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Seven Important Issues

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SEVEN IMPORTANT ISSUES

1. INVESTMENT IN WOMEN IN SCIENCE FOR INCLUSIVE GROWTH

Why in News?

The International Day of Women and Girls in Science is celebrated every year on February 11 and was adopted by the United Nations General Assembly to promote full and equal access to and participation in science technology and innovation for women and girls of all ages, reminding all of as that women and girls play a critical role in science and technology communities. The 2019 theme focuses on "Investment in Women and Girls in Science for Inclusive Green Growth."

Introduction

Over the past 25 years, the UN has drawn the attention of the international community to the serious gender gap that affects science such that it has become a priority of many countries and international political institutions. Yet, the advancement of women and girls in science has not only stalled, but has started regressing with a widening of the gender gap in science.

According to UN Women, fewer than 30 percent of researchers worldwide are women. This could have deep implications for the global economy's future with too few women in decision-making roles and higher-paying jobs in the fields of science, technology, engineering and mathematics (STEM).

Findings from the World Economic Forum have shown that women stand to gain only one new STEM job for every 20 lost, in stark contrast to men, who gain one new STEM job for every four lost. Women are underrepresented throughout the innovation pipeline; they earn 57 percent of all college degrees, but only 35 percent of the degrees are in STEM fields. India, being a patriarchy, too has this problem. Women are not represented adequately in STEM fields.

As the fourth industrial revolution has already been started, women still have less than two-third of the economic opportunity that men have. The jobs of the future will be driven by technology and innovation, and if the gender divide in Science Technology Engineering and Mathematics (STEM) is not bridged soon, the overall gender gap is likely to widen. Improved recruitment, retention and promotion policies, as well as continuous learning and up-skilling for women can go a long way towards closing this gap.

Explanation for Low Representation of Women

There are a variety of proposed reasons for the relatively low numbers of women in STEM fields. These can be broadly classified into societal, psychological, and innate explanations. However, explanations are not necessarily restricted to just one of these categories.

Societal

Stereotypes: Stereotypes about what someone in a STEM field should look and act like may cause established members of these fields to overlook individuals who are highly competent.

The stereotypical scientist or individual in another STEM profession is usually thought to be male. Women in STEM fields may not fit individuals' conception of what a scientist, engineer, or mathematician "should" look like and may thus be overlooked or penalized.

Black Sheep effect: The Black Sheep effect occurs when individuals are likely to evaluate members of their ingroup more favorably than members of their out-group when those members are highly qualified. However, when an individual's in-group members have average or below average qualities, he or she is likely to evaluate them much lower than out-group members with equivalent qualifications. This suggests that established women in STEM fields will be more likely than established men to help early career women who display sufficient qualifications. However, established women will be less likely than men to help early career women who display insufficient qualifications.

Queen Bee Syndrome: The Queen Bee Syndrome is similar to the Black Sheep effect but applies only to women. It explains why higher-status women, particularly in maledominated professions, may actually be far less likely to help other women than their male colleagues might be. And a research study confirmed its prevalence in STEM field.

Mentorship: In STEM fields, the support and encouragement of a mentor can make a lot of difference in



women's decisions of whether or not to continue pursuing a career in their discipline. This may be particularly true for younger individuals who may face many obstacles early on in their careers. Since these younger individuals often look to those who are more established in their discipline for help and guidance, the responsiveness and helpfulness of potential mentors is incredibly important.

Lack of support: Women in STEM may leave due to not being invited to professional meetings, the use of sexually discriminating standards against women, inflexible working conditions, the perceived need to hide pregnancies, and the struggle to balance family and work.

Psychological

Lack of Interest: When interests were classified by RIASEC type (Realistic, Investigative, Artistic, Social, Enterprising, Conventional), men showed stronger Realistic and Investigative interests, and women showed stronger Artistic, Social, and Conventional interests. Recent research reveals an interesting phenomenon that has been called the Patriarchy Paradox: the more gender equal societies are the less equal they are in the choices men and women make with respect to STEM (Science, Technology, Engineering, Mathematics) education and careers.

Lack of confidence: Research has found that women steer away from STEM fields because they believe they are not qualified for them; the study suggested that this could be fixed by encouraging girls to participate in more mathematics classes. One of the factors behind girls' lack of confidence might be unqualified or ineffective teachers. Teachers' gendered perceptions on their students' capabilities can create an unbalanced learning environment and deter girls from pursuing further STEM education.

Innate versus learned skill

Some studies propose the explanation that STEM fields (and especially fields like physics, math and philosophy) are considered by both teachers and students to require more innate talent than skills that can be learned. Combined with a tendency to view women as having less of the required innate abilities, researchers propose this can result in assessing women as less qualified for STEM positions.

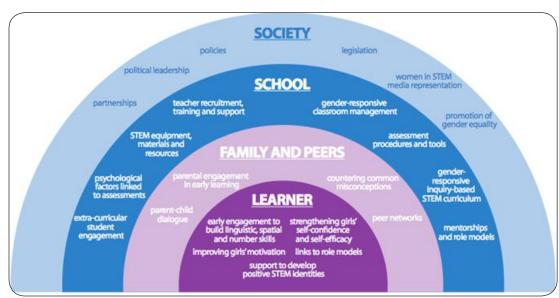
Steps towards Improving Gender Equity in Science

Gender imbalances in science, technology, engineering and maths (STEM) are not a self-correcting phenomenon. Ways to make science more inclusive for women can be

- 1. Advocate for more women in prestige roles: Ensure fair representation of women as keynote speakers at conferences, on society boards and journal editorial boards. Have clear pathways to prestige roles giving women an opportunity to apply if they wish to do so.
- 2. Promote high-achieving females:
 Recognise the achievements of
 females, and select them for roles
 that increase their visibility as role
 models.
- Be aware of gender bias: Consciously reflect on personal biases when hiring, promoting and mentoring staff.
- 4. Speak up, call it out: Point out to conference organisers all-male panels and keynote programs and, where they are underrepresented, write to chief editors suggesting women for editorial boards.
- 5. Provide better support for returning to work after maternity leave: Higher levels of support and more flexible conditions for women returning from maternity leave encourage women to stay in their employment after having children, thereby increasing their

prospects of reaching more senior posts.

- **6.** Redefine success: Recognise the diverse range of definitions of what it means to be a successful researcher.
- 7. Encourage women to enter the discipline at a young age: Many schoolage girls are put off the idea of entering STEM disciplines as they are socially and culturally deemed to be "male" pursuits. This needs to be addressed.





Analysis of Status of Indian Women in Science

The gender disparity in science in India remains worrisome - as it is worldwide. As per the UIS (UNESCO Institute for Statistics) data, less than 30% of the world's researchers are women. The Indian scenario is far from encouraging with only 14% of Indian researchers being women since Science is seen as a male-dominated bastion. Only 25% of women hold top positions in various institutions and universities with the number being high only in biological research institutes. Women constitute only 14% of 2.8 lakh scientists, technologists and engineers in R&D institutions that translates into approximately 39,389 women while the numbers are 28.4% globally.

India's 2008 National Task Force on Women in Science report pointed that women scientists constitute "a distinct minority" and that many highly qualified women, such as those with doctorates, drop out of the workforce, resulting in considerable depletion of national resources in science and technology.

The report noted that the percentage of girls studying science in Indian universities has increased since Independence. However, the ideal fraction of 50% of female students has not been achieved and has, in fact, plateaued off at a lower level. It also observed that the number of girls studying engineering is lower than those studying basic sciences, with the situation in the IITs particularly dismal.

The report also observed that there is a drastic drop in the percentage of women from the doctoral level to the scientist/faculty position, suggesting a bottleneck at the employment stage due to recruitment procedures and family responsibilities. As a result, there was a "major paucity" of women at the senior-most administrative and

policy making positions in scientific institutions.

According to the 2018 UNESCO Institute for Statistics' report on women in science, 44% of bachelor students and 41% of doctoral students in India are female. What happens beyond that has not been chronicled for India, though there are figures from many other countries in the dataset. While more women are enrolling in university, relatively few pursue careers in research. There are many leaks in the pipeline – from stereotypes encountered by girls to the family-caring responsibilities and bias women may face when choosing a career.

Similarly, the prevailing gender pay gap is another discouraging factor for women to pursue career in science field. According to a recent Accenture research report, the gender pay gap in India is as high as 67 percent.

Family commitments, either due to one's choice or as a result of cultural enforcement, have impaired women's capacity to realise their potential. This puts them at a disadvantage in many science and technology related jobs that are dynamic and competitive in nature.

Government Initiatives for Women in Science

Taking cognizance of various reports about status of women in STEM fields and to encourage and improve the abysmally less percentage of women in science government has launched several initiatives.

The Vigyan Jyoti scheme, advanced by the Department of Science and Technology (DST), was announced in the 2017 budget with an allocation of 2,000-crore-rupee. The aim of the scheme is to arrange for girl students of classes 9, 10 and 11 meet women scientists, with the IITs and the Indian Institutes of Science Education and

Research serving as the nodal centres.

The announcement was accompanied by a redesigning and renaming of a national programme called Innovation in Science Pursuit for Inspired Research (INSPIRE), changed to Inspire-MANAK (Million Minds Augmenting National Aspiration and Knowledge), to attract talented young boys and girls to study science and pursue research as a career.

Similarly Unnat Bharat Abhiyan programme, launched by the Ministry of Human Resource Development in 2014 to connect India's elite institutes with local communities and address their developmental challenges with appropriate technological interventions. Some of India's premier institutes, including the IITs in Indore and Bhubaneswar and the IISER in Pune organised on-campus camps for 30 girl students over two weeks, as required by the government, as pilots. Senior women scientists attended the camps as role models to encourage the students to pursue careers in science.

Other programmes launched by the government to encourage women to pursue scientific careers includes a Indo-US fellowship for women in science, technology, engineering, mathematics and medicine to participate in international collaborative research in premier institutions in America; women-centric programmes under the Knowledge Involvement in Research Advancement through Nurturing (KIRAN) initiative; a Bio-technology Career Advancement and Reorientation (Bio-Care) scheme; and relaxing the upper age limit by five years for women candidates for junior and senior research fellowships awarded by the Council of Scientific and Industrial Research. The last is to help those who may need assistance with motherhood or relocation due to husband's transfer.





Way Forward

India will have the world's youngest population by 2022 and the women of the country will play a definitive role in devising the country's future. In school exam results, we hear of how girls have outshone boys, but when it comes to those who take up research in later life, the number of women is minuscule. This means that many of our best brains that showed the maximum potential do not pick research as a career.

It takes a multi-pronged approach to create meaningful, lasting changes in the retention of women in STEM fields. Women's participation in STEM should be encouraged from primary school level rather only in higher studies. Awareness about gender inequality and its outcome has to be increased. The community should be supportive and understanding of career prospects for women.

In some STEM fields, such as the biological sciences, medicine and some specific areas of engineering, the fraction of women has steadily increased over the last few decades. Apart from some active efforts from the government of India, it has mostly happened because of more literacy among women, more opportunities for employment, partly due to the liberalisation of the economy, increased urbanisation and impact of women's movements in India.

However, we also do need to focus on the status of these women once they get the jobs. While the percentage is still low based on some surveys – 10-15% according to some estimates – they continue to face the same kind of discrimination at work as they face in society.

Such discrimination usually takes the form of a hostile and unpleasant atmosphere at the workplace, although it does also manifest as active harassment based on their gender. The men who are responsible for such conditions tend to be insensitive, reluctant to concede that there is a problem and that the women they work with, actually suffer as a result. The implication for Vigyan Jyoti is that if the framework in which it operates does not have "Indian science leaders" politicians working towards improving the "at times hostile" working conditions of women in science in the longer term, the scheme risks becoming "superficial".

Summer and winter camps for those who opted for science; initiating a well-planned role model programme with successful women scientists, both through visual media and personal interactions; special fellowships for girl students securing top positions in university exams; and outreach programmes for girl students during conferences are some recommended

measures to attract women to science. For this to happen and to ensure women achieve their full potential government agencies, universities, and society must work together collaboratively.

Further, skills in science, technology,

engineering and math drive innovation and are critical to achieving the Sustainable Development Goals. Women and girls are vital in all these areas. Yet they remain woefully underrepresented. Gender stereotypes, a lack of visible role models and unsupportive or even hostile policies and environments can keep them from pursuing these careers. The world cannot afford to miss out on the contributions of half our population. We need concerted efforts to overcome these obstacles. We must tackle misconceptions about girls' abilities. We must promote access to learning opportunities for women and girls, particularly in rural areas. And we must do more to change workplace culture so that girls who dream of being scientists, engineers and mathematicians can enjoy fulfilling careers in these fields. Let us ensure that every girl, everywhere, has the opportunity to realize her dreams, grow into her power and contribute to a sustainable future for all.

General Studies Paper-I

Topic: Role of women and women's organizations, Population and associated issues, Poverty and developmental issues, Urbanization, their problems and their remedies.

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.

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

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2. MENACE OF ILLICIT DEPOSIT SCHEMES IN INDIA

Why in News?

Lok Sabha recently passed a bill name 'The Banning of Unregulated Deposit Schemes Bill, 2018' to protect investors from Ponzi schemes. Being a comprehensive Union law, the Bill adopts best practices from State laws, while entrusting the primary responsibility of implementing the provisions of the legislation to the state governments.

Introduction

A scam involving the Saradha group allegedly conning customers under the guise of a chit fund, has raised serious questions for the Chit Funds industry. The scam has sparked responses from centre, states and regulators like Securities and Exchange Board of India (SEBI).

