vadhavan port will be developed on "landlord model".



- A Special Purpose Vehicle (SPV) will be formed with Jawaharlal Nehru Port Trust (JNPT) as the lead partner with equity participation equal to or more than 50% to implement the project.
- The SPV will develop the port infrastructure including reclamation, construction of breakwater, besides establishing connectivity to the hinterland.
- All the business activities would be undertaken under PPP mode by private developers.

#### **Landlord port model**

- In the landlord port model, the publicly governed port authority acts as a regulatory body and as landlord while private companies carry out port operations—mainly cargo-handling activities.
- Here, the port authority maintains ownership of the port while the infrastructure is leased to private firms that provide and maintain their own superstructure and install own equipment to handle cargo.
- In return, the landlord port gets a share of the revenue from the private entity.

#### **Significance**

- With the development of Vadhavan port, India will break into the countries with top 10 container ports in the world.

# EDUCATION

## ***Indian Institutes of Information Technology Laws (Amendment) Bill, 2020***

### **Context**

- Cabinet approves the Indian Institutes of Information Technology Laws (Amendment) Bill, 2020.

### **Background**

IIITs are envisaged to promote higher education and research in the field of Information Technology.

- The Indian Institutes of Information Technology Act of 2014 and Indian Institutes of Information Technology (Public-Private Partnership) Act, 2017 are the unique initiatives of the Government of India to impart knowledge in the field of Information Technology to provide solutions to the challenges faced by the country.
- Introduction of the Indian Institutes of Information Technology Laws (Amendment) Bill, 2020 will amend the principal acts of 2014 and 2017.

### **What the bill intends to do?**

- It will grant statutory status to five Indian Institutes of Information Technology in Public Private Partnership mode at Surat, Bhopal, Bhagalpur, Agartala and Raichur and declare them as Institutions of National Importance along with already existing 15 Indian Institutes of Information Technology under the Indian Institutes of Information Technology (Public-Private Partnership) Act, 2017
- The Bill will encourage IIITs to promote the study of information and technology in the country through their innovative and quality methods.
- This will entitle them to use the nomenclature of Bachelor of Technology (B.Tech) or Master of Technology (M.Tech) or Ph.D. degree as issued by a University or Institution of National Importance.
- It will also enable the Institutes to attract enough students required to develop a strong research base in the country in the field of information technology.

## ***National Means-cum-Merit Scholarship Scheme***

- The Central Sector Scheme 'National Means-cum-Merit Scholarship Scheme' (NMMSS) is being implemented since 2008 with the objective to award scholarships to meritorious students of economically weaker sections to arrest their drop out at class VIII and encourage them to continue the study at secondary stage.
- Scholarship of Rs. 6000/- per annum (Rs.500/- per month) per student is awarded to selected students every year for study in classes from IX to XII in State Government, Government aided and local body schools.
- There is a separate quota of scholarships for each State/UT.

### **Criteria**

- Students whose parental income from all sources is not more than Rs. 1,50,000/- are eligible to avail the scholarships.

- The selection of students for award of scholarships under the scheme is made through an examination conducted by the States/UTs Governments.

### **Performance**

- The Scheme was evaluated by the National Institute of Planning and Administration (NIEPA).
- As per the evaluation study report, the scheme helped poor families in sending their meritorious children for secondary and senior secondary education and has therefore recommended for increasing the scholarship amount from Rs. 500/- to Rs. 1000/- per month for class IX and class X students and Rs. 1500/- per month for Class XI and XII students to make the scheme more attractive and effective.

## **Saakshar Bharat Mission**

- It is the revamped version of the National Literacy Mission (which was launched in 1988).
- This mission, formulated in 2009, goes beyond reading, writing and arithmetic.
- It seeks to create awareness of social disparities. It aims to create a literate society through a variety of teaching learning programmes for non-literate and neo-literate of 15 years and above.
- The objective of the Scheme is achieving 80% literacy level at national level, by focusing on adult women literacy so as to reduce the gap between male and female literacy.
- The four key elements of the programme are:
  - Imparting functional literacy and numeracy to non-literates.
  - Acquiring equivalency to formal educational system.
  - Imparting relevant skill development programme.
  - Promoting a learning society by providing opportunities for continuing education.
- It is under the Ministry of Human Resource Development.

### **Context:**

- Around 7.64 crore learners successfully passed the biannual Basic Assessment Test under Saakshar Bharat Mission.

# DISASTER MANAGEMENT

## ***BIMSTEC Disaster Management Exercise – 2020***

- This exercise will provide a platform for member states to evaluate existing capabilities, share best emergency response practices, improve existing emergency preparedness and strengthen regional response mechanism and also to conduct risk assessment in the context of cultural heritage sites at the time of disaster.
  - The theme of 2020 exercise is “A cultural heritage site that suffers severe damage in the earthquake and flooding or storm.”
- The first such exercise was held in 2017.
- The exercise was hosted by the National Disaster Response Force (NDRF).
- Five member countries namely, India, Bangladesh, Myanmar, Sri Lanka, Myanmar and Nepal participated in the exercise.
  - Two other member countries Bhutan and Thailand did not participate.
- The purpose of the exercise was to test the existing emergency procedures for notification, preparedness and emergency response during a major natural disaster.

### **Context**

- The Minister of State for Home Affairs inaugurated the Field Training Exercise of the 2nd BIMSTEC Disaster Management Exercise on flood rescue at the Ramachandi Beach, Puri (Odisha).

# HISTORY

## **Kota Rani**

- Kota Rani is remembered as the last ruler belonging to the Hindu Lohara dynasty in Kashmir. She died in 1339.
- According to Mohibbul Hasan's "Kashmir under the sultans," she was the daughter of Ramchandra, the commander-in-chief of Suhadev, who was the king of Kashmir belonging to the Lohara dynasty.
- Ramchandra was tricked and defeated by one of his administrators, Rinchan, who was a Ladhaki prince. Rinchan was ambitious and wanted to the throne.
- To gain the trust of the locals, he married Kota rani and took Ramachandra's son, Rawanchandra, in his confidence by making him his commander-in-chief.
- Rinchan ascended the throne in 1320 but died after quelling a rebellion by a former minister in 1323. In between, Rinchan converted to Islam after coming in contact with the Sufis of the Suharawardy order. He took the title of Sadr-ud-din.
- After his death, his minor son from Kota Rani, Hydar, became the king.
- Kota Rani was regent during the minority of her son, and ruled as monarch until 1339. She was deposed by Shah Mir, who became the first Muslim ruler of Kashmir.
  - Mir Shah, who was called Shams-ud-din, then laid the foundation of his dynasty that ruled Kashmir for the next two and half centuries.

## **Legacy**

- She was very intelligent and a great thinker. She saved the city of Srinagar from frequent floods by getting a canal constructed, named after her and called "Kute Kol".

## **Poompuhar: Scientists to digitally recreate Tamil Nadu port city**

### **Context**

- The Chola Dynasty port city in Tamil Nadu that vanished from maritime history around 1,000 years ago will be digitally reconstructed by a consortium led by the Department of Science and Technology (DST).

### **Details**

- The reconstruction of Poompuhar is part of DST's Indian Digital Heritage project — an exhibition of its first project 'Digital Hampi' is currently on display at the National Museum.
- The Hampi project brings to life tangible and intangible heritage in the area offering visitors a peak into how marketplaces looked and the musical pillars were constructed.
- The second phase includes the cities in Gujarat and Tamil Nadu which had submerged into the water
- There are exhaustive narrations in works of Sangam Tamil literature to infer that the city, located 30 km from the existing Poompuhar town in southern TN, was submerged due to "kadalkol" or rising sea levels.

### **Significance**

- The study is expected to provide packages of scientific information not only on the life history of Poompohar and the socio-cultural evolution but also the science and technological evolution and the disaster history of this region

# GOVERNANCE

## ***Aadhaar, no standout performer in welfare delivery***

### **Context:**

- A new research paper, published in the National Bureau of Economic Research, provides details about an extensive empirical study of the impact of Aadhaar in reducing leakages and increasing fiscal savings.

### **Background:**

- India spends a large amount of money every year across several core welfare programmes such as Public Distribution System (PDS), LPG, Mahatma Gandhi National Rural Employment Guarantee Act, etc.
- The government estimates that roughly 30-40% of the money spent by the government is lost in leakages.
  - Leakages are largely due to 'ghost' and 'duplicate' beneficiaries using fake identities to avail government benefits.
- A unique identity biometric scheme could eliminate the large leakages and vastly improve efficiency in welfare delivery.
- The Aadhaar Bill was renamed 'Targeted Delivery of Financial and other Subsidies, Benefits and Services' Bill, to make clear the fact that Aadhaar's primary purpose, was to improve welfare delivery efficiency.
  - The Unique Identification Authority of India (UIDAI) and the government have repeatedly claimed that Aadhaar has reduced leakages of government subsidies leading to fiscal savings for the government.
  - The annual report of 2017-18 claimed that through Aadhaar, savings worth ₹90,000 crores had accrued to the government.

### **Research paper offers an account of Aadhaar's performance.**

- The research team conducted a scientifically designed study of the PDS system in Jharkhand covering 15 million beneficiaries using the technique of randomised control trials (RCT).
- The study compared two sets of beneficiaries. One set of beneficiaries went through the Aadhaar-based biometric authentication while the other group used the old system of procuring their ration.

### **Findings**

- Comparison to check if Aadhaar-based biometric authentication had any impact in reducing leakages revealed that Aadhaar-based biometric authentication had no measurable benefit.
- Aadhaar-based biometric authentication did not reduce leakages due to elimination of ghosts and duplicates, as widely perceived.
- The research paper claims that Aadhaar-based biometric authentication increased transaction costs for beneficiaries, because of multiple trips to authenticate themselves and the opportunity cost of time spent.
- Aadhaar-based biometric authentication also introduced an error of exclusion.

