

NATIONAL SOCIAL ISSUES- WOMEN, POPULATION, URBANISATION, EMPOWERMENT ETC**Acute Encephalitis Syndrome (AES)**

An epidemic of Acute Encephalitis Syndrome (AES) has broken out in five north Bihar districts. Locally known as Chamki Bukhar in the state.

About AES:

- Acute encephalitis syndrome (AES) is a serious public health problem in India.
- It is characterized as acute-onset of fever and a change in mental status (mental confusion, disorientation, delirium, or coma) and/or new-onset of seizures in a person of any age at any time of the year.
- The disease most commonly affects children and young adults and can lead to considerable morbidity and mortality.
- Viruses are the main causative agents in AES cases, although other sources such as bacteria, fungus, parasites, spirochetes, chemicals, toxins and noninfectious agents have also been reported over the past few decades.
- Japanese encephalitis virus (JEV) is the major cause of AES in India (ranging from 5%-35%).
- Nipah virus, Zika virus are also found as causative agents for AES.
- In India, AES outbreaks in north and eastern India have been linked to children eating unripe litchi fruit on empty stomachs. Unripe fruit contain the toxins hypoglycin A and methylenecyclopropylglycine (MCPG), which cause vomiting if ingested in large quantities. Hypoglycin A is a naturally occurring amino acid found in the unripened litchi that causes severe vomiting (Jamaican vomiting sickness), while MCPG is a poisonous compound found in litchi seeds.

Abuja Marias and other PVTGs

The Chhattisgarh government is processing habitat rights for Abujh Marias, a Particularly Vulnerable Tribal Group (PVTG).

Key facts:

- Since Abujh Marias is a PVTG community, they are entitled to the habitat rights under FRA.
- Abujhmarh, where this tribe lives, is considered by the government to be one of the last remaining strongholds of Left-wing extremism.
- Abujh Marias have their own governance structure.
- The Abujhmarh forest is spread over 1,500 square miles in the Bastar region of Chhattisgarh.
- The FRA has a provision that says, "In view of the differential vulnerability of Particularly Vulnerable Tribal Groups (PTGs) among the forest dwellers, the District Level Committee should play a pro-active role in ensuring that all PTGs receive habitat rights in consultation with the concerned PTGs' traditional institutions of these groups, after filing claims before the gram sabha".
- Habitat is defined under the act as, "the area comprising the customary habitat and such other habitats in reserved forests and protected forests of primitive tribal groups and pre-agricultural communities and other forest dwelling Scheduled Tribes."

About 'Particularly Vulnerable Tribal Groups (PVTGs)':

- PVTGs are more vulnerable among the tribal groups. In 1975, the Government of India initiated to identify the most vulnerable tribal groups as a separate category called PVTGs and declared 52 such groups, while in 1993 an additional 23 groups were added to the category, making it a total of 75 PVTGs out of 705 Scheduled Tribes, spread over 18 states and one Union Territory (A&N Islands) in the country (2011 census).
- Among the 75 listed PVTG's the highest number are found in Odisha (13), followed by Andhra Pradesh (12).
- The Ministry of Tribal Affairs implements the Scheme of "Development of Particularly Vulnerable Tribal Groups (PVTGs)" exclusively for them.

- Under the scheme, Conservation-cum-Development (CCD)/Annual Plans are to be prepared by each State/UT for their PVTGs based on their need assessment, which are then appraised and approved by the Project Appraisal Committee of the Ministry.
- Priority is also assigned to PVTGs under the schemes of Special Central Assistance (SCA) to Tribal Sub-Scheme(TSS), Grants under Article 275(1) of the Constitution, Grants-in-aid to Voluntary Organisations working for the welfare of Schedule Tribes and Strengthening of Education among ST Girls in Low Literacy Districts.
- The criteria followed for determination of PVTGs are as under:
 - A pre-agriculture level of technology.
 - A stagnant or declining population.
 - Extremely low literacy.
 - A subsistence level of economy.

CONSTITUTION AND POLITY

Appointment of the Pro-tem Speaker

A MP from Madhya Pradesh Virendra Kumar will be the Pro-tem Speaker of the Lok Sabha.

Pro-tem Speaker

- Pro-tem is a Latin phrase which translates to for the time being in English and so the Pro-tem Speaker is a temporary speaker appointed for a limited period of time.
- Pro-tem speaker is chosen for the conduct of the house when the Lok Sabha and Legislative Assemblies have been elected and the vote for the speaker and deputy speaker has not taken place.
- The Pro-tem Speaker presides over the first sitting of the Lok Sabha, administer the oath of office to the newly elected MPs, and oversee the election of the Speaker.
- Once the new Speaker is elected, the office of the pro tem speaker ceases to exist. He also administers the floor test.