A chit fund is a type of rotating savings and credit association system practiced in India. It is a type of saving scheme where a specified number of subscribers contribute payments in installment over a defined period. Each subscriber is entitled to a prize amount determined by lot, auction or tender depending on the nature of the chit fund. Typically the prize amount is the entire pool of contribution minus a discount which is redistributed to subscribers as a dividend. For example, consider an auction-type chit fund with 50 subscribers contributing Rs 100 every month. The monthly pool is Rs 5,000 and this is auctioned out every month. The winning bid, say Rs 1000, would be the discount and be distributed among the subscribers. The winning bidder would then receive Rs 4,000 (Rs 5,000 - 1,000) while the rest of subscribers would receive Rs 20 (1000/50). Winners cannot enter the auction again and will be liable for the monthly subscription as the process is repeated for the duration of

the scheme. The company managing the chit fund (foreman) would retain a commission from the prize amount every month. With a reported 10,000 chit funds in the country handling over Rs 30,000 crore annually, chit fund proponents maintain that these funds are an important financial tool.

Types of Chit Funds in India

Chit fund schemes may be organized by financial institutions, or informally among friends, relatives, or neighbours. In some variations of chit funds, the savings are for a specific purpose. Chit funds are often microfinance organizations.

There are mainly three types of chit funds prevalent in India:

- Chit Funds run by State Government: these types of chit funds are run by state governments. They are completely transparent. Kerala State Financial Enterprise and Mysore Sales International Limited are examples of these types of chit funds.
- Private Register Chit Funds: There are a number of privately held register chit funds. These funds are registered as per Chit Funds act, 1982.
- Unregistered Chit: It is illegal to run unregistered chit fund. However, you will find many unregistered chit funds across the country. These funds are usually run by a closed group such as relatives, friends, neighbors etc.

Laws Governing Chit Funds

Classifying them as contracts, the Supreme Court has read chit funds as being part of the Concurrent List of the Indian Constitution; hence both the centre and state can frame legislation regarding chit funds. States like Tamil

Nadu, Andhra Pradesh and Kerala had enacted legislation (e.g The Kerala Chitties Act, 1975 and The Tamil Nadu Chit Funds Act, 1961) for regulating chit funds.

In 1982, the Ministry of Finance enacted the Chit Funds Act to regulate the sector. Under this Act, the chit fund businesses can be registered and regulated only by the respective state governments. Regulator of chit funds is the Registrar of Chits appointed by respective state governments under Section 61 of Chit Funds Act. Powers of adjudication vest in the Registrar and the state government concerned is the appellate authority. In case of failure of a chit fund business, the responsibility for winding up such a business also vests with the respective state governments. Moreover, the Prize chits and money circulation schemes are illegal and are banned under the Prize Chits and Money Circulation Schemes (Banning) Act, 1978. Powers of investigation under this Act are vested with the concerned state police authorities. States are responsible for notifying rules and have the power to exempt certain chit funds from the provisions of the Act.

In 2013 West Bengal government passed West Bengal Protection of Interest of Depositors in Financial Establishments Bill, 2013. This was a direct response to the chit fund scam in West Bengal. While not regulating chit funds directly, the Act regulates and restricts financial establishments to curb any unscrupulous activity with regards to deposits.

To facilitate orderly growth of the chit funds sector and remove bottlenecks being faced by the industry, thereby enabling greater financial access of people to other financial products, government has introduced the Chit Funds (Amendment) Bill,



2018 in Parliament. It use of the words "Fraternity Fund" for chit business in the Act to signify its inherent nature, and distinguish its working from 'Prize Chits' which are banned.

Regulators of NBFC in India

The non-banking financial sector is large, diverse and complex. At present there are several regulators regulating acceptance of money from the public. For example,

- Non-Banking Financial Companies (NBFCs) are under the regulatory and supervisory jurisdiction of the Reserve Bank of India (RBI) under the provisions of the Reserve Bank of India, 1934 (RBI Act).
- Chit Funds and Money Circulation Schemes are under the domain of state governments; housing finance companies come under the purview of National Housing Bank (NHB).
- Collective Investment Schemes come under the purview of the Securities and Exchange Board of India (SEBI) and deposit taking actively by companies other than NBFCs are regulated by Ministry of Corporate Affairs (MCA).

Further, section 45S of the RBI Act prohibits acceptance of deposits by individuals and unincorporated entities. Raising of money from public needs to be allowed in a responsible, accountable and transparent manner but it must be ensured that violations are swiftly addressed.

The Banning of Unregulated Deposit Schemes Bill, 2018

In order to establish a statutory mechanism to ban Ponzi schemes. punish wrongdoers, compensate victims and to deal with the menace of illicit deposits in a comprehensive wav government has brought the aforementioned legislation. Recommendations of the Parliamentary Standing Committee on Finance were also incorporated to give the bill its final shape.

The salient features of the Bill are as follows:

 The Bill contains a substantive banning clause which bans 'Deposit Takers' from promoting, operating, issuing advertisements or accepting deposits in any unregulated deposit scheme. The principle is that the Bill would ban unregulated deposit taking activities altogether, by making them an offence ex-ante, rather than the existing legislative-cum-regulatory framework which only comes into effect ex-post with considerable time lags.

- The Bill creates three different types of offences, namely, running of unregulated deposit schemes, fraudulent default in regulated deposit schemes, and wrongful inducement in relation to unregulated deposit schemes. Adequate and stringent penal provisions are provided in relation to the offence.
- The Bill provides for severe punishment and heavy pecuniary fines to act as deterrent.
- The Bill has adequate provisions for disgorgement or repayment of deposits in cases where such schemes nonetheless manage to raise deposits illegally.
- The Bill provides for attachment of properties/ assets by the Competent Authority, and subsequent realization of assets for repayment to depositors.
- Clear-cut time lines have been provided for attachment of property and restitution to depositors.
- The Bill enables creation of an online central database, for collection and sharing of information on deposit taking activities in the country.
- The Bill defines 'Deposit Taker' and 'Deposit' comprehensively. 'Deposit Takers' include all possible entities (including individuals) receiving or soliciting deposits, except specific entities such as those incorporated by legislation. 'Deposit' is defined in such a manner that deposit takers are restricted from camouflaging public deposits as receipts, and at the same time not to curb or hinder acceptance of money by

an establishment in the ordinary course of its business.

The Bill will be beneficial for poor and gullible people who are being duped by illicit deposit schemes launched by rapacious operators. The Bill will protect them by altogether banning unregulated deposit taking schemes. It will also provide the much needed deterrence against promoting or operating an unregulated deposit taking scheme.

Why People are Getting Attracted towards it?

India has a large, low-income, rural population with limited access to formal banking facilities. This leads to the absence of two major helplines for poorer people - that of placing their money safely in deposits and secondly of being able to borrow money for their needs which may be as simple as buying seeds for the next crop or their children's marriage.

The second aim is achieved instead by a web of parallel, informal banking in the form of money lenders (pawn brokers) who have existed in India for a few centuries. At its centre are moneylenders, mostly unregulated, often also wealthy landlords or now politicians, used to charge exorbitant rates of interest. To curb this practice, several moneylenders Acts were enacted by the state governments of India by the 1950s. However failure to replace the role of moneylenders gave rise to unscrupulous financial operators that operated Ponzi schemes. Some commentators place the blame for these kinds of Ponzi schemes on greed rather than exclusion from formal banking systems.

However, this does not address the former issue of being able to save their money easily, keep it in safekeeping and invest it so that it grows. While post offices have tried to address this through postal savings banks, people



are often lured by Ponzi schemes that promise much higher returns.

Similarly other concerns of people being indulge unconsciously in these frauds are lack of literacy especially digital and financial literacy. Inadequate financial inclusion, especially in rural India, is the other bottleneck in curbing these frauds. Schemes like PM Jan Dhan Yojna are steps in the right direction. Also a lot of paperwork in formal saving schemes troubles rural population and act as a push factor for them towards these ponzi schemes.

Collective Investment Management Company

A Collective Investment Management Company is a company incorporated under the provisions of the Companies Act, 1956 and registered with SEBI under the SEBI (Collective Investment Schemes) Regulations, 1999, whose object is to organise, operate and manage a Collective Investment Scheme (CIS).

According to the Securities Laws (Amendment) Act, 2014, a CIS is any scheme or arrangement which pools funds from investors and involves a corpus amount of 100 crore or more. Every CIS has to compulsorily register itself with SEBI, file offer documents for its schemes and obtain a credit rating from a recognised rating agency. It allows investors to pool their money and invest the pooled funds, instead of buying securities directly as individuals.

Way Forward

Chit funds also played an important role in the financial development of people, especially in South India, by providing easier access to credit. In urban areas of Tamil Nadu, Karnataka, Andhra Pradesh, Kerala, 5 to 10% of households participate in registered chit funds. In Kerala, chitty (chit fund) is a common phenomenon practiced by all sections of the society. A company named Kerala State Financial Enterprise exists under the Kerala State government, whose main business activity is the chitty.

Until a few years ago, everybody felt that every entity that could possibly raise money from retail investors was covered by the elaborate regulatory framework of one of the financial market regulators SEBI, Reserve Bank of India (RBI), Insurance Regulatory and Development Authority (IRDA) or Pension Fund Regulatory and Development Authority (PFRDA). But in recent years, it has become clear that dozens of such schemes have been flourishing outside the ambit of regulators. And though they all claim to be legitimate, hardly any of them has sought registration with SEBI as CIS, despite it being a legal necessity. Since chit fund payments aren't insured by

the government, the system is a riskier method of saving than using a bank savings account. Both organizers and subscribers in chit funds are exposed to credit risk because subscribers might default on their periodic payments. One analysis of data from two chit fund companies found that 35% of subscribers have defaulted at least once in their tenure at one of the companies and 24% of them have defaulted after taking winning an auction for the pot.

Therefore along with providing legislations for regulation of this sector, government needs to ensure its implementation too. Also it needs to focus on other aspects like financial inclusion, digital and financial literacy. Tailor-made investment schemes with simple and less paperwork for rural India can go in long run, making them invulnerable to these frauds.

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.

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3. US-AFGHAN TALIBAN PEACE TALK

Background

Following the September 11, 2001 attacks, the US, supported by its western allies, invaded Afghanistan with the stated aim of dismantling the Al Qaeda network, removing Taliban from power and creating a viable democratic state to deny terrorists a base to recruit, train and operate from. 17 years later, after having spent more than a trillion dollars and the death of tens of thousands, violence continues unabated in an inconclusive war in Afghanistan. Unmindful of the

violence that continues to be unleashed by the Taliban to maintain pressure, Washington has initiated the process for a dialogue with the terror outfit. Now, it has abruptly announced the withdrawal of 7000 of its 14000 troops deployed in Afghanistan, possibly to convince the Taliban that it is serious about withdrawing its forces.

The Dialogue

At the end of July 2018, the US reversed its longstanding policy that any peace process would be 'Afghan owned

and Afghan led'. The US appointed Ambassador Zalmay Khalilzad as the Special Representative for Afghanistan Reconciliation.

In a meeting of December 2018, apart from Khalilzad, representatives from Pakistan, UAE, and Saudi Arabia attended this Pakistan sponsored meeting. Taliban officials from the movement's political headquarters in Qatar, two representatives sent by Mullah Yaqub, elder son of Taliban founder the late Mullah Mohammad Omar, and three representatives from





the Haqqani Network were said to have been present. It is significant that among those who attended the meeting, Saudi Arabia, UAE and Pakistan were the only three countries that had recognised the Taliban government during its five-year rule from 1996 to 2001.

Taliban's Stance

Taliban's demand for the peace process has two parts, the first part is with Americans; all those matters which are related to Americans like the withdrawal of their forces, the black list and officially recognizing our political office (in Qatar) and other issues which are related to the Americans; they should be discussed with America on the table.

The second part is those matters which are related to the Afghan side which are mostly internal affairs like the future government, the constitution and there are many other issues; can be discussed with the Afghan side.

Thus, the Taliban's demands for peace in Afghanistan have been that all foreign troops must leave, full Islamic law and customs must be implemented, and the political system must not conflict with the Sharia. Further Taliban does not consider the current government in Afghanistan as legitimate.

The Taliban has been consistent in this stand, having maintained an upper hand militarily. According to the latest quarterly report of the US Congress created office of the Afghanistan Special Inspector General for Afghanistan Reconstruction (SIGAR), as of July 31, 2018, the government of Afghanistan has uncontested control over only 56 percent of the territory, while 32 per cent is contested.

Concerns

 The conflict in Afghanistan is not born out of the difference between Afghan government and taliban, it is the matter of ideology, faith and beliefs.

- Taliban wants to govern the country under the theocratic rule not under man made constitution. Taliban is still connected to Al Qaeda and no major fight between Al-Qaeda and ISIL in Afgh-anistan is witnessed , they silently accommodating each others.
- There is no doubt that the Taliban will be a major player in the politics of Afghanistan in the coming months and years. They already control more than 50% of the country and are getting stronger and bolder by the day.
- Russia has reason to worry about a lack of stability in Afghanistan because of its concerns regarding a spread of radicalism as well as the drug menace.
- China has even stronger concerns, given the situation in its Westernmost Region, as historically Uighur militants angry at Beijing's dominance of Xingiang (China's Westernmost Region) have used Afghanistan as a staging point for camps to train.
- The U.S. might have apprehensions about China entrenching itself in strategically important Afghanistan, but there is little it can do about it; a regional agreement on noninterference might give the U.S. at least some comfort.
- It is early days to conclude whether the situation in Afghanistan has entered its end game. In any case, it would be prudent to assume that the U.S. will definitely leave Afghanistan in the next two years, likely to be followed by other western countries. No other country will offer to put boots on the ground, nor should they; certainly not India.