- Aadhaar authentication falsely rejected genuine PDS beneficiaries who were then denied their ration supplies.
- The study finds that nearly 10% of legitimate beneficiaries were denied their ration either because they did not have their Aadhaar linked to their ration card or due to an exclusion error.

#### **Concerns:**

- Only the widespread belief among the policy elite that ghost beneficiaries and duplicates were the challenges of India's welfare delivery was reason enough for the law of Aadhaar to be enacted.
- A robust pilot project of scale to test the accurateness of the long-held belief was not carried out.
- Many recent studies now establish that ghost beneficiaries and duplicates are not a significant cause of leakages.
- A similar mistake was also committed with respect to the Goods and Services Tax (GST).
  - Policy economists have always claimed that the previous system of a multitude of State taxes are a drag on inter-State commerce and called for the adoption of a nationwide Goods and Services Tax (GST).
  - There was no empirical evidence to back the claim of the policymakers.
  - Three years after the implementation of the GST, the promise of vastly improved inter-State trade and a two percentage point boost to GDP seem distant while States are hurting badly with sole dependence on the Centre for their taxes.

### ***Financial Secrecy Index (FSI)***

- Tax Justice Network (TJN) which is a U.K.-based financial advocacy group, pushes for transparency, ranks countries on the size and secretiveness of their financial sectors every two years.
- It examines how intensely the country's legal and financial system allows wealthy individuals and criminals to hide and launder money.
- Parameters used in the ranking include automatic exchange of information and registration of beneficial ownership.
- TJN's FSI ranking is based on a combination of a country's secrecy score and a scale-weightage based on the country's share in the global market for its offshore financial services.

#### **India**

- It has managed to reduce its contribution to global financial secrecy, with its rank falling from 32 on the 2018 index to 47 in 2020, but this is partly because the new edition of the index covers more countries than it did two years ago.

#### **Global Picture**



FSI Rank	Jurisdiction	Secrecy Score
1	Cayman Islands	76
2	United States	63
3	Switzerland	74
4	Hong Kong	66
5	Singapore	65
6	Luxembourg	55
7	Japan	63
8	Netherlands	67
9	BVI	71
10	UAE	78

#### **Transparency reforms**

- It is true that the government has adopted and supported a few changes, such as the automatic exchange of tax and financial information with other jurisdictions, like Switzerland.
- For example, if an Indian citizen has an account with a Swiss bank, and has a balance over a certain threshold, this information will be sent to the Indian tax authorities automatically.

But reducing the financial losses and making multinationals and the super-rich pay their fair share of taxes requires much more.

#### **Revenue concerns for the government**

- Multinational companies have shifted their profits taking advantage of an outdated international tax system.
  - These multinationals may be making profits in India but can easily declare those profits in a low tax jurisdiction like Hong Kong and justify that transaction as a payment for the use of a patent.
  - According to one estimate, this strategy represented a loss of \$27.5 billion in 2014 for the Indian government, up from \$142 million in 2000.
- The government did create a beneficial ownership register — which would allow the identification of the beneficial owner of an asset regardless of whose name the title of the property is in — but the law is weak, since it exempts a lot of people at the discretion of the authorities.
  - This register is not accessible to the public.
- The government has granted tax incentives on a discretionary basis even though there is little evidence that these incentives attract investment.

- The massive reduction in corporate tax rates has thus far not led to any increase in private investment — but it has meant a significant reduction in tax revenues, with devastating consequences.
- It translates into a lack of resources for education, healthcare, food and nutrition and infrastructure.
- The government budget is also highly dependent on indirect taxes like the Goods and Services Tax which are regressive and hit ordinary citizens harder.

### **Way forward**

- India cannot revive its economy without increasing public spending, and so increasing its fiscal resources is essential.
- There is a need for adopting legislation and institutional reforms to end financial opacity — including, for example, opening the beneficial ownership register to the public and stopping the creation of onshore tax havens.
- In addition, the Government of India must also assume a more vocal role in the international debate about how to make multinationals pay their fair share of taxes.
- This means continuing to appeal for a United Nations tax body, which is much more legitimate than the Organisation for Economic Co-operation and Development (OECD).

### **National e-Governance Awards**

- With a view to recognize and promote Excellence in implementation of e-Governance initiatives, the Government of India presents National Awards on e-Governance every year.
- The Awards are given in 6 categories to recognize achievements in the area of e-Governance.
- This initiative also seeks to disseminate knowledge on effective methods of designing and implementing sustainable e-Governance initiatives, to encourage innovations in successful e-Governance solutions and to exchange experiences in solving problems, mitigating risks, resolving issues and planning for success.
- The National e-Governance Award recognizes some of the best Government to Government (G to G), Government to Citizen (G to C), Government to Business (G to B) initiatives taken by government departments. It also recognizes initiatives in Startups, Academic Research Institutions as well as initiatives in adopting emerging technologies.

The six categories under which Awards will be presented are as follows:-

- 1) Excellence in Government Process Re-engineering for Digital Transformation.
- 2) Excellence in providing Citizen-Centric Delivery.
- 3) Excellence in District level Initiative in e-Governance (i) North-East States + Hilly States (ii) UTs (including Delhi) (iii) Other States.
- 4) Outstanding research on Citizen Centric Services by Academic/Research Institutions.
- 5) Innovative Use of ICT in e-Governance solutions by Startups [Start up as defined by Department of Industrial Policy and Promotion (DIPP) Government of India]
- 6) Excellence in Adopting Emerging Technologies

Gold and Silver Awards in each category will be presented.

### **Context**

- The Election Commission of India has been awarded 'Silver' for Excellence in Government Process re-engineering for digital transformation for the year 2019-20.
  - National Health Authority, Ministry of Health and Family Welfare received Gold for Ayushman Bharat Pradhan Mantri Jan Arogya Yojana, under the category Excellence in Government Process Re-engineering for Digital Transformation.

### **Details**

- The award was given by the Department of Administrative Reforms and Public Grievances (DARPG), Government of India.
- The award seeks to recognize the projects that involved analysis and re-design of workflow and which resulted in improvement in outcomes related to efficiency, effectiveness of process, cost, quality, service delivery or a combination of these.
- The award was given in recognition of ERONET – a common database for all States and UTs with data of 91 crore electors.
  - ERONET standardises forms processing, standard database schema, and offers a standard template for e-roll printing.
  - It automates the process of electoral roll management starting from elector registration, field verification of electors, decision support system for electoral registration officers and for providing extensive integrated value-added services.

## **RailMadad**

### **Context:**

- RailMadad gets Silver award under Category II of National e-Governance Awards – 'Excellence in providing Citizen Centric Delivery'.

### **Details:**

- RailMadad is the single portal for grievances, inquiry & assistance of all categories of railway customers.
- It is the grievance redressal portal of the Indian Railways.
- RailMadad adds to 'ease of living' of Railway customers in the following ways:
  - Convergence & Integration: RailMadad is now the single portal for grievance, inquiry and assistance, for all railway customers – passenger, freight & parcel. Customers can also give their suggestions on RailMadad.
  - Ease of Access: Customers can access the portal through various avenues like internet, mobile App, helpline numbers and post. The phone line facility is available in 12 languages.
  - Ease of registering complaints: RailMadad is linked with Railways' existing ticketing systems like PRS & NTES. Hence journey details of passengers are automatically fetched when passenger enters PNR details, making complaint registration process simpler and easy.
  - Accountability: For every registered grievance, the complainant gets a unique CRN (complaint reference number), using which he/she can check the status of the grievance.

After closure of complaint, the customer gets an SMS with a link to give feedback on the quality of redressal.

- Citizen empowerment: RailMadad incorporates citizen's charter commitment of Indian Railways.

## ***Riding on data for mobility***

### ***Introduction***

- The development and advancement of digital technologies have revolutionized the governance approach. The technological change has made interactions between humans and machines, and among citizens, governments and businesses, seamless and efficient.
- Today, e-governance enables and empowers citizens to directly engage with the state, thereby eliminating barriers in the delivery of public services.
- This article speaks about how data can be used to deliver public services efficiently and can be used as a strategic asset in all aspects of policy planning, service delivery and operations of the government.

Let us take the example of the Transport sector where Data-based governance is expected to provide a solution to the ever-growing threat of congestion to urban economies.

### ***Loss due to Congestion***

- Congestion caused an estimated loss of \$87 billion to the U.S. economy and \$24 billion to the four metro cities in India in 2018.
- Given the limited land resources available, the key to solving congestion lies in improving the efficiency of existing transportation systems.

### ***How can we collect Data?***

- Data can be collected from multiple sources such as CCTV cameras, automatic traffic counters, map services, and transportation service providers.

### ***Results from Global studies***

- A study by Transport for London, the local body responsible for transport in and around the U.K. capital, estimates that its open data initiative on sharing of real-time transit data has helped add £130 million a year to London's economy by improving productivity and efficiency.
- In China, an artificial intelligence-based traffic management platform developed by Alibaba has helped improve average speeds by 15%.

### ***Examples***

#### **1. Hyderabad Open Transit Data**

- Hyderabad has become the first city in the country to make available its transport data for public use.
- It publishes datasets on bus stops, bus routes, metro routes, metro stations, schedules, fares, and frequency of public transit services.

- The objective is to empower start-ups and developers to create useful mobility applications. Using the datasets, app developers could integrate the transit data with Google's own transit feed, thus giving a further boost to the public transport services.
  - It will come in handy for creating innovative tools for the public.
  - Such applications can help save time for drivers and passengers every day using real-time intelligent monitoring of the vehicles, thereby improving customer experience.

