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Contents

December- 2018
Issue-1

Seven Important Issues

1-20

- Shortage of Judges: A Persistent Problem
- Open Defecation Problem Needs Behavioural Change
- Universal Children's Day & Child Rights Protection
- World Malaria Report-2018 & India
- India-Australia Towards Strategic Cooperation
- INSTC: Gateway to Central Asia & Eurasia
- Is it Time to Expand RTI Ambit

Seven Subjective Questions with Model Answers

21-26

Seven Important National & International News

27-33

Seven Brain Boosters & Seven MCQ's Based on Them

34-42

Seven Important Facts For Prelims

43

Seven Important Space Missions

44-46

Seven Practice Questions for Main Exam

47

SEVEN IMPORTANT ISSUES

1. SHORTAGE OF JUDGES: A PERSISTENT PROBLEM

Why in News?

Recently, a Bench headed by Chief Justice of India Ranjan Gogoi has pulled up State governments and the administration of various High Courts for the delay in filling these vacancies. Answers provided in the Rajya Sabha reveal that as on March 31, 2018, nearly a quarter of the total number of posts in the subordinate courts remained vacant. The court has put the actual figure at 5,133 out of 22,036 sanctioned posts. The State-wise figures are quite alarming, with Uttar Pradesh having a vacancy percentage of 42.18 and Bihar 37.23. Among the smaller States, Meghalaya has a vacancy level of 59.79%.

Introduction

Justice-social, economic and political is a preambular precept of the Constitution of India. The guarantee of equality of law and equal protection of law lies at the heart of the judicial set up. The right to life encapsulates the essence of all rights and liberties. It has been universally recognized and iterated repeatedly by the Supreme Court, that timely justice and speedy trial is a facet of the right to life under our Constitution. Ensuring equal access to justice, a constitutional mandate not just in terms of a fundamental right under Part III but also a good governance directive under Part IV of the Constitution, is fraught with multiple constraints - financial, spatial, qualitative and time.

The judiciary is a co-equal branch of governance within the Constitutional

framework. The courts are created not only to adjudicate disputes between disputant parties, but often indicate normative principles which institutions are bound by. These principles are not merely formulated, but frequently redefined and adapted to suit changing times, even while ensuring that the core Constitutional values are affirmed.

The guarantee of equal justice is poignant because it subsumes not merely disputes between state institutions and citizens but disparate bodies of citizens, with vast income and resource disparities often pitted against each other as well as demands for decisions based on economic or commercial considerations, stretching court capacity beyond their limits.

The importance of the judicial branch cannot be undermined - just as the executive's role cannot be or legislative enactments, cannot be overlooked. The third branch-the Judiciary ought not to be made ineffective in the constitutional scheme by depriving it of resources both financial and human. The judiciary has been constantly concerned with the workload of the subordinate judiciary, judge strength and resources.

Background: Subordinate Courts

Subordinate courts perform the most critical judicial functions that affect the life of the common man: conducting trials, settling civil disputes and implementing the bare bones of the law. Any failure to allocate the required human and financial resources may

lead to the crippling of judicial work in the subordinate courts. It will also amount to letting down poor litigants and undertrials, who stand to suffer the most due to judicial delay.

The burgeoning docket burden that weighs down the judiciary is not because of its lumbering judicial processes alone, as it is often made out. The chronic shortage of judges and severe understaffing of the courts they preside over are significant reasons. More than a decade after the Supreme Court laid down guidelines in 2007 for making appointments in the lower judiciary within a set time frame, a similar issue is back before the highest court. The immediate context is the existence of more than 5,000 vacancies in the subordinate courts.

The reasons are not difficult to guess: utter tardiness in the process of calling for applications, holding recruitment examinations and declaring the results and, more significantly, finding the funds to pay and accommodate the newly appointed judges and magistrates. Besides, Public Service Commissions should recruit the staff to assist these judges, while State governments build courts or identify space for them.

Structure of the Lower Judiciary

While the Supreme Court and High Courts are considered to be the 'higher judiciary', the District Courts and the courts below it are part of the 'lower' or 'subordinate' judiciary. Every judicial district is headed by a District/Sessions

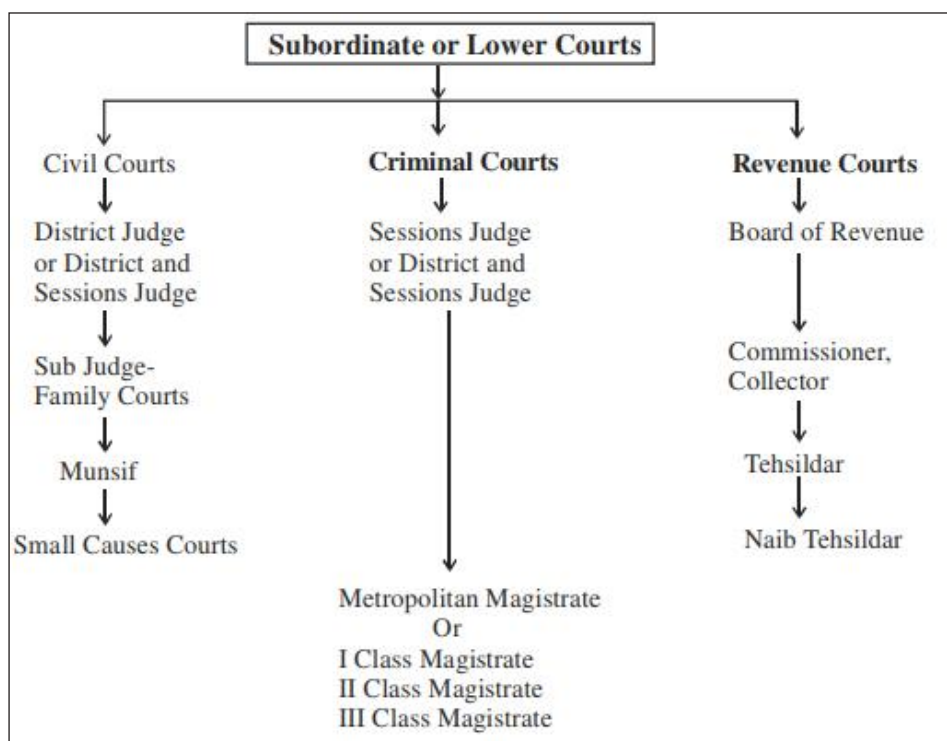
Court. A court is known as 'District Court' when it deals with only civil cases and a 'Sessions' Court when it deals with criminal matters. A District/ Sessions Court is responsible for overlooking the administration of the courts below it in that geographical district. The state High Court oversees the administration of all the District Courts in the state.

Lower courts in India have three tiers of judges. These are District Judges, Civil Judges (Senior Division) and Civil Judges (Junior Division). Each of these tiers, in turn, includes various posts under them. These posts are specified in the Judicial Service Rules of each state. Therefore, the nomenclature of judges under each of these tiers can differ from state to state.

However, broadly there are three categories of courts and judges. At the lowest tier, there exists the Civil Judge (Junior Division). It includes courts of judges such as Judicial Magistrate of the First Class, Metropolitan Magistrates etc. Above this tier, lies the intermediate tier of Civil Judges (Senior Division) which includes Chief and Additional Metropolitan Magistrate and Judicial Magistrate. At the apex of the lower judiciary are the District Judges which commonly includes Additional and Assistant District Judges or Sessions and Additional Sessions Judges.

Constitutional Provision for Appointment

According to the Constitution, district judges are appointed by the Governor in consultation with the High Court. Other subordinate judicial officers are appointed as per rules framed by the Governor in consultation with the High Court and the State Public Service Commission. In effect, the High Courts have a significant role to play. A smooth and time-bound process of making appointments would, therefore, require close coordination between the High Courts and the State Public Service Commissions.



- a) **Civil Judge (Junior Division):** Candidates are appointed through a competitive examination. Usually, candidates can sit for these exams as law graduates. In some cases, some experience as a practicing advocate is also required.
- b) **Civil Judge (Senior Division):** Judges are appointed exclusively by promoting Civil Judges (Junior Division).
- c) **District Judges:** The position of District Judges may be filled in by a combination of promotion, departmental competitive examinations and direct recruitment of advocates with 7 years of litigation experience at the Bar. These advocates are recruited via a written competitive examination. Though this may differ from state to state, the average age range for an advocate to qualify as a judge is that he must not be less than 35 years but should not be more than 45 years.

Physical Infrastructure and its Relevance

The working definition of the "infrastructure" of the judiciary comprises three parts:

- ♦ The first is physical infrastructure, which includes court buildings, rooms, features such as elevators, provisions for drinking water, etc.
- ♦ The second is personnel infrastructure, which includes judicial officers (judges), court staff (court masters, stenographers, registry staff, etc.) and lawyers.
- ♦ The third is digital infrastructure, which includes computers, information technology and the judiciary's overall web presence (such as court websites, e-courts mobile applications, etc.).

The deficiency in physical infrastructure is already regarded as a factor that affects judicial delays and life-cycles of cases. As one moves further away from urban areas, the state of infrastructure invariably worsens. Vital provisions such as clean washrooms, access to water, seating provisions were woefully neglected. Lastly, it is important to note that such infrastructural standards need to be understood as being basic for a modern-day court. They are necessary elements to enhance a court's functioning. The results, therefore, make it abundantly clear that judicial infrastructure needs more focus and budgeting in these courts.

Challenges in Lower Judiciary

The ever-increasing number of vacancies in the Indian judiciary is often cited to demonstrate failings in judicial governance and reform efforts have primarily focussed on filling vacancies in a timely manner.

- ◆ Systemic defects in the appointment process most certainly contribute to vacancies in the lower judiciary.
- ◆ Exams are not conducted frequently enough to fill vacancies as they arise and even when they are, High Courts are often unable to find enough meritorious candidates to fill the vacancies advertised.
- ◆ Unclear recruitment procedures and difficulties in coordination between the High Court and State Public Service Commission, also frequently give rise to disputes and litigation surrounding recruitment, further stalling the process.
- ◆ Little quantitative and qualitative data on the appointment process exists and thus no impactful reform has emerged in the area.
- ◆ Recruitment cycle in most states far exceeded the time limit prescribed by the Supreme Court. This time limit is 153 days for a two-tier recruitment process and 273 days for a three-tier process. Most states took longer to appoint junior civil judges as well as district judges by direct recruitment. This situation demands a massive infusion of both manpower and resources.

Reforms in Lower Judiciary

Law Commission's report suggested the following reforms in Judiciary:

- ◆ Rate of Disposal Method: The Rate of Disposal Method and formulae be followed for calculating adequate judge strength for Subordinate Courts, instead of Judge-Population or Judge-Institution Ratio, Ideal Case Load Method or the Time Based Method.
- ◆ Number of judges to be appointed on a priority basis: Given the large number of judges required to clear

backlog and the time that it will take to complete selection and training processes and to create adequate infrastructure, the Law Commission recommends that the recruitment of new judges should focus, as a matter of priority, on the number of judges required to breakeven and to dispose of the backlog, in a 3 year time frame.

- ◆ Increasing the age of retirement of Subordinate Court Judges from 60 to 62 years.
- ◆ Provision for Staff and Infrastructure: The adequate provisions be made for staff and infrastructure required for the working of additional Courts.
- ◆ Need for System-wide Reform: A systemic perspective, encompassing all levels of the judicial hierarchy, is needed for meaningful judicial reform. Taking measures for the timely disposal of cases at all levels of the judicial system, including by monitoring and increasing judge strength throughout the system; encouraging Alternative Dispute Resolution Methods, where appropriate and more efficient allocation and utilization of resources is required to fulfill the goal of providing timely justice to litigants.

Apart from increasing judge strength, many other measures have to be undertaken for reducing delays, including the application of good judicial management practices such as putting into place timeliness and performance benchmarks.

Way Forward

Healthy and manageable case pendency numbers reflect an efficient judicial system. Conversely, excessive case pendency renders the judicial system ineffective, resulting in loss of confidence of common people in the courts. Subordinate courts perform the most critical judicial functions that affect the life of the common

Alternative Dispute Resolution (ADR)

The concept of Alternative Dispute Resolution (ADR) mechanism is capable of providing a substitute to the conventional methods of resolving disputes. ADR offers to resolve all type of matters including civil, commercial, industrial and family etc., where people are not being able to start any type of negotiation and reach the settlement. Generally, ADR uses neutral third party who helps the parties to communicate, discuss the differences and resolve the dispute. It is a method which enables individuals and group to maintain co-operation, social order and provides opportunity to reduce hostility.

ADR can be broadly classified into two categories: court-annexed options (Mediation, Conciliation) and community based dispute resolution mechanism (Lok-Adalat).

The following are the modes of ADR practiced in India:

1. Arbitration
2. Mediation,
3. Conciliation
4. Negotiation
5. Lok Adalat

man: conducting trials, settling civil disputes, and implementing the bare bones of the law. Any failure to allocate the required human and financial resources may lead to the crippling of judicial work in the subordinate courts. It will also amount to letting down poor litigants and undertrials, who stand to suffer the most due to judicial delay.

Present situation demands a massive infusion of both manpower and resources. There is a pressing need to analyse the systemic challenges that prevent vacancies in the lower judiciary from being filled. This would involve asking questions about the fairness of recruitment processes, adequacy of incentive structures and the culture of legal education and profession in the country.

General Studies Paper- II

Topic: Structure, organization and functioning of the Executive and the Judiciary; Ministries and Departments of the Government: pressure groups and formal/informal associations and their role in the Polity.



2. OPEN DEFECATION PROBLEM NEEDS BEHAVIOURAL CHANGE

Why in News?

Ministry of Drinking Water and Sanitation, received World Toilet Peace Prize on behalf of the government. The summit was organized by World Toilet Organisation, a global non-profit working in the areas of water and sanitation.

The sanitation economy in India is set to double to an estimated amount of US \$62 billion by 2021.

Swachh Bharat Mission has generated significant interest in addressing the urgent sanitation issue in India, not only with traditional actors such as international organizations, but also with the private sector.

Introduction

According to World Health Organization (WHO), around 2.3 billion people in the world do not have access to clean, safe and reliable toilets. They have to walk for miles every day to reach a safe spot where they can relieve themselves in the open. This leads to exposure to life-threatening diseases like diarrhoea, cholera, typhoid, intestinal worms, schistosomiasis and trachoma. In addition, inadequate sanitation is estimated to cause 280, 000 deaths worldwide, annually. Open defecation also leads to rapes, humiliation and school drop-outs, especially among females.

Ever since the re-branding and re-launch of the Indian government's flagship sanitation campaign, the Swachh Bharat Mission, the country's sanitation sector has been galvanised to debate and take action with a sense of urgency. The goal is ambitious: make India open defecation-free by 2 October 2019 – the 150th anniversary of the birth of Mahatma Gandhi. The government of India with help of

partners like UNICEF is looking at the challenge of Open Defecation very seriously.

Advocates of the scheme rightly point to the number of toilets constructed and the number of villages that are declared open defecation free— over 8 crore toilets and 5 lakh villages respectively—whereas critics point to the low usage of the toilets constructed and question the truth behind open defecation free claims.

The 2017 Swachh Survekshan survey conducted by the Quality Council of India reports that 62% of rural households now have a toilet. This is an increase of over 20 percentage points since 2014. More significantly, the survey concludes that more than 90% of the individuals who had access to toilets were using them. Yet, stories continue to pour in, suggesting that the ground reality isn't so rosy. The lengthy queues, lack of water supply and the poor communication in remote and tribal populations have all resulted in low uptake in areas where it is needed the most. Reports suggesting that the Jaipur Municipal Corporation hired an event management company to 'persuade' citizens to give feedback that would make the programme seem a success, raise further questions of the mission's reliability. Similar findings have also been reported in Maharashtra and Gujarat, both declared as open defecation free states.

What is the Clean India Mission?

Swachh Bharat Abhiyan (SBM, or "Clean India Mission") is a national cleanliness campaign launched by the government of India to achieve its vision of a 'Clean India' by 2019. Officially launched on October 2, 2014 by Prime Minister Narendra Modi, this comprehensive program builds upon and expands the

mandate of its predecessors. Designed as a citizen's campaign, its mission is to enlist civil society, corporate businesses and individual citizens as partners to supplement public sector investment with a multi-stakeholder approach. The objectives of the Swachh Bharat Mission are to promote a clean India through several initiatives that have been divided into urban and rural work-streams.

♦ **Swachh Bharat (Gramin):** It strives to achieve Open Defecation Free (ODF) status through emphasis upon behavior change and flexible delivery mechanisms that take into account local cultures, practices, sensibilities and demands. It also seeks to address solid and liquid waste management. It is administered by the Ministry of Drinking Water and Sanitation. Goals of the program are to: (i) promote cleanliness, hygiene and eliminate open defecation; (ii) accelerate sanitation coverage in rural areas; (iii) motivate communities and Panchayati Raj Institutions (local government bodies) to adopt sustainable sanitation practices; and facilities through awareness creation and health education; (iv) encourage cost-effective and appropriate technologies for ecologically safe and sustainable sanitation; and (v) wherever required, develop community-managed sanitation systems focusing on scientific solid and liquid waste management systems for overall cleanliness.

♦ **Swachh Bharat (Urban):** It is focused on building individual toilets, community toilets and solid waste management. Swachh Bharat (Urban) is administered through the Ministry of Urban Development. This program aims at (i) elimination

of open defecation; (ii) eradication of manual scavenging; (iii) modern and scientific municipal solid waste management; (iv) to affect behavioral change regarding healthy sanitation practices; (v) generate awareness about sanitation and its linkage with public health; (vi) capacity augmentation of Urban Local Bodies; and (vii) to create an enabling environment for private sector participation in capital and operation and maintenance expenditure.

- ◆ The components of the mission include construction of household toilets, community and public toilets; solid waste management; informational education communication, public awareness and capacity-building.

Reasons for Open Defecation

The reasons that have been given for people who don't use toilets have either been poverty that makes it a challenge to build latrines or lack of government support in providing such facilities. In cases where the toilets are available but people still end up preferring opened defecation, the reasons can extend to cultural issues related with sharing toilets among family members. There can be many reasons why a person openly defecates and these may include:

- ◆ Poor sanitation.
- ◆ Lack of awareness.
- ◆ Non availability of toilets in some places.
- ◆ Public toilets are available but are grimy, dark, smell bad, or unattractive (due to non maintenance).
- ◆ Toilets are available but there is a risk, e.g. if the public toilets common for all.
- ◆ Public toilets are not available as part of the household but only

at some distance and it may be dangerous to get there at night.

Therefore the reasons for open defecation are varied and it can undeniably be a voluntary choice but in most cases it is due to the fact that the alternatives (i.e. Public toilets) are available but not attractive.

Issues and Challenges

As of January 2018—with a year and a half left to the Swachh Bharat Mission's target of eradicating open defecation—60 million (76%) rural households and 4.2 million urban households have a toilet and 11 states, 1,846 cities and 314,824 villages have declared themselves open-defecation-free (ODF). The challenge, however, will be in ensuring that ODF villages and cities are firstly, truly ODF, but more crucially that they remain so.

Even if the current usage of toilets has considerably improved, the picture may not remain so rosy after a couple of years. This is because often only one pit is constructed and the adoption of the twin pit model is still very low in rural India. Affluent families prefer septic tanks that drive up the cost of constructing a latrine. However, disposal of excreta from septic tanks is not hygienic and that worsens the quality of water and increases health problems. By avoiding pit latrines, rural Indians avoid the need to empty a latrine pit. Moreover, cleaning of both the septic tank and the single pit would involve manual scavenging in rural areas, which is both illegal and against human dignity. States should pay greater attention to these technical issues and to the hygienic disposal of faecal matter.

The second issue which is not being monitored is the quality of construction. Toilet construction is rarely being done by the householder and mostly by a village contractor who pays the labour and masons and gets the subsidy. This leads to corruption

and poor quality of construction. Such toilets may not remain in use after a few years. Greater emphasis should be given to the house owner undertaking management, to ensure quality and usage.

According to World Bank, Inadequate sanitation—management of human excreta, solid waste, and drainage—costs India Rs 2.4 trillion (\$53.8 billion) every year in losses due health, damage to drinking water and tourism costs.

Solutions of Open Defecation

System 1 and System 2 are two distinct modes of decision making.

System 1 is an automatic, fast and often unconscious way of thinking. It is autonomous and efficient, requiring little energy or attention, but is prone to biases and systematic errors.

System 2 is an effortful, slow and controlled way of thinking. It requires energy and can't work without attention but, once engaged, it has the ability to filter the instincts of System 1.