Conclusion

The US perhaps realises that it has lost the war and has no chance of winning. It probably doesn't matter to Trump as to who rules Afghanistan or how its people are governed. He seems to have reconciled himself to the fact that Afghanistan may become an 'Islamic Emirate of Taliban' with Sharia Law being imposed with or without the consent of the people.

Rather than waiting for the situation to deteriorate, it is time to think through the implications of the US withdrawal from Afghanistan, the possibilities of the US initiated Peace Talks fructifying, and its responses if things go wrong. India has not been invited for peace talks and as such. Apart from keeping a close watch on the developments and movements of militants in and out of Afghanistan, it may not take any active part for the present.

However, should Taliban take control of Afghanistan, the country needs to be prepared for Pakistan channelling some of the Afghan based terror groups to the Kashmir Valley. The government would do well to activate its strategic communications machinery to keep the people, especially those in the Valley, informed about the happenings in Afghanistan and its implications so as to counter Pakistani propaganda which is bound to gather steam as events unfold.

General Studies Paper-II

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

Topic: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

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4. THE STRATEGIC IMPORTANCE OF ARUNACHAL PRADESH

Why in News?

Prime Minister of India has laid the foundation stone of projects in Arunachal Pradesh worth more than Rs. 4,000 crore. He also laid the foundation stone for the Sela Tunnel Project, in Arunachal Pradesh. The Project costing Rs. 687 crore being constructed by the Border Roads Organisation (BRO), would be completed in the next three years.

Introduction

Arunachal Pradesh is one of the 29 states of India and is the Northeastern-most state of the country. Arunachal Pradesh borders the states of Assam and Nagaland to the South and shares international borders with Bhutan in the West, Myanmar in the East and is separated from China in the North by the Mac-mohan line.

Arunachal Pradesh's significance for India lies in its geography; the state extends a protective arm around much of India's Northeast. The nearly 4000-km-long Line of Actual Control between India and China touches areas from Jammu and Kashmir to

Arunachal Pradesh. According to an annual report (2018-19) prepared, and released earlier this month by the Central Public Works Department, the agency has been asked to construct 44 "strategically important" roads along the India-China border to ensure quick mobilisation of troops in case of a conflict. The report came at a time when China is giving priority to projects along its India borders. In 2017, Indian and Chinese troops engaged in a faceoff at the Doklam tri-junction after the neighbouring country had begun building road in the area. The standoff ended on August 28 following a mutual agreement under which China stopped the construction of the road and India withdrew its troops.

The lack of motorable roads and rail connections in India's Northeast and Arunachal Pradesh in particular were seen as distinct disadvantages for India vis a vis China in the region. Many analysts had warned Indian of China building infrastructure including access roads right up to the Indian border that would give it strategic advantage in any conflict with India.

Siachen Glacier Aksai Chin CHINA Western Sector (1570 Kms) J&K TIBET Eastern Sector Central Sector (1325 Kms excl.Bhutan) (545 Kms) INDIA BHUTAN **DISPUTED AREAS** Mc Mahon Line BANGLADESH ;

China repeatedly slams visits by Indian leaders and foreign dignitaries to the state, which it claims as part of South Tibet and its own. It has recently objected to a visit of the Prime Minister of India to Arunachal Pradesh. While the government of India said that 'the state of Arunachal Pradesh is an integral and inalienable part of India. Indian leaders visit Arunachal Pradesh from time to time, as they visit other parts of India.

Importance of Tawang

Control over Arunachal Pradesh is essential for India's defense of the Northeast and Tawang plays a key role in this defense. Tawang is a critical corridor between Tibet and the Brahmaputra Valley. During the 1962 border war, Chinese troops invaded India through the Bum La pass, located North of Tawang town, before going on to occupy a large swath of territory in the Northeast.

Tawang's significance goes beyond geostrategic concerns; it has strong historical, cultural and ecclesiastical links with Tibet. It's predominantly occupied by Monpa tribal population practicing Tibetan Buddhism and speaks a language similar to Tibetan. Tawang is an important center of Tibetan Buddhism. The 6th Dalai Lama was born here. The town is home to the Tawang monastery, the largest Tibetan Buddhist monastery in the world after the Potala Palace in Lhasa.

Tawang is also politically significant. When the Dalai Lama fled Tibet in 1959 in the wake of China's suppression of the uprising there, he crossed into India through the Bum La pass and stayed at the Tawang monastery for some weeks. Thus, Tawang figures prominently in the history of Tibetan resistance against Chinese rule.

Bones of Contention

Boundary Dispute

The McMahon Line boundary dispute is at the heart of relations between China and India. The china claim is in the Eastern sector over a region included in the British-designated North-East Frontier Agency,



the disputed part of which India renamed Arunachal Pradesh and made a state. India's sovereignty over the area is internationally recognized.

While China does not claim that the entire Arunachal belongs to China. It only claims that Southern Tibet belongs to China. Arunachal includes most of Southern Tibet. As China and India did not reach any boundary agreement, so the current boundary is formed by historical agreement. According to historical agreements, China believes that Southern Tibet belongs to China, and India believes that it belongs to India according to the McMahon Line. The point of the problem is that the McMahon Association has not been recognized by any Chinese central government. So it is not legal in international law. It was only signed by the Chinese local government of the rebellion in China. Chinese officials refused to sign, while the Indian counter to that it recognised Tibet as an integral part of China and China undertook to respect the religious and cultural traditions of the Tibetans. In 1959, a rebellion took place against Chinese rule in Tibet, and the Dalai Lama fled to India with his followers. This large-scale influx of Tibet refugees into India headed by the Dalai Lama led to heightening of tensions. The Chinese regarded the hosting of the Dalai Lama, Tibetan refugees and the government in exile as an obstacle to India China relations.

Other Disputes

There is more to China's claim over Arunachal Pradesh than a mere contest to possess this large strip of sparsely populated mountainous territory. The state is where almost all of the major tributaries of the mighty Brahmaputra originate from, and therefore controlling it would virtually amount to possessing a vital resource in dominating not just the rest of the Indian Northeast, but also Bangladesh.

China has started accommodating people in the region close to Arunachal Pradesh border. A settlement in the region will serve two main purposes; it can claim the area on humanitarian ground, because India does not have any significant population residing close to the border. Also, it can use the water of rivers in the name of development to suit its own interests, which will put India at a huge disadvantage. And it can set up the military base in the region due which it can gain the territory in future if war happens.

The practice of issuing stapled visa instead of proper visa by the Chinese embassy to Indian citizens from Arunachal Pradesh and Jammu & Kashmir has been another contentious issue between the two nations. China issues stapled visas to residents of Arunachal Pradesh as it claims that the state is "disputed," even as India continues to denounce the stance. China's stapled visa policy has prevented residents from the border state of Aruanchal Pradesh from travelling to that country, making it a contentious issue in bilateral relations.

Development Works in Arunachal Pradesh

India is taking steps for economic growth, though slow, has progressed, notably with the development of some of the state's vast hydroelectric potential. Efforts have been made to improve infrastructure, including extending roads into some remote areas, building the state's first rail line and expanding access to electricity, drinking water and telecommunications facilities in tribal villages. However, some of those efforts have raised calls for concern among environmentalists and others who wish to preserve the natural landscape.

 Arunachal Pradesh got its first dedicated 24x7 television channel, DD Arunprabha. Arunprabha channel will be equipped with

- state-of-the-art facilities, including a digital satellite news-gathering unit to provide live coverage from remote areas, for 24x7 telecast.
- Recently, Prime Minister of India has laid the foundation stone for construction of greenfield Airport at Hollongi and inaugurated an upgraded and retrofitted airport at Tezu in Lohit district at a worth of Rs 125 crore. The Tezu airport will connect Guwahati, Jorhat and Hollongi.
- Dhola-Sadiya Bridge: The 9.15 km long Dhola-Sadiya bridge over the River Brahmaputra, in Assam will ensure 24X7 connectivity between upper Assam and Eastern part of Arunachal Pradesh, marking a major transformation from the ferry-based, day-only connectivity that collapsed during floods. It will also reduce the distance and travel time between the two states. The distance between Rupai on NH-37 in Assam to Meka/Roing on NH-52 in Arunachal Pradesh will be cut down by 165 KM.
- Bogibeel Bridge: The 4.94 km long rail-cum-road bridge in Upper Assam's Dibrugarh district will not only enhance India's national security, but it will also improve Upper Assam's connectivity with Northern Assam and Arunachal Pradesh. The bridge, fourth over the Brahmaputra, will be of strategic importance, for it will boost India's ability to transport troops and supplies to its border with China in Arunachal Pradesh.
- Two important projects under Swadesh Darshan Scheme were inaugurated at PTSO Lake in Tawang, Arunachal Pradesh to boost the tourism industry in the state. The region received a total of 1.69 lakh foreign tourist visits during 2017 as against 1.45 lakh in 2016 registering a growth of 16.7% over 2016. The Domestic Tourist



Visits reached to 95.47 lakhs in the year 2017 against 77.71 lakhs registering impressive double digit growth of 22.8% over 2016.

China's Continuing Tests and Protests

China's aim to expand its territorial gains in Arunachal Pradesh through salami slicing are often also combined with road-building and other infrastructure projects. Such projects bolster the effectiveness of its tactics as well as China's claims of jurisdiction over the territory and exploit India's strategic disadvantage resulting from its poor infrastructure along the border. Indeed, India has constructed barely 963 km of roads along the Line of Actual Control, and has not begun construction on any of the 28 strategic railway lines planned along the border areas. China, on the other hand, has systematically built an infrastructure network of roads, highways, railways, and military assets in the Tibet Autonomous Region, which can support over 15,000 soldiers.

Beyond salami-slicing, China has also tested India's resolve by consistently lodging protests with the government when any Indian official has visited Arunachal Pradesh. As Chinese ambitions in the region have grown in recent years, so, they have lodged such protests, the latest of which came when India's Prime Minister visited the state. However, despite such tests and protests, India has remained firm.

India's Firm and Uncompromising Stance

In the face of such forceful criticisms and tests, India adopted a position of "physical denial" rather than simply expressing its disapproval of Chinese incursions or lodging diplomatic protests with the threat of punishment. This strategy was extremely effective in Doklam and was replicated when Indian troops pushed back Chinese

troops who had crossed the border into Arunachal Pradesh and were attempting to construct a road. In repelling Chinese troops and seizing the road construction equipment, India prevented China's bid to change the status quo. Such a strategy has been historically successful. India has successfully pushed back Chinese troops in earlier standoffs.

As China continues to implement its salami-slicing tactics of challenging India's tolerance on the border and trying to embarrass India's leadership, India has stood firm, physically and rhetorically denying China the opportunity to enact de facto changes to the status quo along the border. While such a strategy of denial has been effective, India must acknowledge its limitations and make urgent progress on matching China's infrastructure and military build-up along the border. This progress, however, must not come at the expense of India's broader strategy against China, which depends on greater assertiveness against Chinese encroachment, not just along the border, but in the wider Indian Ocean region as well.

About Sela Tunnel

Sela tunnel will cover a total distance of 12.04 kms which consist of two tunnels of 1790 and 475 meters. It aims to provide all weather connectivity to Tawang in Arunachal Pradesh — an area claimed entirely by China — and other forward areas. Once built it will cut travel time to Tawang by at least an hour for Indian troops stationed in adjoining Assam's Tezpur town — the headquarters of the Indian army's IV Corps.

All weather connectivity to Tawang would be a game changer for the local population apart from the much required strategic edge for our security forces.

Once completed this would result in-

- Travellers would be able to avoid the dangerous snow covered Sela top at a height of 13,700 feet.
- It will allow faster troop mobility along the border to impart much needed strategic to Indian military force against china.

Way Forward

India faces many challenges but opportunities are also immense. The response to LAC today cannot be a limited to military deployment. It requires a political action and vision. It needs to show the same wisdom and vision inside its own border so that, these areas can be better integrated with the rest of India.

India should formulate a multipronged strategy to effectively counter Chinese ambitions. For this first, India must build up its defense posture in Arunachal Pradesh. It must ensure that any reiteration of the "One China" policy and recognition of Tibet as part of China be contingent on China's assurance that it rescinds its problematic visa policy with regard to natives of Arunachal Pradesh. Second, India should realize that China is vulnerable with regard to its energy supply lines in the Indian Ocean. Hence, India must link the Chinese posture on Arunachal Pradesh to offering its Indian Ocean cooperation to China. Third, the India-US defense framework should be tightened for creating alternative pressure points on China. Fourth, China is insecure with regard to Tibet and any protests there. India should communicate to China that the Tibetan government in exile's non-interference in Tibet issues is contingent on China's non-interference on issues with regard to Arunachal Pradesh. Fifth, the mechanisms of border talks must be kept robust.India should also use its growing influence to become a stabilizing force in Asia and vigorously use existing regional institutional mechanisms to resolve conflicting issues.

Along with this India must improve ground level infrastructure in Arunachal Pradesh on an urgent basis. Although the government has sanctioned many infrastructure project but the pace of implementation is still a issue requiring an urgent look.

Current Affairs: Perfect 7



Simultaneously India must work for empowerment of the people of Arunachal Pradesh by strengthening the institutions of democracy. Local political representatives must be held accountable for corruption and low implementation of developmental projects.

This century is considered as 'century of Asian power'. The geopolitical and economic power pole is shifting towards Asia which was in

Western region upto last century. In the Asian dominated world, China and India aims to become a super power. China has many economic problems surrounding them which have recently become more glaring. India is on the path of an economic leap forward with its huge demographic dividend, a positive political mood for reforms and a stable democracy. Any slowdown in economic growth will cost both nations heavily, politically and economically.