## 2. Memorandum of Understanding signed (MoU) between the Telangana Government and Ola Mobility Institute

- The MoU will support the efforts of Telangana Govt. towards strengthening the traffic infrastructure in the city. This partnership will see Ola share intelligent insights that enable the Government to implement smart solutions to enhance the mobility experience in the city.
- Under this collaboration, Ola has developed a tool, Ola City Sense, to provide data-based insights that can monitor the quality of Hyderabad's roads and identify bad quality patches.
- This data will be provided to respective state government departments who monitor road conditions. The data is provided on a dashboard and updated every 2-3 weeks to capture the nature of potholes/roads.

### **Advantages of Data based Governance**

- The information given is useful not only for carrying out road repairs, but it also helps officials take initiatives to improve road safety, monitor quality of construction, and study the role of bad roads in causing congestion.
- The dashboard will help city officials plan the pre-monsoon repair work and budget for repairs.
- An efficient transportation system would help ease congestion, reduce travel time and cost, and provide greater convenience.
- It helps in analyzing data from multiple sources, which assists in better decision making for the Government thereby reducing project cost in the future.

### **Conclusion**

- Governments, therefore, should make their departments data-centric by institutionalizing data collection, building technology platforms and helping the departments develop capacity to handle the insights generated from the data.
- Such interventions, however, also need to address genuine concerns around data security and privacy.

# MISCELLANEOUS

## **'Darknet' Narcotics Operative Held**

### **Context**

- The Narcotics Control Bureau, the central anti-narcotics agency, arrested the country's first 'darknet' narcotics operative under the Narcotic Drugs and Psychotropic Substances (NDPS) Act.

### **Details**

- Darknet refers to the hidden internet platform that is used for narcotics sale, exchange of pornographic content and other illegal activities by using the secret alleys of The onion Router (ToR) to stay away from the surveillance of law enforcement agencies.
  - Owing to its end-to-end encryption, the darknet is considered very tough to crack when it comes to investigating criminal activities being rendered over it.
- The NCB was part of a global 'Operation Trance', launched in 2019, entailing a joint intelligence-gathering action on international postal, express mail and courier shipments containing psychotropic drugs that are abused as sedatives and painkillers.
- The payment gateways of cryptocurrencies like Bitcoins and Litecoin were used by the operators to conceal the transactions from regulatory agencies.

## **The Onion Router (Tor)**

- The Onion Router, commonly referred at "Tor" has allowed any person, regardless of technical expertise, to communicate anonymously over the Internet.
- Tor is not a covert means of Internet use, but rather, anonymizes Tor users in a manner that practically makes tracking or identifying users difficult if not impossible.

## **HK Firodia awards**

- H K Firodia awards for excellence in Science & Technology are given annually by the H K Firodia foundation.
- The awards were initiated in 1996 to recognize achievements by Indian scientists in any field of science, and aim to promote a scientific spirit among young Indians.
- The awards are given to any Indian citizen who has made original and outstanding contribution and done world class work in the field of science & technology and distinguished himself.

### **Context**

- Two eminent scientists prof Sandip Trivedi, director, at Tata Institute of Fundamental Research (TIFR) Mumbai and prof Satyajit Mayor, director, National institute of biological sciences and inStem were presented the awards.

## **International Gandhi Awards for Leprosy**

- This award was instituted by the Gandhi Memorial Leprosy Foundation in 1986.

- The Gandhi Memorial Leprosy Foundation is a pioneering organisation established in 1951 in the field of leprosy in India.
- The award is presented once in two years and consists of Rs. 2 lakhs as cash award, a medallion and a citation.
- Two awards are presented either to individuals or institutions.
- The award is given to a Leprosy Worker or Institution who/which has undertaken work in the field of leprosy for a period of not less than 10 years and made a significant contribution in any aspect of leprosy work, resulting in the amelioration of the suffering of leprosy patients and enabling them to lead a normal life.

#### **Context**

- The President of India, Shri Ram Nath Kovind, presented the International Gandhi Awards for Leprosy to Dr N.S. Dharmashaktu under the Indian nomination (individual) category and the Leprosy Mission Trust under the institutional category.

### ***Mirza Asadullah Khan Ghalib***

- He was a prominent Urdu and Persian poet during the last years of the Mughal Empire.
- Mirza Ghalib is considered one of the greatest Urdu poets of all time. Mirza Ghalib basically a poet also wrote prose, known as Qate Burhan which is one of the literary differences he had with other poets.
- The important works of Mirza Ghalib include the Charagh-e Dair.
- He wrote in both Urdu and Persian.

#### **Context**

- Kolkata had organised a week-long celebration titled Bayaad-e-Ghalib (Remembering Ghalib), on the International Mother Language Day.

### ***Paraquat Poisoning***

- Paraquat is a toxic chemical that is widely used as an herbicide (plant killer), primarily for weed and grass control.
- Paraquat consumption leads to pulmonary fibrosis and patients find difficulty in respiration. Similarly, kidney failures occur.
- Even if a person survives, he will not be fully fit as pulmonary fibrosis worsens with the passage of time. Paraquat does not have antidote.

#### **Context**

- The Veer Surendra Sai Institute of Medical Sciences and Research (VIMSAR), a major public healthcare centre for western Odisha and parts of Chhattisgarh and Jharkhand, has registered 157 deaths, mostly of farmers, since September 2017.
- The reason behind these deaths is the consumption of Paraquat
- The tragedy stirred the conscience of young doctors, forcing them into the role of medical activists.

## **RAISE 2020**

### **Context:**

- The Government of India announces maiden summit on Artificial Intelligence to spearhead social empowerment, inclusion and transformation.

### **Details:**

- The event named RAISE 2020 'Responsible AI for Social Empowerment 2020' will be held in April in New Delhi.
- This is India's first Artificial Intelligence summit to be organized by the Government in partnership with the industry and the academia.
- The summit will be a global meeting of minds to exchange ideas and charter a course to use AI for social empowerment, inclusion and transformation in key areas like healthcare, agriculture, education and smart mobility amongst other sectors.

## **Tyler Prize**

- Established in 1973 by the late John and Alice Tyler, the Tyler Prize for Environmental Achievement is one of the first international premier environmental awards.
- This global environmental prize recognizes individuals who have contributed in an outstanding manner to the scientific knowledge and public leadership to preserve and enhance the environment of the world.
- Recipients encompass the spectrum of environmental concerns, including environmental policy, health, air and water pollution, ecosystem disruption and loss of biodiversity, and energy resources.

### **Context**

- Esteemed environmental economist and UN Environment Programme (UNEP) Goodwill Ambassador Pavan Sukhdev has won prestigious Tyler Prize for Environmental Achievement for his work on bringing the economic consequences of environmental degradation and loss to the attention of corporate and political decision-makers.
- Sukhdev will be awarded the 2020 Tyler Prize with Gretchen C. Daily, Bing Professor of Environmental Science at Stanford University and founder of the Natural Capital Project. They will each receive a gold medallion and share a \$200,000 cash prize.

## **IVRI releases Live attenuated Classical Swine Fever (CSF) cell culture vaccine**

### **Classical Swine Fever (CSF)**

- It is also known as hog cholera, is a contagious viral disease of domestic and wild swine.
- The causative agent is CSF virus, a small, enveloped RNA virus of the genus Pestivirus.
- It is the disease of pigs causing high mortality with an annual loss of approximately Rs. 4.299 billion.

### **Lapinized CSF vaccine**



Lapinization refers to the weakening or modification of a virus or vaccine by its serial passage through rabbits.

- A lapinized CSF vaccine (Weybridge strain, UK) is being used in India since 1964 for controlling the disease. The vaccine is produced by sacrificing large numbers of rabbits for each batch.
- The country's total requirement is 22 million doses per year and hardly 1.2 million doses are produced per year by the lapinized vaccine, as only 50 doses are produced from a single rabbit spleen.
- In order to do away with the sacrificing of rabbits and increase productivity, IVRI had earlier developed a cell culture CSF vaccine by adapting the lapinized vaccine virus in cell culture.

#### **Context**

- IVRI releases live attenuated Classical Swine Fever (CSF) cell culture vaccine (indigenous strain).

#### **Details**

- Since the cell culture vaccine is from a foreign strain (Weybridge Strain, UK), IVRI has further developed a new CSF Cell Culture Vaccine by attenuating an indigenous virulent CSF virus in cell culture. The vaccine virus has very high titre and lakhs of doses can be produced very easily in cell culture and the country's requirement can be easily fulfilled using this new vaccine.
- The new vaccine will be part of the Government's One Health Initiative and result in huge savings as it will nip the spread of the virus at the animal stage so that it does not pass on to the human population.
- Due to a very high titre of vaccine virus, this vaccine would be the most economical CSF vaccine costing around less than Rs 2/- per dose as against Rs 15-25/- of lapinized CSF vaccine and Rs.30/dose (approx.) for an imported Korean vaccine being used in the country.
  - Besides, the new vaccine gives immunity for two years as compared to 3 to 6 months of protection under the vaccines currently being used.
  - The vaccine is safe, potent, does not revert to virulence and provides protective immunity from day 14 of the vaccination until 24 months studied so far.
  - The vaccine has been tested on around 500 pigs at multiple locations.
  - The new vaccine has been developed by a team of IVRI scientists.

#### **Indian Veterinary Research Institute (IVRI)**

- Established in 1889, the Indian Veterinary Research Institute (IVRI) is one of the premier research institutions dedicated to livestock research and development of the region.
- It is under the administrative control of the Indian Council of Agricultural Research (ICAR), New Delhi.
- IVRI is located in Izatnagar, Bareilly in UP.

## **4,000 year old crafts village unearthed**

#### **Context**

- A nearly 4,000-year-old urban settlement has been unearthed by a team of surveyors from the Banaras Hindu University (BHU), which experts say could be one of the craft villages mentioned in ancient texts.