To solve this issue, it takes the action of individuals and even the intervention of the government to address the cultural, economic and social challenges in tandem.

Provision of Toilets

First, there is a need to ensure that there are enough toilets. But, it will take the efforts of the government as well as the goodwill of local organisations such as NGOs to help fix the problem. Construction of pit latrines and other toilet options such as compost toilets is necessary to help deal with the problem of lacking sewer systems.

Corrective Civil Education

Another platform that needs to be addressed is the negative cultural association that people have with toilets. The people should be informed and given civic education to enable them break away from their cultural beliefs on issues such as the fact that toilets are not supposed to be shared.

Incentivise Public Hygiene Participation

By creating government programs that encourage sanitation and personal hygiene, individuals must be involved and forced to take up the responsibility of enhancing their hygiene as well as overall health. Through such programs, people can get to learn the importance of their environments and work towards ensuring that they do not harm themselves by partaking in open defecation. It eventually reduces healthcare burdens on the government and lessens the number of those who practice open defecation as it will be seen as a terrible activity.

Behavioural Change

One way to bring about behavioural change is to adopt, what psychologists refer to as System 2 drivers of change. These focus on spreading rational knowledge (germ theory), having explicit action plans (such as personal and political commitments to change) and using human emotions of pride and shame to change behaviour. Community led Total Sanitation (CLTS) programmes is one such approach. It promotes the mobilisation of local communities to talk openly about, appraise and analyse their defecation practices. Triggers, both psychological and visual, are used to shock and disgust people in an effort to move away from such practices.

Maharashtra with its adoption of the 'Good Morning Squads', Indore with its 'dibba gang' and Delhi with its Gabbar posters, are all using System 2 drivers to trigger behavioural change. If policymakers believe that such methods can be effective, and evidence of CLTS programmes from Bangladesh and Malawi seems to suggest so, emphasis must be put on ensuring proper training, to prevent facilitators from using tactics of public shaming and coercion. Behavioural change must also be understood more widely to include System 1 drivers.

Poorly understood and inadequately adopted by policymakers,



System 1 drivers play a critical role in facilitating desired behaviour. Research suggests that people tend to stick to their existing habits for tasks performed frequently and so, System 1 drivers, rather than focusing on changing habits, look to cultivate existing ones into a more positive outcome. They tap into the unconscious, cue-driven behaviours that all humans have.

To mitigate open defecation, a simple but ingenious System 1 driver would be the building of public toilets in fields which people already use to defecate openly. Leveraging India's recent growth in mobile connectivity and growth in constructed household toilets, incentive programs for increased latrine use can also issue text message reminders, scheduled and framed to promote latrine usage at the same time and place each day.

Strategic timing of key interventions can also go a long way in disrupting behaviour. For example, promoting the use of toilets during the monsoon, when people find it difficult to defecate openly, or launching new interventions during the outbreak of a disease, when people are actively thinking about hygiene, are ways to ensure a new behaviour is developed.

Lastly, initiatives creating an annual ritual, aligned with prevalent religious beliefs, when a village is declared open defecation free can ensure change is celebrated and thus, sustained in the long run.

Conclusion

For India to permanently eradicate open defecation, the Swachh Bharat Mission must adopt three pillars of support. The first must provide and maintain the infrastructure needed to aid toilet use. The second must motivate people to change behaviour towards toilet use and the third must harness cues and automatic habits to drive positive behaviour. It's time policymakers start focusing on the third pillar, before the facade wobbles.

General Studies Paper-II

Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Topic: Issues relating to development and management of Social Sector/ Services relating to Health, Education, Human Resources.



3. UNIVERSAL CHILDREN'S DAY & CHILD RIGHTS PROTECTION

Why in News?

Universal Children's Day is celebrated annually on 20th November. To raise awareness about the rights of children, UNICEF has launched Go Blue Campaign.

The Go Blue For Children global campaign aims to raise awareness about the rights and needs of children and the need of every child to be in school, safe from harm so they can fulfil their potential.

Introduction

India with 1.21 billion people constitutes as the second most populous country in the world, while children represents 39% of total population of the country. Protecting children from violence, exploitation and abuse is an integral component of protecting their rights to survival, growth and development. Child Protection Strategy based on two main pillars that are applicable in all contexts, including emergencies:

1. Strengthening child protection systems – including laws, policies, regulations and services across all social sectors but especially social welfare, education, health, security and justice; and
2. supporting social change that contributes to improved protection of children from violence, exploitation and abuse.

Rights are what you should have or be able to do to have the best start in life. These rights are listed in the UN Convention on the Rights of the Child. All rights are equally important and are connected to each other. Every child is born with these rights and no one can take them away. Governments have the main responsibility to make sure the rights of children in the Convention on the Rights of the Child are protected

and provided for. All citizens have responsibility to respect the rights of children as well.

National child protection systems, protective social practices and children's own empowerment coupled with good oversight and monitoring are among the elements of a protective environment and enable countries, communities and families to prevent and respond to violence, exploitation and abuse.

Go Blue Campaign

UNICEF has launched Go Blue Campaign. UNICEF has flagged several issues around its Go Blue campaign when iconic buildings in Mumbai and Delhi went blue to raise awareness on the rights and needs of children. The organisation aims to "amplify the voices of children and young people as active participants in decision making" across the country.

Go Blue is live on all social media platforms along with the main video featuring Millie Bobby Blue, Blue Lipa and more; they have also released a series of short-videos illustrating hardships children have to go through. Global Citizens can do their bit to support the initiative by signing a petition to call on world leaders to commit to fulfilling the children rights. Children are encouraged to tell the world what they want, how they want to create and build a better world. The whole & sole purpose of this campaign is to urge people all over the world to support this initiative.

What are Child Rights?

A right is as an agreement or contract established between the persons who hold a right (often referred to as the "rights-holders") and the persons or institutions which then have obligations

United Nations Children's Fund

United Nations Children's Fund (UNICEF), formerly (1946–53) United Nations International Children's Emergency Fund, special agency of the United Nations (UN) devoted to aiding national efforts to improve the health, nutrition, education and general welfare of children. UNICEF was created in 1946 to provide relief to children in countries devastated by World War II. After 1950 the fund directed its efforts toward general programs for the improvement of children's welfare, particularly in less-developed countries and in various emergency situations. The organization's broader mission was reflected in the name it adopted in 1953, the United Nations Children's Fund. UNICEF was awarded the Nobel Prize for Peace in 1965. It is headquartered in New York City. UNICEF has concentrated much of its effort in areas in which relatively small expenditures can have a significant impact on the lives of the most disadvantaged children, such as the prevention and treatment of disease. In keeping with this strategy, UNICEF supports immunization programs for childhood diseases and programs to prevent the spread of HIV/AIDS; it also provides funding for health services, educational facilities, and other welfare services. Since 1996 UNICEF programs have been guided by the Convention on the Rights of the Child (1989), which affirms the right of all children to "the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health." UNICEF's activities are financed by both government and private contributions.

and responsibilities in relation to the realization of that right (often referred to as the "duty-bearers".) Child rights are specialized human rights that apply to all human beings below the age of 18.

The purpose of the UN convention on the Rights of the Child (UNCRC) is to outline the basic human rights that should be afforded to children. There are four broad classifications of these rights. These four categories cover all civil, political, social, economic and cultural rights of every child.

Right to Survival

A child's right to survival begins before a child is born. According to government of India, a child life begins after twenty weeks of conception. Hence the right to survival is inclusive of the child rights to be born, right to minimum standards of food, shelter and clothing and the right to live with dignity.

Right to Protection

A child has the right to be protected from neglect, exploitation and abuse at home, and elsewhere.

Right to Participation

A child has a right to participate in any decision making that involves him/her directly or indirectly. There are varying degrees of participation as per the age and maturity of the child.

Right to Development

Children have the right to all forms of development: Emotional, mental and physical. Emotional development is fulfilled by proper care and love of a support system, mental development through education and learning and physical development through recreation, play and nutrition.

Children's Issues

Vulnerability of children is created by the socio-cultural, socio political and socio-religious situations they are in. A child who is forced or born into a situation or discriminated group is at risk for abuse, neglect and exploitation. The lack of a protection system either due to mis-implementation of national laws and programmes or the absence of protection policies and legislation also renders children vulnerable.

Violations of the child's right to protection take place in every country

and are massive, under-recognized and under-reported barriers to child survival and development, in addition to being human rights violations. Children subjected to violence, exploitation, abuse and neglect are at risk of death, poor physical and mental health, HIV/AIDS infection, educational problems, displacement, homelessness, vagrancy and becoming poor parents later in life.

Constitutional Safeguards for Indian Children

The first step to fulfil the rights of children can be found in the Constitution of India. There are a number of articles that address various needs of children as outlined below. The articles are divided into two categories: Fundamental Rights and Directive Principles of State Policy. Fundamental Rights are justifiable in a court of law and are negatives that prohibit the states from doing thing. The courts are bound to declare a law as invalid if it violates a fundamental right. Directive principles are positive suggestions for states and are not justifiable in a court of law.

Fundamental Rights

- ◆ **Article 14** - The State shall not deny to any person equality before the law or the equal protection of laws within the territory of India.
- ◆ **Article 15** - The State shall not discriminate against any citizen.. Nothing in this Article shall prevent the State from making any special provisions for women and children.
- ◆ **Article 21** - No person shall be deprived of his life or personal liberty except according to procedure established by law.
- ◆ **Article 21A** - This Article was introduced by 86th Amendment Act and was notified on 13th December

2002, making free and compulsory education a fundamental right for all children in the age group of 6-14 years.

- ◆ **Article 23** - Traffic in human beings and beggary and other forms of forced labour are prohibited and any contravention of this provision shall be an offence punishable in accordance with the law.
- ◆ **Article 24** - No child below the age of 14 years shall be employed to work in any factory or mine or engaged in any other hazardous employment.

Directive Principles & Other Provisions

- ◆ **Article 39(e) & (f)**- It direct that the state policies are directed towards securing the tender age of children.
- ◆ **Article 45**- It states that the state shall endeavor to provide early childhood care and education for all children until they complete the age of six years.
- ◆ **Article 47**- The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties.
- ◆ **Article 51A**- It mentions that it shall be the fundamental duty of the parent and guardian to provide opportunities for education to his child or as the case may be, ward between the age of six and fourteen.
- ◆ **Article 243G**- It provides for institutionalization of child care by seeking to entrust programmes of Women and Child Development to Panchayat, apart from education, family welfare, health and sanitation and other items with a bearing on the welfare of children.

Government Initiatives: To Promoting Child Right in India

National Health Mission

Reproductive, Maternal, Newborn and Child Adolescent Health (RMNCH+A), Routine Immunisation (RI), Mission Indradhanush, Measles & Rubella vaccine introduction, Mother Infant Young Child Nutrition (MIYCN), Rashtriya Bal Swasthya Karyakram (RBSK), Risk Communication for Public Health in Emergencies and Disease Outbreaks (Zika and Acute Encephalitis Syndrome), Childhood Pneumonia and Anemia, Communication Framework on Menstrual Hygiene Management.

Right to Education

The programmes, emphasising the rights approach, mobilised community support and involvement for promoting children's education and monitoring progress of RTE interventions.

Swachh Bharat Mission

Sanitation Hygiene Advocacy and Communication Strategy (SHACS), Drinking Water Advocacy and Communication Strategy (DWACS).

Child Protection and Well Being

Launched across 12 states, the programme focused on scaling-up sustainable and low-cost child protection interventions to prevent child marriage as well as violence and exploitation of children.

The Immoral Traffic (Prevention) Act, 1986 (ITPA)

It was enacted for the prevention of immoral traffic. All persons whether male or female who are exploited sexually for commercial purposes fall under the purview ITPA. ITPA provides more severe penalties for trafficking of women and child.

The Child Marriage Restraint Act

Under this act promotion, permitting and participation in a child marriage are punishable offences.

The Child Labour (prohibition and regulation) Act

This act distinguishes between hazardous and non hazardous forms of labour and protects all children under 14 years of age from being employed in both form except in certain conditions.

The Information Technology Act

Child pornography can be dealt under this Act as publishing of information which is obscene in electronic form is punishable.

Child Protection Infrastructure in India

The Juvenile Justice (Care and Protection) Act and the Protection of Children from Sexual Offences (POCSO) Act protect all children under the age of 18 years from procedural hassles in cases of offences done by and against them. Several authorities have been set up under the Juvenile Justice Act, namely Special Juvenile Police Units, Child Welfare Committees, Juvenile Justice boards, Special Homes etc. The integrated child protection scheme is a Government-Civil Society partnership scheme which is aimed at facilitating adequate child protection services delivery in line with the state objectives. State Child Protection Societies (SCPS) and District Child Protection Units (DCPUs) have been set up under the scheme as fundamental units for implementation at State and District levels respectively.

Way Forward

Welfare of the child though of a recent origin has become not only a national but also an international endeavour. The international community along with organisations like United Nations

have formulated legislations and policies that have helped in developing the concept of childhood and child welfare.

At the National level India being a developing country having adverse socio-economic conditions resulting in the malnutrition, high IMR, adverse child sex ratio, child labour and child abuse, the concept of childhood and child welfare is slowly taking shape so that no child is excluded from the having a secure and safe childhood.

The concept of childhood and child welfare needs to be developed further by disseminating information about the child welfare services; ensuring that every child attends school compulsorily; providing vocational education to ensure that children are able to derive maximum benefits from the education they receive; proper health facilities before and after the birth of the child.

It is needless to mention that, though India has a comprehensive legal regime and policy framework to protect the rights and interests of the children, greater momentum is required for effective implementation of these policies and programmes for well-being of the children by improving their level of education, health and nutrition etc. Above all a just and fair environment is desirable for all children at home, school or any other place, with growing mind and body to see a shining tomorrow and ultimately to become responsible citizens of India.

General Studies Paper- II

Topic: Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.



4. WORLD MALARIA REPORT-2018 & INDIA

Why in News?

The World Health Organisation (WHO) has released the 'World Malaria Report-2018'. According to the report, the disease had globally been on a decline, progress “stalled” between 2015 and 2017. Prior to this period, the World Health Organization (WHO) said that the world was seeing an “unprecedented period of success in global malaria control.” But data from 2015 to 2017 shows that “no significant progress in reducing global malaria cases was made in this period.

Introduction

The World malaria report-2018 summarizes global progress in the fight against malaria up to the end of 2017, 2 years after the launch of the Global Technical Strategy for malaria 2016–2030 and the SDGs. The report reinforces the message from the World Malaria Report-2017 that the world is off track to achieve two critical targets of the GTS: reducing malaria deaths and disease by at least 40% by 2020. Although there has been a substantial reduction in the burden of malaria since 2010, the analysis indicates a stalling of the progress between 2015 and 2017. Thus, in 2017, there were an estimated 219 million malaria cases globally, compared with 214 million cases in 2015 and 239 million cases in 2010. The reduced or reversed progress in countries with the highest malaria burden is one of the main contributors to the stalling of the global progress.

India has 4% of the global malaria burden. Between 2016 and 2017, India showed an impressive 24% reduction in malaria cases or a reduction of three million cases. Out of all the 11 highest burden countries, India is the only one to have recorded a substantial drop. The WHO credits the efforts in the

state of Odisha for India’s impressive decline saying that the country’s drop is largely due to substantial declines of the disease in the highly malarious state of Odisha, home to approximately 40% of all malaria cases in the country.

Malaria is a major public health problem in some states of India including the North East region. Recognizing the burden due to malaria on the health and economic development of the population living in ‘high-risk’ areas, the government of India has given special attention to malaria control in these areas. In states with very low malaria burden, the strategic interventions are different. The National Malaria Strategic Plan (NMSP) outlines a strategy for translating commitment into concerted action for scaling up malaria control interventions with a focus on high burden areas and categorized strategic interventions for achieving preelimination status. It is envisaged that effective implementation of the Strategic Plan would reduce the burden on health and economic development of millions of people affected by malaria. It details India’s roadmap for malaria elimination in 571 districts out of India’s 678 districts by 2022.

Key Finding of World Malaria Report-2018

- ◆ In 2017, there were an estimated 219 million cases of malaria globally, a slight increase from 217 million cases in 2016.
- ◆ Deaths from malaria decreased from 451,000 in 2016 to 435,000 in 2017. While this represents positive progress, the rate of decline has slowed since 2015.
- ◆ The world is off track to achieve two of the three critical targets of the WHO Global Technical Strategy

for Malaria 2016-2030, reducing malaria deaths and disease by at least 40% by 2020. The third target – elimination of malaria in at least 10 countries by 2020 – is on track and likely to be reached.

- ◆ In countries nearing elimination the pace of progress is quickening – 46 countries reported fewer than 10,000 indigenous cases in 2017, up from 37 countries in 2010.
- ◆ Funding for the global malaria response in 2017 grew slightly, but more domestic and international investment is needed to close crucial gaps in access to proven, life-saving malaria interventions.
- ◆ In 2017, there were an estimated 435000 deaths from malaria globally, compared with 451000 estimated deaths in 2016 and 607 000 in 2010. Children aged under 5 years are the most vulnerable group affected by malaria. In 2017, they accounted for 61% (266000) of all malaria deaths worldwide.

History of Malaria Control in India

In 1947, at India’s independence 22% population of country was estimated to suffer from Malaria with 75 million cases and 0.8 million deaths due to Malaria annually. To combat devastating effects of Malaria, the National Malaria Control Programme (NMCP) was launched in 1953 built around three key activities - insecticidal residual spray (IRS) with DDT; monitoring and surveillance of cases; and treatment of patients. Malaria related morbidity and mortality in India rapidly brought down within a few years. Encouraged by the programme’s success. It was converted to National Malaria Eradication Programme (NMEP) in

1958. But in 1976, there was a massive resurgence of malaria with 6.46 million cases reported attributed to poor health infrastructure and sub-optimal monitoring and logistics in many parts of the country. In addition, *P.falciparum* resistance to chloroquine and vector resistance to insecticides were also reported.

National Vector Borne Disease Control Programme (NVBDCP)

The NVBDCP is an umbrella programme for prevention and control of vector borne diseases viz., malaria, filariasis, kala-azar, Japanese encephalitis, dengue and chikungunya. The Directorate of NVBDCP, under the Directorate General of Health Services (DGHS), Ministry of Health and Family Welfare (MOHFW), Government of India (GOI), is the national level unit dedicated to the program. The Directorate of NVBDCP is the nodal agency for programme planning, implementation and oversight in coordination with the states. It is responsible for formulating policies and guidelines, monitoring, and carrying out evaluations. It is also responsible for administering GOI's financial assistance to the states in the context of the program.

As a consequence, the modified plan of operations (MPO) was launched in 1977 with a three-pronged strategy: early diagnosis and prompt treatment, vector control and Information Education Communication/Behaviour Change Communication (IEC/BCC) with community participation. The malaria incidence showed a decline again and in 1984 the cases were reduced to about 2 million with 247 deaths. In order to combat malaria in high transmission areas of the country, an Enhanced Malaria Control Project (EMCP) was launched with additional support from the World Bank in 1997 and Intensified Malaria Control Project (IMCP) launched with support of the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM) in 2005. The malaria control programme and other Vector Borne Diseases namely Kala-azar, Dengue, Lymphatic Filariasis, Japanese Encephalitis and

Chikungunya were integrated into the National Vector Borne Disease Control Programme (NVBDCP) in 2002. New tools for malaria prevention and control were introduced under NVBDCP i.e., monovalent Rapid Diagnostic Tests (RDTs) for *P. falciparum* detection in 2005; Artemisinin Based Combination Therapy (ACT) in 2006; Long Lasting Impregnated Bednets (LLINs) in 2009; antigen detecting bi-valent RDTs for detection of both *P. falciparum* and *P. vivax* in 2013; and newer insecticides and larvicides in 2014- 15.

WHO Global Malaria Programme

The WHO Global Malaria Programme (GMP) is responsible for coordinating WHO's global efforts to control and eliminate malaria. It is guided by the Global Technical Strategy for Malaria 2016–2030 (GTS) adopted by the World Health Assembly in May 2015. The Global Technical Strategy provides a technical framework for all malaria-endemic countries working towards malaria control and elimination. It sets ambitious but attainable global targets for 2030, including:

- ◆ Reducing malaria case incidence by at least 90%.
- ◆ Reducing malaria mortality rates by at least 90%.
- ◆ Eliminating malaria in at least 35 countries.
- ◆ Preventing a resurgence of malaria in all countries that are malaria-free.

The timeline of 2016–2030 is aligned with the 2030 Agenda for Sustainable Development, endorsed in 2015 by all United Nations Member States.

