

**NATIONAL SOCIAL ISSUES- WOMEN, POPULATION, URBANISATION, EMPOWERMENT ETC****Prohibition Of Electronic Cigarettes Bill, 2019**

Parliament has passed the Prohibition of Electronic Cigarettes Bill, 2019, with the Rajya Sabha approving it. The Lok Sabha has already passed the bill.

**Salient Features of Bill:**

- Any production, import, export, transport, sale (including online sale) or advertisement (including online advertisement) of e-cigarettes shall be a cognizable offence punishable with an imprisonment of up to one year or fine up to Rs. 1 lakh or both for the first offence.
- For a subsequent offence, there will be imprisonment of up to 3 years and fine up to Rs. 5 lakh.
- Storage of electronic-cigarettes shall also be punishable with an imprisonment up to 6 months or fine up to Rs 50,000 or both.
- The Sub-Inspector of Police has been designated as the Authorized Officer to take action under the Ordinance. The Central or State Governments may also designate any other equivalent officer(s) as Authorized Officer for enforcement of the provisions of the Ordinance.

**Electronic-cigarettes:**

- Electronic-cigarettes are battery-operated devices that produce aerosol by heating a solution containing nicotine, which is the addictive substance in combustible cigarettes.
- These include all forms of Electronic Nicotine Delivery Systems (ENDS), Heat Not Burn Products, e-Hookah and the like devices.
- Their use has increased exponentially and has acquired epidemic proportions in developed countries, especially among youth and children. These products are usually marketed as being safer alternatives for conventional cigarettes but such notions of safety are false.

**Bullet Train**

Maharashtra Chief Minister Uddhav Thackeray has announced a “review” of the bullet train project, sending out signals of uncertainty over the prestigious enterprise.

**High Speed Railways (HSR):**

- There's no standard definition, but a railway system designed for speeds above 250kmph is generally called high speed.
- The success of the Shinkansen network of HSR in Japan (which started in 1964), triggered HSR investments in other countries.

**Indian scenario:**

- At present, India doesn't have an HSR. In 2015, India and Japan signed an agreement for HSR line between Ahmedabad and Mumbai which will be built on Japan's Shinkansen technology, and is expected to be operational by 2022-23.
- National High Speed Rail Corporation Limited (NHSRCL) is the body implementing the project.
- Both Gujarat and Maharashtra own 25% each in the project, while the remaining 50% is owned by the Government of India. The total project cost is around 1 lakh crore. Of this –
  - Government of India is to pay Rs. 10,000 crore to the NHSRCL.
  - The two states involved, Gujarat and Maharashtra, are to pay Rs. 5,000 crore each.
  - The rest is to be paid by Japan through a loan at 0.1 % interest.
- NHSRCL says it is on course to do a trial run between Surat and Bilimora in Gujarat in August 2022, and to open the full service to the public around December 2023.

**Challenges:**

- From its inception, the NHSRCL has been facing controversies over land acquisition in tribal-dominated areas, and cases filed by farmers in court.

- There is fundamental opposition to the idea of a Rs 1.1 lakh crore train corridor between Mumbai and Ahmedabad — even though the project is being funded by an 80% loan from Japan.

Can the new Maharashtra government scrap the project?

- Maharashtra is not investing any money per se in the project. Its equity is through land.
- The state government can change the rules for land acquisition, as that is within its purview. However, the contract with Japan that the Centre has entered into, cannot be impacted.

## **INDIAN HERITAGE AND CULTURE, HISTORY**

### **Declassified Files/Records**

The Minister of Culture and Tourism informed Lok Sabha that the Government of India has declassified all records relating to Netaji Subhash Chandra Bose and Azad Hind Fauj and placed them in the National Archives of India.

About:

- Accordingly, a total of 304 declassified records/files have been transferred to National Archives of India by above mentioned Ministries/Offices for permanent retention. Out of 304 files, 303 files are already uploaded on the Netaji web portal i.e. [www.netajipapers.gov.in](http://www.netajipapers.gov.in)
- The National Archives of India is the custodian of declassified files/records of the Government of India.

National Archives of India

- The National Archives of India is an Attached Office under the Ministry of Culture.
- It was established in 1891 at Kolkata (Calcutta) as the Imperial Record Department.
- Following the transfer of the capital from Calcutta to Delhi in 1911, the present building of the National Archives of India was constructed in 1926 in Delhi.
- There are over 50 lakhs files/documents presently in the holdings in the National Archives of India.