For china it even gets worse by an internal rebellion against communist party domination and restricted civil liberties. While India is trying to catch up the major powers.

General Studies Paper-II

Topic: India and its neighborhood-relations.

COC

5. THE LOOMING FEAR OF DATA COLONISATION

Why in News?

Calling data the new oil, Reliance Industries chairman Mukesh Ambani urged the Prime Minister Narendra Modi to take steps to end increasing "data colonisation" by global corporations, saying Indians should own and control their own data.

Introduction

Around the turn of the century, companies started realizing the economic value of data. Google started monetizing it, tailored ads based on search queries. Facebook did pretty much the same thing years later, in the context of social media. What these companies were doing was essentially using data for commerce to understand a customer's preferences. Between 2000 and 2010, data was used largely for this kind of monetization. And that is just the beginning. Increasing the control that individuals have over the manner in which their personal data is collected, managed and shared will spur a host of new services and applications. As some one put it, personal data will be the new "oil" - a valuable resource of the 21st century. It will emerge as a new asset touching all

aspects of society. To look at how data can disrupt, one need look no further than the digital advertising business in the US and the payments business in China. In the US, Google and Facebook have a 71% share of total digital advertising spending. In 2015-16, they captured 89% of all incremental digital advertising. China's mobile payments are a staggering \$5.5 trillion. The Chinese have done an amazing job of using QR codes for payments. These payments are dominated by two companies—Alipay, part of the Alibaba Group and Tencent Holdings' WeChat. These two companies own over 90% of the payments market in China.

Similary, Artificial Intelligence (AI) has been around as an idea for 40 years but the availability of data, a lot of it, changed its contours. The breakthrough was deep learning, which uses layers of neural networks to automate problemsolving. Interestingly, data combined with AI creates scale and speed. Take for example the case of Netflix in the US. Ten years back, it was stuffing a DVD in a FedEx envelope and sending it to people. It has data on who is watching what, when, how and what they like. It helped them to create

better programming. Today, it has over 100 million customers worldwide, that's the power of data.

Sources of Data

The Internet of Things (IoT) will soon bring 50 billion devices online. Realizing this many digital giants like Apple, Google, GE, Siemens, Amazon, Tencent, Baidu—are moving from products and pipes to platforms. These platforms enable products that solve problems but they also capture and own data produced in the interaction. They also use the data produced to become better at what they do. That, in turn, attracts more customers, generating more data. This leads to data domination.

India, with a population of 130 crore people, is having 121 crore mobile phones, 44.6 crore smartphones and 56 crore internet users generates a huge amount of data. Adding to this the government initiatives such as 'Digital India' which includes not just e-Commerce but also e-Communications and e-Governance. There are multiple risks from data domination: violation of privacy, data colonization and a winner-takes-all scenario that stifles innovation and



competition. The world is just waking up to this. India should too.

Data Colonization and its Challenges

'Colony' is a country or area under the full or partial political control of another country and occupied by settlers from that country. Colonization is a process by which a central system of power dominates the surrounding land and its components.

By those definitions, neither India nor any region of it is a colony of a dominant society, community or country anymore. However, India and its population is no longer a nation that is defined by its physical presence alone either. We are all living our lives within the geographical boundaries of India and within the virtual boundaries of Facebook, Twitter, Instagram, Google, Airbnb, Uber and hundreds of other mobile apps.

Colonising a country no longer requires its physical invasion with military strength but can simply be done by controlling activities through networks and databases with a single click. Data colonialism is the new deployment of a quasi-imperial power over a vast number of people, without their explicit consent, manifested in rules, designs, languages, cultures and belief systems by a vastly dominant power. Data colonialism describes the domination of Western companies in the provision of digital services in developing countries.

Our lives today are as much about our physical being as they are about our data. The only difference is that while we are conscious of our physical lives, we are seldom aware of how our data is being used by its custodians, which may not necessarily be a government but could very well be a multinational company based in a developed country.

Let's take the example of Facebook. Although it is not a country, the American company holds data, including personal and private information, of more than 150 million Indians. It not only holds our personal information but also tracks our daily routine, habits, behaviour, and communication. This extent of information about 150 million Indians is enough to help the social networking influence decisions, both giant democratic and consumerist, taken by individuals.

The use of the internet has exponentially increased in the last decade, exposing individuals thousands of benefits of a connected world, starting from making communication faster to accessing services easier. When we give our data to Google Maps, we know we're giving our private information in exchange of a traffic-free route to our destination - and we do this without thinking how our personal data may be used by Google.

Let's take the example of Aadhaar now. It is one of the largest databases of information about individuals and it is not restricted to data of connected people but extends beyond to those who are not connected, are poor, and are illiterate. There is a huge potential for this information being used to catch people in a virtual captivity.

Today our data is controlled as much by the Indian government as it is by Google. This dominance of data online is increasing the hegemony of multinational corporations over individuals all around the world. Gradually, borders will not decide control over people or their nationality. Instead, control over data will. The future of control over humanity will be decided by who owns how much of our data.

Time is running out and India needs to take a strategic view on data colonisation, privacy, and data dominance, it is a policy issue and not a technology issue that needs to be addressed soon.

Data Regulation in India

In India data is regulated time to time by the notification of government and its authorised agencies. Such as:

- The Reserve Bank of India (RBI) in April 2018 ordered companies to store the "the entire data relating to payment systems operated by them in a system only in India" so as to ensure "unfettered supervisory access" for "better monitoring".
- In December 2018, Department of Industrial Policy and Promotion (DIPP) issued a retrospective clarification of the Foreign Direct Investment (FDI) policy in e-Commerce which is likely to curb online marketplaces and possibly limit consumer access to goods.
- More recently, the Ministry of Home Affairs issued an order on December 20, 2018, which empowered ten security and intelligence agencies 'for the purposes of interception, monitoring and decryption of any information generated, transmitted, received or stored in any computer resource'.

The Srikrishna committee was tasked with coming up with a report and recommendations on what India's data protection regime should look like, especially in light of the Supreme Court's 2017 judgment that asserted the fundamental right to privacy for all Indians. The panel has delivered a report that covers its views on the data protection landscape in India.





International Comparison of Data Protection and Privacy Laws							
Country	European Union	Australia	Canada	India (proposed Draft Bill)			
Coverage of entities	Single law for private and public entities.	Single law for private and public entities.	Separate laws for private entities and federal government institutions.	Single law for private and public entities.			
Sensitive personal data	Does not include financial data and passwords.	Does not include financial data and passwords.	Not defined separately; any data may be sensitive based on the context.	Includes financial data and passwords.			
	Stor	age and Sharing of Data across	Borders				
Local storage of data	Not mandatory.	Not mandatory.	-	-			
Sector specific mandates, e.g., for health data.	Not mandatory.	Mandatory storage of a copy; critical personal data stored only in the country.	-	-			
Cross border transfer of data	Permitted if the receiving country has adequate standards of data protection, as assessed by the European Commission.	Permitted if the processing entity has taken steps to ensure that the recipient does not breach country's privacy principles.	Permitted if the processing entity uses contractual or other means to ensure comparable level of protection.	Permitted (for some data) if approved by the regulator or prescribed by the government.			
	Regulation and Enforcement						
Data breach notification	Potentially harmful breach must be reported to the regulator. Individual may not be informed if processing entity has taken corrective measures, or if it involves disproportionate effort.	Potentially harmful breach must be reported to the regulator and affected individuals.	Potentially harmful breach must be reported to the regulator and affected individuals (amendment not in force).	Potentially harmful breach must be reported to the regulator. Regulator will determine if the individual will be notified, on the basis of severity or need of an action by the individual.			
Criminal penalties	No criminal penalties.	No criminal penalties.	No criminal penalties.	Imprisonment up to five years for certain offences.			

Criticism

Indian data would probably remain in India, ready for exploitation by commercial interests, which, given the population, would likely yield large dividends. The unending reaping of Indian data would also serve political interests not just in terms of cracking down on opposing voices but in terms of tailoring political speech directed at individuals to suit their specific concerns.

An unregulated internet, would subject India to data colonisation and deprive Indians of their very own data. The benefits arising from internet penetration within the country should be exclusively enjoyed by Indians. Like China, India should adopt measures which promote local industry.

Pro-protectionist arguments for internet regulation, particularly from

Indian industry, can seem reasonable at first glance. Unfortunately, in their fine print, these arguments often say less about "Indians benefitting" than they do about "keeping non-Indians out" which, of course, assumes, without any demonstrable basis, that threats to Indians primarily come from beyond the country's borders.

Future Challenges

While tremendous value resides in the data generated by different sources, it often remains untapped. Unlocking the full potential of data will require addressing current uncertainties and points of tension, such as:

- Privacy: Individual needs for privacy vary. Policy makers face a complex challenge while developing legislation and regulations.
- Global governance: There is a lack of global legal interoperability, with

each country evolving its own legal and regulatory frameworks.

- Personal data ownership: The concept of property rights is not easily extended to data, creating challenges in establishing usage rights.
- Transparency: Too much transparency too soon presents as much a risk to destabilising the personal data ecosystem as too little transparency.
- Value distribution: Even before value can be shared more equitably, much more clarity will be required on what truly constitutes value for each stakeholder.

Way Forward

Data are to this century what oil was to the last one: a driver of growth and change. Flows of data have created new infrastructure, new businesses,



new monopolies, new politics and—crucially—new economics.

Beyond tensions of privacy and security, the alarming tension whose emergence we are witnessing is the one between control and freedom, not only of the individual, but of entire populations and regions. And this is indeed affected by regional and global politics. Some criticise it as a form of "digital colonialism" but very few countries, outside those who had to react in time to the threats out of necessity or lack of alternatives, seem aware about this new form of dominance, which is very seemless, without exercising any violence at all, but at a deep and exponential increase we never ever witness.

Given the speed at which Indians are adopting the digital life, India will go from a data-poor country to a data-rich one in three years. India has a unique digital infrastructure, a set of serendipitously developed public Application Programming Interface (APIs), such as eSign, Unified Payments Interface, Bharat Interface for Money, the Goods and Services Tax Network and eKYC, developed as public goods. India is the only country in the world

that can empower every resident with her own data, thanks to the technology infrastructure for inversion of data available due to Aadhaar and India Stack.

We must invert the data. It has to be owned by the user and used only with her consent. Individuals should be in control of their own data. It should be used to empower the individual, not the state, or the companies.

We need accelerated regulatory reform in the spirit of antitrust legislation. We need to contain the expansion of big tech and their ability to extract data from people on abusive terms. We need a reinvented knowledge and data commons, and we need to innovate collaborative, publicly funded forms of artificial intelligence for the common good.

This is not a job for grassroots movements alone. To burn down data colonialism, we need governments, municipalities, regions, cooperatives, collective forms of social innovation and collaboration. We need everyone to become aware of what's at stake, so we can take back our public infrastructure, and build our own sustainable platforms for the future.

What we need, apart from a strong data protection law, is an efficient consent process. This could take the form of data consent, Application Programming Interfaces (APIs)that allow consent collection, storage, and audits. And at any time, users have the right to pull out their data. They can choose what they want to be part of, and what they don't.

This prevents data colonization, yet enables and empowers AI. It tilts the privacy debate in favour of the user. And it creates real user choice at every level. Data empowered people. Inverting it allows freedom and choice. This is data democracy.

General Studies Paper- III

Topic: Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.

Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

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6. CINEMATOGRAPH AMENDMENT BILL, 2019: AN OVERVIEW

Why in News?

The Ministry of Information and Broadcasting recently published a draft amendment to the Indian Cinematograph Act of 1952, with the stated aim of countering film piracy. According to a report by global solution provider in digital platform security and media and entertainment, Irdeto, the Indian media and entertainment sector loses \$2.8 billion of its annual revenue to piracy and India is one of the top five countries for peer-to-peer downloads.

Introduction

The medium of cinema, the tools and the technology associated with it and even its audience has undergone radical changes over a period of time. There have also been many changes in the field of media and entertainment with the proliferation of TV channels and Cable network throughout the country, advent of new digital technology, apprehension of piracy, particularly release of pirated version of films on internet, causing huge losses

to the film industry and government exchequer.

Film industry has been demanding for a long time, that government should consider amendments to the law preventing camcording and piracy. Prime Minister made an announcement at the inaugural function of the National Museum of Indian Cinema at Mumbai on 19th January 2019 to tackle the menace of camcording and piracy. The Ministry of Information and Broadcasting (I&B) piloted this matter for consideration of Union Cabinet. The

Current Affairs: Perfect 7



Interim Budget presented early this month too took note of the need for anti-piracy measures.

The introduction of amendment bill is significant move to protect intellectual property in our country. This communicates to all stakeholders that as a country we respect and reward innovation and creativity, and will ensure that the rights of owners and creators of this intellectual property are safeguarded.

The proposed amendments would increase industry revenues, boost job creation, fulfill important objectives of India's National IP Policy and give relief against piracy and infringing content online.

Laws Protecting Copyright and Piracy in India

Piracy and Indian Copyright Act

The Indian Copyright Act, 1957 as amended from time to time and the Indian Copyright Rules, 1958, governs the system of copyrights in India. Copyright is a right given by the law to creators of literary, dramatic, musical and artistic works and producers of cinematographic films and sound recordings. In fact, it is a bundle of rights including, inter alia, rights of reproduction, communication to the public, adaptation and translation of the work. The enactment of the Copyright Act, 1957, Copyrights Rules, 1958 and the amendments thereto protects the interests of the creators of intellectual property while protecting the interests of the public at large.