Global Technical Strategy for Malaria

The Global Technical Strategy for Malaria 2016–2030 was adopted by the World Health Assembly in May

2015. It provides a comprehensive framework to guide countries in their efforts to accelerate progress towards malaria elimination. The strategy sets the target of reducing global malaria incidence and mortality rates by at least 90% by 2030.

The world needs to prevent at least 40 per cent malaria case incidence and mortality rates by 2020 and eliminate the disease in at least 10 countries. To achieve these, the world needed an estimated US\$ 4.4 billion in 2017 and needs US\$ 6.6 billion by 2020. However, a new report by the World Health Organization said that in 2017, global funding for malaria control and elimination fell short by US\$ 1.3 billion.

What is Malaria?

Every two minutes, a child dies from malaria, a disease caused by a single mosquito bite. Malaria is preventable and treatable, with a life-saving, insecticide-treated bed net and other malaria prevention tools and treatment. Refugees, pregnant women and children are most vulnerable to this disease.

Malaria is transmitted to people through the bites of *Anopheles* mosquitoes, which primarily bite at night and carry the life-threatening disease caused by the blood parasite *Plasmodium*.

- Malaria is a potentially life threatening parasitic disease caused by parasites known as *Plasmodium vivax* (*P.vivax*), *Plasmodium falciparum* (*P.falciparum*), *Plasmodium malariae* (*P.malariae*) and *Plasmodium ovale* (*P.ovale*).
- Man develops disease after 10 to 14 days of being bitten by an infective mosquito.
- There are two types of parasites of human malaria, *Plasmodium vivax*, *P. falciparum*, which are commonly reported from India.
- Inside the human host, the parasite undergoes a series of changes as part of its complex life cycle. (*Plasmodium* is a protozoan parasite).
- The parasite completes life cycle in liver cells (pre-erythrocytic schizogony) and red blood cells (erythrocytic schizogony).
- Infection with *P.falciparum* is the most deadly form of malaria.

Challenges in Malaria Control

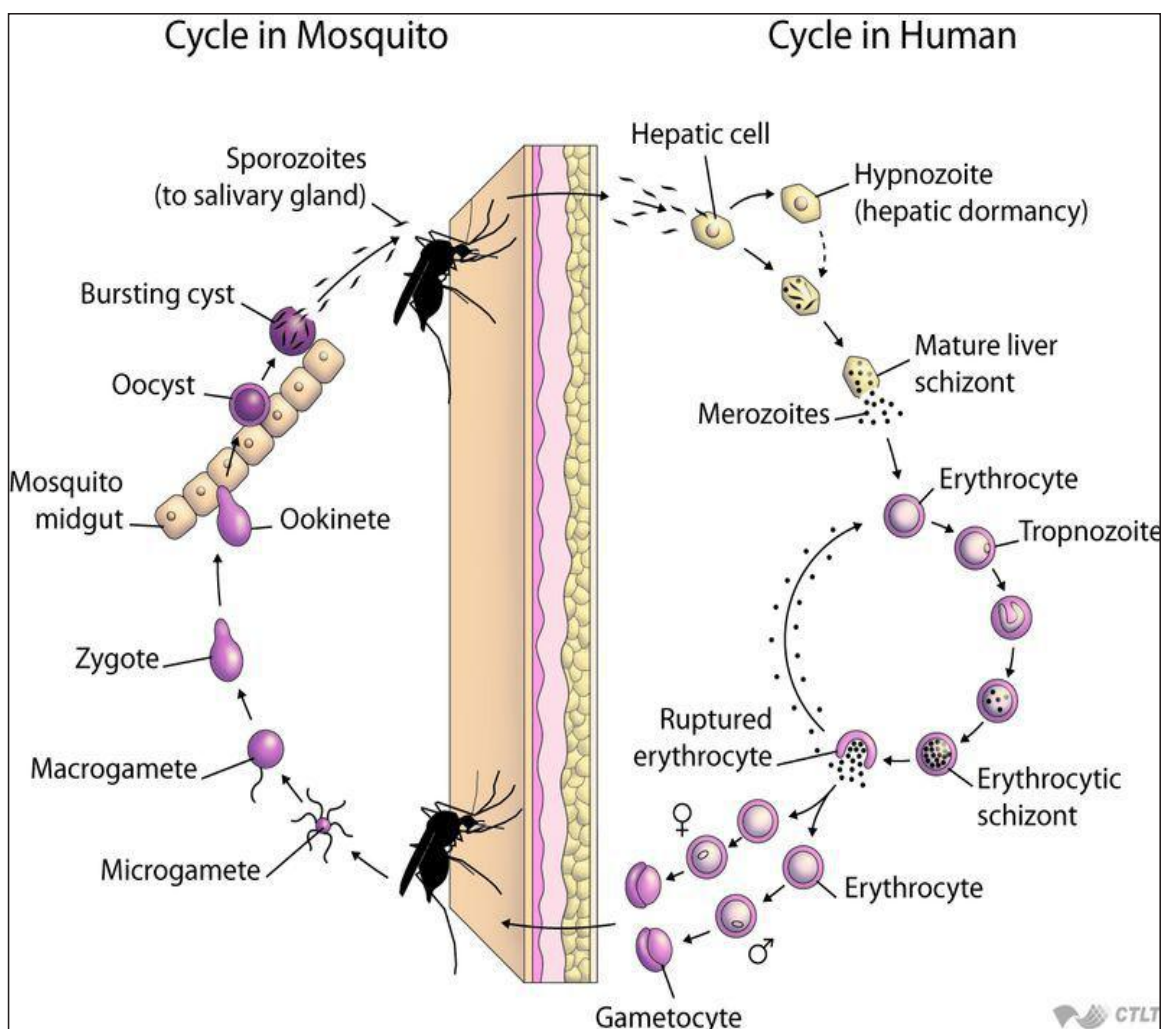
Malaria control programme was launched since last 60 years still we are not able to control malaria. There are so many challenges in malaria control such as tribal malaria; the constant movement of tribal people in forests make it difficult to treat individuals and the malaria gametocytes load remains high. Main cause of malaria can be removed by improving the environmental sanitation which is not emphasized till date. Lack of community involvement is an important hindrance in achieving the malaria control. Development of antimalarial drug resistance is another area of concern. Treatment in both the public and private sectors is hampered by low quality of care, inefficiency in service delivery and low utilization of adequate care. Shortage of man power in rural, tribal and hilly areas is really a major problem area which needs to be tackled more tactfully. Another major problem is lack of political will to eradicate the disease.

The challenges facing the global malaria response are many and as highlighted in this year's report, immediate barriers to achieving the fast-approaching GTS milestones for 2020 and 2025 are malaria's continued rise in countries with the highest

burden of the disease and inadequate international and domestic funding. At the same time, the continued emergence of parasite resistance to antimalarial medicines and mosquito resistance to insecticides pose threats to progress.

Conclusion

India has suffered from a major burden of malaria for decades, with high levels of morbidity and death. But the declining trend of the scourge shows that sustained public health action can achieve good results. The World Malaria Report-2018 of the World Health Organisation notes that India's record offers great promise in the quest to cut the number of new cases and deaths globally by at least 40% by 2020, and to end the epidemic by 2030.



Building capacity and enhancing universal access to rapid and accurate laboratory diagnostics are necessary to control Malaria in India. The establishment of a well functioning laboratory network that provides the population with easy access to high quality microscopy services as well as availability of rapid diagnostic kits should be the highest priority for Malaria control. Also, Integrated vector control is the major emphasis area to be handled.

General Studies Paper- II

Topic: Issues relating to development and management of Social Sector/ Services relating to Health, Education, Human Resources.



5. INDIA-AUSTRALIA TOWARDS STRATEGIC COOPERATION

Why in News?

President Ram Nath Kovind has concluded his visit to Australia, the first by an Indian head of state, has added momentum to the bilateral ties and enhanced the strategic cooperation. India and Australia signed five agreements in key areas like agricultural research, education, disability, trade and investments, scientific collaboration and innovation.

Introduction

President Kovind became the first-ever President of India to pay a state visit to Australia. Traditionally, Indian presidents have not visited Australia as the queen is the head of that country. By choosing to set aside traditions, President Kovind has sent across a message to the Australians. The Australian leadership expressed exceptional warmth and highly appreciated the growing ties and engagement with India. The President held talks with Prime minister Scott Morrison to step-up bilateral strategic ties as the two countries signed five agreements to boost investments and enhance cooperation. Prime Minister Morrison also released Australia's response to the India Economic Strategy, a blueprint to transform the economic engagement to increase the Australian investment from current 10 billion dollars to 100 billion dollars by 2035. Australia also pinpointed the initial implementation plan with key actions for next one year which will include agreements forged between Austrade and Invest India, the establishment of an Australia-India Food Partnership, opening up new opportunities for agri-tech and service companies and Australia-India Strategic Research Fund grants of up to Australian dollar 500,000. The fund is designed to help researchers solve challenges shared by

both nations, including energy storage, marine science and plant genomics.

There is a strong geopolitical convergence between the two countries anchored in their security partnership in the Indo-Pacific. Both countries are facing a common challenge in the expanding and often unilateral assertion of Chinese power in shared region. The US still maintains a formidable forward military presence in the region, but its relative predominance has diminished and this devolves more responsibility on other major powers, including India, Japan, and Australia.

Both India and Australia attach value to the role of Association of Southeast Asian Nations (ASEAN) and would like to see the strengthening of other regional institutions, such as the East Asia Summit process and the early conclusion of the Regional Comprehensive Economic Partnership (RCEP) in which both countries are partners. But this strategic convergence is not matched by a strong and vibrant economic and commercial relationship, nor is there broad-based civil society engagement. And this asymmetry puts at risk further strengthening of the security partnership between the India and Australia, which will have to play a critical role in shaping new open, inclusive, transparent and rule-based security architecture in the Indo-Pacific.

Background

The India - Australia bilateral relationship has undergone evolution in recent years, developing along a positive track, into a friendly partnership. The two nations have much in common, underpinned by shared values of a pluralistic, Westminster-style democracies, Commonwealth traditions, expanding

economic engagement and increasing high level interaction. Their several commonalities including strong, vibrant, secular and multicultural democracies, free press, independent judicial system and English language, serve as a foundation for a closer co-operation and multifaceted interaction. The long-standing people-to-people ties, ever increasing Indian students coming to Australia for higher education, growing tourism and sporting links, especially Cricket and Hockey, have played a significant role in further strengthening bilateral relations between the two countries.

With the changing global scenario, Australia has come to look at India as a potential partner in promoting regional security and stability. This led to upgradation of bilateral relationship between the two nations to a 'Strategic Partnership', including a Joint Declaration on Security Cooperation in 2009. Over the years an array of institutional mechanism has been put in place to promote bilateral co-operation such as exchange of high level visits, Foreign Ministers' Framework Dialogue, Joint Trade & Commerce Ministerial Commission, Defence Policy Talks including Policy talks at the level of Senior Officials, Staff Talks, Energy Security Dialogue and Australia-India Education Council, Track-2 Dialogues like Australia-India Leadership Dialogue, Youth Dialogue, etc.

India and Australia also co-operate in various multilateral fora. Australia supports India's candidature in an expanded UN Security Council. Both India and Australia are members of the Commonwealth, Indian Ocean Rim Association (IORA), ASEAN Regional Forum, Asia Pacific Partnership on Climate and Clean Development and have participated in the East Asia

Summits. Both countries have also been cooperating as members of the Five Interested Parties (FIP) in the World Trade Organisation (WTO) context. Australia is an important player in Asia-Pacific Economic Cooperation (APEC) and supports India's membership of the organisation. In 2008, Australia became an Observer in South Asian Association for Regional Cooperation (SAARC).

India and Australia: Bilateral Relationship

The India - Australia economic relationship has grown significantly in recent years. India's growing economic profile and commercial relevance to the Australian economy is recognized, both at the federal and state level in Australia.

Bilateral Trade

India's trade in goods and services with Australia was approximately US\$ 15.6 billion (A\$20.7 bn) in 2016. India's exports to Australia stood approximately at US\$4.6 billion (A\$6.1 bn) in 2016 while India's import from Australia during the same period stood at US\$11 billion (A\$14.6 bn). India's main exports to Australia are passenger motor vehicle & machinery, pearls, gems and jewellery, medicaments and refined petroleum while major imports are coal, non-monetary gold, copper, wool, fertilizers and education related services.

Civil Nuclear Co-Operation

In the face of rising energy demands and international pressure to address its carbon emissions, increasing nuclear energy production continues to be a popular solution for the Indian government. India's active nuclear weapons program, combined with its non-membership of the Treaty on the Non-proliferation of Nuclear Weapons (NPT), has made the acquisition of nuclear materials difficult over the years. A long-term civil nuclear trade deal with Australia is an efficient way to

sustain these future nuclear projects, especially given Australia's geostrategic importance for India and broader cooperation between the two states in the Asia-Pacific.

Education

Although India does contain some quality higher education institutions, improving the overall quality of education is paramount in order for India to take full advantage of its large and young population. The challenge of training this emerging group (estimated at about 400 million people) presents an opportunity for Australia both in terms of university collaboration and as a destination for Indian students. Australia has become the second largest destination for Indian students (and now the second largest destination for all international students) and the education sector has become the main export of Australia to India.

State-to-State Engagement

Over the past two decades, state governments in India have increased their engagement with the outside world. This outreach has increased in recent years – especially the last two government laying a strong emphasis on subnational diplomacy. There are several key reasons why states are emerging as important stakeholders in foreign policy.

- ◆ First, the economic reforms of 1991 created space for states seeking foreign direct investment.
- ◆ Second, a number of regional leaders, eager to burnish their credentials, have sought to showcase their states by having roadshows abroad and, in recent years, organizing investors' summits at home.

- ◆ Third, the diaspora from a number of states has also played an important role in strengthening linkages between the states they hail from and countries they have migrated to.

India-Australia Inked 5 Pacts

During the state visit of President Kovind to Australia, five agreements were exchanged in the presence of Marise Payne, Foreign Minister of Australia and Anant Kumar Hegde, Minister of State for Skill Development and Entrepreneurship, by High Commissioners of both countries.

- ◆ The first agreement was for cooperation in the area of disability and to deliver services to the differently-abled.
- ◆ The second one was between Invest India and Austrade to facilitate bilateral investment.
- ◆ The third agreement was signed between the Central Mine Planning and Design Institute, Ranchi and the Commonwealth Scientific and Research Organisation, Canberra, to foster scientific collaboration and innovation.
- ◆ The fourth one between the Acharya NG Ranga Agricultural University, Guntur and the University of Western Australia, Perth, for cooperation in agricultural research and education.
- ◆ The Fifth was between the Indraprastha Institute of



Information Technology, New Delhi and the Queensland University of Technology, Brisbane for a joint Ph.D agreement.

Comprehensive Economic Cooperation Agreement

The two countries are currently discussing a Comprehensive Economic Cooperation Agreement (CECA) which will provide greater market access to exporters of goods and services. The two sides have exchanged their goods and services offer lists. It is expected that the conclusion of the CECA will expand the base of merchandise trade, remove non-tariff barriers, encourage investment and address the border restrictions to trade. India is also seeking to address its adverse balance of trade in goods and services through specialized market access for its products.

Quadrilateral Arrangement

The world is witnessing a geopolitical shift from the North Atlantic to the Indo-Pacific region. US power is in relative decline with a steady build-up of Chinese power, wealth and influence. The last 15–20 years have also seen the rise of India. Against this backdrop, Australia's reconceptualisation of its strategic frame as the Indo-Pacific widens its geopolitical canvas and elevates India's importance for multiple Australian interests and objectives. The Quadrilateral arrangement (Quad) involving Australia, India, Japan and the U.S. saw a revival as officials exchanged notes on regional and global security. It has been a remarkable turnaround in the prospects of an arrangement which had collapsed a decade ago under the weight of Chinese demarches. The principles of Indo-Pacific region is that it should be free and inclusive where countries should respect international laws.

Quad and Indo-Pacific Strategy

In recent years, the Indo-Pacific strategy and the Quad concept have been introduced and advocated by various countries at various points in time. As such, changes in the geopolitical environment in the Asia-Pacific region are the fundamental causes motivating the creation of the Indo-Pacific strategy. Fortunately, relations among the Indo-Pacific's four key maritime democracies— Australia, India, Japan and the US—are stronger than ever, characterized by high-level linkages and intelligence-sharing. These countries should institutionalize their "quad" initiative, with the India-Japan dyad forming the cornerstone of efforts to pursue wider collaboration in the region. However, such collaboration will face considerable obstacles.

India-Australia both sides agreed that a free, open, prosperous and inclusive Indo-Pacific region serves the long-term interests of all countries in the region and of the world at large. The Indo-Pacific region is now central to global politics and economics and recent days have merely reinforced the trends that have been emerging for some time.

India and Australia are wary of China's assault on maritime security and freedom of navigation in the Indo-Pacific region. These common concerns have strengthened the need for greater maritime cooperation between the two nations and the two have started conducting joint naval combat exercises. During PM Modi's visit to Australia, a security framework agreement was signed by the two countries, further underscoring the importance of defense cooperation in the Indian Ocean region. India and Australia are leading powers in the Indian Ocean region. The two countries are also at the helm of Indian Ocean Regional Association (IORA),

a formal grouping consisting of the Indian Ocean Littoral States. Australia is also a permanent member of Indian Ocean Naval Symposium, which brings together the local navies of Indian Ocean region. The extent of their regional cooperation in Indian Ocean can also be ascertained by their annual trilateral dialogues with countries like Japan and Indonesia.

The need of the hour is to push for greater engagement with such like-minded nations. Australia has been long keen on joining the Malabar exercises along with the U.S. and Japan. India should favorably consider this request as the idea of an Indo-Pacific democratic quad needs resurrection at the earliest.

Way Forward

India today is full of opportunities for business, social enterprises and cultural connections with Australia. The strategic and economic interests of both countries are converging which opens up opportunities for working together in a rapidly changing region.

The relationship between India and Australia has tremendous prospects for the future and both the countries are focused in developing a comprehensive relationship in all fields and in particular this time trade and investment are other fields are equally important. India has always been a country with great national ambitions and is one of the most important advocates of the concept of "Indo-Pacific Strategy". As far as terrorism is concerned both India and Australia have similar views. Terrorism is threats which need to be fought globally, in whatever region acts of terrorism are not acceptable.

General Studies Paper- II

Topic: India and its neighborhood-relations.



6. INSTC: GATEWAY TO CENTRAL ASIA & EURASIA

Why in News?

India, Russia and Iran held a trilateral meeting on the International North South Transport Corridor (INSTC) on November 23 to make the 7,200-km-long ship, road and rail route operational soon. The multi-modal connectivity project designed to promote transportation cooperation among the member states and links the Indian Ocean and the Persian Gulf to the Caspian Sea via Iran.

What is the INSTC?

Central Asia, over the last two decades in general and recently in particular, is witnessing an unprecedented integration into the global economic and political mainstream.

The North-South Transport Corridor is an ancient route that connected South Asia with North Europe for centuries. This route was used by the European, Indian, Russian and many other foreign traders. During the late 17th and early 19th centuries, Indian traders used this route to reach out to the Central Asian markets. Under the Safavid Dynasty (1501-1722), there were some 10,000 to 20,000 Indian traders spread across the empire.

The modern day INSTC was launched in 2000 by India, Iran and Russia and ratified in 2002 by the three countries. It is a multi-modal transportation route linking India Ocean and Persian Gulf to the Caspian Sea via Iran and onward to Northern Europe via St. Petersburg in Russia. The INSTC envisages movement of goods from Mumbai (India) to Bandar Abbas (Iran) by sea, from Bandar Abbas to Bandar-e-Anzali (an Iranian port on the Caspian Sea) by road and then from Bandar-e-Anzali to Astrakhan (a Caspian port in the Russian Federation) by ship across the Caspian Sea and



thereafter from Astrakhan to other regions of the Russian Federation and further into Europe by Russian railways.

This connectivity route was originally envisioned because the existing route of transporting goods from India to Russia and northern Europe through the Suez Canal to the western ports like Rotterdam, and through the eastern ports like Shanghai was too expensive and time-consuming. It was thought that a more direct route through Iran and Azerbaijan would provide a strong impetus to the commercial and people-to-people connection among different countries of the region.