## **GOVERNANCE- WELFARE SCHEMES, E-GOVERNANCE, SERVICES ETC.**

### **Mission Indradhanush 2.0**

Government of India launched nationwide vaccination drive to prevent eight diseases under Intensified Mission Indradhanush 2.0 on December 2, 2019.

About:

- The scheme is aimed at immunizing children under the age of 2 years and pregnant women against eight vaccine preventable diseases.
- The IMI covers vaccines for diphtheria, whooping cough, tetanus, poliomyelitis, tuberculosis, measles, meningitis and Hepatitis B. Vaccines for Japanese encephalitis and hemophilus influenza are also being provided in selected areas.
- The IMI 2.0 aims to achieve targets of full immunization coverage in 272 districts spread over 27 States.
- The Immunization activity under IMI 2.0 will be carried out in 4 rounds between December 2019 and March 2020.
- Under this campaign, vaccination services will be provided free of cost to the drop out and left out children and pregnant women.

### **Anaemia**

Government informed Lok Sabha about the prevalence of Anaemia among women and children in urban and rural India.

About:

- The data, based on the findings of the National Family Health Survey (NFHS) IV (2015-16), divide the incidence of anaemia into 'Mild', 'Moderate' and 'Severe' kinds for both rural and urban India.

- As per the details, 29.8% of children in rural India suffer from moderate anaemia, and 40.3% of women in the villages are mildly anaemic.
- As many as 58.5% of children between the ages of 6 months and 59 months, and 53.1% of women between the ages of 15 and 49 years, are anaemic in the country.

**Anaemia Mukht Bharat (AMB) Strategy:**

- In 2018, the union government launched the Anaemia Mukht Bharat (AMB) Strategy under POSHAN Abhiyaan to reduce anaemia prevalence by three percentage points every year till 2022.
- AMB is a 6x6x6 strategy that is targeting six age groups, with six interventions and six institutional mechanisms.
- The six age groups include pre-school children (6-59 months), children (5-9 years), adolescent girls (10-19 years), adolescent boys (10-19 years), women of reproductive age group (15-49), and pregnant women and lactating mothers.
- Among the six interventions are prophylactic iron folic acid supplementation, periodic deworming, and addressing non-nutritional causes of anaemia in endemic pockets, with special focus on malaria, haemoglobinopathies and fluorosis, the Minister said.
- Institutional mechanisms include a National Anaemia Mukht Bharat Unit, and a National Centre of Excellence and Advanced Research on Anaemia Control.

**INTERNATIONAL AFFAIRS- BILATERAL, GROUPINGS, ORGANISATIONS**

**Exercise Hand-in-Hand-2019**

The 8th India-China joint training exercise 'HAND-IN-HAND 2019' with the theme counter terrorism under United Nations mandate is scheduled to be conducted at Umroi, Meghalaya from 07 to 20 December 2019.

**About:**

- The aim of the annual exercise is to promote close relations between 'Armies' of India and China and to enhance ability of the joint exercise commander to take military contingents of both nations under command.
- The Chinese contingent from the Tibet Military command comprising of 130 personal and the Indian Contingent of similar strength will participate in the 14 day long training exercise.

**"Power Of Siberia" Gas Pipeline**

Chinese President Xi Jinping and his Russian counterpart Vladimir Putin inaugurated the "Power of Siberia" gas pipeline.

**About:**

- Under the contract, Russia will deliver 1 trillion cubic meters of natural gas to China over the next 30 years. The 30-year project is anchored by a \$400 billion gas deal.
- From Siberia to China's Yangtze River delta in Shanghai, the massive pipeline will cover 8,000 km, with 5,111 km inside China, passing through nine provinces and municipalities.
- Gas is being sourced from Chayandinskoye and Kovytko fields in eastern Siberia, and is then piped to Blagoveshchensk — the last town on the Russian side of the border. From there, it is tunneled under the Amur River, before entering Heihe on the Chinese side.

**Comment:**

- Russia has been a primary gas supplier to Europe, but the Power of Siberia is the first cross-border gas pipeline between Russia and China, adding a prominent eastern dimension to Moscow's energy blueprint.
- This massive cross-border undertaking is not only central to China's energy security but also for bolstering special ties between Beijing and Moscow.
- The brand new pipeline is an emblem of closer energy integration in Eurasia.

**ENVIRONMENT- CONSERVATION, BIO-DIVERSITY AND ISSUES****COP25 Climate Summit**

The 25th edition of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) or COP25 has begun from December 2 in Madrid (Spain).