Music theft or piracy is constantly evolving as technology changes. Many different actions qualify as piracy, from downloading unauthorized versions of copyrighted music from a file-sharing service to illegally copying music using streamripping software or mobile apps. Copyright law protects the value of creative work. When you make

unauthorized copies of someone's creative work, you are taking something of value from the owner without his or her permission.

The Berne Convention

The Berne Convention provides for a minimum terms which applied uniformly to all signatory nations which is 50 years after the life terms of the author, however the signatories are free to increase the terms of protection, but not to reduce less than the agreed international consensus. For example, in Europe and United States, the term of protection is life plus seventy years.

Copyright in India, subsists for a period of 25 to 60 years, depending upon the nature of the work. The Act provides a copyright for works whether published or unpublished for a lengthy, though limited period of 60 years excluding the life of the author which shall commence to run after the death of the author. The municipal statute provides a longer term of 60 years post mortem auctoris, which is 10 years more than the international requirement under the Berne or the TRIPS agreement. However, in cases where the work falls under the category of a cinematograph film, sound recording, photograph, posthumous publications, anonymous organisations, the 60 years period is counted from the date of publication.

Infringement of Copyright

Copyright in a work is considered as infringed only if a substantial part is used unauthorizedly. What is 'substantial' varies from case to case. More often than not, it is a matter of quality rather than quantity.

For example, if a lyricist copy a very catching phrase from another lyricist's song, there is likely to be infringement even if that phrase is very short.

The following are some of the commonly known acts involving infringement of copyright:

- Making infringing copies for sale or hire or selling or letting them for hire;
- Permitting any place for the performance of works in public where such performance

- constitutes infringement of copyright;
- Distributing infringing copies for the purpose of trade or to such an extent so as to affect prejudicially the interest of the owner of copyright;
- Public exhibition of infringing copies by way of trade; and
- Importation of infringing copies into India.

A copyright owner can take legal action against any person who infringes the copyright and is entitled to remedies by way of injunctions, damages and accounts.

The Cinematograph Act, 1952

The cinematograph Act, 1918 was repealed by the Cinematograph Act, 1952 was amended by the Cinematograph (Amendment) Act, 1973 which made slight modifications to the Act for the purpose of standardizing the law relating to film and censorship. In India, the Censorship in presenting a movie is fully justified under the Constitution and it is done for the benefit of the society. The Cinematograph Act is a Central legislation that came in to force on July 28, 1952 which provides for the establishment of competent authorities to censor movies and prevent the exhibition of films that are against the culture of our society. The Act extends to the entire Indian territory but certain provisions shall cover the State of Jammu and Kashmir only after the amendment of the Act in 1973.

The Act prohibits the presentation of a film through cinematograph other than in a place where license is granted or according to the conditions provided under the license. The District Magistrate shall have power under the Act to provide license to the persons to present films by cinematograph. But license shall be granted by the authority



consistent to the provisions of the Act and the rules made there under. The license obtained by a person shall be cancelled if such person is found to be convicted for an offence.

Cinematograph Amendment Bill, 2019

The Ministry of I&B has introduced the cinematograph Amendment Bill, 2019. The Ministry has called for public comments on the draft amendment bill. Film industry bodies have hailed the move as a necessary step to combat film piracy. The Bill seeks to amend provisions of Cinematograph Act. 1952 in order to tackle film piracy by including penal provisions for unauthorized camcording and duplication of films. Section 7 of the Cinematograph Act prescribes the penalties for contravention of offences related to the Act. The draft amendment:

- Uses non-obstante language to override any contrary terms of the Copyright Act.
- Goes on to state that any person who:
 - a. in the course of the exhibition of any 'audiovisual work, cinematographic';
 - b. in an 'exhibition facility;
 - c. without express permission from the copyright owner.

Makes a recording of the film or of the sound recording in such film, shall be punished with:

 Imprisonment for a term not exceeding three years and liable to a fine not exceeding 10 lakhs, or merely imprisonment or both.

Analysis of Amendment Bill

While a legislation for countering film piracy is a much needed one but there are several issues with this draft amendment, least of all the shoddy drafting. The poor drafting is reflected in repetitive and redundant wording of the punishment proposed for the offence.

Some terms in the draft amendment are also unclear and undefined. For example, the Cinematograph Act does not define an 'exhibition facility', although the section applies only to exhibitions of cinematographic films and their sound recordings in such facilities.

Further, there is no clear rationale for placing such a provision in the Cinematograph Act and overriding the Copyright Act, as the former is the law for the certification of films and does not concern the rights or entitlements of copyright holders, a subject squarely covered by the latter. In fact, the entire subject of film piracy is squarely one of infringement already covered under the Copyright Act.

The offence is broadly worded and captures the making of a copy of a film or its sound recording or any part thereof, which can also include making short clips of the movie on your phone, for any purpose, without an exception. By overriding the provisions of the Copyright Act, the amendment fails to consider the right of fair dealing which is available under the Copyright Act under Section 52, and which protects certain non-permissioned uses of copyrighted works, such as for personal use or criticism or review.

Finally, the penalties proposed in the draft amendment are blunt disproportionate. The draft amendment mandates up to three years in imprisonment with the possibility of an additional fine. As per its current drafting, there is no option where the offence may be punished with only a fine, either. This is a heavily disproportionate sanction for merely the act of creating a copy of a film or a part of a film, without making any finding of wide-scale abuse of rights at a commercial scale, which is what antipiracy measures should actually aim to counter.

Information Technology Act, 2000 and On-line copyright Issues

The following provisions of the Information Technology Act, 2000 are relevant to understand the relationship between copyright protection and information technology:

- (a) Section 1(2) read with Section 75 of the Act provides for extra-territorial application of the provisions of the Act. Thus, if a person (including a for national) violates the copyright of a person by means of computer, computer system or computer network located in India, he would be liable under the provisions of the Act.
- (b) While adjudging the quantum of compensation, the adjudicating officer shall have to consider the following factors:
- The amount of gain or unfair advantage, wherever quantifiable, made as the result of the default;
- 2. The amount of loss caused to any person as a result of the default;
- 3. The repetitive nature of the default.

Thus, if the copyright is violated intentionally and for earning profit, the quantum of damages will be more as compared to innocent infringement.

Sustainable Solutions for Online Piracy

It is hard to substantiate the monetary loss caused by online piracy of Indian media content abroad, as the industry is currently serving this market only in a very limited way. Since hardly any sales displacements are happening, it is hard to agree with the views of the industry that internet piracy is causing substantial loss to the Indian film industry. But merely because internet piracy within India is currently not that substantial, does it necessarily mean that online piracy cannot be a threat for the Indian film. It would be in the long term interests of the industry to address the issue of online piracy and reduce the supply of pirated products before more consumers get acquainted with online pirated products.





It is also important for the industry to recognize that by reaching the consumers abroad with legitimate product access options, they could substantially increase their revenues thereby also increase investments in quality and diversity of movies. The most important measure to be taken in this regard is decreasing the waiting period for providing legitimate access of movies to consumers abroad. As the information flow on the new movie releases were slow in the predigital era, the film industry could have earlier expected the consumers abroad to wait patiently for several months to watch a new movie.

Another equally important measure to be taken is the collaboration within the industry for building affordable, easily searchable and accessible databases of movies. This requires cooperation among movie producers with regard to licensing of their contents. On the other hand, one can see highly appreciable efficiency in the organising of contents in pirated movie platforms.

- First, producers from different regional film industries within India could join hands and start new databases offering similar experiences for consumers within and outside India.
- Second, they could also try to negotiate with infringers for building revenue-sharing business models and convert the infringing platforms to legitimate access platforms. While such efforts would



have many positive externalities for the society in general, including provision of alternate legitimate income for infringers, it could also save considerable money for the producers. This includes avoiding the costs involved in hosting movies online and avoiding the reconversion of analogue prints to digital formats.

Finally, the Indian film industry should also show willingness to follow the changing consumer preferences and try to adapt their business models to those changes.

Way Forward

The provisions of the above mentioned two enactments show that the Copyright protection in India is strong and effective enough to take care of the Copyright of the concerned person. The protection extends not only to the Copyright as understood in the traditional sense but also in its modern aspect. Thus, on-line copyright issues are also adequately protected, though not in clear and express term. To meet the ever- increasing challenge posed by the changed circumstances and latest technology, the existing law can be so interpreted that all facets of copyright are adequately cover. This can be achieved by applying the purposive interpretation technique, which requires the existing law to be interpreted in such a manner as jus done in the fact and circumstances of the case. Alternatively, existing laws should be amended as per the requirements of the situation. The existing law can also be supplemented with newer ones, specifically touching and dealing with the contemporary issues and problems.

The Indian film industry has always played a significant role in influencing the evolution of copyright law in India. Under the influence of

studies sponsored by the film and media industry, the Indian parliament has taken the view that online piracy is causing substantial loss to the Indian copyright holders and they have considered Cinematograph Amendment Bill, 2019 as the adequate solution to the problem. The Indian judiciary has also inadvertently supported this view by issuing many broadly worded orders that can affect the legitimate uses and users of internet in India.

The primary consumers those pirated products might be the (potential) consumers abroad, who are deprived of access to legitimate channels for watching Indian movies. It is high time for the industry to evolve innovative business practices to reach those potential consumers, rather than solely relying on threats against those consumers through technological and legal measures. If the industry attempts to continue with their age old business models through legal and technological protection measures it may only deviate their (potential) consumers to other avenues of entertainment in the digital world.

Till the country has such a sound and strong legal base for the protection of Intellectual Property Rights, the judiciary should play an active role in the protection of these rights, including the copyright. The situation is, however, not as alarming a perceived and the existing legal system can effectively take care of any problems associated with copyright infringement.

General Studies Paper- III

Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

CCC



7. FOOD INDUSTRY AND NIFTEM BILL, 2019

Why in News?

In recently held budget session, the government introduced the 'National Institutes of Food Technology, Entrepreneurship and Management Bill (NIFTEM), 2019 in Rajya Sabha to declare two institutes of food technology in Haryana and Tamil Nadu as institutions of national importance and enabling them to provide financial autonomy for starting new courses and research.

Introduction

Food has become a high-profit industry by reason of the scope it offers for value addition, particularly with the food processing industry getting recognized in India as a high-priority area.

The Indian food industry is poised for huge growth, increasing its contribution to world food trade every year. In India, the food sector has emerged as a high-growth and high-profit sector due to its immense potential for value addition, particularly within the food processing industry.

Accounting for about 32 per cent of the country's total food market, the government of India has been instrumental in the growth and development of the food processing industry. The government through the Ministry of Food Processing Industries (MoFPI) is making all efforts to encourage investments in the business.

In order to achieve the expected returns on investment through good quality and right value addition, application of technology has become imperative, leading to an unprecedented demand for scientists, technologists and other professionals who can manage the emerging challenges of the food processing industry effectively.

The concept of processed foods has caught the imagination of consumers in recent years because of their enhanced convenience, variety, nutrition and taste. The challenge therefore lies in continuously developing new variations of food items, as well as new processes that will maximize its appeal and shelf-life, and minimize the use of chemicals and preservatives.

The food processing industry covers a range of food products. These include the basic or primary foods such as wheat and rice products, sugar, oil and pulses and the processes for converting them into edible form and the processed foods such as biscuits and bakery products, confectionery, dairy products, breakfast foods, meat and fish products, fruit and vegetable products and all such items which are processed and packaged to enhance and prolong their edible life.

The swelling consumerism has seen the introduction of a range of new products like ready-to-eat snack foods, breakfast cereals, textures vegetable protein foods and so on. Different brands of the same item and attractive packaging vie for the consumer's attention.

NIFTEM Bill, 2019

The objective of the bill is to confer the status of institutions of national importance to 'National Institute of Food Technology, Entrepreneurship and Management' (NIFTEM) at Kundli, Haryana, and the 'Indian Institute of Food Processing Technology' (IIFPT) at Thanjavur, Tamil Nadu.

The legislation would provide for functional autonomy to these institutes to design and develop courses, undertake research activities and leverage enhanced status in their academic pursuits of food processing technology, so that they become world class institutes. The institutes would implement the reservation policy of the government and would also undertake special outreach activities for the benefits of concerned stakeholders. It would enable the institutes to provide world class teaching and research experience by adopting innovative practices.

In future, the legislation would be helpful in opening modern food processing industries (FPIs) in the country and will create handsome job opportunities for youth in the sector. In addition to it, it will pave way for better utilization of unused agricultural produce, helping in doubling the farmer's income by 2022 and increasing the contribution of agriculture in gross domestic product (GDP).

Food Processing: A Sunrise Industry

The food processing sector contributed 1.6 % of India's GDP in 2014-15. It made up 10.12% of GDP attributable to agriculture and 9 % of manufacturing GDP during the same year. Between 2011-12 and 2014-15, the food-processing sector grew at an annual average growth rate of 2.3 %, relative to the 1.7% growth rate in the agriculture sector. The sector is an important source of direct and indirect employment, accounting for 11.95% of formal employment in 2012-13. Food processing industries cover a wide array of activities ranging from traditional agrobased industries such as rice and flourmills to the processing of tea and coffee to the dairy industry.

Relevance of the Bill

Economical

- Boost the utilization of agricultural produce.
- Crate opportunity for farmers.
- Provide highly skilled personnel.
- Increase in entrepreneurship.





- Increase in Foreign Direct Investment (FDI)
- Increase in the 'Para diplomacy' among states.
- Generate employment in various sectors.
- Modern FPIs would flourish.
- Increase in export of agri-produce.
- Helpful in doubling the farmer's income by 2022.

Agricultural/ Environmental

- Development of agriculture and environment science.
- Enhances agricultural sustainability by:
 - a) Post harvest management of food crops.
 - b) Food security.
 - Agro produce waste management.
- Educate students about the importance of biodiversity ecological processes.