In 2005, Azerbaijan has joined the group. The four countries lie along the route of the corridor geographically and are building it to secure common economic interests with the free flow of goods and passengers. The INSTC is emerging at a time when the Chinese-backed Belt and Road Initiative (BRI), a grand scheme of a transnational transportation corridor spanning a total of 68 countries in Europe, Asia and even Africa, has started reshaping the global rules of trade in favour of China. The INSTC is dwarfed by the BRI;

however, it still remains important as it reflects the determined will of the founding member countries to tread in a direction that is distinctive from the one prescribed by China.

The corridor, meant for both passenger and cargo transportation, is 7,200 kilometers (4,478 miles) in length between the port of Mumbai and St Petersburg. Already two dry runs have been successfully conducted along the route of the corridor. The results have shown that transportation costs for goods travelling along the INSTC could be cut by \$2,500 per 15 tons of cargo and transit time could be reduced to 25-30 days compared to 40-60 days taken at present via the Suez Canal route. This INSTC reduces carriage costs by 30% and transit time by 40%. Take the route between Mumbai and Moscow, for instance: the traditional sea route is 8,700 nautical miles (around 16,112 kilometers) and would take 32-37 days, compared to the INSTC, which is just 2,200 nautical miles (around 4,074 kilometers) plus 3,000 kilometers (overland) and would take only 19 days. Now, take the route between New Delhi and Helsinki: while the traditional route via sea is

16,129-kilometer-long and takes 45 days, the new rail route opened up by the INSTC is 9,389-kilometer-long and takes just 21 days.

INSTC Member Countries

Given these advantages not only for India and Russia but also the countries en route, the corridor is attracting the interest of a growing number of countries across Europe and Asia. At present, it has 10 member countries further to the four (India, Iran, Russia and Azerbaijan) mentioned above, namely – Belarus, Ukraine, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkey, Armenia, Syrian Arab Republic and Oman; Bulgaria is an observer member. Moreover, many countries from around the world, such as Finland, Estonia, Latvia and Pakistan, have expressed their interest to join it; others, such as Turkmenistan, may not be formal members but are likely to be linked to it; yet others, such as Myanmar, Thailand, Cambodia, Laos and Vietnam, are to get linked with India through the India-Myanmar-Thailand Highway Project and East-West Economic Corridor, opening up the possibility of future expansion of the INSTC to Southeast Asia; while a few, such as the US and Japan, have reportedly endorsed it, though the recent hardening of the US posture against Iran and Western posture against Russia may have significant implications. The US withdrawal from the Iran nuclear deal, the US sanctions on Iran and the Western sanctions on Russia particularly affect India that has long-standing political, commercial and/or defence ties with the US, Iran and Russia.

The Main Objectives of This Agreement

1. To increase the effectiveness for transport ties in order to organize goods and passenger transport along the international “North-South” Transport corridor.

2. To promote access to the international market through rail, road, sea, river and air transport of the parties to the Agreement.
3. To provide assistance in increasing the volume of international transport of passengers and goods.
4. To provide security of travel, safety of goods as well as the environmental protection according to the international standard.
5. To harmonize the transport policies as well as law and legislative basis in the field of transport for the purpose of implementing this agreement.
6. To setup, equal and non-discriminative condition for all types of transport service providers from all the parties in transport of passengers and goods within the framework on “North South” Transport Corridor.

Prospects

The strategic significance of INSTC for India is immense. It offers many opportunities to enhance India's connectivity with Iran, Afghanistan and the vast Eurasian region and vice versa. At present, India has to depend on the sea route via Rotterdam to St. Petersburg and increasingly through China and then inland to transport goods to Russia. To reach out to Central Asia, goods have to be routed through China, Europe or Iran. The routes through China and Europe are long, expensive and time consuming. Therefore, need for a route that is relatively shorter, cheaper and, more importantly, safer and well secured. It is said that the INSTC can reduce time and cost of container delivery by 30-40 per cent.

The potential of this corridor will be manifold for India if linked with the Southeast Asian countries. This will boost trade between Europe and Southeast Asia as well. As compared to the current route through the Suez

Canal and the Mediterranean Sea, the INSTC is much shorter and cost effective. The Suez Canal route takes 45-60 days, whereas the INSTC would take 25-30 days. In fact, the INSTC is 40 per cent shorter and 30 per cent cheaper.

From India's point of view, this corridor would not only help India bypass Pakistan and yet reach out to Central Asia and Russia, but also enable it to transport goods at cheaper cost to the European markets. In addition, Indian exports could potentially get a competitive advantage due to lower cost and less delivery time. Despite the limitations of regional connectivity, India is working to invest in the region in the IT and education sectors. Since, India has a big IT sector and very qualified and talented working professionals, India is looking to use its power in this sector to set up a Central Asian e-network linking all five Central Asian states with its hub in India to provide tele-education and telemedicine connectivity. The IT sector has a huge potential and can work as a bridge to bring the region closer.

Major Issues and Challenges

The full potential of the INSTC, however, cannot be realised until bottlenecks and constraints are addressed by the member states. Unlike other international organisations, the INSTC still does not have a strong mechanism to address the operational issues on ground; problems related to customs procedure and documentation; issues related to the funding of various infrastructure projects; and, the low level of container trade on the INSTC. Due to the low level of trade, containers often come back empty, increasing the cost of container movement on this route. There is also lack of common border crossing rules among the member countries; problems related to the insurance and data exchange between the member states; gradient problem restricting speed; higher

tariffs by rail vis-a-vis road transport for movement from Bandar Abbas to Amirabad; wagon shortage and load restrictions for transit traffic in Iran; problem of break of gauge; and, finally, the security fears emanating from Afghanistan. All these are likely to further hamper the development of the India–Iran–Afghanistan–Central Asia route. Growing violence and the uncertain security environment in the Afghanistan- Pakistan region, continue to pose challenges for the regional countries and their efforts for enhanced connectivity.

A major challenge before the member countries is sustaining the momentum of progress which they have achieved in the last few years. Since India, Iran and Russia are three major pillars of this huge network of North South connectivity projects, a larger share of responsibility will have to be borne by them. As the interest shown by other countries clearly highlight the growing importance of the transnational corridor, regular enhanced cooperation among the 14 member states of the INSTC needs to be accelerated. Also, new members from the region should be encouraged

to join the INSTC to make it more effective.

Equally important is the prioritisation and identification of the projects (both reviving old routes and building missing links) which deserve more attention from the point of their utility in enhancing the trade and economic ties between the countries. Member countries need to formulate long-term strategies both at the bilateral and regional level to address the bottlenecks and to realise the future potential of the corridor. Creation of high level working groups on transport cooperation among the regional partners, setting up of independent joint study groups and organising annual meeting of the technical groups to follow the developments in a sustained manner, particularly on transport projects which are more result oriented in nature, will go a long way in re-energising the INSTC.

Conclusion

The initiatives by India, Iran and Russia, supported by the countries of Central Asia and also Turkey, Armenia and Azerbaijan, provides a favourable atmosphere to re-activate and

realise the full potential of the INSTC. However, without sustained efforts by the member states to address the bottlenecks, it will only remain an ambitious plan, an unfulfilled connectivity project.

Described by some as India's response to China's Belt and Road Initiative, the International North-South Transport Corridor (INSTC) will link India, currently the world's fastest growing big economy, with Central Asia, Russia and potentially the Baltic, Nordic and Arctic regions. Connect Central Asia policy shouldn't just remain on paper but it should be realized in practice. If India manages does that, its stature will rise in the international system. On the whole, this policy will be a game changer in times to come. Central Asian regional dynamics will become very interesting with India's involvement in the region in the coming years.

General Studies Paper- II

Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

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7. IS IT TIME TO EXPAND RTI AMBIT

Why in News?

At a time when the government is mulling changes in the Right to Information Act (RTI Act), information commissioner Divya Prakash Sinha has suggested that investigative, intelligence and security agencies like National Investigation Agency (NIA), Central Bureau of Investigation (CBI), Intelligence Bureau (IB) and paramilitary forces should come under the purview of the law, saying there are adequate safeguards in the Act to keep sensitive information outside the public domain. Sinha's remarks come at a time when CBI is virtually going

through turmoil with the top brass trading charges against one another.

Introduction

In the pre-RTI era, for several decades, the entire system was built on the premise of transparency being the exception and secrecy being the norm. Thus, secrecy has been the norm of the system and transparency was the exception. There are laws and rules authorising officials not to disclose information to anyone, including courts.

In order to encourage a corruption free, transparent as well as accountable form of government,

the Right to Information Act 2005 (RTI, 2005) came into existence. India is a democracy and the essence of democracy is, 'freedom'. Hence, to encourage democracy in its true sense, the RTI 2005 was implemented with a view to allow every Indian citizen to freely ask for any information from the government if he/she desires. The Right to Information Act represents a paradigm shift in the sense that it completely changes everything. Now, transparency is the norm.

However, India's top security and intelligence agencies are consistently refusing to give out any information

about the Right to Information requests they receive and those that do, reject the bulk of queries they receive. Currently, 20-odd investigative agencies are outside the ambit of the RTI Act, subject to exceptions like allegations of corruption and human rights violations. According to a study by the Delhi-based Commonwealth Human Rights Initiative 11 of these security agencies, including the National Investigation Agency, the Research and Analysis Wing, the Special Protection Group and the Enforcement Directorate, have never reported any RTI information to the CIC.

The Central Bureau of Investigation stopped reporting data after it was included in the list of largely exempt organisations in 2012. There was a purpose as to why the CBI was not brought into the ambit of the RTI- this was because the CBI was not considered to be one of those organizations which really looks into the strategic interests of India. However, the CBI made out a case that they are also investigating into all kinds of cases- and that these cases include those which are of a strategic importance for India and therefore, if they would be subjected to the RTI, much of that information would go out into the public domain. The then government had agreed to include in the list of exempted organisations.

The Intelligence Bureau (IB), the Research & Analysis Wing (RAW) and such organizations which gather intelligence, are dealing with strategic matters and so they were from the very beginning kept in the exempted category.

Even among the agencies which do submit data to the Central Information Commission (CIC), the rate of rejection is very high.

What is Problematic with these Rejections?

There are two kinds of exemptions available under the RTI Act. Section

8 exempts certain categories of information while Section 24 exempts certain categories of organisations from the purview of the transparency law. This is a kind of double veto as much of information sought by an applicant might get hit by either of the two provisions.

Section 24 of the RTI Act

It provides that the provisions of this Act shall not apply to the intelligence and security organisations established by the Central government as specified in Second Schedule. Any information furnished by such organisations to government shall be outside the ambit of this Act. Thus, right to information may restrict on grounds of national security. The Second Schedule of the RTI Act specifies twenty such organisations namely IB, CBI, NIA among others established by the government and the information furnished by these organisations to the government cannot be disclosed for security reasons.

However, provision to Section 24(1) provides that information pertaining to the allegations of corruption or violation of human rights in these organisations is not exempted from disclosure and therefore, such information may be sought and has to be released within 45 days from the date of receipt of the application for request.

The Central Government is empowered under sub-section (2) of Section 24 to amend the Second Schedule by adding any new organisation or deleting the existing one from the Schedule by a notification issued in this behalf.

What is this Second Schedule?

It includes 26 intelligence and security agencies under its ambit. Some of which are Central Bureau of Investigation (CBI), Intelligence Bureau (IB), Research and Analysis Wing (RAW) of the Cabinet Secretariat, Directorate of Revenue Intelligence (DRI), Special

Frontier Force (SFF), Border Security Force (BSF), National Security Guards (NSG) and Assam Rifles, etc.

Section 8 of the RTI Act

Exemptions against furnishing information under the RTI Act have been provided under Section 8(1) and Section 9 of the Act.

Under Section 8 (1) (a) of the RTI Act, a public authority is not under obligation to furnish the information disclosure of which would prejudicially affect the sovereignty and integrity of India, the security, strategic, scientific or economic interests of the state, relation with foreign state or lead to incitement of an offence among others.

Functions of Organisations

There are two categories of organizations, one is the Research & Analysis Wing (RAW), the IB, etc. which are intelligence organizations and the other being the CBI (investigation agency). So far as the first categories of organizations are concerned, these organizations are not even accountable to the Parliament of India. This is because of the nature of the work that they are into. Further, there are many other organizations across the globe which is like that. But, this is the nature of the State. It tries to preserve itself, protect itself and in the process, it might create these kinds of organizations.

The second is that of investigative agencies, whose nature of work is not like that of the intelligence agencies. Their nature of work is different. However, even in that work, there can be two categories:

- ◆ About their investigation - Nobody can ask anything about an investigation.
- ◆ About their administrative work - So far as their administrative work is concerned, that should be open to the RTI. Thus, as far as the investigative agencies are

concerned, the blanket protection given to them under Section 24 of the RTI Act, should end. Secondly, any information apart from that pertaining to an investigation should be open to the RTI.

Arguments in Favour

Nobody is above transparency and accountability. Further, there are already enough provisions available to exempt these agencies or any other agency if required.

For public interest, if the matter is related to corruption or the violation of human rights, section 24 of the RTI Act directs the concerned organisation to share information to that extent.

The investigative agencies like CBI are not sanctioned by the law, meaning, they don't have a legislation effecting their establishment. So, there are fears that maintaining absolute secrecy in such organisations might serve the vested interests of top brass beaureaucrats as evident from the recent tussle between CBI #1 and #2. Moreover, in the era where transparency has become the norm, when judiciary has encouraged open court hearings by allowing live telecast of proceedings, we must be willing to make a transition from secrecy to transparency.

Argument against

Even in the developed countries like the US, there's no blanket immunity to the investigative agencies rather

there are advisory boards to oversee their functioning. The current form of RTI is in no way a loosely worded act. It contains adequate provisions to distinguish the sensitivity of information and prohibiting such transmission which may affect national interests as mandated in section 8 of the RTI Act. So, we must not get the picture that bringing them under the ambit of RTI will dampen their functional efficiency.

All three agencies (CBI, IB and NIA) deal with sensitive material that can be of great national interest. If such information comes out in the public domain it might have disastrous consequences for the country or even to an ongoing investigation.

One may not agree with Sinha's suggestion to bring intelligence agencies, which are not even accountable to Parliament due to their nature of work, under the Act. But the same kind of blanket exemption can't be given to investigative and security agencies.

Way Forward

There is a need to rationalise some of the exemptions and the exempted organizations. It is a fact that the RTI has made a big difference in the way we deal with the government. The confrontational nature of our relationship with the government has been to a great extent moderated because now we have access into the Government, which we didn't have

prior to the RTI. Thus, the RTI should be welcome. However, the IB, NIA etc. are instruments used by the state in furthering some of the most crucial, sensitive and strategic interests of the state. Thus, whether we should allow more transparency into these organizations is a matter of debate and serious thinking.

It is true that these organizations cannot be completely shielded from public scrutiny. There should be some scrutiny. For example, in the Intelligence Bureau, if a certain budget is being placed, whether or not it is being correctly spent for the purpose for which it has been allocated, these are issues which the public will never know. At the end of the day, nobody is above accountability. In the end, there should be as much use of Section 4 of the RTI Act and as much information as possible should be placed in the public domain.

General Studies Paper- II

Topic: Important aspects of governance, transparency and accountability, e-governance-applications, models, successes, limitations and potential; citizens charters, transparency & accountability and institutional and other measures.

General Studies Paper- III

Topic: Various Security forces and agencies and their mandate.



SEVEN SUBJECTIVE QUESTIONS WITH MODEL ANSWERS

Shortage of Judges: A Persistent Problem

Q1. Subordinate courts perform the most critical judicial functions that affect the life of the common man. Any failure to allocate the required human and financial resources may lead to the crippling of judicial work in the subordinate courts. Analyse the systemic challenges that prevent vacancies in the lower judiciary from being filled.

Hints:

- ◆ Recently, a Bench headed by Chief Justice of India Ranjan Gogoi has pulled up state governments and the administration of various High Courts for the delay in filling these vacancies. Answers provided in the Rajya Sabha reveal that as on March 31, 2018, nearly a quarter of the total number of posts in the subordinate courts remained vacant. The court has put the actual figure at 5,133 out of 22,036 sanctioned posts. The state-wise figures are quite alarming, with Uttar Pradesh having a vacancy percentage of 42.18 and Bihar 37.23. Among the smaller states, Meghalaya has a vacancy level of 59.79%.
- ◆ Subordinate courts perform the most critical judicial functions that affect the life of the common man: conducting trials, settling civil disputes and implementing the bare bones of the law. Any failure to allocate the required human and financial resources may lead to the crippling of judicial work in the subordinate courts. It will also amount to letting down poor litigants and undertrials, who stand to suffer the most due to judicial delay.
- ◆ The burgeoning docket burden that weighs down the judiciary is not because of its lumbering judicial processes alone, as it is often made out. The chronic shortage of judges and severe understaffing of the courts they preside over are significant reasons. More than a decade after the Supreme Court laid down guidelines in 2007 for making appointments in the lower judiciary within a set time frame, a similar

issue is back before the highest court. The immediate context is the existence of more than 5,000 vacancies in the subordinate courts.

- ◆ Challenges in Lower Judiciary:
 - ◆ Systemic defects in the appointment process most certainly contribute to vacancies in the lower judiciary.
 - ◆ Exams are not conducted frequently enough to fill vacancies as they arise and even when they are, High Courts are often unable to find enough meritorious candidates to fill the vacancies advertised.
 - ◆ Unclear recruitment procedures and difficulties in coordination between the High Court and State Public Service Commission, also frequently give rise to disputes and litigation surrounding recruitment, further stalling the process.
 - ◆ Little quantitative and qualitative data on the appointment process exists and thus no impactful reform has emerged in the area.
- ◆ Healthy and manageable case pendency numbers reflect an efficient judicial system. Conversely, excessive case pendency renders the judicial system ineffective, resulting in loss of confidence of common people in the courts. Subordinate courts perform the most critical judicial functions that affect the life of the common man: conducting trials, settling civil disputes and implementing the bare bones of the law. Any failure to allocate the required human and financial resources may lead to the crippling of judicial work in the subordinate courts. It will also amount to letting down poor litigants and undertrials, who stand to suffer the most due to judicial delay.
- ◆ Present situation demands a massive infusion of both manpower and resources. There is a pressing need to analyse the systemic challenges that prevent vacancies in the lower judiciary from being filled. This would involve asking questions about the fairness of recruitment processes, adequacy of incentive structures and the culture of legal education and profession in the country.

Open Defecation Problem Needs Behavioural Change

Q2. The success of Swachh Bharat Mission depends not on toilet construction but whether India can sustain efforts to remain open defecation free after completing the targets. Discuss.

Hints:

- ◆ Ministry of Drinking Water and Sanitation, received World Toilet Peace Prize on behalf of the government. The summit was organized by World Toilet Organisation, a global non-profit organisation working in the areas of water and sanitation. Swachh Bharat Mission has generated significant interest in addressing the urgent sanitation issue in India, not only with traditional actors such as international organizations, but also with the private sector.
- ◆ Advocates of the scheme rightly point to the number of toilets constructed and the number of villages that are declared open defecation free— over 8 crore toilets and 5 lakh villages respectively—whereas critics point to the low usage of the toilets constructed and question the truth behind open defecation free claims.
- ◆ According to the Swachh Survekshan survey-2017, the Quality Council of India reports that 62% of rural households now have a toilet. This is an increase of over 20 percentage points since 2014. More significantly, the survey concludes that more than 90% of the individuals who had access to toilets were using them. Reports suggesting that the Jaipur Municipal Corporation hired an event management company to 'persuade' citizens to give feedback that would make the programme seem a success, raise further questions of the mission's reliability. Similar findings have also been reported in Maharashtra and Gujarat, both declared as open defecation free states.
- ◆ The reasons that have been given for people who don't use toilets have either been poverty that makes it a challenge to build latrines or lack of government support in providing such facilities. In cases where the toilets are available but people still end up preferring open defecation, the reasons can extend to cultural issues related with sharing toilets among family members. There can be many reasons why a person openly defecates and these may include:
 - ◆ Poor sanitation.
 - ◆ Lack of awareness.
 - ◆ Non availability of toilets.

- ◆ Public toilets are available but are grimy, dark, smell bad, or unattractive (due to non maintenance).
- ◆ Toilets are available but there is a risk, e.g. if the public toilets common for all.
- ◆ Public toilets are not available as part of the household but only at some distance and it may be dangerous to get there at night
- ◆ Even if the current usage of toilets has considerably improved, the picture may not remain so rosy after a couple of years. This is because often only one pit is constructed and the adoption of the twin pit model is still very low in rural India. Affluent families prefer septic tanks that drive up the cost of constructing a latrine. However, disposal of excreta from septic tanks is not hygienic and that worsens the quality of water and increases health problems.
- ◆ The second issue which is not being monitored is the quality of construction. Toilet construction is rarely being done by the householder and mostly by a village contractor who pays the labour and masons and gets the subsidy. This leads to corruption and poor quality of construction. Such toilets may not remain in use after a few years. Greater emphasis should be given to the house owner undertaking management, to ensure quality and usage.
- ◆ For India to permanently eradicate open defecation, the Swachh Bharat Mission must adopt three pillars of support. The first must provide and maintain the infrastructure needed to aid toilet use. The second must motivate people to change behaviour towards toilet use and the third must harness cues and automatic habits to drive positive behaviour. It's time policymakers start focusing on the third pillar, before the facade wobbles.