### **Details**

- The university's Department of Ancient Indian History, Culture and Archaeology, did the preliminary survey of the site in Babhaniyav village which is about 13 km from Varanasi.
- The site at Babhaniyav could be a small sub-centre of Varanasi which grew as an urban town
- Such crafts villages have been earlier unearthed in Sarnath, Tilmapur, Ramnagar and other areas, Babhaniyav is an addition.
- They have also found a pillar with a two-line text in Kushan-Brahmi script which makes the findings at least 3,500-4,000 years old.

# PRACTICE QUESTIONS

1. Which of the following statement/s is/are correct?

1. The centre's gross fiscal deficit as a share of GDP has continuously decreased in the past five years.
2. The GDP growth rate for India has continuously decreased in the past five years.

Options:

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

2. Which of the following statement/s is/are correct?

1. The responsibility of declaring a disease outbreak as a global health emergency lies with the Director-General of the World Health Organization.
2. The previous declaration of the public health emergency by the WHO was in regard to the SARS outbreak.

Options:

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

3. Which of the following statement/s is/are correct?

1. Endosulfan is an organochlorine insecticide and pesticide.
2. It is part of the negotiations under the Stockholm convention on persistent organic chemicals.
3. The Supreme Court of India has ordered a ban on the production and sale of Endosulfan in India.

Options:

- a. 1 and 2
- b. 2 and 3
- c. 1 and 3
- d. 1,2 and 3

4. Which of the following do not form part of the eight core industries in the Indian context:

Options:

- a. Electricity
- b. Fertilizer
- c. Textiles
- d. Natural gas

5. Which of the following statements are correct?

1. Article 110 of the Indian constitution, provides for the presentation of the annual financial statement in both houses of the parliament.
2. Though both the Houses of Parliament discuss the Budget, only the Lok Sabha's Concurrence is needed for the passage of the budget.

Options:

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

6. Which of the following statements are correct?

1. The Current Account Deficit as a percentage of the Forex reserves of India has continuously decreased over the past five years.
2. Self-employed labour constitutes the highest proportion of the Labour work force in India.

Options:

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

7. Which of the following statements are correct with respect to the Union budget of 2020-21?

1. Corporation Tax constitutes the highest share of the incoming money for the central government
2. Interest payments constitute the highest share of the outgoing money for the central government

Options:

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

8. Which of the following statements are correct?

1. "Kisan Rail" scheme envisages the creation of a seamless national cold supply chain for perishables.
2. The NIRVIK Scheme deals with the export sector.

Options:

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

9. Which of the following is wrongly paired?

State: State Bird

Options:

- a. Arunachal Pradesh: Great Hornbill
- b. Gujarat: Greater Flamingo
- c. Goa: Indian Roller
- d. Rajasthan: Great Indian Bustard

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

- 1. Bandipur National Park comprises primarily of deciduous forests.
  - 2. Bandipur National Park is flanked by the Kabiniriver and the Moyar river.
- a. 1 only  
b. 2 only  
c. Both 1 and 2  
d. Options:  
e. Neither 1 nor 2

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

- 1. The Food Corporation of India (FCI) is a statutory body under the Ministry of Agriculture and Farmers' Welfare.
- 2. FCI is involved in the procurement of wheat and rice only.

Options:

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

12. Which of the following is wrongly matched?

Options:

- a. Rakhigarhi: Haryana
- b. Shivsagar: Assam
- c. Adichanallur: Kerala
- d. Hastinapur: Uttar Pradesh

13. Which of the following statements is/are correct with respect to the national infrastructure pipeline?

- 1. It is the investment plan for enhancing infrastructure in identified sectors for a period of ten years from 2020-30.
- 2. The funding for it will be jointly made by the Centre and states only.

Options:

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

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

1. Defence industrial corridors have been proposed in Tamil Nadu and Uttar Pradesh.
2. According to data released by the Stockholm International Peace Research Institute (SIPRI), India is the largest arms importer for the period between 2014-2018.

Options:

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

15. The Operation Vanilla of the Indian Navy is associated with which of the following?

Options:

- a. Madagascar
- b. Reunion island
- c. Mauritius
- d. Seychelles

16. Arrange the following islands starting with the closest to the equator and moving towards the farthest to the equator:

1. Seychelles
2. Comoros
3. Reunion island
4. Mauritius

Options:

- a. 1, 2, 4, 3
- b. 1, 4, 2, 3
- c. 2, 1, 4, 3
- d. 2, 1, 3, 4

17. Consider the following statements:

1. Designation of a place as UNESCO World Heritage Site provides prima facie evidence that such a site is legally protected pursuant to the Law of War, under the Geneva Convention.
2. The latest addition to the UNESCO World Heritage Site from India was Jaipur.
3. There are 38 places in India, designated as UNESCO World Heritage Sites.

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

Options:

- a. 1 only
- b. 1 and 2 only
- c. 2 and 3 only
- d. 1, 2 and 3

18. "Amrabad Tiger Reserve" is located in:

Options:

- a. Andhra Pradesh
- b. Telangana
- c. Tamil Nadu
- d. Karnataka

19. Which of the following is/are the service/s covered under the Integrated Child Development Scheme (ICDS)?

- 1. Supplementary nutrition to children below 14 years of age.
- 2. Supplementary nutrition to pregnant and lactating mothers.
- 3. Pre-school non-formal education.
- 4. Health check-up for pregnant and lactating mothers.

Choose the correct option:

- a. 1 and 2 only
- b. 1, 2 and 3 only
- c. 2, 3 and 4 only
- d. 1, 2, 3 and 4

20. Consider the following statements:

- 1. According to the anti-defection provisions, when the question of disqualification of a member on account of defection arises, the decision of the Speaker or the Chairman of the House is final.
- 2. A member who is disqualified for being a member of that House under the 10th Schedule shall also be disqualified to be appointed as a Minister until the time he is re-elected as a member of the house.
- 3. Under the anti-defection provisions, no court shall have any jurisdiction with respect to the matter connected with the disqualification of a member of a House under the 10<sup>th</sup> Schedule.

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

Option:

- a. 1 only
- b. 1 and 2 only
- c. 1 and 3 only
- d. 1, 2 and 3 only

21. Consider the following statements:

- 1. India joined the exclusive group of submarine constructing nations with the commissioning of the first French origin Scorpene-class submarines, in 2018.
- 2. INS Kalvari is the first of the French origin Scorpene-class submarines built indigenously.

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

Option:

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

22. Consider the following statements with respect to River Beas:

1. It originates near the Rohtang Pass, on the southern end of the PirPanjal Range.
2. River Beas meets River Satluj at Harike in Punjab.
3. Under the Indus Water Treaty, Pakistan has control over the water flowing in River Beas.

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

Option:

- a. 1 and 2 only
- b. 1 and 3 only
- c. 3 only
- d. 1, 2 and 3

23. Consider the following statements with respect to Real Estate Investment Trusts (REITs):

1. Real estate investment trusts (REITs) are securities that can be traded on stock exchanges.
2. The money collected under Real estate investment trusts is deployed in income-generating real estate only.
3. India has only four listed REITs.

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

Option:

- a. 1 only
- b. 2 and 3 only
- c. 1 and 2 only
- d. 3 only

24. Consider the following statements with respect to Brihadishvara Temple:

1. The Temple is located at the South bank of River Kaveri in Thanjavur in Tamil Nadu.
2. The construction of this temple was inaugurated by the Chola King, Rajaraja I.
3. It is also known as "DakshinaMeru" in the inscriptions.

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

Option:

- a. 1 only
- b. 2 and 3 only
- c. 1 and 2 only
- d. 1, 2 and 3 only

25. Consider the following statements with respect to Cash Reserve Ratio (CRR):

1. CRR is decided by the Monetary Policy Committee.
2. CRR is a monetary policy tool used for controlling the money supply in the economy.
3. If the Cash Reserve Ratio is low, the liquidity with the bank increases.

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

Option:

- a. 2 only
- b. 1 and 3 only
- c. 3 only



- d. None of the above

26. Consider the following statements with respect to “Bandar Abbas Port”:

1. It is located in Iran, on the Gulf of Oman.
2. It serves as Iran’s only oceanic port.

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

Option:

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

27. Which of the following is/are NOT correct?

1. Disguised Unemployment: lesser people employed than actually needed.
2. Structural Unemployment: unemployment arising from the mismatch between the jobs available in the market and the skills of the available workers in the market.
3. Cyclical Unemployment: loss of jobs or unemployment occurring due to changes in technology.

Choose the correct option:

Option:

- a. 1 and 3 only
- b. 2 and 3 only
- c. 1 only
- d. 3 only

28. Which of the following Central Asian Countries border the Caspian Sea?

1. Uzbekistan
2. Kyrgyzstan
3. Turkmenistan
4. Kazakhstan

Choose the correct option:

Option:

- a. 1 and 2 only
- b. 1, 2 and 3 only
- c. 3 and 4 only
- d. 1 and 4 only

29. Which of the following statement/s is/are correct?

1. M-STrIPES is a software- based monitoring system launched by The National Tiger Conservation Authority.
2. The National Tiger Conservation Authority is set up under the Chairmanship of the Minister for Environment and Forests.

Options:

- a. 1 only
- b. 2 only

- c. Both 1 and 2
- d. Neither 1 nor 2

30. Which of the following statement/s is/are correct?

1. The Mines and Minerals (Regulation and Development) Act (1957) is applicable to all minerals except minor minerals and atomic minerals.
2. Mining of minor minerals comes under the purview of the State Governments.