 Fosters an interdisciplinary perspective on environmental issues.

Social

- Wastage of food grains every year creates unrest in society, it would help in reducing it.
- Reduce gap between government and allied sectors.
- Skill based job creation would satisfy the minds of youth.
- New agricultural pattern and techniques to farmers.
- Higher education for all.
- Sustainability in food safety, standard quality food etc.

Challenges

The food processing sector contributes directly to economic growth through reducing food wastage, creating jobs and export earnings. However, growth and productivity are plagued by several challenges. According to the World Bank Enterprise Survey, value added per worker in agribusiness in China was

almost four times that in India in 2014. Food processing firms, particularly Small and Medium Enterprises (SMEs), have difficulties in accessing finance. The lack of quality infrastructure, including cold storage, storage for nonperishables, distribution networks and transportation, raise costs and inhibit competitiveness. Additionally, small farm sizes, restricted access to markets, uncertainty related to price, availability and quality of raw materials, and limited skilled manpower pose further challenges to the sector's growth.

What should be Done?

Apart from passing the NIFTEM bill from the parliament, there is need for other actions to rejuvenate the sector. Some of these actions are given below:

- Restructure the 'Essential Commodities Act' to provide exemptions to exporters, food processors, multiple outlet retailers and large departmental retailers from applicability of stock limits. This will enhance output and marketability of these products.
- ◆ Attract private investment in agribusiness through institutional reforms. These institutional reforms will include reforms in Agriculture Produce Market Committee (APMC) Acts, modern contract farming act, easier access to term loan credit instead of just crop loan credit, greater encouragement for farmer producer organisations (FPOs) and improved transport, power and communications.
- Infrastructure in rural areas.
- Improve logistics and storage facilities.
- Raise standards to converge with international standards.
- Set up food testing laboratories to ensure safety of products.
- Scale up initiatives that are integrated processing hubs such as Mega Food Parks.

Policy Initiatives by the Government in the Food Processing Sector

- 1. Investors Portal: Information on potential and opportunities for investment in the food processing sector and incentives provided by the Central and State Governments were made available to the prospective investors at a single point. The queries of the investors were received and answered through the portal guiding them and making it easier for them to take decision.
- **2. Food Map of India:** The Food Map enables investor to take decision with regard to locating their projects as the food map showed mapping of the potential of food processing in surplus production areas.
- **3. Priority Sector Lending:** Food and agro-based processing unit and cold chain infrastructure have been classified under agriculture activities for Priority Sector Lending. It will increase availability of additional credit for food processing activities and infrastructure.
- **4. Permitting 100% FDI:** Permitting 100% FDI in retail trade including e-Commerce of food products manufactured and or produced in India. This has enhanced investment opportunities in India globally and have generated interest among the leading world food retailers for making investment in India.
- **5. SAMPADA Scheme:** The SAMPADA Scheme will target creation of infrastructure and increasing capacities of processing and preservation in entire supply chain of food processing sector right from farm gate to retail outlets. It will help in integrating food processing units and food trade with the farmers creating huge opportunities for employment of increasing income of the farmers.
- **6. Model Law on Contract Farming:** The Contract Farming Law will integrate backward integration of the food processors with the farmers and attracting investment in post harvest management activities leading to increased benefit to the farmers and reduction in wastages.
- **7. National Policy on Food Processing:** The policy will provide a road map for holistic development for the food processing sector, the potential and opportunities for the growth of supply chain and promote food processing in the country to create employment opportunities and ensure wellness of the farmers.

Current Affairs: Perfect 7



Conclusion

The challenges for the food preservation, distribution and processing sectors are diverse and demanding and need to be addressed on several fronts to derive maximum market benefits. Presently, the organizations addressing the educational and R & D requirements are too few and there is a pressing need for supplementing efforts on this front. In the emerging scenario, the food engineering professional needs to develop sufficient awareness and appreciation of the relevant principles

of life sciences and physical sciences, as well as of a wide variety of other topics including: nutrition, preservation and storage techniques, processing unit operations, bio-processing, management, distribution and supply chain management, food laws and regulations and so on. Besides, the professional needs to develop an appreciation of R&D and innovation in critical technology areas such as: newer or novel process development in preservation and storage techniques, colloids and dispersal rheology,

systems, packaging polymers and composites, sensors for detection and process control, bioprocess engineering, and so on.

General Studies Paper- III

Topic: Food processing and related industries in India- scope and significant; location, upstream and downstream requirements, supply chain management.

COC

SEVEN SUBJECTIVE QUESTIONS WITH MODEL ANSWERS

Q1. "It is said that more than a manufacturing-centric Electric Vehicle (EV) policy, we need a set of ecosystem-level EV policies".

Comment in the light of constraints faced by EV industry in India. What are the advantages

of EV over conventional fuel

Approach

Introduction

vehicles?

Briefly explain manufacturing centric EV policy alony with ecosystem level EV policy by highlighting the differences.

Body

Explain in detail about how ecosystem level policy will take a holistic view of whole supply chain of EV vehicles than a manufacturing centric policy. Explain the major constraint faced by EV India with solution.

Highlight the need/major advantage of EV over conventional fuel vehicle.

Conclusion

Highlight the need of EV with reference to high pollution level in India.

Model Answer

Manufacturing-centric Electric Vehicle policy only focuses on building electric/hybrid vehicle whereas ecosystem level EV policy would deal with supply chain of EV right from sourcing electric power to disposing the used batteries.

The ecosystem level EV policy would consist of manufacturers of EV affordable battery; Source of electricity to power vehicle; Electric Grid connection and grid stability;

Building EV charging infrastructure; Afforda-bility of EV to consumers; abd Disposal of E-waste. Thus, it will help in addressing the various challenges faced by EV industry as follows.

Issues Faced by EV Industry in India

Source of funding: EV segment requires huge investment initially, whereas Automobile manufacturer are already under pressure due to implementation of Bharat Stage VI norms from 2020 and banks in India are cautious over new lending due to increasing NPA's.

High cost of Batteries: On an average, it costs around 40-50% of a typical mass segment electric vehicle.

Affordability: India's affordability index (population's ability to afford to purchase a particular item) is lower than developed economies due to lower per capita income.

Time consuming: It still takes longer to charge an electric vehicle than it does to refuel a conventional car at the pump.

Chemical pollution: Lack of ecofriendly disposal facilities of batteries in India to curb pollution

A scholar famously termed EVs as EEVs—Emissions Elsewhere Vehicles. But "elsewhere" may still be dangerous, given that point sources like coal plants are easier to clean up than millions of cars on road creating palpable air pollution Effective roll out of EV's would increase high level of electricity consumption.

Which cannot be supplied by conventional sources. So use solar photovoltaic (PV) to charge EVs could be envisaged. However solar, as

deployed today is intermittent and opportunistic. Solar power has a well-known bell-curved shape for maximum possible output, with a peak around noon, falling to zero output by night. This would create a possible disruption in the supply chain.

Another issue would be timing of the EV to be charged. If the majority of the vehicle is plugged during peak hours of the day time, it would be near impossible for the grid to cope with increased load. So night would be better alternative, but solar energy production stops during night. This anomaly needs to be tackled.

Building EV charging infrastructure—building such infrastructure in India is harder than in many countries due to land and grid limitations.

Need/Advantage of EV

Boost to Make in India Initiative: It will make Indian automobile industry a leading global hub for design, manufacture and export of pure electric vehicles.

Fighting climate change: A vehicle powered by low-carbon electricity rather thancoal will help in keeping total global warming below 2 degrees Celsius.

Achieving INDC target: India can save 64% of energy demand from the road sectorfor passenger mobility and 37% of carbon emissions in 2030.

Decrease in oil import bill thus improvement in Current Account Deficit (CAD).

Given the importance and need for EV, government has come with schemes like National Electric Mobility



Mission which aims to achieve national fuel security by promoting hybrid and electric vehicles in the country and FAME-India (Faster Adoption and Manufacturing of Electric vehicles in India) scheme.

The Indian government has set a target of having 30% EVs on its roads by 2030 under India's Electric Vehicle (EV) Mission 2030. To make this a reality government has to prepare a robust ecosystem which can promote and sustain EV segments in India. In the absence of Ecosystem level EV policy, we'll emit more carbon, creating more pollution and global warming, but, at worst, our already straining electricity grid could be pushed to near breaking.

Q2. What do you mean by block chain technology? Do you think block chain technology is going to revolutionize the financial sector in coming years. Analyze. Also, throw light on status of block chain in India.

Approach

Introduction

Explain block chain technology to convey to examiner that you know the topic with very simple words.

Body

Concentrate on two major parts:

First, a application of block chain in financial sector and wherever possible compare it with existing/previous technology. And, secondly, directly discuss present usage of block chain in India.

However its good if you mention some of the issues with block chain.

Conclusion

Talk about regulation of block chain as its being discussed widely now a days.

Model Answer

By 2030, Blockchain can cease all traditional banking services, says State Bank of India.

Blockchains are a new data structure that is secure, cryptography-based, and distribu-ted across a network. The technology supports cryptocur-rencies such as Bitcoin, and the transfer of any data or digital asset. Spearheaded by Bitcoin, block chains achieve consensus among distributed nodes, allowing the transfer of digital goods without the need for centralized authorisation of transactions.

Emerging applications of Block chain technology in financial services, uses Distributed Ledger Technologies which is a database that is consensually shared and synchronized across network spread across multiple sites, institutions and geographies.

Major uses of Block chain in financial sector

- acts as a medium of exchange making use of cryptography to make the transaction more secure and to regulate the creation of additional units of currency. Eg: Bitcoin, Ethereum, Ripple, Litecoin, etc.
- 2. Trade Finance: A complex transaction of the letter of credit can be made more simplified and prompt if all the big corporates, the big shippers, and manufacturers, as well as the customs authorities, are onboarded on blockchain network. The infor-mation is shared on the privately distributed ledger by the exporters, importers and their respective banks. After satisfying certain conditions the trade deal can be automatically executed through various smart contracts. The respective parties can view data as well as actions performed on their systems.
- **3. Capital Markets:** Blockchain can be used for directly transferring share ownership between the participants, instead of putting all

- transactions through a centralized hub. It huge potential for the stock market, because it offers security, faster exchanges risk reduction, trust and transparency.
- 4. Trade and securities servicing:

 KYC checks can be done much faster and economical with the help of KYC data stored in the blockchain. Blockchain will bring in transparency, reduced credit exposures, real time matching of transactions and a prompt irrevocable settlement. It eliminates intermediaries resulting in reduction in margin and collateral required.
- Supply Chain Financing: Small and medium-sized enterprises (SME) faces a lot of issues in accessing credit due to lack of sufficient collateral and credit history.
 Blockchain can boost supply chain finance by providing greater

security, efficiency and better

decision making.

- Monitoring of Consortium Accounts: One of the most important applications of block chain technology is to prevent the diversion of funds. The end use of funds is not tracked by the lender as the borrower makes multiple transactions in moving funds from one bank to another. Block chain technology helps in monitoring of end use of funds of a borrower funded by a consortium of banks. It will lead to a reduction in nonperforming assets (NPA) as the banks can have an eye on the end use of funds.
- 7. Digital Assets and Stocks: Allow stocks, bonds, tickets, reward points, digital keys, and other assets to be exchanged securely.
- **8. Smart Contracts:** Smart contracts relies on block chain technology and executes the terms of contracts.





- Identity: IDs can be created using block chain technology. Such block chain IDs can be used to login to websites without needing passwords.
- 10. Money Transactions: Cryptocurrencies provide people across the globe with instant, secure, and frictionless money. Block chains provide the permanent records, torage for every cryptocurrency transaction taken place and permits only verified transactions to be recorded on block chain.
- 11. Increase Efficiency: Reduces the transaction time by replacing the verification of every transaction in centralized system by self-verification from the users.
- **12. Protection of anonymity:** Since transactions are not recorded by any third party, the data of any transaction remains anonymous.
- **13. Data security:** Any breach in data or hacking of bank systems would not threaten the data security as the data is not stored at a central location.

Status of Blockchain usages in India

Bitcoins in India: Investment in bitcoin and other Cryptocurrencies increased tremendously in India in 2017. India accounts for more than 11% of global cryptocurrency trade.

The Finance Ministry issued a statement warning against investing in bitcoin and other Cryptocurr-encies. Likening crypto currencies to 'Ponzi schemes', it linked them to terrorfunding, smuggling, drug-trafficking, and money-laundering. Last year, the RBI had directed all banks to wind up any existing banking relationship with virtual currency exchanges and trader.

Banks are using the technology for vendor financing and for financing international trade. ICICI bank successfully executed its pilot project with Dubai's largest Bank - Emirates

NBD in cross-border remittances. By using the blockchain technology the time required to settle cross-border remittances has reduced from two days to few minutes. Axis Bank Ltd. and Kotak Mahindra Bank Ltd have jumped onto the Blockchain bandwagon in association with global financial institutions. They are mainly working in cross-borderremittance and the trade finance industry. Yes Bank has successfully implemented a blockchain transaction for Bajaj Electricals to digitize vendor financing. The State Bank of India (SBI) has become the first Indian bank in establishing afinancial Blockchain consortium of ten commercial banks.

Infosys and TCS are developing block chain solutions in areas such as anti-money laundering, cross-border remittances, assetregistry and loan syndication.

Challenges

Blockchain technology has enormous potential, but it has various challenges that may dampen the technology's adoption rate. The challenges include:

Interoperability: The technology does not have an international standard for competing block chain systems. Greater interoperability is needed to make the blockchain compatible with the wider web and to integrate them into existing practices and processes.