Universal Children's Day & Child Rights Protection

Q3. What are Child Rights? Discuss how 'Go Blue For Children' campaign aims to raise awareness about the rights and needs of children and the need of every child.

Hints:

- ◆ A right is as an agreement or contract established between the persons who hold a right (often referred to as the "rights-holders") and the persons or institutions which then have obligations and responsibilities in relation to the realization of that right (often referred to as the "duty-bearers"). Child rights are specialized

human rights that apply to all human beings below the age of 18. These four categories cover all civil, political, social, economic and cultural rights of every child. It includes Right to Survival, Right to Protection, Right to Participation and Right to Development.

- ◆ Vulnerability of children is created by the socio-cultural, socio political and socio-religious situations they are in. A child who is forced or born into a situation or discriminated group is at risk for abuse, neglect and exploitation. The lack of a protection system either due to mis-implementation of national laws and programmes or the absence of protection policies and legislation also renders children vulnerable.
- ◆ Violations of the child's right to protection take place in every country and are massive, under-recognized and under-reported barriers to child survival and development, in addition to being human rights violations. Children subjected to violence, exploitation, abuse and neglect are at risk of death, poor physical and mental health, HIV/AIDS infection, educational problems, displacement, homelessness, vagrancy and becoming poor parents later in life.
- ◆ UNICEF has launched GoBlue campaign. It aims to "amplify the voices of children and young people as active participants in decision making" across the country. It is live on all social media platforms along with the main video featuring Millie Bobby Blue, Blue Lipa and more; they have also released a series of short-videos illustrating hardships children have to go through. Global Citizens can do their bit to support the initiative by signing a petition to call on world leaders to commit to fulfilling the children rights. Children are encouraged to tell the world what they want, how they want to create and build a better world. The whole & sole purpose of this campaign is to urge people all over the world to support this initiative.
- ◆ The concept of childhood and child welfare needs to be developed further by disseminating information about the child welfare services; ensuring that every child attends school compulsorily; providing vocational education to ensure that children are able to derive maximum benefits from the education they receive; proper health facilities before and after the birth of the child.
- ◆ It is needless to mention that, though India has a comprehensive legal regime and policy framework to protect the rights and interests of the children, greater momentum is required for effective implementation of these policies and programmes for well-being of the

children by improving their level of education, health and nutrition etc. Above all a just and fair environment is desirable for all children at home, school or any other place, with growing mind and body to see a shining tomorrow and ultimately to become responsible citizens of India.

World Malaria Report-2018 & India

Q4. Malaria is a major public health problem in India and one which contributes significantly to the overall malaria burden in Southeast Asia. Discuss how National Strategic Plan for Malaria Elimination lays down a blueprint of action to tackle the problem.

Hints:

- ◆ According to the World Malaria Report-2018, the disease had globally been on a decline, progress "stalled" between 2015 and 2017. Prior to this period, the World Health Organization (WHO) said that the world was seeing an "unprecedented period of success in global malaria control." But data from 2015 to 2017 shows that "no significant progress in reducing global malaria cases was made in this period.
- ◆ India has 4% of the global malaria burden. Between 2016 and 2017, India showed an impressive 24% reduction in malaria cases or a reduction of three million cases. Out of all the 11 highest burden countries, India is the only one to have recorded a substantial drop. The World Health Organisation (WHO) credits the efforts in the state of Odisha for India's impressive decline saying that the country's drop is "largely due to substantial declines of the disease in the highly malarious state of Odisha, home to approximately 40% of all malaria cases in the country".
- ◆ The National Malaria Strategic Plan (NMSP) outlines a strategy for translating commitment into concerted action for scaling up malaria control interventions with a focus on high burden areas and categorized strategic interventions for achieving pre-elimination status. It is envisaged that effective implementation of the Strategic Plan would reduce the burden on health and economic development of millions of people affected by malaria. It details India's roadmap for malaria elimination in 571 districts out of India's 678 districts by 2022.
- ◆ The Global Technical Strategy for Malaria 2016–2030 was adopted by the World Health Assembly in May 2015. It provides a comprehensive framework to guide countries in their efforts to accelerate progress towards

malaria elimination. The strategy sets the target of reducing global malaria incidence and mortality rates by at least 90% by 2030.

- ◆ The world needs to prevent at least 40 per cent malaria case incidence and mortality rates by 2020 and eliminate the disease in at least 10 countries. To achieve these, the world needed an estimated US\$ 4.4 billion in 2017 and needs US\$ 6.6 billion by 2020. However, a new report by the World Health Organization says that in 2017, global funding for malaria control and elimination fell short by US\$ 1.3 billion.
- ◆ Lack of community involvement is an important hindrance in achieving the malaria control. Development of antimalarial drug resistance is another area of concern. Treatment in both the public and private sectors is hampered by low quality of care, inefficiency in service delivery and low utilization of adequate care. Shortage of man power in rural, tribal and hilly areas is really a major problem area which needs to be tackled more tactfully. Another major problem is lack of political will to eradicate the disease.
- ◆ India has suffered from a major burden of malaria for decades, with high levels of morbidity and death. But the declining trend of the scourge shows that sustained public health action can achieve good results. The World Malaria Report 2018 of the World Health Organisation notes that India's record offers great promise in the quest to cut the number of new cases and deaths globally by at least 40% by 2020 and to end the epidemic by 2030.

India-Australia Towards Strategic Cooperation

Q5. The Indo-Pacific region is an emerging geostrategic and geo-economic concept that has been gaining significance in the field of defence and security construct. India and Australia are at different interest in Indo-Pacific region, while it has both opportunity and challenge. Examine.

Hints:

- ◆ The global economic power shift from the West to East (Asia) and the increasing geostrategic significance of the Indo-Pacific region has resulted in cooperation and competition among the established and rising powers in the region. Rich in natural resources, especially hydrocarbons, the Indo-Pacific represents the centre of gravity of the world's economic, political and strategic interests, finding competition among global and emerging powers. It has swiftly emerged as a centre of

international trade and investments, defined by nearly half of the world's population.

- ◆ In this context, regional peace and stability, freedom of navigation and maritime security have become very important as over 90% of the world's trade by volume is by sea. The emerging trends and issues in the Indo-Pacific offer unique opportunities to these nations, but also at the same time daunting challenges. Though economic cooperation between them has been growing satisfactorily, the geostrategic and geopolitical frameworks remain very uncertain.
- ◆ For the Quad, China's Belt and Road Initiative (BRI) is of special focus since it is the fulcrum of China's aggressive moves. India has been opposed to the BRI because its flagship project, the China-Pakistan Economic Corridor (CPEC) passes through Indian territory illegally occupied by Pakistan, which China has gone about developing it, along with other development ventures, without any reference to India.
- ◆ The relationship between India and Australia has tremendous prospects for the future and both the countries are focused in developing a comprehensive relationship in all fields and in particular this time trade and investment are other fields are equally important. India has always been a country with great national ambitions and is one of the most important advocates of the concept of "Indo-Pacific Strategy". As far as terrorism is concerned both India and Australia have similar views. Terrorism is threats which need to be fought globally, in whatever region acts of terrorism are not acceptable.
- ◆ India today is full of opportunities for business, social enterprises and cultural connections with Australia. The strategic and economic interests of both countries are converging which opens up opportunities for working together in a rapidly changing region. India-Australia both sides agreed that a free, open, prosperous and inclusive Indo-Pacific region serves the long-term interests of all countries in the region and of the world at large. The Indo-Pacific region is now central to global politics and economics, and recent days have merely reinforced the trends that have been emerging for some time.
- ◆ The need of the hour is to push for greater engagement with such like-minded nations. Australia has been long keen on joining the Malabar exercises along with the U.S. and Japan. India should favorably consider this request as the idea of an Indo-Pacific democratic quad needs resurrection at the earliest.

INSTC: Gateway to Central Asia & Eurasia

Q6. India may have an opportunity to act as a counter-weight, using the INSTC to increase its political, security, economic and cultural connections across the region. Discuss.

Hints:

- ◆ India, Russia and Iran held a trilateral meeting on the International North South Transport Corridor (INSTC) on November 23 to make the 7,200-km-long ship, road, and rail route operational soon. The multi-modal connectivity project designed to promote transportation cooperation among the member states and links the Indian Ocean and the Persian Gulf to the Caspian Sea via Iran.
- ◆ The modern day INSTC was launched in 2000 and ratified in 2002 by India, Russia and Iran. It is a multi-modal transportation route linking India Ocean and Persian Gulf to the Caspian Sea via Iran, and onward to northern Europe via St. Petersburg in Russia. The INSTC envisages movement of goods from Mumbai (India) to Bandar Abbas (Iran) by sea, from Bandar Abbas to Bandar-e-Anzali (an Iranian port on the Caspian Sea) by road, and then from Bandar-e-Anzali to Astrakhan (a Caspian port in the Russian Federation) by ship across the Caspian Sea, and thereafter from Astrakhan to other regions of the Russian Federation and further into Europe by Russian railways.
- ◆ Already two dry runs have been successfully conducted along the route of the corridor. The results have shown that transportation costs for goods travelling along the INSTC could be cut by \$2,500 per 15 tons of cargo, and transit time could be reduced to 25-30 days compared to 40-60 days taken at present via the Suez Canal route. The INSTC reduces carriage costs by 30% and transit time by 40%.
- ◆ The strategic significance of INSTC for India is immense. It offers many opportunities to enhance India's connectivity with Iran, Afghanistan and the vast Eurasian region and vice versa. At present, India has to depend on the sea route via Rotterdam to St. Petersburg and increasingly through China and then inland to transport goods to Russia. To reach out to Central Asia, goods have to be routed through China, Europe or Iran. The routes through China and Europe are long, expensive and time consuming. Therefore, need for a route that is relatively shorter, cheaper and,

more importantly, safer and well secured. It is said that the INSTC can reduce time and cost of container delivery by 30-40 per cent.

- ◆ The potential of this corridor will be manifolds for India if linked with the Southeast Asian countries. This will boost trade between Europe and Southeast Asia as well. As compared to the current route through the Suez Canal and the Mediterranean Sea, the INSTC is much shorter and cost effective. From India's point of view, this corridor would not only help India bypass Pakistan and yet reach out to Central Asia and Russia, but also enable it to transport goods at cheaper cost to the European markets. In addition, Indian exports could potentially get a competitive advantage due to lower cost and less delivery time. Despite the limitations of regional connectivity, India is working to invest in the region in the IT and education sectors.
- ◆ Described by some as India's response to China's Belt and Road Initiative, the International North-South Transport Corridor (INSTC) will link India, currently the world's fastest growing big economy, with Central Asia, Russia and potentially the Baltic, Nordic and Arctic regions. Connect Central Asia policy shouldn't just remain on paper but it should be realized in practice. If India manages does that, its stature will rise in the international system. On the whole, this policy will be a game changer in times to come. Central Asian regional dynamics will become very interesting with India's involvement in the region in the coming years.

Is it Time to Expand RTI Ambit

Q7. At a time when the government is mulling changes in the Right to Information Act (RTI Act), intelligence and security agencies like NIA, CBI, IB and paramilitary forces should come under the purview of the law. There are adequate safeguards in the Act to keep sensitive information outside the public domain. Comment.

Hints:

- ◆ In the pre-RTI era, for several decades, the entire system was built on the premise of transparency being the exception and secrecy being the norm. Thus, secrecy has been the norm of the system and transparency was the exception. There are laws and rules authorising officials not to disclose information to anyone, including courts. In order to encourage a corruption free, transparent as well as accountable form of government, the Right to Information Act, 2005 (RTI, 2005) came into existence.

- ◆ However, India's top security and intelligence agencies are consistently refusing to give out any information about the Right to Information requests they receive and those that do, reject the bulk of queries they receive. Currently, 20-odd investigative agencies are outside the ambit of the RTI Act, subject to exceptions like allegations of corruption and human rights violations. According to a study by the Delhi-based Commonwealth Human Rights Initiative 11 of these security agencies, including the National Investigation Agency, the Research and Analysis Wing, the Special Protection Group and the Enforcement Directorate, have never reported any RTI information to the CIC.
- ◆ There are two kinds of exemptions available under the RTI Act. Section 8 exempts certain categories of information while Section 24 exempts certain categories of organisations from the purview of the transparency law. This is a kind of double veto as much of information sought by an applicant might get hit by either of the two provisions.
- ◆ The investigative agencies like CBI are not sanctioned by the law, meaning, they don't have a legislation effecting their establishment. So, there are fears that maintaining absolute secrecy in such organisations might serve the vested interests of top brass beaureaucrats as evident from the recent tussle between CBI #1 and #2. Moreover, in the era where transparency has become the norm, when judiciary has encouraged open court hearings by allowing live telecast of proceedings, we must be willing to make a transition from secrecy to transparency.
- ◆ All three agencies (CBI, IB and NIA) deal with sensitive material that can be of great national interest. If such information comes out in the public domain it might have disastrous consequences for the country or even to an ongoing investigation.
- ◆ There is a need to rationalise some of the exemptions and the exempted organizations. It is a fact that the RTI has made a big difference in the way we deal with the government. The confrontational nature of our relationship with the government has been to a great extent moderated because now we have access into the Government, which we didn't have prior to the RTI. Thus, the RTI should be welcome. However, the IB, NIA etc. are instruments used by the state in furthering some of the most crucial, sensitive and strategic interests of the state. Thus, whether we should allow more transparency into these organizations is a matter of debate and serious thinking.
- ◆ It is true that these organizations cannot be completely shielded from public scrutiny. There should be some scrutiny. For example, in the Intelligence Bureau, if a certain budget is being placed, whether or not it is being correctly spent for the purpose for which it has been allocated, these are issues which the public will never know. At the end of the day, nobody is above accountability. In the end, there should be as much use of Section 4 of the RTI Act and as much information as possible should be placed in the public domain.



SEVEN IMPORTANT NATIONAL & INTERNATIONAL NEWS

NATIONAL

1. Quadricycles for Private Use

The Ministry of Road Transport and Highways, in a notification on 20 November, has approved the sale of quadricycles for personal use. Motorized quadricycles were so far allowed to ply only for commercial use. Ministry of Road Transport & Highways notified the insertion of 'Quadricycle' as a 'non transport' vehicle under the Motor Vehicles Act, 1988.

A quadricycle is a vehicle of the size of a three-wheeler but with four-tyres and is fully covered like a car. It has an engine like that of a three-wheeler. This makes it a cheap and safe mode of transport for last-mile connectivity. Though the government permitted the use of quadricycles for

commercial purpose in June, the latest notification opens the door for their use for personal purpose.

The main aim is to give another mobility option, especially to the middle class who want to upgrade from two-wheelers. Besides, a person cannot carry family members in a three-wheeler, therefore, quadricycles are being allowed in the private category. The move will help them to upgrade to four-wheelers and move around with family.

Conflicting Stance

- ◆ However, according to analysts, the introduction of such category also raises a lot of questions

about the government's thought process. On the one hand, it is talking about road safety and the need for environment-friendly vehicles and therefore stressing on features such as anticlock braking system (ABS) and airbags and on the other, it is promoting vehicles like quadricycles which do not have such safety mechanisms.

- ◆ Quadricycles will pose a serious challenge to entry level cars. With the centre giving a go-ahead on the sale of quadricycles for personal use, top auto makers will have to revamp their strategy on entry-level cars, given quadricycles are expected to be far cheaper. ■

2. Manipur Sangai Festival

The eleventh edition of Manipur Sangai Festival was inaugurated by Defence Minister Nirmala Sitharaman on 21st November. It is the biggest tourism festival of the state. The Sangai festival is an annual cultural festival organised by Manipur Tourism Department every year from November 21 to 30. The Sangai festival is named after the state animal, Sangai, the brow-antlered deer found only in Manipur. It started in the year 2010 and has grown over the years into a big platform for Manipur to showcase its rich tradition and culture to the world in terms of art and culture, handloom, handicrafts &

fine arts, indigenous sports, cuisines & music, eco & adventure sports as well as the scenic natural beauty of the land.

- ◆ Indigenous sports were also major highlight of the state's biggest tourism festival this year. Manipur's famous martial arts- Thang Ta (combination Spear & Sword skills), Yubi-Lakpi (a game played with greased coconut like rugby), MuknaKangjei (a game that combines hockey and wrestling) and SagolKangjei- Modern Polo (believed to have evolved in Manipur) were the part of the festival.

This edition reflected the state's proud cultural heritage and the love for art which is inherent amongst various tribes inhabiting the state of Manipur. The state's classical dance form, 'RasLeela' is quite famous all over the world for its distinctiveness from any other dance forms in India. The RasLeela was an important part of the dance performances at the Manipur Sangai Festival 2018 besides the various other folk dance performances like the Kabui Naga dance, Bamboo dance, Maibi dance, Lai Haraoba dance, KhambaThoibi dance etc. which was showcased at the festival. ■

3. Transgenic Rice with Reduced Arsenic Accumulation

To address the agricultural issue of Arsenic accumulation in rice grains in India, researchers at Lucknow-based CSIR-National Botanical Research Institute have developed transgenic rice by inserting a novel fungal gene, which results in reduced arsenic accumulation in rice grain.

- ◆ Researchers have cloned Arsenic methyltransferase (WaarsM) gene from a soil fungus, *Westerdykella aurantiaca* and inserted the same into the rice genome with the help of *Agrobacterium tumefaciens*, a soil bacterium which has natural ability to alter the plant's genetic makeup.
- ◆ The newly developed transgenic rice along with normal rice was then treated with arsenic. Comparison of transgenic and non-transgenic

rice showed that transgenic plants accumulated less arsenic in root as well as shoot as compared to non-transgenic lines.

- ◆ Researchers found that the resulting transgenic plant acquired the potential for methylating inorganic arsenic to a variety of harmless organic species, including volatile arsenicals. This could be potential strategy for developing transgenic rice capable of low arsenic accumulation not only in grain but also in straw and feed which are used for livestock.
- ◆ Now the team is focusing on food safety test and field trials, subject to regulatory approvals. In addition, researchers are also looking for gaps in arsenic metabolism in rice which will ultimately lead to

understand arsenic uptake and metabolism in rice.

- ◆ The research team is involved in developing biotechnological methods for reducing arsenic accumulation in rice grain. They have showed that OsPRX38 transgenics accumulate less arsenic due to high lignification in root which acts as a barrier for arsenic entry in transgenic plants.

As large numbers of people are affected by arsenic toxicity, it is imperative to develop rice with lesser arsenic content and high yield. In this background, biotechnological methods such as modulating the expression of Arsenic metabolism-related genes in rice will be a fruitful and practical approach to decrease arsenic accumulation. ■

4. SHe-Box

Against the backdrop of the #MeToo movement, the Ministry of Women and Child Development (WCD) has linked SHe-Box, an online portal to report complaints of sexual harassment at workplaces, to all central and state departments in 653 districts across the country.

- ◆ For prompt disposal of complaints on SHe-Box, each case goes directly to the Central or state authority concerned having powers to take action in the matter. SHe-Box cases can be monitored by the complainants and the WCD Ministry, thereby reducing the time taken for their disposal.
- ◆ As many as 321 complaints were registered with SHe-Box, out of which 120 are related to Union Ministries/ departments, 58 from

state governments and 143 from private companies till November 20, 2018.

- ◆ Those who have already filed written complaints with the Internal Complaint Committee (ICC) or Local Complaint Committee (LCC) constituted under the Sexual Harassment Act are also eligible to file complaints through the SHe-Box portal.
- ◆ To ensure security of women at workplaces, the WCD Ministry has empanelled institutions/ organisations to organise awareness sessions on the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.

The Sexual Harassment of Women at Workplace Act, 2013 mandates all

workplaces, including any department, organisation, undertaking, establishment, enterprise, institution, office, branch or unit which is established, owned, controlled, or wholly or substantially financed by funds provided directly or indirectly by the appropriate government, local authority, corporation or cooperative society, with more than 10 workers to constitute the ICC to receive complaints of sexual harassment.