Options:

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

31. Which of the following is not a part of the artillery unit of the Indian Army?

Options:

- a. Sharang
- b. K9- Vajra
- c. Dhanush
- d. Rustom

32. Sammakka-SaralammaJatara is held in which of the following states?

Options:

- a. Telangana
- b. Andhra Pradesh
- c. Karnataka
- d. Chattisgarh

33. Which of the following statements are correct?

1. Thiruvalluvar commonly known as Valluvar, was a celebrated Tamil poet- saint and philosopher.
2. Thiruvalluvar is the author of Thirukkural, a collection of couplets on ethics, political and economic matters.

Options:

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

34. With reference to LokAdalats, consider the following statements:

1. An award made by a LokAdalat is deemed to be a decree of a civil court and no appeal can be made against it before any court.
2. It has statutory backing through the Legal Services Authorities Act, 1987.
3. It is in line with the constitutional mandate of Article 39-A of the Constitution of India.
4. Code of Civil Procedure and Indian Evidence Act are applicable to the proceedings of LokAdalat.

Which of the following statements are wrong?

Options:

- a. 2 and 3
- b. 1 and 3
- c. 2 and 4
- d. 4 only

35. Which of the following statements are correct?

- 1. The International Nitrogen Initiative (INI) was set up in 2003 under sponsorship of the Scientific Committee on Problems of the Environment (SCOPE) and the International Geosphere-Biosphere Program (IGBP).
- 2. The key aims of INI are to optimize nitrogen's beneficial role in sustainable food production and minimize nitrogen's negative effects on human health and environment resulting from food and energy production.

Options:

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

36. Which of the following statements are correct?

- 1. Cotton is offered Minimum Support Price in India.
- 2. India is the largest producer of cotton in the world.
- 3. India is the 2nd largest exporter of cotton in the world

Options:

- a. 1, 2, 3
- b. 1 and 2
- c. 1 and 3
- d. 2 and 3

37. Van Vihar National Park is located in which of the following states?

Options:

- a. Chhattisgarh
- b. Madhya Pradesh
- c. Uttar Pradesh
- d. Rajasthan

38. Which of the following pairs of crop and the largest producing state is wrongly matched?

Options:

- a. Cotton: Maharashtra
- b. Coffee: Karnataka
- c. Jute: West Bengal
- d. Pulses: Madhya Pradesh

39. Which of the following is/are not considered under the Accessible Indian Campaign of the Ministry of Social Justice and Empowerment?

1. Built environment accessibility
2. Education system accessibility
3. Transportation system accessibility
4. Financial system accessibility
5. Information and communication eco-system accessibility

Options:

- a. 2, 3 and 4 only
- b. 4 and 5 only
- c. 1 and 2 only
- d. 2 and 4 only

40. Which of the following statements is/are correct with respect to River Cauvery?

1. It has its origin in Kodagu, Karnataka.
2. Its tributaries include the Harangi, Kabini, Noyyal and Arkavati.
3. The Shivanasamudra Falls is located on the river Cauvery.

Options:

- a. 1 and 2 only
- b. 1 and 3 only
- c. 1, 2 and 3
- d. 2 and 3 only

41. "Chindu Bhagavatam" is widely performed in which of these states?

Options:

- a. Uttar Pradesh
- b. Odisha
- c. Karnataka
- d. Telangana

42. Consider the following statements with respect to the Great Indian Bustard:

1. The great Indian bustard is omnivorous.
2. These birds are often found associated in the same habitat as the blackbuck.
3. It is included in the "Schedule I" of the Indian Wildlife (Protection) Act, 1972.
4. It is classified as "Endangered" in the IUCN Red List.

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

Options:

- a. 1, 2 and 3 only
- b. 1, 2 and 4 only
- c. 2, 3 and 4 only
- d. 1, 2, 3 and 4

43. Consider the following statements with respect to Convention on the Conservation of Migratory Species of Wild Animals (CMS):

1. CMS is the only global, and United Nations-based, intergovernmental organization established exclusively for the conservation and management of terrestrial, aquatic and avian migratory species.
2. The Conference of Parties (COP) is the decision-making organ of this convention.
3. India, in 2019, became a Party to the CMS.

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

Options:

- a. 1 only
- b. 2 and 3 only
- c. 3 only
- d. 1 and 3 only

44. Consider the following statements with respect to Cash Reserve Ratio (CRR):

1. CRR is the proportion of deposits that a bank has to park with the Reserve Bank of India (RBI), in cash.
2. Banks do not earn any interest for maintaining CRR with the RBI.

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

Options:

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

45. Consider the following statements with respect to River Kaveri/Cauvery:

1. Cauvery river basin covers the states of Karnataka, Kerala and Tamil Nadu.
2. It originates in the foothills of the Western Ghats in Tamil Nadu.
3. Hemavati, Shimsha and Arkavati are its right-bank tributaries.

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

Options:

- a. 1 only
- b. 1 and 2 only
- c. 2 and 3 only
- d. 2 only

46. Parivara, Talwara and Siddi are Scheduled Tribes from which state?

Options:

- a. Chhattisgarh
- b. Rajasthan
- c. Karnataka
- d. Telangana

47. Consider the following statements with respect to Privilege Motion:

1. Privilege Motions are handled in a joint sitting with the Speaker presiding the sitting and deciding the matter.
2. Privilege Motion can be passed by any parliamentarian against anyone accused of breaching parliamentarians' privileges.
3. Privilege Motion does not involve arrests of the guilty but just the suspension or fining.

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

Options:

- a. 1 only
- b. 1 and 2 only
- c. 1 and 3 only
- d. 1, 2 and 3

48. Consider the following statements:

1. The first specification of Scheduled Tribes in relation to a particular State/Union Territory is by a notified order of the President, after consultation with the State governments concerned.
2. These orders can be modified through an Act of Parliament only.
3. No community has been specified as a scheduled tribe in relation to the state of Punjab.

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

Options:

- a. 1 only
- b. 1 and 2 only
- c. 1 and 3 only
- d. 1, 2 and 3

49. Consider the following statements:

1. Financial Action Task Force (FATF) is an inter-governmental body established on the initiative of the G20.
2. Pakistan is a member of the FATF and had earlier been placed on the FATF black list.
3. Grey Listing by FATF invites economic sanctions from various international agencies including the International Monetary Fund (IMF), the World Bank, the Asian Development Bank (ADB) and the like.

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

Options:

- a. 1 only
- b. 1 and 2 only
- c. 2 only
- d. 1, 2 and 3

50. Consider the following statements with respect to Base Erosion and Profit Shifting (BEPS):

1. BEPS refers to corporate tax planning strategies used by multinationals to shift profits from one jurisdiction to another.
2. The BEPS Project is a project by the International Monetary Fund to set up an international framework to combat tax avoidance by multinational enterprises using BEPS tools.

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

Options:

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

51. Which of the following items are included under the Essential Commodities Act of 1955?

- 1. Drugs
- 2. Pulses and edible oils
- 3. Petroleum and Petroleum products
- 4. Fertilisers

Choose the correct option:

Options:

- a. 2 only
- b. 2 and 4 only
- c. 2, 3 and 4 only
- d. 1, 2, 3 and 4

52. Consider the following statements with respect to “Yara Virus”:

- 1. The virus was discovered from Lake Pampulha in Brazil.
- 2. Yaravirus does not infect human cells but infects amoeba.

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

Options:

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

53. Consider the following statements with respect to Integrated Child Development Services (ICDS):

- 1. ICDS provides primary healthcare to children less than 6 years of age and their mothers.
- 2. Under the programme, Supplementary Nutrition (SNP) is given to the children (6 months – 6 years) and pregnant women but not lactating mothers.
- 3. Among the objectives of ICDS is to reduce the incidence of mortality, morbidity, malnutrition and school dropout.

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

Options:

- a. 1 only
- b. 1 and 3 only
- c. 1 and 2 only
- d. 1, 2 and 3

54. Consider the following statements with respect to “COVID-19” recently seen in news:

- 1. Middle East Respiratory Syndrome (MERS) is caused by a coronavirus.
- 2. “COVID-19” is a strain of human coronavirus.

3. There are seven identified strains of zoonotic coronaviruses.

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

Options:

- a. 1 only
- b. 1 and 2 only
- c. 1 and 3 only
- d. 1, 2 and 3

55. Consider the following statements:

- 1. The Generalised System of Preferences by the U.S. is a part of WTO's Most Favored Nation (MFN) clause.
- 2. The United States Trade Representative has removed India from the "Developing Countries" list.

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

Options:

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

56. Consider the following statements:

- 1. Konark Sun Temple located in Odisha is a 13th century temple and a UNESCO World Heritage Site.
- 2. The temple earlier, called Black Pagoda, is an example of Kalinga architecture.
- 3. It was built during the reign of the Eastern Ganga King Narasimhadeva-I.

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

Options:

- a. 1 only
- b. 1 and 2 only
- c. 1, 2 and 3
- d. None of the above

57. The Fiscal Responsibility and Budget Management (FRBM) Act requires the government to lay before the parliament, which of the following policy statement/s?

- 1. Medium Term Fiscal Policy Statement
- 2. Fiscal Policy Strategy Statement
- 3. Macroeconomic Framework Policy Statement
- 4. Medium Term Expenditure Framework

Choose the correct option:

Options:

- a. 1 only
- b. 2 and 4 only
- c. 1, 2, 3 and 4
- d. 1 and 4 only



58. Which of the following are the right bank tributaries of Yamuna?

1. Chambal
2. Hindon
3. Betwa
4. Ken
5. Sindh

Options:

- a. 1, 2 and 4 only
- b. 1, 3, 4 and 5 only
- c. 2, 3 and 4 only
- d. 1, 2, 3, 4 and 5

59. Consider the following statements with respect to the Alternative Investment Fund (AIF):

1. Angel Funds come under the Category 2 Alternative Investment Fund.
2. Mutual funds come under the definition of AIF.

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

Options:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. None of the above

60. With respect to Competition Commission of India, consider the following statements:

1. It is an extra-constitutional body.
2. It will ensure fair and healthy competition in economic activities in the country for faster and inclusive growth.