- Originally, the Summit was scheduled to be held at Chile (South America) but violent mass movement across the country made Chile reluctant from hosting the event.
- The location of this conference is rotated every year in different regions of the world. This year it was the turn of South America to host the event.

**Agenda for COP25**

- The prime objective of the conference is to complete the rule-book to the 2015 Paris Agreement that will become effective in 2020 to replace the 1997 Kyoto Protocol (comes to an end in 2020).
- The issues like the creation of new carbon markets, emission reduction targets, country's individual targets, etc. remained unresolved during COP24 at Katowice (Poland) 2019. Thus the rulebook under the Paris Agreement could not be finalized.
- The summit will also discuss about the functioning of international emissions trading systems, compensation for poor countries to deal with rising sea levels and other consequences of climate change.
- It will consider the annual Emissions Gap Report, produced by the UN Environment Programme (UNEP) and a series of reports from the Intergovernmental Panel on Climate Change (IPCC).
  - Both the reports summarise that the goal of keeping average temperatures within 1.5°C from pre-industrial times is "on the brink of becoming impossible." As the overall emissions are still increasing worldwide.
- The processes and methods of reporting information about climate change would be fixed during the summit. Specifically, the developing countries will try to ensure that there are greater appreciation and recognition of the issue of loss and damage due to climate change.
  - There is a demand to institute a mechanism to compensate countries that suffer major losses due to climate change-induced events like cyclones or floods.
- Efforts to commit to a long-term action plan to fight climate change.
  - So far, only 71 countries, most of them small emitters, have committed themselves to achieve net-zero emissions by 2050.

**India's Agenda**

- India is unlikely to announce any enhanced targets during the summit.
- India's current efforts are already much more compared to even rich and developed countries. Thus, India will reiterate its stand for "Common but Differentiated Responsibilities".
- Developed countries are major contributors to climate change and they are doing proportionately less, especially when it comes to providing finance and technology to the less developed world.

**Kyoto Protocol**

- The Kyoto Protocol is an international agreement linked to the UNFCCC, which commits its Parties by setting internationally binding emission reduction targets.
- The Kyoto Protocol was adopted in Kyoto, Japan, in 1997 and entered into force in 2005.
- It recognized that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity.
- The detailed rules for the implementation of the Protocol were adopted at COP-7 in Marrakesh, in 2001, and are referred to as the Marrakesh Accords.
- Kyoto Protocol Phase-1 (2005-12) gave the target of cutting down emissions by 5%.

- Phase- 2 (2013-20) gave the target of reducing emissions by at least 18% by the industrialized countries.

#### Carbon Market

- A carbon market allows countries, or industries, to earn carbon credits for emission reductions they make in excess of what is required of them.
- These credits can be traded to the highest bidder in exchange for money.
- The buyers of carbon credits can show the emission reductions as their own and use them to meet their own emission reduction targets.
- A carbon market already existed under the 1997 Kyoto Protocol but several countries walked out of the Kyoto Protocol and thus the demand for carbon credits had waned.
- As a result, developing countries like India, China and Brazil had accumulated huge amounts of carbon credits. These credits are now in danger of getting redundant.

### **SCIENCE AND TECHNOLOGY- EVERYDAY SCIENCE, SPACE, NUCLEAR, DEFENCE ETC**

#### End-To-End Encryption

Globally, intelligence and law enforcement agencies are arguing that end-to-end encryption makes it much harder to track terrorists, pedophiles and human traffickers as it makes it nearly impossible for them to get access to people's digital communications.

#### Working:

- End-to-end encryption takes place on either end of a communication. A message is encrypted on a sender's device, sent to the recipient's device in an unreadable format, then decoded for the recipient.
- For doing this, a program on your device mathematically generates two cryptographic keys — a public key and a private key.
- The public key can be shared with anyone who wants to encrypt a message to you. The private key, or secret key, decrypts messages sent to you and never leaves your device.

#### Comparison with transport layer encryption:

- Transport layer encryption relies on a third party, like a tech company, to encrypt messages as they move across the web.
- With this type of encryption, law enforcement and intelligence agencies can get access to encrypted messages by presenting technology companies with a warrant or national security letter. The sender and recipient would not have to know about it.
- End-to-end encryption ensures that no one can eavesdrop on the contents of a message while it is in transit. It forces spies or snoopers to go directly to the sender or recipient to read the content of the encrypted message.