About

SHe-Box was launched by Ministry of Women and Child Development last year. It offers the facility of making online complaints of sexual harassment at the workplace to all women employees in the country including government and private employees. ■

5. Antimicrobial Stewardship Guidelines

To ensure judicious use of antibiotics in healthcare facilities, the Indian Council of Medical Research (ICMR) has released, Antimicrobial Stewardship Guidelines to advise hospitals in setting up Antimicrobial Stewardship Programmes (AMSP) for the purpose.

- ◆ These guidelines provide guidance for setting up structure and processes of Antimicrobial Stewardship Programmes in healthcare institutions. It will help discuss essential elements of antimicrobial stewardship, diagnostic stewardship besides providing information on tools that can be used to measure progress.
- ◆ Irrational prescription of broad-spectrum antibiotics, poor regulations around sale of antibiotics, self-medication, lack of

education and awareness regarding responsible use of antibiotics have been identified as some of the key factors driving antimicrobial resistance in our country.

- ◆ The National Health Policy, 2017, terms antimicrobial resistance as one of the key healthcare issues and prioritises development of guidelines regarding antibiotic use, limiting over-the-counter use of antibiotics and restricting the use of antibiotics as growth promoters in livestock.

Since inappropriate use of antibiotics is rampant in India, there is an urgent need to improve antibiotic use in hospitals, which can be achieved through implementation of good AMS programmes.

Antimicrobial Resistance

Antimicrobial resistance (AMR) is a major public health challenge. It happens when microorganisms (such as bacteria, fungi, viruses and parasites) change when they are exposed to antimicrobial drugs (such as antibiotics, antifungals, antivirals, antimalarials, and anthelmintics). Microorganisms that develop antimicrobial resistance are sometimes referred to as “superbugs”.

Antimicrobial resistance is putting the gains of the Millennium Development Goals at risk and endangers achievement of the Sustainable Development Goals.

6. City Gas Distribution Projects

Prime Minister of India has laid the foundation stones of City Gas Distribution (CGD) projects in 65 Geographical Areas (GAs) in 129 Districts under the 9th CGD Bidding Round. PM also launched 10th CGD Bidding Round in 50 GAs spread over 124 districts in 14 states.

- ◆ The projects are awarded by the Petroleum and Natural Gas Regulatory Board (PNGRB), would cover 65 GAs to bring gas to around half of the country's population in 26 states and Union Territories.
- ◆ As part of a larger plan to shift towards an environment friendlier gas-based economy, the development of CGD networks will increase the availability of clean cooking fuel or Piped Natural Gas (PNG) and transportation fuel Compressed Natural Gas (CNG) for consumers.

- ◆ Government of India has put thrust to promote the usage of environment friendly clean fuel i.e. natural gas as a fuel/feedstock across the country to move towards a gas based economy. Accordingly, development of CGD networks has been focused to increase the availability of cleaner cooking fuel (i.e. PNG) and transportation fuel (i.e. CNG) to the citizens of the country. The expansion of CGD network will also benefit to industrial and commercial units by ensuring the uninterrupted supply of natural gas. Presently the share of gas in the country's energy mix is just over 6% and the aim is to reach the 15% figure, while the world average is 24%.

- ◆ India made a commitment in COP21 Paris Convention in December 2015 that by 2030, it would reduce carbon emission by

33% of 2005 levels. Natural gas, as domestic kitchen fuel, as fuel for transport sector as well as a fuel for industries and commercial units, can play a significant role in reducing carbon emission.

Why Natural Gas?

Natural gas is a superior fuel as compared with coal and other liquid fuels being an environment friendly, safer and cheaper fuel. Natural Gas is supplied through pipelines just like one gets water from the tap. There is no need to store cylinders in the kitchen and thus saves space. Natural Gas (as CNG) is cheaper by 60% as compared with petrol and 45 % w.r.t. diesel. Similarly, Natural Gas (as PNG) is cheaper by 40 % as compared with market price LPG and price of PNG almost matches with that of subsidised LPG.

7. NSE goBID: Online Platform for Retail Investors

In a bid to make it easier for retail investors to invest in government bonds directly, the National Stock Exchange has launched a mobile application and web-based platform — “NSE goBID” (Government Bond Investment Destination). “NSE goBID” and web-based platform for investing in government securities will be available to all investors registered with trading members of NSE.

- ◆ The NSE goBID facility aims to provide a common platform for all members of the exchange and to enable their clients/investors to participate directly in non-competitive bidding in a seamless manner.
- ◆ Through NSE’s platform retail investors can place an order for

buying treasury bills (T-Bills) and Government of India (GoI) dated bonds in the primary market.

- ◆ NSE goBID will offer a ready infrastructure to the trading members of the NSE for order collection, payment, refunds and transfer of bonds. However, trading members may offer their own facility for collecting orders from their investors.
- ◆ NSEgoBID will help retail investors participate, on a “non-competitive” basis, in the auction of g-secs and Treasury Bills (T-bills) conducted periodically by the Reserve Bank of India (RBI).

Retail investors could put money in T-Bills of 91 days, 182 days and 364



days and various government bonds from one year to almost 40 years through the app. Investment can be made almost every week after a one-time registration.

RBI conducts auction of G-sec and T-bills on a weekly basis where 5 per cent of the notified amount is allotted for eligible investors under the scheme for non-competitive bidding facility.

■

INTERNATIONAL

1. International Day for the Elimination of Violence against Women

International Day for the Elimination of Violence against Women (IDEVAW) is observed every year across the world on 25 November, to raise awareness about violence against women and girls, end violence against women. It also seeks to show that prevention is possible against violence of women.

The Declaration on the Elimination of Violence against Women issued by the UN General Assembly in 1993, defines violence against women as “any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life.”

◆ In recent years, the voices of survivors and activists, through

campaigns such as #MeToo, #TimesUp, #Niunamenos, #NotOneMore, #BalanceTonPorc and others, have reached a crescendo that cannot be silenced any more. Advocates understand that while the names and contexts may differ across geographic locations, women and girls everywhere are experiencing extensive abuse and their stories need to be brought to light. This is why the UNiTE Campaign's global advocacy theme this year is: 'Orange the World: #HearMeToo'.

◆ Violence against women and girls is one of the most widespread, persistent and devastating human rights violations in our world today remains largely unreported due to

the impunity, silence, stigma and shame surrounding it.

◆ In general terms, it manifests itself in physical, sexual and psychological forms, encompassing:

- Intimate partner violence (battering, psychological abuse, marital rape, femicide).
- Sexual violence and harassment (rape, forced sexual acts, unwanted sexual advances, child sexual abuse, forced marriage, street harassment, stalking, cyber-harassment).
- Human trafficking (slavery and sexual exploitation).
- Female genital mutilation.
- Child marriage.

2. Titli Cyclone: 'Rarest of Rare'

The Regional Integrated Multi-Hazard Early Warning System (RIMES) for Africa and Asia, a 45-nation international organisation on disaster warning, has termed 'Titli', the severe cyclonic storm that devastated Odisha in October, as 'rarest cyclone'. According to the RIMES, more than 200 years of cyclone track history in the Odisha coast reveals

that the Titli cyclone is the rarest of rare in terms of its characteristics such as recurvature after landfall and retaining its destructive potential after landfall and recurvature away from the coastal areas for more than two days.

Earlier, India Meteorological Department had called the formation of Titli as a 'rarest of rare' occurrence.

The severe cyclone had changed its path after landfall.

About RIMES

RIMES was established on 30 April 2009 and was registered with the United Nations on 1 July 2009. RIMES operate from its regional early warning center located at the campus of the Asian Institute of Technology in Pathumthani, Thailand.

RIMES evolved from the efforts of countries in Africa and Asia, in the aftermath of the 2004 Indian Ocean tsunami, to establish a regional early warning system within a multi-hazard framework for the generation and communication of early warning information and capacity building for preparedness and response to trans-boundary hazards.



3. Stratospheric Barrier to Curb Warming

According to a study, the geo-engineering technique known as stratospheric aerosol injection (SAI) could limit rising temperatures that are causing climate change. Spraying sun-dimming chemicals high above the earth to slow global warming could be "remarkably inexpensive", costing about \$2.25 billion a year over a 15-year period. As yet unproven and hypothetical, it would involve the use of huge hoses, cannons or specially designed aircraft to spray large quantities of sulphate particles into the upper layer of the atmosphere to act

as a reflective barrier against sunlight.

- ◆ Stratospheric sulfur aerosols are sulfur-rich particles which exist in the stratosphere region of the Earth's atmosphere. These particles consist of a mixture of sulfuric acid and water. They are created naturally, such as by photochemical decomposition of sulfur-containing gases, e.g. carbonyl sulfide.
- ◆ SAI is the process of spraying particles of sulfide gases such as sulfuric acid, hydrogen sulfide (H₂S) or sulfur dioxide (SO₂) into

the upper layer of the atmosphere to block sunlight.

Associated Risks

- ◆ There are some risks. Scientists have said SAI could cause droughts or extreme weather in other parts of the world, harm crop yields as well as potential public health and governance issues.
- ◆ It also does not address the issue of rising carbon dioxide emissions, the main greenhouse gas blamed for global warming. ■

4. World Fisheries Day

World Fisheries Day is celebrated on November 21st every year to ensure sustainable stocks of fisheries and healthy oceans ecosystems. Fisher folks also demonstrate the importance of maintaining the fisheries of the world along with highlighting the problems like overfishing and mechanization. The day also explores moves towards finding solutions to the increasingly inter-connected problems that world is facing to follow the sustainable model.

Recently, United Nations study had reported that more than two-thirds of world's fisheries have been

overfished or are fully harvested. It also reported that more than one third fisheries are in state of decline because of factors such as the loss of essential fish habitats, pollution and global warming. The World Fisheries Day helps to highlight these problems and moves towards finding solutions to increasingly inter-connected problems and in longer term, to sustainable means of maintaining fish stocks.

Fisheries in India

- ◆ A fishery is an important sector in India that provides employment to millions of people apart from

contributing to the food security of the country.

- ◆ India has over 8,000 km of coastline, and an Exclusive Economic Zone (EEZ) of over 2 million sq km and extensive freshwater resources. Thus, fisheries play a vital role in the economy of the country with the practice contributing about 1.07 per cent to the GDP (Gross Domestic Product).
- ◆ Fisheries in India make up to 5.3 per cent to agriculture and allied activities. ■

5. United Nations Global Pact on Migration

Recently, Australia has announced that it will not join a United Nations-backed global pact on migration because the agreement would undermine its existing immigration policies. Australia's immigration policy already promotes "safe, orderly and regular migration". Adopting the pact "would risk encouraging illegal entry

to Australia and reverse hard-won successes in combating the people-smuggling trade".

Over 250 million migrants worldwide account for 3% of the world's entire population, but contribute 10% of the global gross domestic production (GDP). Migrants remittance is huge contributor to their

home countries' development.

About

The UN made the decision to come up with a global compact on migration in 2016, in the wake of the crisis in the Mediterranean, which has seen thousands of migrants die while attempting to cross into Europe. It

is due to be adopted next month although the United States and a handful of European countries such as Poland and Hungary have already rejected it. It sets out 23 objectives to deal issues ranging from factors that compel people to move, legal

channels for migration, combating trafficking and smuggling, harnessing the economic benefits of migration and return of the migrants.

The GCM is meant to be consistent with target 10.7 of the 2030 Agenda for Sustainable Development – in

which Member States committed to cooperate internationally to facilitate orderly, safe and responsible migration.

6. New Kilogram Standards

The 26th meeting of the General Conference on Weights and Measures (CGPM) was held during November 13-16 2018 at Palais des Congr s, Versailles, France. It redefined the 130 years old “Le grand K – the SI unit of kg” in terms of the fundamental Planck’s constant (h). The new definitions will come into force on 20 May 2019.

Currently, the kilogram has a very simple definition: It’s the mass of a hunk of platinum-iridium alloy that’s been housed at the International Bureau of Weights and Measures in Sevres, France since 1889. It’s called the International Prototype Kilogram (a.k.a. Big K, or Le Grand K).

New System

Scientists want to redefine the kilogram using Planck’s Constant, a value from quantum mechanics. They’re also using a tool called a Kibble balance. Instead of balancing the scale with weights, they use electromagnetism. In this method, an electrical current is sent through a coiled wire, generating a magnetic field that creates the upward force needed to balance the scale. Scientists can figure out the strength of that field by pulling on the coil. If you know the voltage, the current and the velocity at which the coil was pulled, you can calculate the Planck constant with extreme precision. So, in principle,

scientists can define a kilogram, or any other weight, in terms of the amount of electricity needed to counteract the weight (gravitational force acting on a mass).

Other Facts

- ◆ CGPM is the highest international body of the world for accurate and precise measurements.
- ◆ The International Bureau of Weights and Measures (BIPM), the main executive body of CGPM has the responsibility of defining the International System of Units (SI).

7. InSight Spacecraft

A NASA spacecraft designed to burrow beneath the surface of Mars landed on the red planet after a six-month, 300 million-mile (482 million km) journey and a perilous, six-minute descent through the rose-hued atmosphere.

- ◆ The three-legged InSight spacecraft reached the surface after being slowed by a parachute and braking engines.

- ◆ It was NASA’s ninth attempt to land at Mars since the 1976 Viking probes. All but one of the previous U.S. touchdowns were successful.
- ◆ NASA last landed on Mars in 2012 with the Curiosity rover.

Mars has been the graveyard for a multitude of space missions. Up to now, the success rate at the red planet has been only 40%, counting every attempted flyby, orbital flight and landing by the US, Russia and other countries since 1960.

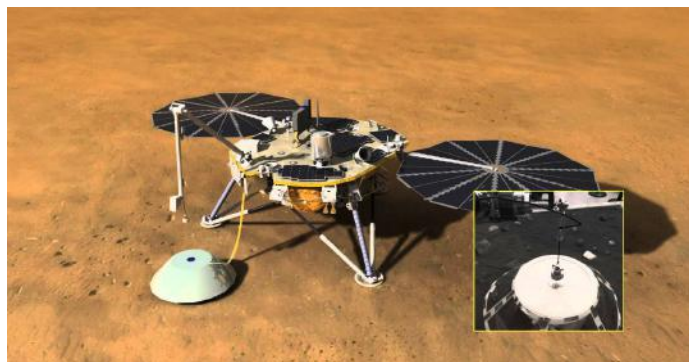
Significance

By examining the interior of Mars, scientists hope to

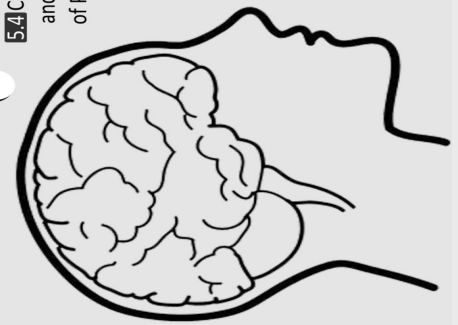
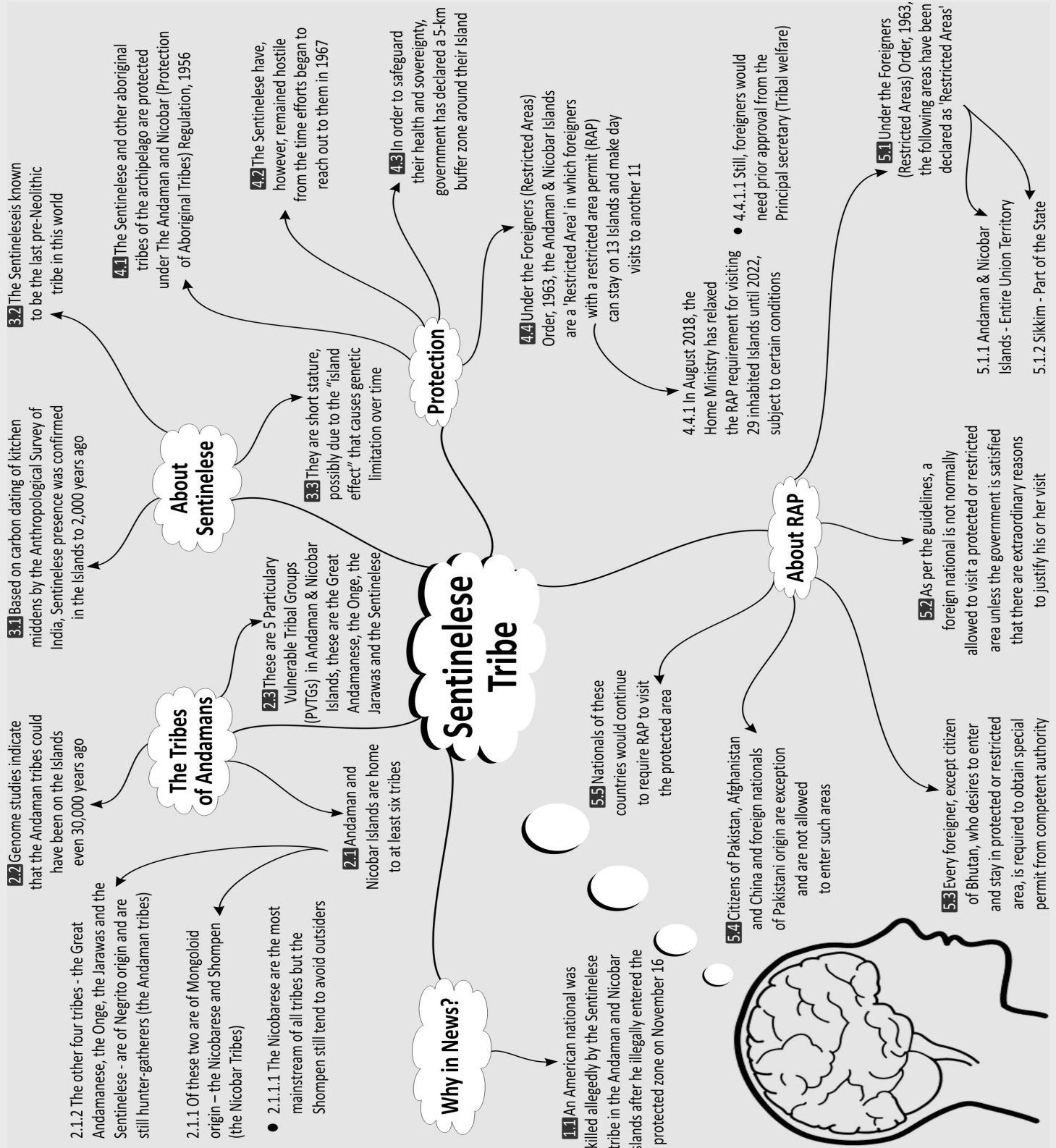
understand how our solar system’s rocky planets formed 4.5 billion years ago and why they turned out so different—Mars cold and dry, Venus and Mercury burning hot and Earth hospitable to life.