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

Options:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. None of the above

61. Consider the following statements:

1. It is an island on the western coast of Africa located in the Atlantic Ocean.
2. It is part of the Spanish archipelago.

The island in discussion is:

Options:

- a. Comoros
- b. Reunion
- c. Canary
- d. Cape Verde

62. Consider the following statements about the National Commission for Protection of Child Rights:

1. It is a statutory body
2. It comes under the administrative control of the Ministry of Social Justice and Empowerment

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

Options:

- a. 1 only
- b. 2 only
- c. Both
- d. None

63. BimalJalan committee was primarily set up:

Options:

- a. To provide Roadmap on Fiscal Consolidation
- b. To review the economic capital framework of the RBI.
- c. To simplify the Income Tax Act, 1961
- d. To suggest changes in rules on market frauds and insider trading

64. Which of the following statement/s is/are correct?

1. A starred question requires a written answer and hence, supplementary questions cannot follow.
2. An unstarred question requires an oral answer and hence supplementary questions can follow.

Options:

- a. 1 only
- b. 2 only
- c. Both
- d. None

65. Which of the following rivers flow into the Black sea?

1. Rhine
2. Danube
3. Elbe
4. Dniester
5. Vistula

Options:

- a. 1, 2, 3, 4 and 5
- b. 3, 4 and 5 only
- c. 2 and 4 only
- d. 1, 2, 3 and 5 only

66. Mukurthi National Park is in which state?

Options:

- a. Karnataka
- b. Gujarat
- c. Kerala
- d. Tamil Nadu

67. Consider the following statement/s about Particularly Vulnerable Tribal Groups (PVTGs):

1. PVTGs are less developed among the tribal groups.
2. Currently there are 75 tribals identified under the PVTG classification.
3. They are spread over 18 states and one Union Territory (UT) in the country.
4. Saharia and Asurs are included in the list.

Which of the above statements is/are correct?

Options:

- a. 1, 3 and 4 only
- b. 2, 3 and 4 only
- c. 1, 2 and 3 only
- d. 1, 2, 3 and 4

68. Consider the following statements with respect to National Capital Territory of Delhi:

1. The Chief Minister shall be appointed by the Lt. Governor and the Ministers shall hold office during the pleasure of the Lt. Governor.
2. Delhi and Puducherry are the two union territories to have a Separate High Court.
3. The number of seats reserved for Scheduled Castes is regulated by the Election Commission of India.

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

Options:

- a. 2 only
- b. 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

69. With reference to Korku Tribe, consider the following statements:

1. Korku language is a member of the Munda language.
2. The Korkus socially consume liquor made from the flowers of the Mahua tree.
3. They are found in Rajasthan and Gujarat.

Which of the above statements is/are correct?

Options:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

70. Consider the following statements with respect to "Dal Lake":

1. The lake is located in the Zabarwan mountain valley.
2. It is surrounded by Shankaracharya hills on three sides only.
3. It has been declared an Eco-Sensitive Zone.

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

Options:

- a. 1 and 2 only
- b. 1 and 3 only

- c. 1 only
- d. 1, 2 and 3 only

71. Consider the following statements with respect to Kaziranga National Park:

- 1. Kaziranga National Park is a declared Tiger Reserve.
- 2. It is a UNESCO World Heritage Site.
- 3. It is recognized as an Important Bird Area by BirdLife International.

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

Options:

- a. 2 only
- b. 1 and 3 only
- c. 1 and 2 only
- d. 1, 2 and 3

72. Consider the following statement/s with respect to "SUTRA PIC", recently in news:

- 1. It is a programme launched for the conservation and development of indigenous breeds of cows in a scientific manner.
- 2. It is led by the Ministry of Fisheries, Animal Husbandry and Dairying.

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

Options:

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

73. Consider the following statements with respect to Rufous-fronted Prinia:

- 1. The bird is endemic to the Western Ghats.
- 2. It is classified as Endangered in the IUCN Red List.

Which of the given statement/ is/are incorrect?

Options:

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

74. Consider the following statements:

- 1. Budgetary deficit is the sum of revenue account deficit and capital account deficit.
- 2. While Fiscal Deficit represents the government's total borrowing including interest payments, Primary Deficit shows the amount of borrowing excluding interest payments.

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

Options:

- a. 1 only
- b. 2 only
- c. Both 1 and 2

- d. Neither 1 nor 2

75. Selection Committee for the Chief Information Commissioner (CIC) includes:

1. The Prime Minister
2. Leader of Opposition in the Lok Sabha
3. The Home Minister
4. A Union Cabinet Minister to be nominated by the Prime Minister

Choose the correct option:

Options:

- a. 1, 2 and 3 only
- b. 1, 2 and 4 only
- c. 1, 3 and 4 only
- d. 1, 2, 3 and 4

76. Consider the following statements:

1. Bodos are the single largest community among the notified Scheduled Tribes in Assam.
2. Bodos traditionally practise Buddhism.
3. Bodo is listed in the Eighth Schedule of the Constitution.

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

Options:

- a. 1 and 3 only
- b. 1 and 2 only
- c. 2 and 3 only
- d. 1, 2 and 3

77. Consider the following statements:

1. The President of India appoints the members of the Central Vigilance Commission.
2. Central Vigilance Commission is led by the Central Vigilance Commissioner and has five Vigilance Commissioners.
3. Matters pertaining to State Governments are not within the powers of the Central Vigilance Commission.

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

Options:

- a. 1 only
- b. 3 only
- c. 2 only
- d. None of the above

78. "Kambala" is:

Options:

- a. An annual traditional Buffalo Race held in coastal districts of Karnataka.
- b. A popular bull taming sport held during Pongal typically practised in Tamil Nadu.
- c. A traditional boat race conducted during the season of the harvest festival in Kerala.
- d. Assam's traditionally woven piece of cloth with a distinctive red border and floral motifs.

79. Consider the following statements with respect to Mudumalai National Park:

1. Mudumalai National Park is located at the tri-junction of Karnataka, Kerala and Tamil Nadu.
2. It is a declared tiger reserve.
3. It is contiguous with Wayanad Wildlife Sanctuary on the West, Bandipur Tiger Reserve on the North.

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

Options:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 3 only
- d. 1, 2 and 3 only

80. Consider the following statements with respect to Restructured Weather Based Crop Insurance Scheme:

1. The scheme does not cover oilseeds and commercial crops.
2. It is a yield guarantee insurance.

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

Options:

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

81. Consider the following statements:

1. The Law Commission of India is a Constitutional body.
2. The first Law Commission was formed as a result of the Charter Act of 1853.
3. The first Law Commission was formed under the chairmanship of TB Macaulay.

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

Options:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 3 only
- d. 2 only

82. Which of the following National Parks is/are a part of the Nilgiri Biosphere Reserve?

1. Bandipur National Park
2. Mukurthi National Park
3. Silent Valley National Park

Choose the correct option:

Options:

- a. 1 only
- b. 1 and 3 only
- c. 3 only
- d. 1, 2 and 3

83. Consider the following statements with respect to Kalasa-BanduriNala project:

1. It is a canal project undertaken by Karnataka to divert water from the Malaprabhariver to the Mahadayiriver.
2. Kalasa and Banduri are two tributaries of River Malaprabha.

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

Options:

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

84. Consider the following statements with respect to Foreign Contribution Regulation Act (FCRA), 2010:

1. All the NGOs or associations intending to receive foreign funds have to compulsorily register under the FCRA.
2. FCRA is monitored by the Ministry of Finance.
3. The registered NGOs are barred from receiving contributions for religious and economic purposes.

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

Options:

- a. 1 and 2 only
- b. 1 only
- c. 2 and 3 only
- d. 1, 2 and 3

85. Consider the following statements with respect to Indian Tent Turtle:

1. Indian Tent Turtle is endemic to India.
2. It is listed in Schedule I of the Wildlife Protection Act, 1972.
3. It is a herbivorous species and inhabits slow-running rivers and stagnant water bodies.

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

Options:

- a. 1 and 2 only
- b. 1 and 3 only
- c. 2 only
- d. 1, 2 and 3 only

86. Article 371 of the Indian Constitution includes special provisions for which of the following states?

1. Maharashtra
2. Karnataka
3. Tripura
4. Assam
5. Manipur

Options:

- a. 3, 4 and 5 only
- b. 1, 2 and 3 only
- c. 1, 2, 3 and 5 only

- d. 1, 2, 4 and 5 only

87. Which of the following statement/s is/are correct?

1. Renewable energy (including large hydro) accounts for almost 36% of India's total power capacity mix.
2. Cumulative solar installations capacity is higher than the Windpower installations capacity in India.

Options:

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

88. Which of the following statement/s is/are correct?

1. India is the largest producer of tobacco in the world.
2. Flue-cured tobacco cultivation is concentrated in the states of Telangana, Karnataka and Andhra Pradesh in India.

Options:

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

89. Which of the following statement/s is/are incorrect?

1. Currently, North Korea and Iran are the only two countries included in the black list of the Financial Action Task Force (FATF).
2. Currently, Yemen, Mongolia, and Iceland are among the other nations placed under the grey list of the FATF.

Options:

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

90. Which of the following statement/s is/are correct?

1. Madhya Pradesh and Andaman and Nicobar Islands have the maximum number of National Parks in India.
2. Maharashtra is the state with the largest number of wildlife sanctuaries in India.

Options:

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



91. Which of the following statements are correct?

1. Yakshagana is practiced predominantly in the coastal regions of Karnataka.
2. Yakshagana stories are based only on the Hindu epic of Mahabharata.