Privacy: Data on blockchain technology is inherently shared publically among all the participants of the system. There are various problems with respect to transaction privacy on block chain as the data is made public and anybody can see it. Private blockchains are much secure, but it faces interoperability issues with other blockchains.

Encryption: There are many issues related to encryption of block chain data. If the key is made public anybody can access the encrypted data and if someone loses the key to unlock the

Block chain, it is impossible to get it back. Encryption used in blockchain technology may be broken through loopholes in the system as people may find out new ways to manipulate or misuse the data.

Scalability: With growth in blockchain applications, the need for a larger block chain database is required along with the speed of access to database. Speed and accuracy of processing of a transaction will be of utmost importance to make it commercially viable.

Energy Consumption: There is enormous consumption of energy in the use of blockchain technology. Technology leaves a massive carbon footprint of its own. It requires huge computing power greater than the world's fastest supercomputers.

Legal Framework: Blockchain technology and its applications lacks a national and international regulations. Though various gove-rnments across the globe are exploring the applications of blockchain, but still more clarity is required on the legal aspects of blockchain technology.

Blockchain needs a serious look at its vulnerability and commerciality. Proper regulation for the use of blockchain is needed.India should effectively channel its technical human capital surplus to position itself as one of the pioneers during this upcoming wave of innovation

Q3. "Indo-Israel relation is mostly driven by national interest rather than any ideological readjustment". Comment. Do you think relation with Israel would impact India`shistorical commitment to the Palestinian cause?

Approach

Introduction

Highlight the importance of relation or changed dimension of relation between both the countries.



Body

Concentrate on major parts: Explain in detail about the bilateral relation between countries mainly driven by geopolitical and national interest. It is always advisable to mention few challenges when you are addressing questions of International Relation so that answer looks holistic.

About historical commitment of India. Explain briefly about historical aspect. Mention if you think India has tilted towards Israel with example. However it is must to mention about De-hyphenation policy.

Conclusion

Write some positive/optimistic statement about geopolitics of Asia mentioning the role of India.

Model Answer

India and Israel has completed 25 years of their diplomatic relationship which was marked by first Indian Prime Ministerial visit to Israel by Sri Narendra Modi in 2017.

India and Israel relationship can be broadly categorized into two part:

- a. BEFORE 1992: At this time, India maintained close relations to the Arab world and the Soviet Union , while Israel more inclined to the US and the Western Europe.
- **b. POST 1992:** In 1992 India and Israel established full diplomatic relations. It wasthe start of an era which has culminated to the following.

Defence Deals

- a. Today Israel is third largest defense supplier to India and India accounts for over 40 percent of Israel's defence exports.
- They range from Barack missiles to powerful Phalcon radar on AWACS (Airborne Warning and Control System).

National Security and Counter Terrorism

- a. Israel backs India's defence against terror and also completely understood India's nuclear tests in 1998.
- Mumbai attack in 2008 paved a way to creation of a joint working group to fight against terrorism.
- India is adopting hi-tech antiinfiltration systems and innovative tactics from Israel to safeguard its Western and Eastern borders.

Water and Agriculture

- a. Israel has become one of the foremost technology superpowers in areas such as rainwater harvesting, use of oceanic water and using that for irrigation in the most dry land.
- Israel has mastered water conservation techniques and India can learn from it.
- It helps India to face its water stressed condition.
- d. Another area of potential cooperation is cleaning polluted rivers.

Commercial Trade

- a. Commercial relations between the diamond traders in Gujarat and Israel grew from \$200 million to nearly \$5 billion with gems and jewellery accounting for nearly 40%.
- Science and technology, agriculture, biotech and space emerged as new areas of cooperation.

Tourism

- Tourism provided an impetus to people-to-people relations.
- India emerged as the preferred tourist destination for young Israelis wanting to unwind after their compulsory military service and Hebrew signage in Varanasi, Manali and Goa.

Start-ups

- a. Israel today boasts of nearly 4,500 start-ups and 140 incubators/ accelerators.
- In a recent study, NASSCOM and Accenture estimated that cooperation with Indian start-ups has the potential to generate \$5 billion within five years.

Differences

Difference in terms of Iran: Where on one hand Israel considers Iran an existential threat, India, on the other, has a historical relationship, and finds the cooperation with Iran useful for energy supplies and an alternative route through Chabahar port to Afghanistan and Central Asia.

Different approach towards Arab world: While Israel has inherent differenceswith Arab countries, India has significant stakes there and India's recent vote atthe UN against America's move on Jerusalem was a reflection of that underlying reality.

Stand on China: China is Israel's largest trading partner in Asia, there are strong technology and investment linkages between them.

Differences in terms of technology transfer: There exist differences between India and Israel over issues related to technology transfer, enduser agreements and a proposed free trade agreement, more so given India's policy of 'Make in India'.

The free trade agreement (FTA) is stuck because of the concerns from the Indian domestic industry.

Relation with Palestine

Indo-Palestinian relations have been largely influenced by the independence struggle against British colonialism. After India achieved its independence, the country has moved to support Palestinian self determination following the partition of British India. In the light of a religious partition between India and Pakistan, the impetus to boost ties





with Muslim states around the world was also a cause for India's support for the Palestinian cause. As a result India kept away from Israel till early 1990's. However the recent engagement by India with Israel over the years has made. Indian government to tone down its reactions to Israel's treatment of Palestinians. India is no longer initiating anti-Israel resolutions at the United Nations.

India has made serious attempts to moderate the Non-Aligned Movement's (NAM) anti-Israel resolutions.

Therefore, it can be said that while still maintaining its ideological support to Palestine, as evident by its recent vote in support of UNHRC resolution condemning Israel and Dehyphenation of relation between Israel and Palestine, India has become more pragmatic off late.

Indo-Israeli bilateral ties will increasingly be shaped by the rapidly evolving geopolitical realities in Asia and the Middle East. Israel will have to figure out its own response to this Asian flux.

Q4. Since Left Wing Extremism is result of accumulation of plethora of causes, the solution also has to be all encompassing. In this context, assess the effectiveness of Solution SAMADHAN by Ministry of Home Affairs.

Approach

Introduction

Briefly introduce Left Wing Extremism (LWE). You can elaborate about the expanse of LWE in India and gravity of the problem.

Body

Write the various causes for Left Wing Extremism in India.

In that context, suggest what all should be content of the solution.

Describe Solution SAMADHAN.

Assess if Solution SAMADHAN addresses all the causes of the LWE.

Conclusion

Suggest what else needs to be done to contain LWE.

Model Answer

The Left Wing Extremism poses one of the most serious internal security threats to India. They are active since the late 60s and 70s. The rise of left wing extremism can be attributed to various factors. Few such reasons are:

- 1. Lack of Governance: Governance in these regions lacks a long term strategic perspective. Priority of Government bodies is to focus on industrialization and they do not give much importance to people living in tribal areas. Tribal have been denied their constitutional rights and justice.
- 2. Socio-Economic Issues: Economic discontent was a prevailing factor which led to the growth of extremism in India. Towards the end of the 19th century, the economic conditions of the people became miserable due to unemployment and repressive financial measures of the government. The machinery to provide relief to the poor and needy was very slow. This kind of apathetic attitude of the Government provoked the people to rise in revolt more militantly.
- Lack of Education and increasing poverty also paved the way for the growth of left wing extremism.
- 4. The government has been mistaking industrialization for development. The tribal have been denied their constitutional rights and justice.

The cancer of Left Wing Extremism flourishes in poverty or backwardness. Therefore, Extremists' strategy is to ensure that the people of these area stay without electricity, without road,

without education, so that their vested interest continues unabated.

They not only target the Security Forces but also public property like roads, culverts, railway tracks, electricity and telephone towers, hospitals, schools, anganwadi and Panchayat bhawans etc, that are created by the Government for the benefit of the common man. Therefore, in order to tackle the menace of left wing extremism the government has to come up with an all encompassing policy.

SAMADHAN, is one such solution for the problem of anti-development left wing extremism. SAMADHAN stand for:

- S- Smart Leadership
- A- Aggressive Strategy
- M- Motivation and Training
- A- Actionable Intelligence
- D- Dashboard Based KPIs (Key Performance Indicators) and KRAs (Key Result Areas)
- H- Harnessing Technology
- A- Action plan for each Theatre
- N- No access to Financing

SAMADHAN Doctrine focuses on aggressive strategy to deal with LWE who have been causing heavy casualties on armed forces and the common man living in the left wing affected areas. It also aims at efficient utilization of technology to combat LWE.

However, it doesn't addresses the root causes of LWE i.e. governance deficit, poverty, deprivation etc. Solution SAMADHAN has mainly law and order centered approach.

But LWE has plethora of causes. However, it will build pressure on the Maoists and it shall be helpful in effectively implem-enting development works in LWE affected regions.

Solution SAMADHAN should be supplemented by dialogue and development process. It should



incorporate the civil society and the media to build pressure on the Maoists to eschew violence, join the mainstream and recognise the fact that the socio economic and political dynamics and aspirations of 21st century India are far removed from the Maoist world-view.

Q5. "No FIR, no arrest, no talk ...
Judgment on the spot. Mob
Trial seems to be the new fad in
India" Critically comment. Also
discuss the role of social media in
fomenting mob trial. (15 Marks)

Approach

Introduction

Briefly explain the context of the question by quoting some instances of mob trial. Alternatively you can also explain what is meant by mob trial.

Body

Give argument for and against the statement if mob trial has become the new fad in India.

Give reasoning for increasing incidence of mob trial in India.

Write about the role of social media in fomenting mob trial.

Conclusion

Give your suggestion to curb this increasing menace of mob trial.

Model Answer

Mob Trial is a situation in which a group of people get hold of an accused, declare that person guilty and they award the penalty as well. This is also termed as instantaneous justice in the hand of public. In this, no FIR is registered against the accused, no investigation is done and no hearing happens in the court.

It is definitely violation of rule of law, which says that only ordinary Judicial Court has the right to penalise a person. It is also a violation of Principle of Natural Justice, according

to which an accused must be given a right to defend himself/herself.

This way, several fundamental rights of a person viz. right to equality, right to freedom, right to life are also violated.

In recent times, the incidents of mob violence and lynching are on rise E.g. lynching in Dadari, Alwar, Manipur etc. Unfortunately, such incidences are not confined to certain areas and regions. Increasing incidence of mob trial is definitely a symptom of lawlessness and anarchy.

Reasons for Mob Trial

- 1. Rumour Mongering: Rumour spreads like wildfire and takes over the reasoning of common people, who takes laws in their hand.
- Policing is too ineffective in India.
 There is a perception that police is highly corrupt and criminals get away by spending some money. It is compounded by the fact that Justice delivery system is too slow. Justice delayedis justice denied. And when people feel that justice is denied to them, they take laws in their hands.
- 3. Religious intolerance: Many cases like lynching due to beef eating etc. emerges from the rising religious intolerance among communities.
- 4. Reducing value level of people:
 Lynching of helpless poor or
 oppressed people rises as a result
 of non-existent sensitivity of
 human dignity in our society.
- 5. Oppression disguised as mob violence: Many a times asocial elements and rabble-rousers take excuses as a weapon to target people.
- **6. Superstition:** Human sacrif-ices, parading naked after calling them witch are resul to prevailing

superstition in many parts of country. Odisha has the highest cases of witch hunt.

Though mob justice and lynching has been in India for quite a long time, this was because of prevailing inequality, superstition, lack of proper law and order, prejudice against woman. But the new rising trend is a setback. Misuse of social media is the new weapon used to foment anarchy:

Role of Social Media

- Fake news: It is the single largest cause of fomenting animosity. Social media isfull of fake news and often have political undertone.
- 2. Greater reach: Social media can reach a high number of people in very short span of time, leading to quicker assault. e.g. Lynching of three software engineers in Bengaluru.
- 3. Customer targeting: Due to specialised algorithm one is more likely to see the similar content in social media and search engines. This leads to invisible distancing between two communities.

To prevent such unfortunate situation, which is an anathema for a civilized society, a holistic approach is necessary. Gove-rnment needs to take proactive measures for faster delivery of justice to victims, stern action against culprits and stronger legal framework.

Society too has to ponder upon the consequences of rising anarchy and creating awareness against these trends. We need to remember that without rule of law there is no liberty in true sense.

Q6. As the grouping of five countries met for the 10th BRICS summit at Johannesburg, this diverse group of nations with varying trajectories, continued to be seen as yet another 'alphabet soup' with limited potential to

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transform global governance structures. Critically examine the role of BRICS coalition in altering the worldwide order.

Approach

Introduction

What is BRICS? How often its summits are held? Where was the last and recent summit held?

Body

Elaborate the factors challenging the smooth functioning of the BRICS association and why it is seen as an 'alphabet soup' Mention how BRICS can play an important role in altering the worldwide order.

Conclusion

Give your opinion on the direction in which BRICS should proceed.

Model Answer

BRICS is the association of five major emerging national economies: Brazil, Russia, India, China and South Africa. The BRICS members are known for their significant influence on regional affairs; all are members of G20. Since 2009, the BRICS nations have met annually at formal summits. China hosted the 9th BRICS summit in Xiamen on September 2017, while South Africa hosted the most recent 10th BRICS summit in July 2018.