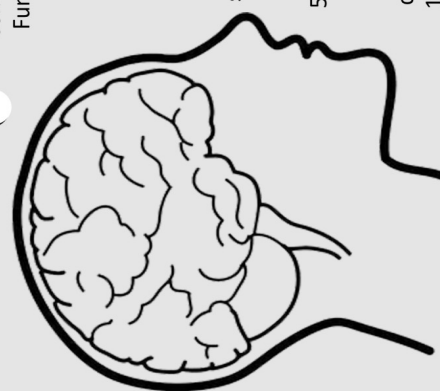
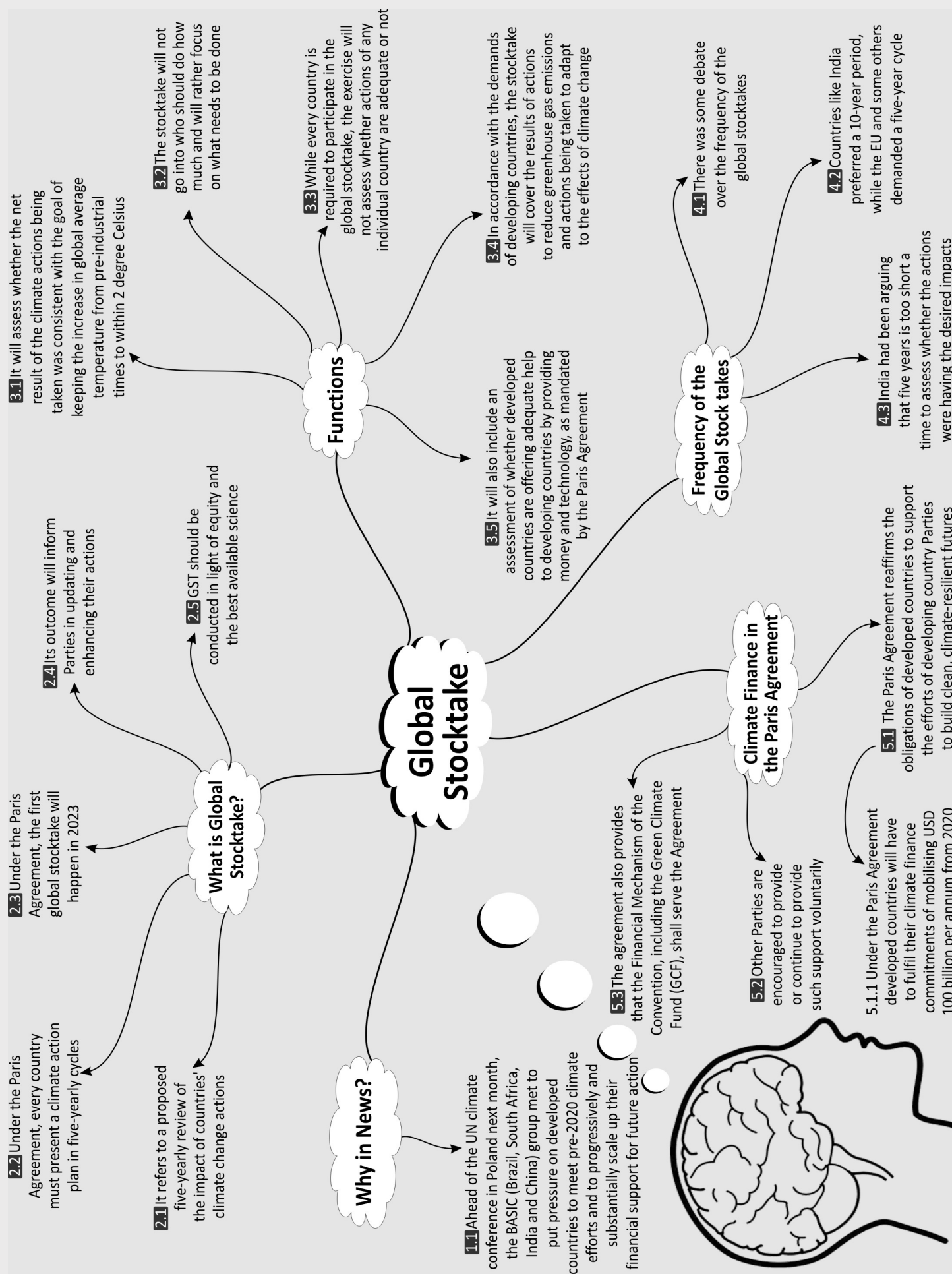
About Spacecraft

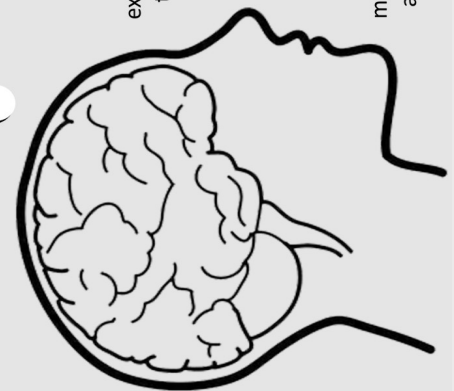
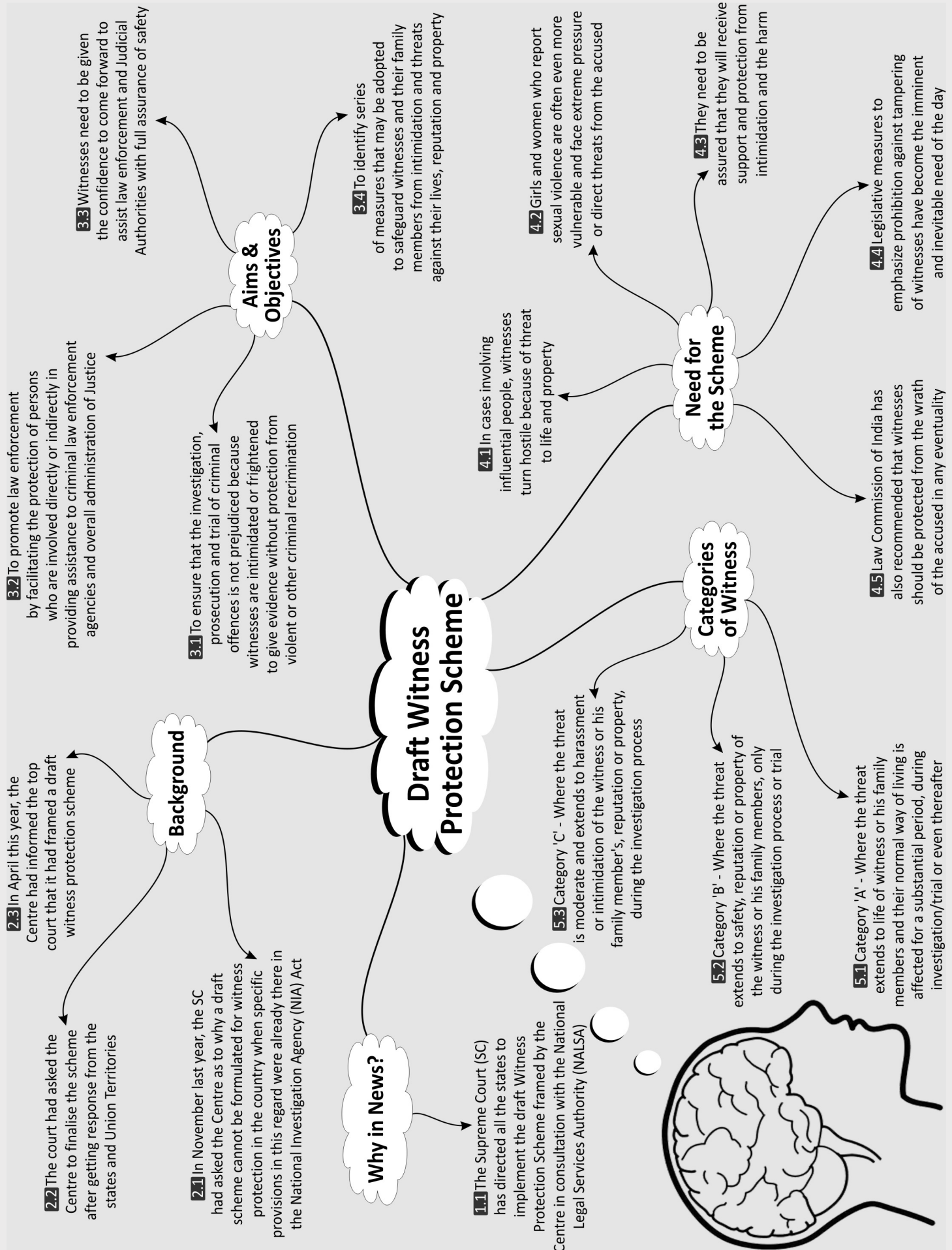
It is no rock-collecting expedition. Instead, the stationary lander will use its six-foot (1.8-meter) robotic arm to place a mechanical mole and seismometer on the ground. The self-hammering mole will burrow 16 feet (5 metres) down to measure the planet’s internal heat, while the seismometer listens for possible quakes.

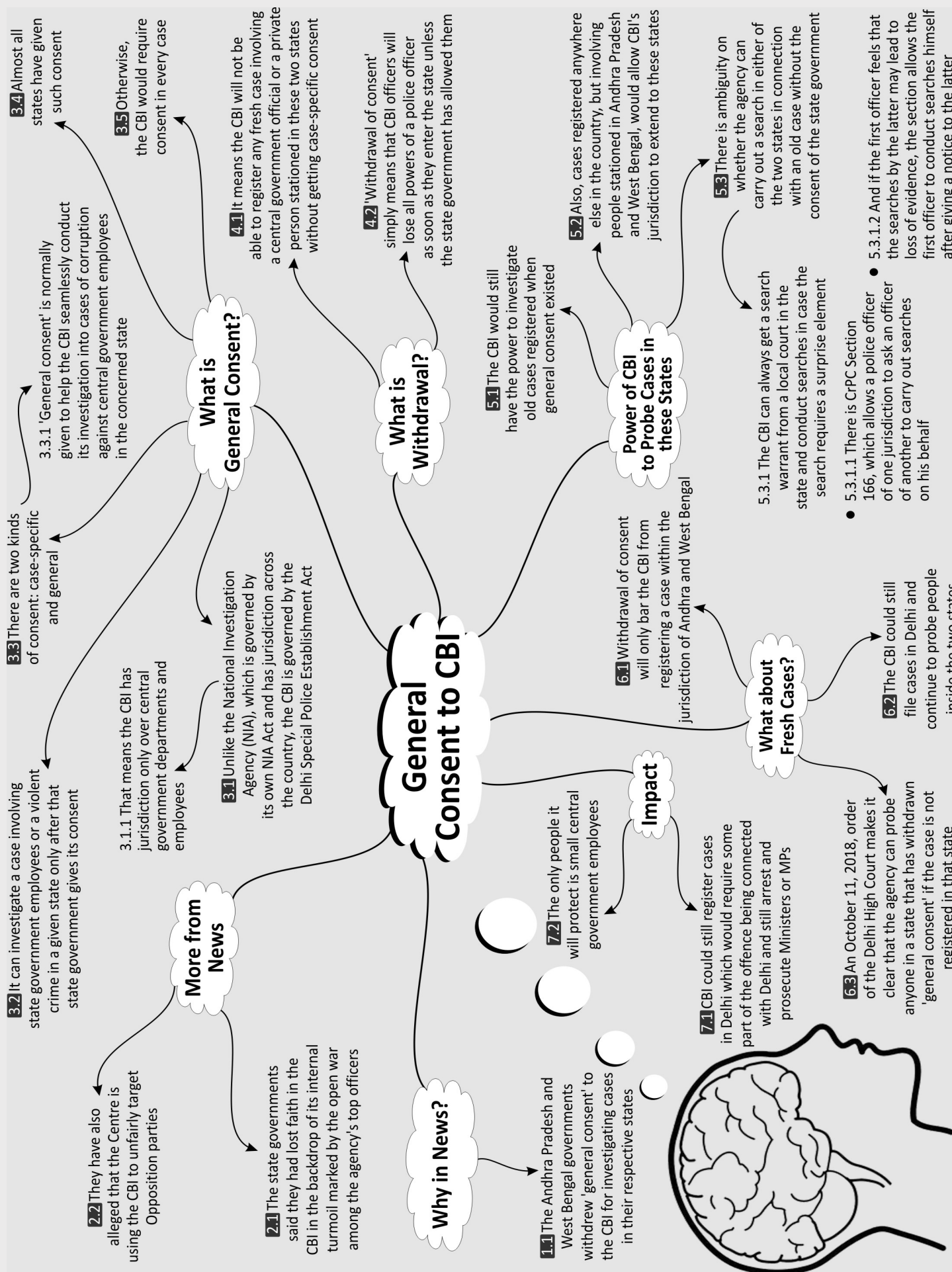


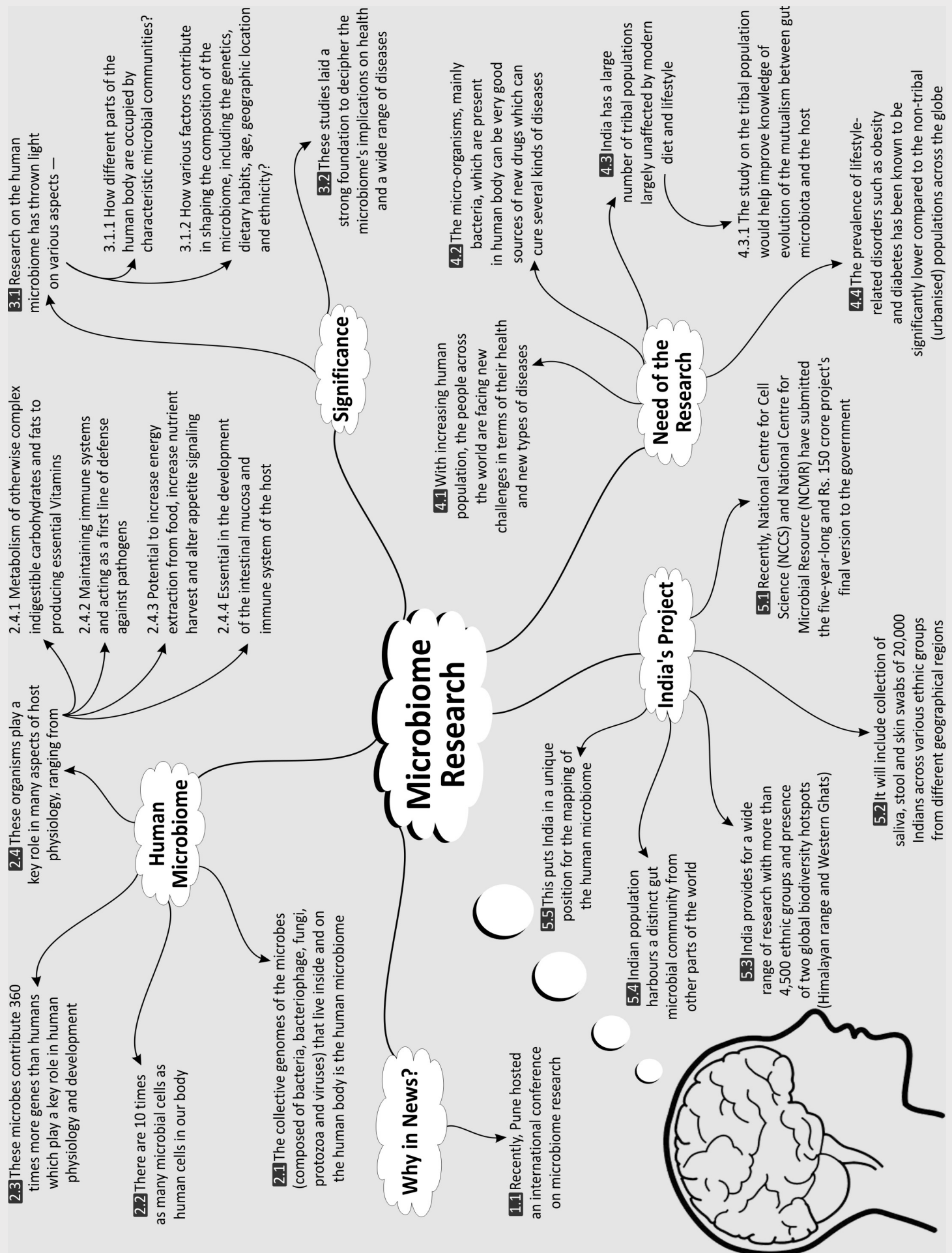
SEVEN BRAIN BOOSTERS

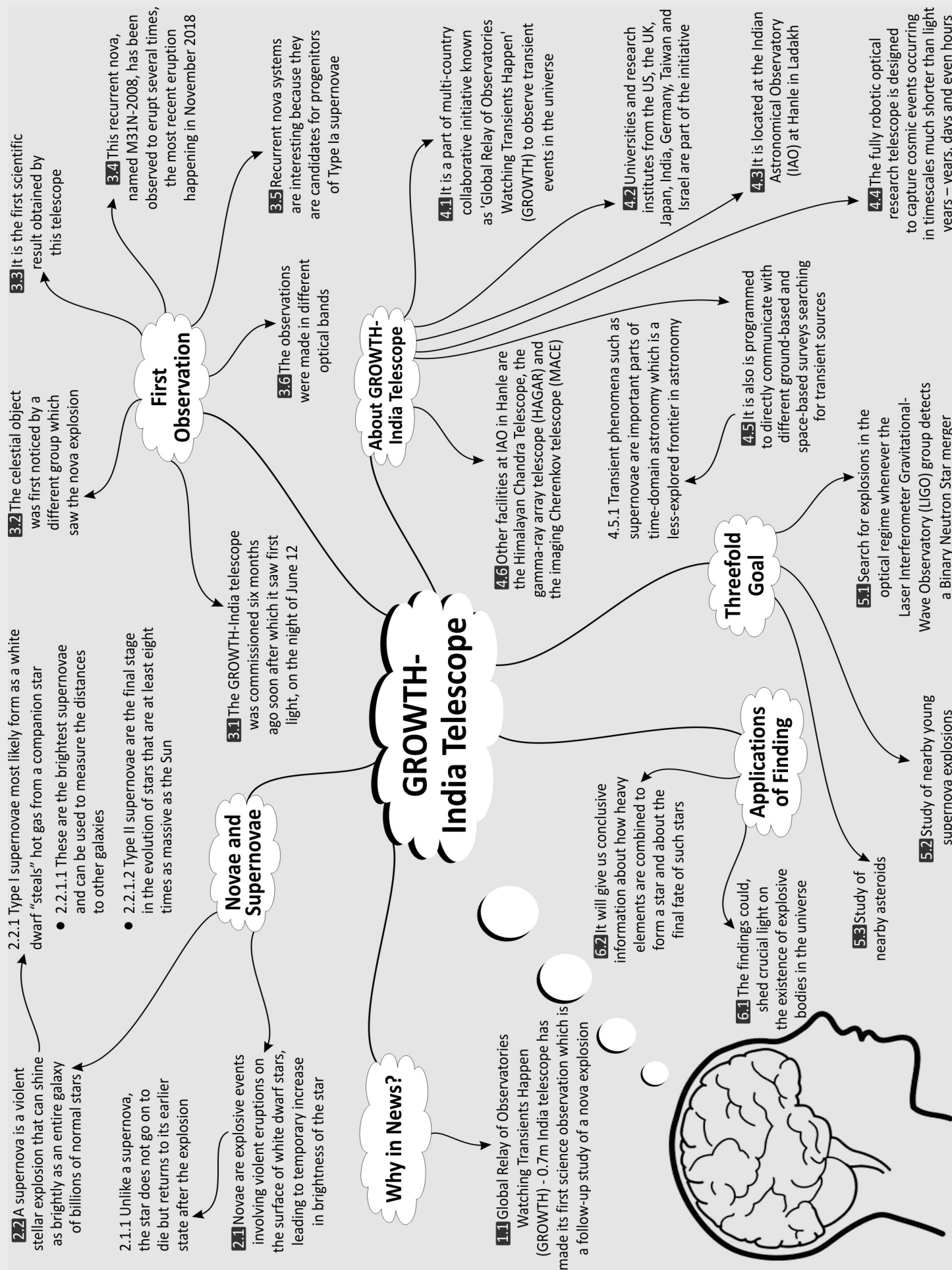


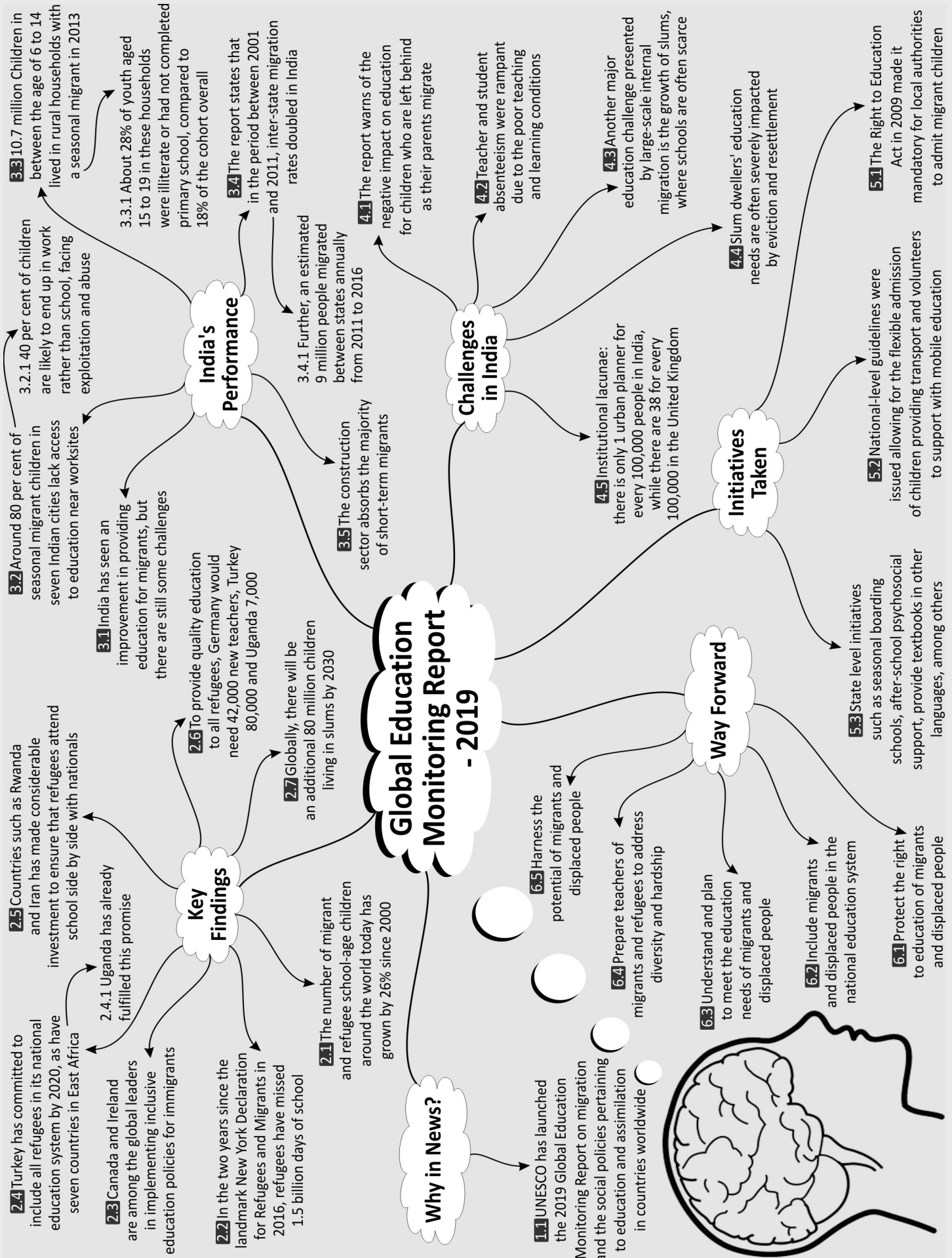












SEVEN MCQ's WITH EXPLANATORY ANSWERS (Based on Brain Boosters)

Sentinelese Tribe

Q1. Consider the following statements in respect of 'Sentinelese tribe' of Andaman and Nicobar:

1. The Sentinelese, a Mongoloid origin tribe who live on the South Sentinel Island of the Andamans.
2. The Sentinelese is known to be the last pre-Neolithic tribe in this world.