### **PRELIMS SPECIFIC FACTS- INDICES, DAYS, EVENTS, AWARDS ETC**

#### Navy Gets its First Woman Pilot

Recently, Sub Lieutenant Shivangi Swaroop became the first pilot in the Indian navy after qualifying as a Dornier pilot. Earlier, Bhawana Kanth, Avani Chaturvedi and Mohana Singh became the first women fighter pilots in the Indian Air Force.

#### Dornier aircraft

- It is a multi-role Short Range Maritime Reconnaissance (SRMR) aircraft, with twin-engine manufactured by Hindustan Aeronautical Ltd. (HAL), Kanpur.
- The aircraft can be used for electronic warfare missions, maritime surveillance, search and rescue and to provide targeting data to weapon platform.
- It is an important contribution towards indigenous development and self-reliance through 'Make in India', with state-of-the-art sensors and equipment including a glass cockpit, advanced surveillance radar, optical sensors and networking features.



**ODISHA DEVELOPMENT****Odisha's Subsidy Burden Ballooned Courtesy Natural Disasters: CAG**

Natural disasters have made the subsidy bill of Odisha government soar to a new high in 2017-18. Subsidy expenses on natural disasters had risen by a massive Rs 391 crore.

**CAG Report:**

- As per CAG report 'State of Finance' laid in State Assembly recently, when the FRBM (Fiscal Responsibility and Budget Management) Act has mandated to prune the subsidy bill by 10 per cent every year, Odisha's subsidy bill, however, had soared by a massive 19 per cent in 2017-18.
- The amount spent as subsidy by the Revenue & Disaster Management Department in 2017-18 clocked a whopping 108 per cent rise to touch Rs 754 crore vis-a-vis Rs 363 crore in 2016-17, the report observed.
- Significantly, the year 2017-18 had not witnessed any major calamity like cyclones or any worst flood or drought.
- Still, the disaster subsidy budget soared solely due to amount distributed under the disaster relief code for drought in 3.15 lakh hectares in 70 blocks spread across 15 districts in 2017. Also, the massive Chakada pest attack in over 1.18 lakh hectares during October 2017 was considered another reason behind the big spike in natural disaster subsidy bill.
- The CAG report has also noted that a 530 per cent rise in subsidy bill on Industries had an impact on ballooning the subsidy budget of Odisha government in 2017-18. The report added that subsidy on industries in the year 2017-18 touched Rs 170 crore from mere Rs 27 crore in 2016-17.
- Subsidies granted to fishermen had also posted a rise to Rs 56 crore in 2017-18 from Rs 10 crore in 2016-17.
- Following the rise in subsidy in some crucial sectors, the report added that the expenditure on subsidies cornered nearly 4 per cent of State's revenue expenditure.
- Experts are of the opinion that subsidy on natural disaster could relegate the food subsidy bill to number 2 in 2019-20 owing to cyclone Fani.
- And increasing natural disasters could derail the State's economy, because, while the natural disasters make big impact on productivity and at the same time shoot up the non-plan expenditure, they observed.
- In contrast, the subsidy on agriculture stagnated at Rs 203 crore in 2017-18.
- And the food subsidy, which accounted for the largest share in subsidy bill, had even recorded a 9 per cent dip to stay at Rs 886 crore in 2017-18 from Rs 970 crore in 2016-17.
- According to CAG findings, the subsidy given by State Cooperation department to strengthen the cooperative societies has also dropped by around 4 per cent in 2017-18.
- A further glance at the subsidy bill shows that subsidies granted to handlooms & handicrafts account for mere 1.8 per cent of the total subsidy expenditure in 2017-18, when handloom and handicraft industries have provided employment to around 2 lakh people and the artisans are facing worst financial crisis in the State. The total subsidy to the vital sector totalled to mere Rs 50 crore in 2017-18 from Rs 47 crore in 2016-17.

## **DAILY ANSWER WRITING PRACTICE**

**Qns. What is Ozone Layer Depletion? Evaluate the efforts being made to protect the Ozone Layer?**

**Ans**

Ozone (O<sub>3</sub>) is a protective layer in the atmosphere of the Earth. It is found in the lower portion of stratosphere. The Ozone Layer acts as a shield to protect the earth against harmful ultraviolet (UV) radiation from the sun. Ozone is regarded harmful at ground level but stratospheric ozone plays a vital role in the protection of all living beings on Earth.