Her/his Appointment

- After a general election and the formation of a new government, a list of senior Lok Sabha members prepared by the Legislative Section is submitted to the Minister of Parliamentary Affairs, who selects a pro tem speaker.
- The appointment has to be approved by the President.
- The first meeting after the election when the Speaker and the Deputy Speaker are selected by members of the Parliament is held under the pro tem Speaker.

INTERNATIONAL AFFAIRS- BILATERAL, GROUPINGS, ORGANISATIONS

Windrush Scheme

UK has issued another personal apology for the Windrush scandal, involving migrants being wrongly denied their British citizenship rights. A latest official update revealed that hundreds more Indians were confirmed as British Citizens.

Windrush Scheme

- The Windrush Scheme enables Commonwealth citizens, their children, and some other long term residents of the UK to obtain documentation confirming their status free of charge.
- The Windrush generation refers to citizens of former British colonies who arrived before 1973, when the rights of such Commonwealth citizens to live and work in Britain were substantially curtailed.
- While a large proportion of them were of Jamaican/Caribbean descent who came on the ship Windrush, Indians and other South Asians were also affected by the UK government's handling of their immigration status.
- A total of 737 Indians have been able to confirm their status in the wake of the scandal involving Commonwealth nationals wrongly denied their citizenship rights in Britain.
- A majority of them (559) had arrived in the UK before 1973, when the immigration rules had changed, while the others either arrived later or were a family member of the so-called "Windrush generation".

INDIAN ECONOMY**VG Kannan committee to review ATM pricing**

The RBI has set up a six-member committee, headed by VG Kannan, Chief Executive, Indian Banks' Association, to review the ATM interchange fee structure. It aims for giving a fillip to ATM deployment in unbanked areas.

Terms of reference

- The committee will review the existing structures and patterns of costs, charges and interchange fees for ATM transactions.
- It will also review the overall patterns of usage of ATMs by cardholders and assess the impact, if any, on charges and interchange fees.
- It will assess the entire gamut of costs in respect of the ATM ecosystem and make recommendations on the optimal charge/interchange fee structure and pattern.

Why appoint such committee?

- When a customer transacts at another bank's ATM, his bank has to pay an interchange fee to the other bank.
- The cost of operating ATMs has steadfastly increased.
- Hence, Banks and white-label ATM operators (WLAOs) want the RBI to raise ATM interchange fee from Rs. 15 to Rs. 18 for cash withdrawals and card-to-card fund transfers, and from Rs. 5 to Rs. 8 for other non-financial transactions.

**SCIENCE AND TECHNOLOGY- EVERYDAY SCIENCE, SPACE, NUCLEAR, DEFENCE
ETC****New paper-based test kit for Malaria Detection**

With over one million reported cases in 2017, malaria still continues to be a burden for India and most countries of Southeast Asia. Now, a group of researchers from IIT Guwahati has developed a simple detection method that uses an instrument when in the lab or a piece of chromatographic paper when in the field.

Paper Test Kit for Malaria

- The kit can be used to detect Plasmodium parasite, which causes malaria and also specifically detect Plasmodium falciparum, a notorious species.
- Using an ordinary syringe fitted with a small magnet, magnetic beads and few chemicals inside, the researchers were able to specifically capture the antigen released by the parasites in the blood of malaria patients.
- As the blood has many interfering agents, the kit used magnetic bead-tethered aptamers (two small DNA molecules), which capture only the specific antigens and separate these from the blood serum to perform the reaction.
- This kit also has high stability in hot and humid conditions.

Working mechanism

- When the captured antigens interact with specific substrates inside the syringe, the blue dye turns pink. The dye is then adsorbed over a modified chromatographic paper.
- The formation of pink colour on the paper is a direct indication of the presence of parasites in the blood serum. The intensity of the colour increases when the concentration of antigen is high.
- The intensity of the colour change is measured using a spectrophotometer. This gives a quantitative measurement and can detect very low level of the antigen in blood.

Artificial Intelligence, the law and the future:

Artificial Intelligence (AI) has arrived in our everyday lives. For eg: In February, the Kerala police inducted a robot for police work. The same month, Chennai got its second robot-themed restaurant, where robots not only serve as waiters but also interact with customers in English and Tamil. In Ahmedabad, in December 2018, a cardiologist performed the world's first in-human telerobotic coronary intervention on a patient nearly 32 km away.