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

Answer: (b)

Explanation: Statement 1 is not correct. The Sentinelese, a negrito tribe who live on the North Sentinel Island of the Andamans, have not faced incursions and remain hostile to outsiders.

Statement 2 is correct. The Sentinelese is known to be the last pre-Neolithic tribe in this world. They inhabited North Sentinel Island for an estimated 30,000 years without contact with the outside world.

Global Stocktake

Q2. With reference to the 'Global Stocktake', consider the following statements:

1. It refers to a proposed five-yearly review of the impact of countries' climate change actions.
2. The exercise will assess actions of any individual country as well collective efforts of the world.

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

Answer: (b)

Explanation: Statement 1 is correct. It refers to a proposed five-yearly review of the impact of countries' climate change actions. Under the Paris Agreement, the first global stocktake will happen in 2023. Its outcome will inform Parties in updating and enhancing their actions.

Statement 2 is not correct. While every country is required to participate in the global stocktake, the exercise will not assess whether actions of any

individual country are adequate or not. It will only make an assessment of the "collective" efforts of the world.

Draft Witness Protection Scheme

Q3. Consider the following statements in respect of 'Witness Protection Scheme-2018':

1. Recently, the Supreme Court has directed all the states to implement the draft witness protection scheme framed by the Centre in consultation with the NITI Aayog.
2. One of the objectives of scheme is to give witnesses the confidence to come forward to assist law enforcement and full assurance of safety.

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

Answer: (b)

Explanation: Statement 1 is not correct. The Supreme Court (SC) has directed all the states to implement the draft witness protection scheme framed by the Centre in consultation with the National Legal Services Authority (NALSA).

Statement 2 is correct. One of the objectives of the scheme is to give witnesses the confidence to come forward to assist law enforcement and Judicial Authorities with full assurance of safety among others such as to promote law enforcement by facilitating the protection of persons who are involved directly or indirectly in providing assistance to criminal law enforcement agencies and the overall administration of Justice, etc.

General Consent to CBI

Q4. Recently, the Andhra Pradesh and West Bengal governments withdrew 'general consent' to the CBI for investigating cases in their respective states. Consider the following statements in this regard:

1. It means the CBI will not be able to register any fresh case involving a central government official or a private person stationed in these two states without getting case-specific consent.

2. The CBI would also lose the power to investigate old cases registered when general consent existed in these states.

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

Answer: (a)

Explanation: Statement 1 is correct. 'Withdrawal of consent' simply means that CBI officers will lose all powers of a police officer as soon as they enter the state unless the state government has allowed them.

Statement 2 is not correct. The CBI would still have the power to investigate old cases registered when general consent existed in these states. Also, cases registered anywhere else in the country, but involving people stationed in Andhra Pradesh and West Bengal, would allow CBI's jurisdiction to extend to these states.

Microbiome Research

Q5. Consider the following statements in respect of 'human microbiome':

1. The micro-organisms, mainly bacteria, which are present in human body can be very good sources of new drugs which can cure several kinds of diseases.
2. Human microbiome contributes 360 times more genes than humans which play a key role in human physiology and development.

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

Answer: (c)

Explanation: Both statements are correct. The human body carries diverse communities of microorganisms, which are mainly bacterial. These are referred to as "human microbiome". These organisms play a key role in many aspects of host physiology.

The human body is inhabited by 10 times more micro-organisms (mainly bacteria) than the total number of cells present in our own body. These microbes contribute 360 times more genes than humans, which play a key role in human physiology and development.

GROWTH- India Telescope

Q6. With reference to the 'GROWTH- India Telescope', consider the following statements:

1. It is located at the Indian Astronomical Observatory (IAO) at Hanle in Ladakh

2. It is designed to capture only young supernova explosion events occurring in different timescales.

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

Answer: (a)

Explanation: Statement 1 is correct. It is a part of multi-country collaborative initiative known as 'Global Relay of Observatories Watching Transients Happen' (GROWTH) to observe transient events in the universe. It is located at the Indian Astronomical Observatory (IAO) at Hanle in Ladakh.

Statement 2 is not correct. The fully robotic telescope is designed to capture cosmic events occurring over relatively shorter periods of the cosmological timescale: years, days and even hours. Its goals are threefold: Search for explosions in the optical regime whenever LIGO group detects a Binary Neutron Star merger, Study nearby young supernova explosions and Study nearby asteroids.

Global Education Monitoring Report- 2019

Q7. Consider the following statements in respect of 'Global Education Monitoring Report- 2019':

1. It is a World Bank report on migration and the social policies pertaining to education and assimilation in countries worldwide.
2. Canada and Ireland are among the global leaders in implementing inclusive education policies for immigrants.

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

Answer: (b)

Explanation: Statement 1 is not correct. UNESCO launched the 2019 Global Education Monitoring Report (GEM Report) on migration and the social policies pertaining to education and assimilation in countries worldwide. The number of migrant and refugee school-age children around the world today has grown by 26% since 2000.

Statement 2 is correct. Canada and Ireland are among the global leaders in implementing inclusive education policies for immigrants. Turkey has committed to include all refugees in its national education system by 2020, as have seven countries in East Africa. Uganda has already fulfilled this promise.



SEVEN IMPORTANT FACTS FOR PRELIMS

1. Who has been appointed as the new Chief Election Commissioner of India?

–Sunil Arora

2. Which city hosted the 12th World Congress on Mountain Medicine?

–Kathmandu, Nepal

3. Which state has been unveiled a 70 ft tall Lord Buddha's statue?

–Bihar

4. Which player has won her sixth world championship gold at the 10th World Women's Boxing Championships in 48 kg category?

–Mary Kom

5. Which state government has passed a bill to give land rights to enclave dwellers?

–West Bengal

6. Which state government has launched 'Bhudaar' portal to make land records accessible to people?

–Andhra Pradesh

7. Which nation has decided to set up its domestic Gold Council?

–India

○○○

SEVEN IMPORTANT SPACE MISSIONS

1. Kepler Space Telescope

- ◆ NASA's low-on-fuel Kepler space telescope has awoken from yet another slumber and begun making science observations again.
- ◆ It was launched in March 2009, tasked with determining how common Earth-like planets are around the galaxy. The spacecraft initially studied more than 150,000 stars simultaneously, looking for tiny brightness dips caused by the passage of orbiting planets across these stars' faces. That work came to an end in May 2013, after the second of Kepler's four orientation-maintaining reaction wheels failed and the spacecraft lost its superprecise pointing ability. Mission team members figured out a way to stabilize Kepler using sunlight pressure, however, and the instrument embarked on a new mission called K2 in 2014. During K2, Kepler studies a variety of cosmic objects and events over a series of 80-day "campaigns."
- ◆ In early July of this year, mission team members put Kepler into a hibernation-like state, to ensure that the telescope would have enough fuel left to reorient itself toward Earth in early August and beam home data collected during Campaign 18.
- ◆ Kepler got all the Campaign 18 data down successfully — and then went back to sleep. Kepler has woken up again, starting Campaign 19 of its K2 mission on August 29.
- ◆ Its retirement began from October 30, 2018 when NASA announced that Kepler had run out of fuel and could no longer conduct science.

2. Spitzer Telescope

- ◆ NASA's Spitzer Space Telescope — which was initially scheduled for 2.5-year primary mission — has completed 15 years of space exploration. It was launched into a solar orbit in 2003. Spitzer has illuminated some of the oldest galaxies in the universe, revealed a new ring around Saturn and peered through shrouds of dust to study newborn stars and black holes. It assisted in the discovery of planets beyond our solar system, including the detection of seven Earth-size planets orbiting the star TRAPPIST-1, among other accomplishments.
- ◆ The NASA Great Observatories programme comprises four large powerful astronomical telescopes — the Hubble Space Telescope, the Compton Gamma Ray Observatory (not operational anymore), the Chandra X-ray Observatory and the Spitzer Space Telescope. These four telescopes have played an important role in shaping our current understanding of outer space, that great unknown, famously called the "final frontier" for humanity.
- ◆ The goal of the Great Observatories is to observe the universe in distinct wavelengths of light. Spitzer focuses on the infrared band, which normally represents heat radiation from objects.
- ◆ Spitzer's highly sensitive instruments allow scientists to peer into cosmic regions that are hidden from optical telescopes, including dusty stellar nurseries, the centers of galaxies and newly forming planetary systems.
- ◆ Spitzer's infrared eyes also allows astronomers see cooler objects in space, like failed stars (brown dwarfs), extrasolar planets, giant molecular clouds and organic molecules that may hold the secret to life on other planets.

3. ICESat-2 Satellite

- ◆ NASA has launched 'Ice, Cloud and land Elevation Satellite-2 (ICESat-2)', on 15 September, 2018. The satellite will capture data from the Earth's poles about the seasonal and annual changes in land-ice elevation. It will do this at a mind-boggling rate of 3.6 million readings minute or 60,000 readings a second.
- ◆ ICESat-2 will orbit the Earth flying over both poles and measure the polar ice height along its path — for both seasonal and annual variations — four times each year. The researchers hope that the data collected will reduce the uncertainty in sea level forecasting, as well as support data for climate change studies.
- ◆ It will fire as many as 10,000 such photons every second in green laser light, collecting elevation data from the photons' roundtrip to an accuracy of one-billionth of a second.
- ◆ When not observing the poles, the satellite is also tasked with measuring ocean and land surfaces — even forests, using comparisons of the tops of trees vs the ground — and provide scientists with useful estimates of forest densities and how much carbon is stored in them.
- ◆ The ICESat-2 project is an extension and upgrade to the space agency's 15-year record of polar ice heights — taking over from the Operation IceBridge that began in 2009, replacing the first ICESat mission that was started in 2003.
- ◆ The new and improved ICESat-2 has a much higher degree of accuracy, rendered by its Advanced Topographic Laser Altimeter System (ATLAS) to measure ice height using the time it takes for a photon to reflect off the bottom of the ice-bed and return to the satellite's detectors.

4. NASA Balloon Mission

- ◆ A NASA balloon has captured rare images from right at the very edge of Earth's atmosphere, where it has been examining a thin group of electric blue clouds with high-powered cameras. Forming 50 miles above

the poles in summer, these clouds are known as noctilucent clouds or polar mesospheric clouds (PMCs). The resulting photos, which scientists have just begun to analyze, will help us better understand turbulence in the atmosphere, as well as in oceans, lakes and other planetary atmospheres and may even improve weather forecasting.

- ◆ On July 8, 2018, NASA's PMC Turbo mission launched a giant balloon to study PMCs at a height of 50 miles above the surface. For five days, the balloon floated through the stratosphere from its launch at Esrange, Sweden, across the Arctic to Western Nunavut, Canada. During its flight, cameras aboard the balloon captured 6 million high-resolution images filling up 120 terabytes of data storage — most of which included a variety of PMC displays, revealing the processes leading to turbulence. Scientists are now beginning to go through the images and the first look has been promising.
- ◆ The mission aimed at studying atmospheric motions, such as airflow over mountains or the motions caused by thunderstorms, which can cause disturbances in the atmosphere which are generated through something called gravity waves. Besides, with this mission, scientists want to understand the processes of matter in near-Earth space, including how matter there interacts with Earth's atmosphere and weather.
- ◆ Noctilucent clouds coalesce as ice crystals on tiny meteor remnants in the upper atmosphere. The clouds are only visible during twilight, when the angle of the sun reflects off them and causes them to shine a bright electric blue or white colour. These clouds are affected by what's known as atmospheric gravity waves — caused by the convecting and uplifting of air masses, such as when air is pushed up by mountain ranges. The waves play major roles in transferring energy from the lower atmosphere to the mesosphere.

5. NASA's New Horizons Probe

- ◆ NASA's New Horizons probe is on course to flyby the Kuiper Belt object nicknamed

Ultima Thule, which is at a distance of 6.6 billion kilometers from Earth this New Year. This event will set the record for the most distant object ever visited by a spacecraft. The spacecraft is just 112 million kilometres from Ultima, closing in at 51,911 km/h.

- ◆ The Kuiper Belt, or the Edgeworth-Kuiper belt is a disc (circumstellar) found at the outer most regions of our solar system. This extends from Neptune's orbit at approximately thirty (30) AU to about fifty (50) AU from our sun. This distant region is probably populated with hundreds of thousands of icy bodies larger than 100 km (62 miles) across and an estimated trillion or more comets.
- ◆ The belt also consists of objects largely composed of frozen volatiles such as water, ammonia and methane. The Kuiper belt is somewhat similar to the asteroid belt in terms of composition but as for size, it is much larger, about twenty (20) times as wide and one-hundred and fifty (150) times as large.
- ◆ New Horizons was launched on 19 January 2006 and has been travelling through space for the past nine years. New Horizon's core science mission is to map the surfaces of Pluto and Charon, to study Pluto's atmosphere and to take temperature readings.

6. NASA's Dawn Mission

- ◆ NASA's Dawn mission is drawing to a close after 11 years of breaking new ground in planetary science, gathering breathtaking imagery and performing unprecedented feats of spacecraft engineering. Dawn's mission was extended several times as it explored Ceres and Vesta, which when combined, make up 45 percent of the mass of the main asteroid belt. Now, the spacecraft is about to run out of a key fuel, hydrazine. When that happens, it will lose its ability to communicate with Earth. It will remain in a silent orbit around Ceres for decades.
- ◆ It was launched in 2007. It was aimed at studying the asteroid Vesta and dwarf planet Ceres, celestial bodies believed to have

accreted early in the history of the solar system.

- ◆ Dawn is the only spacecraft to orbit a body in the asteroid belt. And it is the only spacecraft to orbit two extraterrestrial destinations. It orbited giant asteroid Vesta for 14 months from 2011 to 2012, then continued on to Ceres, where it has been in orbit since March 2015.

7. Mission MeRcury

- ◆ The European Space Agency (ESA) and the Japan Aerospace Exploration Agency (JAXA) has successfully sent two probes on a joint mission to Mercury, the closest planet to the Sun. An Ariane 5 rocket was launched from French Guyana, lifted an unmanned spacecraft, BepiColombo, which is carrying the two probes. The spacecraft separated and went into orbit for the 7-year trip to Mercury.
- ◆ It is the first European mission to Mercury and the first to send two spacecraft to make complementary measurements of the planet and its environment at the same time. The orbiters are ESA's Mercury Planetary Orbiter (MPO) and JAXA's Mercury Magnetospheric Orbiter (MMO, or 'Mio'). The ESA-built Mercury Transfer Module (MTM) will carry the orbiters to Mercury using a combination of solar electric propulsion and gravity assist flybys, with one flyby of Earth, two at Venus and six at Mercury, before entering orbit at Mercury in late 2025.
- ◆ The two orbiters will be able to operate some of their instruments during the cruise phase, to try and collect data at Venus. Moreover, some of the instruments designed to study Mercury in a particular way can be used in a completely different way at Venus, which has a thicker atmosphere.
- ◆ The Sun's enormous gravity makes it difficult to place a spacecraft into a stable orbit around Mercury. The mission will have to ensure a controlled fall. The spacecraft has been specially designed for extreme temperatures.



SEVEN PRACTICE QUESTIONS FOR MAIN EXAM

Answer each of the following questions in 200 words:

- Q1. Despite facing different kinds of political and economic challenges, Indo-German development cooperation has deepened over the six decades. Both countries also shared a common destiny as young democracies. Discuss it in context of 60th anniversary of relationship.
- Q2. For India to grow, healthcare as an engine of the economy needs to flourish. Discuss how adoption of smart technology and using emerging platforms such as Blockchain will enrich healthcare sector in India.
- Q3. 'The government's maternity benefit programme must be implemented better and comply with the Food Security Act.' Comment.
- Q4. What is genetic modification? Discuss the ethical concerns related to genome editing technology.
- Q5. 'Well-being within ecological limits requires a societal transformation redefining 'happiness' in accordance with our own rather than Western values.' Discuss it in context of climate change and poor urban air quality in India.
- Q6. At present, India has no law to regulate or protect the anonymity of any person who divulges top secret information to the journalists. Discuss why India needs to strengthen Whistle Blowers Protection Act.
- Q7. 'Regional agreements such as the Belt and Road Initiative could embrace greater trade liberalisation goals.' Comment.

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UPPCS Mains Test Series 2018



**02
Dec.**

Test-1 - (12:00Noon-3:00pm)

Modern India, India After Independence,
World History, History of Uttar Pradesh

**09
Dec.**

Test-2 - (12:00Noon-3:00pm)

Social Issues, Art & Culture ,
Uttar Pradesh (Social Issues, Art & Culture)

**16
Dec.**

Test-3 - (12:00Noon-3:00pm)

World Geography, Indian Geography,
Geography of Uttar Pradesh

**23
Dec.**

Test-4 - (12:00Noon-3:00pm)

Indian Polity, Constitution,
In special reference of Uttar Pradesh

**30
Dec.**

Test-5 - (12:00Noon-3:00pm)

Governance and Public Policy,
International Relation
In Special Reference of Uttar Pradesh

**06
Jan.**

Test-6 - (12:00Noon-3:00pm)

Indian Economy, Internal Security
in Special Reference of Uttar Pradesh

**13
Jan.**

Test-7 - (12:00Noon-3:00pm)

Science & Tech., Disaster Management,
Ecology & Environment

**20
Jan.**

Test-8 - (12:00Noon-3:00pm)

Ethics (Paper-I)
Ethics and Human Interface, Attitude,
E.I. and Thinkers with Case Study

**27
Jan.**

Test-9 - (12:00Noon-3:00pm)

Ethics (Paper-II)
Aptitude and Value of Civil Services, Ethics
in P.A., Probity in Govt. with Case Study

**03
Feb.**

Test-10 - (12:00Noon-3:00pm)

General Studies (Paper-I) Full Test

Test-11 - (3:30pm-6:30pm)

Hindi Full Test

**10
Feb.**

Test-12 - (12:00Noon-3:00pm)

General Studies (Paper-II) Full Test

Test-13 - (3:30pm-6:30pm)

Essay

**17
Feb.**

Test-14 - (12:00Noon-3:00pm)

General Studies (Paper-III) Full Test

Test-15 - (3:30pm-6:30pm)

Hindi Full Test

**24
Feb.**

Test-16 - (12:00Noon-3:00pm)

General Studies (Paper-IV) Full Test

Test-17 - (3:30pm-6:30pm)

Essay

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