Options:

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

92. Which of the following statements are correct?

1. The Kawal Tiger Reserve is situated in Northern Telangana.
2. The predominant vegetation of the Kawal Tiger Reserve includes the deciduous forests of Teak.

Options:

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

93. Which of the following statements are correct?

1. The 2020 edition of the G-20 Finance Ministers and central bank governors meeting was held in Osaka.
2. The G-20 constitutes only one member nation each from the continents of Africa and South America.

Options:

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

94. Which of the following statements are correct?

1. The Convention on the Conservation of Migratory Species of Wild Animals is also known as the Bonn Convention.
2. India played host to the 13<sup>th</sup> conference of parties of the Convention on Migratory Species.
3. India hosted the conference of parties of the Convention on Migratory Species for the second time after playing host to the 4<sup>th</sup> COP in 1994.

Options:

- a. 1 only
- b. 1 and 2
- c. 2 and 3
- d. 1,2 and 3

95. Consider the following statements:

1. Speaker of Legislative Assembly addresses his resignation to the deputy speaker.
2. The Governor decides the salary and allowance of the speaker of the Legislative Assembly.
3. The Constitution of India does not provide for joint sessions of State Legislatures.

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

Options:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3 only

96. Consider the following statements with respect PradhanMantriKisanSammanNidhi:

- 1. PM-KISAN is a centrally sponsored scheme that provides income support to the farmers and their families.
- 2. The beneficiaries of the scheme receive Rs.6000 per annum per family member, payable in three equal instalments over the year.
- 3. Responsibility of identifying the landholder farmer family eligible for benefit under the scheme is with the State/UT Government.

Which of the above is/are incorrect?

Options:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

97. Consider the following statements with respect to Assam:

- 1. Tripura is the only North-Eastern state that the state of Assam does not share a border with.
- 2. The state shares international borders with Bangladesh and Bhutan only.

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

Options:

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

98. Justice Sri Krishna Committee report deals with:

Options:

- a. Mobilization of Resources for Major Railway Projects
- b. Data Protection Law
- c. Insolvency and Bankruptcy Code
- d. None of the above

99. Consider the following statements:

- 1. Bharat Stage norms are based on European emission norms and were introduced in the year 2017.
- 2. In BS-IV, petrol and diesel contain 10 parts per million (ppm) of sulphur.
- 3. India skipped Bharat Stage (BS) V norms.

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

Options:

- a. 1 only
- b. 1 and 2 only
- c. 2 and 3 only
- d. 2 only

100. Consider the following statements with respect to FATF:

- 1. "FATF grey list" is formally called "High-risk and non-cooperative countries, not committed to an action plan".
- 2. FATF also addresses the issues related to low tax jurisdiction or tax competition in addition to issues pertaining to the laundering of proceeds of crimes and the financing of terrorism.

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

Options:

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

101. Consider the following statements with respect to "Masala Bonds":

- 1. Masala bonds are Rupee denominated domestic bonds.
- 2. The first Masala bond was issued by the International Finance Corporation (IFC).

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

Options:

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

102. Which of the following is/are correctly matched?

- 1. Lotus Revolution: Egypt
- 2. Pearl Revolution: Tunisia
- 3. Jasmine Revolution: Bahrain

Choose the correct option:

Options:

- a. 1 and 3 only
- b. 2 only
- c. 1 only
- d. 1, 2 and 3 only

103. Which of the following pairs of the Harappan sites and the respective states is wrongly matched?

Options:

- a. Rakhigarhi: Haryana
- b. Alamgirpur: Punjab
- c. Kalibangan: Rajasthan
- d. Surkotada: Gujarat

104. Which of the following statements are correct?

1. National Technical Textiles Mission focuses on increasing the use of technical textiles in the domestic market and also increasing technical textile exports from India.
2. National Technical Textiles Mission will have a four-year implementation period from 2020-21 to 2023-24.

Options:

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

105. Which of the following statements are correct?

1. Jal Jeevan Mission aims to provide Functional Household Tap Connection (FHTC) to every rural household by 2022.
2. Jal Jeevan Mission aims at providing potable water in adequate quantity i.e. 155 litre per capita per day (lpcd) of prescribed quality i.e. BIS Standard of IS: 10500 on regular basis.

Options:

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

106. Which of the following statements are correct?

1. Biochemical oxygen demand is generally less than Chemical oxygen Demand.
2. Higher Biochemical oxygen demand implies lower water pollution.

Options:

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

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

1. Papikonda National Park is located in the Indian state of Andhra Pradesh.
2. The Polavaram irrigation project once completed will submerge parts of the Papikonda National Park.

Options:

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

108. The term MH-60 is associated with:

Options:

- a. Novel wheat variety developed by CSIR
- b. Drug being developed for COVID-19
- c. Indigenous UAV
- d. Helicopters for Navy

109. 'India Economic Strategy' (IES) is associated with which of the following countries?

Options:

- a. Brazil
- b. Australia
- c. The European Union
- d. The United States

110. Which of the following cities lies closest to the 82.5 degree east longitude?

Options:

- a. Lucknow
- b. Raipur
- c. Ranchi
- d. Patna

111. Which of the following pair of stock indices and stock exchanges are correctly matched?

- 1. Nikkei: Tokyo
- 2. Kospi: South Korea
- 3. FTSE 100: London
- 4. DAX: Frankfurt
- 5. S&P: United states

Options:

- a. 1 and 5 only
- b. 1,2 and 5 only
- c. 1,3,4 and 5 only
- d. 1,2,3,4 and 5

112. Which of the following statement/s is/are correct?

- 1. Article 82 of the Indian Constitution empowers the Parliament to enact a Delimitation Act after every census.
- 2. So far, Delimitation Commissions have been set up seven times in India.
- 3. The orders of the Delimitation Commission cannot be questioned before any court or modified by the legislatures.

Options:

- a. 1 and 2
- b. 1 and 3
- c. 2 and 3
- d. Only 2

113. The term 'Remdesivir' is associated with?

Options:

- a. Plant species with high salt tolerance
- b. The oldest fossil of the mammoth recorded in Asia
- c. Anti-viral medication
- d. Fungal species capable of bio-remediation

114. Which of the following statements are correct?

- 1. Index of Eight Core Industries (ICI) is compiled and released by the Ministry of Finance.
- 2. Index of Eight Core Industries (ICI) is released quarterly.

Options:

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

115. Justice DM Dharmadhikari Committee was appointed to address issues related to:

Options:

- a. Interstate Border issues
- b. Sharing of water from River Krishna between the states of Maharashtra, Telangana and Andhra Pradesh
- c. Resolution of the dispute between Punjab and Haryana with respect to Sutlej
- d. Allocation of power sector employees between Andhra Pradesh and Telangana

116. With respect to Namdapha National Park, which of the following statement/s is/are incorrect?

- 1. It is located in Arunachal Pradesh.
- 2. The Namdapha flying squirrel is endemic to the park and its IUCN status is endangered.
- 3. It lies close to the India-Myanmar border.

Options:

- a. 1 and 2 only
- b. 2 only
- c. 2 and 3 only
- d. None

117. Consider the following statements about the National Tiger Conservation Authority (NTCA):

- 1. It is a statutory body under the Ministry of Environment, Forests and Climate Change constituted under the Prevention of Cruelty to Animals Act, 1960.
- 2. 'Project Tiger' is a Central sector scheme.

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

Options:

- a. 1 only
- b. 2 only

- c. Both
- d. None

118. Which of the following countries are part of SAARC?

- 1. Afghanistan
- 2. Bangladesh
- 3. Myanmar
- 4. Nepal
- 5. Bhutan
- 6. Sri Lanka
- 7. Thailand

Options:

- a. 1, 2, 3, 4, 5 and 6 only
- b. 1, 2, 3, 4, 5, 6 and 7
- c. 2, 3, 4, 5, 6 and 7 only
- d. 1, 2, 4, 5 and 6 only