Concerns:

- AI has several positive applications, as seen in these examples. But the capability of AI systems to learn from experience and to perform autonomously for humans makes AI the most disruptive and self-transformative technology of the 21st century.
- Therefore, if AI is not regulated properly, it is bound to have unmanageable implications.

Challenges of AI:

- Regulation of AI: no comprehensive legislation to regulate this growing industry has been formulated in the country till date.
- Lack of broad-based expertise in research and application of AI.
- Absence of access to intelligent data.
- High resource cost.
- Low awareness for adoption of the technology.
- Privacy and security issues.
- Shortage of skilled manpower.

Need of the hour:

- A legal definition of AI.
- Establish the legal personality of AI (which means AI will have a bundle of rights and obligations), and whether any sort of intention can be attributed to it.
- Since privacy is a fundamental right, certain rules to regulate the usage of data possessed by an AI entity should be framed as part of the Personal Data Protection Bill, 2018.

National strategy for artificial intelligence: The National Strategy for Artificial Intelligence published by NITI Aayog narrates the different pain points and key challenges involved in implementing Artificial Intelligence in India. It has also tried to touch upon many sectors where AI can play a significant role in bringing India to the forefront of AI revolution.

DEFENCE**Defence Space Research Agency (DSRA)**

To enhance the capabilities of the armed forces to fight wars in space, the government has approved the setting up of a new agency which will develop sophisticated weapon systems and technologies.

Defence Space Research Agency

- The Cabinet Committee on Security headed by PM Modi has cleared the setting up of the DSRO.
- It has been entrusted with the task of creating space warfare weapon systems and technologies.
- The agency would be provided with a team of scientists which would be working in close coordination with the tri-services integrated Defence staff officers.
- It would be providing the research and development support to the Defence Space Agency (DSA) which comprises members of the three services.
- The DSA has been created “to help the country fight wars in the space”.
- The Defence Space Agency is being set up in Bengaluru under an Air Vice Marshal-rank officer and will gradually take over the space-related capabilities of the three forces.

Why such move?

- In March, India had carried out the Anti Satellite Test (ASAT) which demonstrated its capability to shoot down satellites and joined an elite club of four nations with similar capability.
- The test also helped the country develop deterrence capability against adversaries who may want to attack Indian satellites to cripple systems in times of war.

QUOTE OF THE DAY

No matter how you feel, Get up, Dress up, Show up and Never, Never ever Give Up.

DAILY ANSWER WRITING PRACTICE

Qns: Critically discuss the role of Artificial Intelligence in context of India.

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DAILY CURRENT AFFAIRS BASED MCQS

1. Consider the following statements w.r.t the Acute Encephalitis Syndrome (AES).
 1. The disease most commonly affects children and young adults.
 2. Japanese encephalitis virus (JEV) is the major cause of AES in India.
 3. Nipah virus, Zika virus are also found as causative agents for AES.
 Which of the statements is/are incorrect?
 - (a) 1 only
 - (b) 1 and 2
 - (c) 3 only
 - (d) None of the above**
2. Which of the following is correct about the Tribal group Abujh Marias?
 1. It is a Particularly Vulnerable Tribal Group.
 2. They are predominantly living in Chhatisgarh.
 3. It is the only tribal group that doesn't have their own governance structure.
 Select the correct answer using codes given below
 - (a) 1 and 2**
 - (b) 1 and 3
 - (c) 2 and 3
 - (d) 1, 2 and 3
3. Consider the following statements w.r.t Particularly Vulnerable Tribal Groups (PVTGs)
 1. These are the most vulnerable tribal groups recognized by Govt of India
 2. Odisha has the highest no. of PVTGs
 Which of the statements is/are incorrect?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2**
4. Consider the following statements about the Pro Tem Speaker.
 1. The Pro-tem Speaker presides over the first sitting of the Lok Sabha
 2. Her/His appointment has to be approved by the President.
 Which of the statement is/are incorrect?
 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2**
5. Recently in news, the Windrush Scheme related to the issues of migrants is initiated in which of the following country/countries?
 - (a) USA
 - (b) UK**
 - (c) Mexico
 - (d) Both (a) and (c)
6. Recently appointed by the RBI, V.G Kannan committee will look into the matters of
 - (a) PCA Framework
 - (b) ATM Pricing**
 - (c) Stressed Assets
 - (d) All of the above.