### **Ozone Layer Depletion:**

- The ozone layer depletion was first identified to be a potential problem in the early 1970s. It is the gradual thinning of Earth's ozone layer in the upper atmosphere caused by the release of ozone depleting substances.
- Ozone layer depletion causes increased UV radiation levels at the Earth's surface, which is damaging to human health. UV radiation also affects terrestrial and aquatic ecosystems, altering growth, food chains and biochemical cycles.

### **Efforts to protect the Ozone Layer Depletion:**

- In 1985, countries adopted the Vienna Convention for the Protection of the Ozone Layer.
- According to this Convention, the parties were to promote cooperation on the effects of human activities on the ozone layer and to adopt legislative or administrative measures against activities likely to have adverse effects on the ozone layer.
- The Montreal Protocol on Ozone Depleting Substances in 1987 is regarded as the greatest effort and environmental success of United Nations towards protecting the Ozone Layer.
- The objective of Montreal Protocol was to cut down the production and consumption of ozone-depleting substances, in order to reduce their presence in the atmosphere and thus protect the Earth's ozone layer.
- The Montreal Protocol was amended by the Kigali Agreement. It came into force from 1st January 2019. This is a legally binding agreement between the signatory parties with non-compliance measures. It has divided the signatory parties into three groups-
- The first group consists of rich and developed economies like USA, UK and EU countries who will start to phase down HFCs by 2019 and reduce it to 15% of 2012 levels by 2036.
- The second group consists of emerging economies like China, Brazil as well as some African countries that will start phase down by 2024 and reduce it to 20% of 2021 levels by 2045.
- The third group consists of developing economies and some of the hottest climatic countries like India, Pakistan, Iran, and Saudi Arabia who will start phasing down HFCs by 2028 and reduce it to 15% of 2024-2026 levels till 2047.
- The Kigali Agreement also provides for a multilateral fund for HFC reduction.

### **Conclusion:**

- The recent detection of the 'rogue' production of CFC-11, one of the most powerful ozone depleting gases is a reminder that we should be vigilant. The actions taken through the Vienna Convention, the Montreal Protocol, and the successive amendments to the protocol were planet-saving steps. But it is also important to be watchful and not undo the good that has been done to the ozone layer.

**DAILY CURRENT AFFAIRS MCQs**

1. With reference to the Mission Indradhanush 2.0, consider the following statements:
  1. The scheme is aimed at immunizing children under the age of 12 years and pregnant women against eight vaccine preventable diseases.
  2. It covers vaccines for diphtheria, whooping cough, tetanus, poliomyelitis, tuberculosis, measles, meningitis and Hepatitis B.
 Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only**
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
2. With reference to the End-to-end encryption, consider the following statements:
  1. For doing End-to-end encryption, a program on the device mathematically generates two cryptographic keys — a public key and a private key.
  2. End-to-end encryption ensures that no one can eavesdrop on the contents of a message while it is in transit.
 Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2**
  - (d) Neither 1 nor 2
3. Power of Siberia is the first cross-border gas pipeline between Russia and:
  - (a) China**
  - (b) France
  - (c) Ukraine
  - (d) India
4. Which of the following organization is the custodian of declassified files/records of the Government of India?
  - (a) National Archives of India**
  - (b) Central Bureau of Investigation
  - (c) Cabinet Secretariat
  - (d) Prime Minister's Office
5. With reference to the Prohibition of Electronic Cigarettes Bill, 2019, consider the following statements:
  1. Any production, import, export, transport, sale (including online sale) or advertisement (including online advertisement) of e-cigarettes shall be a cognizable offence punishable.
  2. Storage of electronic-cigarettes shall also be punishable with an imprisonment up to 6 months or fine up to Rs 50,000 or both.
 Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2**
  - (d) Neither 1 nor 2
6. Joint training exercise 'HAND-IN-HAND 2019' is being held between Armies of India and:
  - (a) Sri Lanka
  - (b) Nepal
  - (c) U.S.A
  - (d) China**
7. With reference to the bullet train, consider the following statements:
  1. At present, India has only one High Speed Railway (HSR).
  2. National High-Speed Rail Corporation Limited (NHSRCL) is the body implementing the project.
 Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only**
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
8. With reference to the Anaemia, consider the following statements:
  1. As per the government details, 29.8% of children in rural India suffer from moderate anaemia, and 40.3% of women in the villages are mildly anaemic.
  2. In 2018, the union government launched the Anaemia Mukta Bharat (AMB) Strategy under POSHAN Abhiyaan to reduce anaemia prevalence by three percentage points every year till 2022.
 Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2**
  - (d) Neither 1 nor 2