# ANSWER KEYS

1	A
2	A
3	D
4	C
5	B
6	B
7	D
8	C
9	C
10	C
11	D
12	C
13	D
14	A
15	A
16	A
17	D
18	B
19	C
20	D

21	B
22	A
23	D
24	D
25	D
26	C
27	A
28	C
29	C
30	C
31	D
32	A
33	C
34	D
35	C
36	A
37	B
38	A
39	D
40	C



41	D
42	A
43	C
44	C
45	C
46	C
47	A
48	D
49	D
50	A
51	D
52	C
53	B
54	D
55	A
56	D
57	C
58	B
59	D
60	C

61	C
62	B
63	B
64	D
65	C
66	D
67	D
68	D
69	A
70	A
71	D
72	D
73	C
74	C
75	B
76	A
77	C
78	A
79	D
80	C

81	A
82	D
83	C
84	B
85	B
86	D
87	A
88	B
89	D
90	C
91	A
92	C
93	D
94	B
95	C
96	A
97	A
98	B
99	B
100	D

101	A
102	C
103	B
104	C
105	D
106	A
107	C
108	D
109	B
110	B
111	D
112	B
113	C
114	D
115	D
116	B
117	D
118	D

# MAINS PRACTICE QUESTIONS

1. Agricultural development is important to ensure inclusive development and in providing a stimulus to the slowing GDP growth rates and hence realizing the vision of a 5 trillion economy for India. Comment. Discuss the major concerns for the agricultural sector in India. (15 marks, 250 words)
2. The Economic Survey's forecast of a GDP growth of 6-6.5% for the next fiscal year seems too optimistic given the current downside risks. Comment. Discuss the Economic survey's observations for the current slowdown and remedial actions to revive growth. (15 words, 250 words)
3. The budget proposals with respect to the power sector and the renewable energy sector will not only help fulfill India's commitment towards global climate action but will also serve as a stimulus to the economy. Comment. (10 marks, 150 words)
4. As against the market expectations, there was no big stimulus package in terms of increased public spending or additional boost for investment, to revive the slowing economy. Discuss the Constraints for the government to announce such a major fiscal stimulus. (10 marks, 150 words)
5. Discuss the constitutional provisions with respect to the Finance Commission of India and its significance in the Indian framework. Analyze the major recommendations as per the interim report of the 15th Finance Commission. (10 marks, 150 words)
6. The budget lays out a long term plan for the agricultural sector, detailing 16 broad initiatives that would help achieve the government's vision of doubling farmers' incomes. Critically examine. (10 marks, 150 words)
7. In the backdrop of a few states opposing the implementation of the NPR-NRIC, discuss the constitutional provisions with respect to the current crisis. Discuss the concerns with respect to the current scenario and suggest a suitable way forward. (10 marks, 150 words)
8. Post Brexit, there is a need to start a new chapter in the relations between the U.K. and the European Union. Discuss the need and potential of such a cooperation. (10 marks, 150 words)
9. With the government planning to amend the Disaster Management Act of 2005, discuss the importance of main streaming disaster management with an emphasis on "long-term recovery". What components need to be addressed while considering the long-term recovery measures? (15 Marks, 250 Words).
- 10 With respect to the increasing incidences of natural calamities in the Indian Ocean Region, comment on India's growing role as a regional security provider. Is India's growing role a cause for caution for the other countries? Justify your answer. (15 Marks, 250 Words).
11. For Speakers to do their job effectively, insulation from political pressure is essential. Discuss the various issues surrounding the office of the Speaker. Should India follow the UK model? Suggest suitable measures. (15 Marks, 250 Words)

12. Examine the need for Prison Reforms in India. Also, discuss the recommendations of the Justice Roy committee on Prison Reforms. (15 Marks, 250 Words).
13. Death in Police Custody warrants strict action as it is a violation of the right to life. Discuss why Police reforms are the need of the hour. (15 Marks, 250 Words)
14. Formalization could be the harbinger of change for the economy, but excessive formalization is a recipe for distress to the informal sector. Analyze. (15 Marks, 250 Words)
15. Discuss India's cyber security challenges and the salient features of the National Cyber Security Policy, 2013. (10 marks, 150 words)
16. In the backdrop of U.S. – India Trade deal negotiations, discuss the major concerns of the two countries. Analyze the potential of a U.S. – India trade deal. (10 marks, 150 words)
17. In the backdrop of government's intention to sell a part of its stake in Life Insurance Corporation, discuss the associated concerns and challenges. Analyze the benefits of disinvestment as a mode for mobilization of resources for the government. (10 marks, 150 words)
18. Discuss the importance of the textile sector for India. Analyze the major challenges facing the textile sector in India. (10 marks, 150 words)
19. Analyze the Government's approach to counter the challenges posed by Left wing extremism in India and its effectiveness. (10 marks, 150 words)
20. Discuss the major provisions of the recent accord signed between the government and the Bodo groups. Analyze the significance of the agreement and the possible concerns with respect to the deal. (15 marks, 250 words)
21. In the context of Tamil Nadu state government's decision to declare the Cauvery delta region as a Protected Special Agriculture Zone, discuss the significance of the proposal and the likely challenges to such a move. (10 marks, 150 words)
22. In the backdrop of the novel coronavirus epidemic, analyze India's response to the outbreak. With increasing frequency and intensity of global epidemics suggest suitable policy measures and interventions for India. (15 marks, 250 words)
23. Despite a nationwide public campaign in 2011 and the subsequent passage of the Lokpal and Lokayuktas Act of 2013, the institution of the Lokpal is yet to play any significant role in tackling corruption in the country. Comment. (10 marks, 150 words)
24. Though India and Sri Lanka share good bilateral ties, there are challenges to the bilateral relation. Comment. Discuss what should India's strategy be with respect to its bilateral relation with Sri Lanka. (15 marks, 250 words)
25. Explain how digital technologies have the potential to deliver a revolutionary impact on the public transport sector. (10 Marks, 150 Words).

26. Malnutrition is a complex and multi-dimensional issue that will require convergence of all Nutrition related schemes and coming together of multiple stakeholders. Discuss. (15 Marks, 250 Words).
27. Illustrate with examples, how the Supreme Court has laid emphasis on individual autonomy over societal norms with respect to marriage. (15 Marks, 250 Words).
28. Should women be given command posts in the Army? Critically Comment. (10 Marks, 150 Words).
29. When law breakers become law makers, the country suffers. Elaborate on the directions given by the Supreme Court of India in an effort to de-criminalize politics. (15 Marks, 250 Words).
30. What are the major differences between BS-IV and BS-VI emission norms? How will the adaptation to BS- VI standards impact the economy and the environment? (15 Marks, 250 Words).
31. What is the Urban Heat Island Effect? Discuss the causes for it and the mitigation strategy.
32. The United States Trade Representatives (USTR) has taken India and other countries off the developing country list. Explain in detail how this could impact the Indian and the Global economy.
33. Does the National Security Act (NSA) violate the fundamental ethos of the Constitution? Critically examine.
34. Has India's desire to diversify its defence imports impacted India-Russia relations? Discuss.
35. In the backdrop of the Supreme Court ruling Short Service Commission women officers as being eligible for permanent commission and command posts in the Army, discuss the significance of the judgment and the associated implementation challenges. (15 marks, 250 words)
36. Discuss the concerns associated with the turmoil being witnessed in the telecom sector of India. Suggest a suitable way forward for the telecom sector. (10 marks, 150 words)
37. There is potential for private-sector health-care providers, health innovators, industry and start-ups to be equal partners in the Ayushman Bharat scheme of the government. Comment. (10 marks, 150 words)
38. In the backdrop of the U.S. move to drop India from the list of developing countries under the framework of the Agreement on Subsidies and Countervailing Measures of the World Trade Organization, discuss the associated concerns for India. (15 marks, 250 words)
39. In the event of an outbreak of an epidemic, secrecy is a killer and transparency the saviour. Comment. (15 Marks, 250 Words).
40. The announcement of Presidential election results has given rise to a new turmoil in Afghanistan with fears of the war torn country being pushed into an Infinite crisis. Discuss. (10 Marks, 150 Words)

41. Is India prepared to deal with the new strain of coronavirus (SARS-CoV-2) that is causing worldwide panic? Comment on the preparedness of the Indian States in dealing with health emergencies. (15 Marks, 250 Words).
42. The Assisted Reproductive Techniques Bill is a much-needed complement to Surrogacy Bill. Discuss. (10 Marks, 150 Words)
43. What are the judicial measures taken so far in decriminalizing politics in India? Discuss the challenges in implementing the judiciary's recent clean-up order? (15 Marks, 250 Words)
44. What is Integrated Road Accident Database (IRAD)? Discuss the steps taken by the Government in devising safety interventions to curb Road fatalities in India. (15 Marks, 250 Words)
45. Unlike the trade co-operation where there are a number of disputes and differences, the defence cooperation between India and the U.S. is more realistic given the mutual interests and needs. Analyze. (15 marks, 250 words)
46. There is an important need to ensure that a Bodo solution does not engender a non-Bodo problem in Assam. Discuss in the backdrop of the recently finalized Bodo deal. (10 marks, 150 words)
47. Data localization as envisaged by the Personal Data Protection (PDP) Bill, 2019 has both associated advantages and concerns. Analyze. Suggest suitable safeguards to the Bill to truly ensure the protection of privacy rights. (15 marks, 250 words)
48. Discuss the concerns associated with the Indo-Pacific strategy being propounded by the U.S. What should be India's response to the Indo-Pacific strategy? (10 marks, 150 words)
49. The quote from Mahatma Gandhi's book Hind Swaraj, "real rights are a result of the performance of duty" seems anachronistic in the present constitutional age. Analyze. (10 marks, 150 words)
50. Discuss the significance of NOTA option in Indian elections. Analyze if NOTA has been able to justify its intended purpose. Suggest steps to enhance the effectiveness of the NOTA option. (15 marks, 250 words)
51. Though the recent U.S. president's India visit has aided bilateral ties and catalyzed progress in defence, security and energy cooperation, there have been concerns over the fact that the visit's concrete outcomes have not been substantive. Critically examine. (10 marks, 150 words)
52. Water is an urgent concern for public health and the ecosystem of a country, more so for a country like India. Discuss. (15 marks, 150 words)
53. In the backdrop of the recent decision in principle to set up theatre commands in India, centred on the theme of tri-service integration, discuss the significance of this step and also the associated concerns. (15 marks, 250 words)
54. New research findings note that the Eastern Ghats may be facing a serious threat from climate change and calls for urgent action. Comment. (10 marks, 150 words)

55. Poor oversight, laxity in implementing laws and corruption at the local level, is enabling unscrupulous manufacturers of medicine to operate without penalty. Suggest measures to overcome the issue. (15 Marks, 250 Words)

56. Right to avail legal services of an advocate is a constitutional right of an accused and denying them the right to legal representation violates the principles of the Due Process of Law. Elaborate. (15 Marks, 250 Words)

57. For achieving technological superiority and better outcomes in the industrial sector, investment in research and development is the key. Discuss

58. Should the SC/ST community have reservations in promotions? Critically Analyze.

# INTERVIEW TRANSCRIPT

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

## **Shri Vinay Mittal:**

- A 1975 Batch Indian Railway Traffic Service (IRTS) officer, he is an alumnus of Doon School, Dehradun and St. Stephen's College, Delhi from where he did his B.A. (Hons.) – English Literature. He also studied Law from Delhi University.
- Shri Vinay Mittal, was the Chairman, Railway Board (CRB)

## **Questions asked by the interview board:**

### **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?

**On Hobbies**

What was your role while playing Cricket?

What is Chinaman bowling? Are there any Chinman Bowlers from India?