Reasons why BRICS continues to be seen as yet another 'alphabet soup' with limited potential to transform global governance structures:

- Western analysts have highlighted potential divisions and weaknesses in the BRICS grouping, including significant economic instabilities and disagreements between the members over UN Security Council reform.
- At present China, which constitutes two-thirds of the economic power of BRICS, has

- major difficulties with India, the group's second largest economy.
- Russia remains entangled with the US on many global flashpoints and Brazil and South Africa are preoccupied with their own regional and domestic problems.
- The rapid rise in intra-BRIC trade from \$29 billion in 2000 to \$319 billion in 2010 (when South Africa joined), and then to \$744 billion last year provides a catchy explanation to underline BRICS' expanding partnerships. But this was trigge red simply by the overall rapid rise in their global commerce.
- China's foreign trade during 2000-2017 rose from \$47 billion to \$4.1 trillion which is much higher compared to rise in intra-BRICS trade.
- contribution As regards its to creating alternative global structures, governance New Development Bank and its regional centre in Johannesburg have emerged as efficient institutions and the currency reserve pool has evolved as per expectations but the BRICS Credit Rating Agency remains stuck in negotiations.

The role of BRICS coalition in the altering worldwide order:

- BRICS is a united voice of five rapidly developing countries to protect and promote their interest. These nations are already united in their demand for reforming various international organisations.
- They could push for much needed reforms in the membership of the UNSC, since many of its members such as India, Brazil and South Africa are aspiring for its membership. They could pitch for a shift in the voting pattern of International Finance Institution

- (IFI) in favour of one country one vote.
- All BRICS summits are preceded, not just by dozens of official meetings but also by events involving sports, media and the youth that generate social networks and goodwill for institutionalising BRICS.
- This includes initiatives such as the MoU for Regional Aviation Partnership Cooperation. Such state facilitation promises to promote greater trade investments, encourage intra-BRICS tourism and also educational. cultural and information exchanges.
- The credibility of BRICS was strengthened worldwide by the introduction of the BRICS+N formulation at their 2014 For taleza summit. This was an attempt to start dialogue with leaders of the regional developing economies that saw them holding additional dialogue with select Southern American countries.
- At the 2015 Ufa summit, this outreach was formalised in a dialogue with leaders of the Eurasian Economic Union and the 2016 Goa summit held a similar outreach with BIMSTEC leaders. But at the Xiamen summit last year, BRICS+N was upgraded to 'BRICS Plus' mechanism of 'friends' and instead of regional powers, the BRICS outreach dialogue invited representatives from five major economies developing from around the world.
- The Johannesburg summit expanded the BRICS outreach further. It will hold dialogue in both formulations: BRICS+N outreach (involving African such as Angola, Ethiopia, Gabon, Namibia, Rwanda, Senegal,



Togo, Uganda and Zambia) and also 'BRICS Plus' dialogue with 'friends' (which will include national leaders from Argentina, Egypt, Indonesia, Jamaica, and Turkey) along with the Secretary General of the United Nations.

- This truly makes BRICS an event with global overtones and its implications become stronger in face of United States' tariff war which portends a majority of BRICS members potentially being identified as US adversaries.
- BRICS should work in the direction of global internet governance. Besides it could be a forum for greater involvement of these nations in international conflict resolution. BRICS could well be a vehicle of balancing the power structure of the world creating an equitable global order.
- Q7. Through appropriate illustrations comment how the existence of great Indian diaspora and common colonial history has been influential in constructing decent association between India and various nations spread across the globe.

Approach

Introduction

State the position and importance of Indian diaspora. Write how Indian government acknowledges their various contributions.

Body

Explain the economic, political and cultural influences of the existence of Indian diaspora and common colonial history between India and countries of the world. Mention the names of countries and the type of diaspora

Discuss how with some countries Indian diaspora has contributed towards healthy relationship with India

Conclusion

Give points signifying the importance of Indian diaspora as potential resources for the country and few areas where India can seek their inputs.

Model Answer

Indian diaspora is the 2nd largest in world and is financially and politically powerful.

Many countries formulate their policies considering the Indian Diaspora so as to strengthen diplomatic ties with India. Indian government also acknowl-edges the contributions of NRIs and PIOs from time to time for their cooperation and knowledge sharing in Indian industries, remitting their earnings, special bank accounts etc. Every year distinguished NRIs are also awarded PRAVASI BHARTIYA SAMMAN.

The presence of Indian diaspora and colonial linkages has had a significant role to play in the India's relation with few countries. It can be seen in the following ways:

Economic

- Indian diaspora forms a critical component of the profess-ional services in the Western countries, especially in the field of medicine and telecommunications. For example- Indians form 13% of the professional workforce in the U.S.A
- The ratio of Indian students present in International universities, adding to global research and knowledge base, is progressively increasing. Example-Europe, U.S.A. Singapore, etc

 The presence of Indian tourists across all countries in the world is also increasing. E.g.- Dubai, Thailand

Political

- The presence of Indians in International decision-making bodies has seen a steady increase over recent years. Example- ADB, United Nations, World Bank, International Organisations/ NGOs etc.
- Indian diaspora has also been active in countries like Australia, U.K, Germany etc. in work against racism and other forms of oppression.

Cultural

- Shared colonial history has given India very strong cultural relations with countries like Indonesia, Malaysia, Bangladesh, etc
- Indian diaspora has also been excellent representatives of Indian culture in different countries leading to international recognition of the country. E.g.-Cuisine, Ayurveda, etc. Some countries where Indian diaspora contributed towards healthy relationship with India:
- ◆ USA, UK: Large number of IT professionals, Scientists, Analysts, Investors and Doctors serve in the US. Ever since the IT boom across the world, US is found tobe cooperating with India in all spheres and has developed close diplomatic tiesin security, defence, science, energy etc.
- European Countries: Many Indian students choose European countries for Management, Engineering and Post-graduation and finally get settled there.

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SEVEN IMPORTANT NATIONAL & INTERNATIONAL NIEWS

NATIONAL

1. Least Available Depth Information System

Moving a step ahead towards ensuring optimum use of National Waterways, the Inland Waterways Authority of India (IWAI) has launched a new portal 'Least Available Depth Information System' (LADIS).

Key Points

It will ensure that real-time data on least available depths is disseminatedfor ship/barge and cargo owners so that they can undertake transportation on national waterways (NWs) in a more planned way. An assured depth of waterway is required for seamless movement of vessels. If real time information is made available regarding least available depth (LADs) in stretches of various NWs, it will help transporters by guiding them on the suitability of time of movement.

- Initially, LAD information will be available for NW-1, NW-2, Indo-Bagladesh Protocol route and NW-3, along with the date of survey. The facility will be expanded to other NWs also.
- Details of LAD will be fed into the portal by respective surveyors

and regional incharge deputed with IWAI survey vessels which constantly move on NWs.

- IWAI has designed LADIS to facilitate the day to day operations of inland vessels plying on National Waterways and to avoid any hindrance in service and operation.
- It will enhance credibility and efficiency of information sharing to achieve seamless operations on National Waterways, besides preempting problems that may occur during movement of vessels.

2. e-AUSHADHI Portal

Ministry of AYUSH has launched the e-AUSHADHI an acronym for 'Ayurveda, Unani, Siddha and Homeopathy Automated Drug Help Initiative' portal to increase transparency and accountability in the online licensing of Ayurveda, Siddha, Unani and Homoeopathy drugs and related matters.

Key Points

- e-AUSHADHI portal is intended for increased transparency, improved information management facility, improved data usability and increased accountability.
- The timelines will be fixed for processing of application through this portal with SMS and e-mail

status updates at each step of the process.

This portal will not only aid the licensing authority, manufactures and consumers, as it will provide real time information of the licensed manufactures and their products, cancelled and spurious drugs, contact details of the concerned authority for specific grievances.

"Ayush" Finds a Place in English Language

In pursuance of the proposal of the Ministry of AYUSH the Commission for Scientific and Technical Terminology has decided to adopt the word "AYUSH" in Hindi and English languages for scientific and technical purposes.

As approved by the Commission, the word "AYUSH" will have the meaning "Traditional and Non-Conventional Systems of Health Care and Healing which include Ayurveda, Yoga, Naturopathy, Unani, Siddha, Sowa Rigpa, Homoeopathy etc."

About National Ayush Mission (NAM)

It was launched on September 2014 for promotion of AYUSH healthcare in the country. It intends to build on India's unmatched heritage represented by its ancient systems of medicine like Ayurveda, Sidhha, Unani& Homeopathy (ASU&H) which are a treasure house of knowledge for preventive and promotive healthcare.



3. Promotion and Protection of Maithili Language

The Ministry of Human Resource Development has decided to apply the recommendations of a committee constituted in 2018 for the promotion and protection of Maithili language and its scripts.

Some of the recommendations of the committee as follows:

- To establish a Script and Manuscript Centre at Darbhanga in any one of the Universities viz. Kameshwar Singh Sanskrit University or Lalit Narayan MithilaUnviersity.
- Early completion of the work pertaining to Unicode Scripts

- of Mithilakshar by Technology Development of Indian Languages (TDIL).
- To prepare audio-visual teaching materials for teaching the Mithilakshar scripts.

Need

Use of this script has been on decline since last 100 years and therefore our culture is getting decimated. Because its own script is not being used, the Maithili language is getting developed in a composite manner despite having been accorded a constitutional status in the constitution.

What is Mithilakshar?

Mithilakshar or Tirhuta is the script of broader cultural Mithila. The scripts of Mithilaksar, Bangla, Assamese, Nebari, Odia and Tibetan are part of the family.

It is an extremely ancient script and is one of the script and is one of the scripts of the broader North Eastern India. Mithilakshar had come to its current shape by 10th Century AD. The oldest form of Mithilakshar is found in the Sahodara stone inscriptions of 950 AD. Afterwards, the scripts has been used throughout Mithila from Champaran to Deoghar.

4. 53rd Edition of "Know India Programme"

A group of Indian Origin youth from 8 countries called on the government of India under the 53rd Edition of "Know India Programme" (KIP). The 53rd edition of Know India Programme for Young Indian Diaspora involves 40 participants (24 female and 16 males) from Fiji, Guyana, Mauritius, Portugal, South Africa, Sri Lanka, Suriname and Trinidad & Tobago. The partner states of this edition are Maharashtra and Daman & Diu.

The participants have visited Maharashtra, Daman & Diu, Agra and Delhi from 23rd January to 16th Februray.

Significance

This programme provides an opportunity to these youth to learn about and know their roots and share experiences. It also talks about the role of 'people to people' connect in improving the relations between the countries, because the world has now shrunk due to improved connectivity that has reduced the physical barriers.

The KIP will help India origin youth to them understand the Indian traditions, heritage and their family connections. The youth also shared the influences which they have from India e.g. IT industry, Bollywood, Indian cuisine and sports etc.

About KIP

Know India Programme organised by the Ministry of External Affairs, Government of India with the objective of familiarizing the India Diaspora Youth, in the age group of 18-30 years, with developments and achievements made by the country and bringing them closer to the land of their ancestors. The programme provides a unique forum for students and young professionals of India origin to visit India, share their views, expectations and experiences and to bond closely with the contemporary India.

5. Tagore Award for the Years 2014, 2015 and 2016

The President of India has presented the Tagore Award for Cultural Harmony for the years 2014, 2015 and 2016. Exponent of Manipuri dance ShriRajkumarSinghajit Singh was given the award for the year 2014. Chhayanaut, a cultural organization of Bangladesh was given the award for 2015 for its role in the promotion of

Gurudev Rabindranath Tagore's works and Bangla arts. Renowned sculptor and scholar Shri Ram VanjiSutar was given the award for 2016. The awardee were selected by a jury headed by the Prime Minister and includes Chief Justice of India Justice RanjanGogoi, former Chief Election Commissioner Shri N Gopalaswami and the President

of Indian Council for Cultural Relations Shri Vinay Sahasrabuddhe.

About Awards

Tagore Award for Cultural Harmony was instituted by the Government from 2012 during the commemoration of the 150th birth anniversary of Rabindranath Tagore. It is awarded annually and

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carries an amount of One Crore rupees, a citation in a Scroll, a Plaque as well as an exquisite traditional handicraft or handloom item. The first Tagore Award was conferred upon Indian sitar legend Pandit Ravi Shankar and the second in 2013 upon music maestro

Zubin Mehta.

Significance of Gurudev's Teachings

India's multi-dimensional heritage was well reflected in the works of Gurudev. RabindraSangeet has all the colours of our country and it is not bound by a language. Tagore's teachings are timeless and the world stands to learn a great deal from his works. He recognised the folk arts and traditional dances as indicative of Indian culture.

6. Guidelines on Electric Vehicle Charging Infrastructure

The government has approved amendments to Model Building Byelaws (MBBL), 2016 and Urban Regional Development Plans Formulation and Implementation (URDPFI) Guidelines, 2014, to set up charging stations for electric vehicles across the country. The guidelines will act as a guiding document to the state governments and union territories to incorporate the norms and standards of electric vehicle charging infrastructure in their respective building bye-laws.

India is committed to United Nations' goal to take urgent action to combat climate change. Government

has initiated several steps to reduce dependence on fossil fuels. One of such steps is to encourage environmentfriendly electric cars.

The ministry of power proposed to the Fifteenth Finance Commission a scheme for supporting switching to electric mobility in India – for rolling out EV infrastructure across 70 cities and 20% of highways in five years— by 2025 — at a cost of ~5,000 crore.

Key Guidelines

 The government permitted private charging at residences and offices.
 Public charging stations will be set up every 25 km on both sides of highways and roads. For heavy electric vehicles such as trucks and buses, at least one fast-charging station will be set up every 100 km.

- Charging facilities will also be available at bus depots and transport hubs within three years.
 In the first phase, to be completed by 2021, mega cities — with a population of over 4 million as per the 2011 census will be covered.
- Other big cities such as state capitals and union territories will come under the second phase, to be completed by 2023.

7. PARMANU TECH 2019

'Parmanu Tech - 2019' conference was organised by the Ministry of External Affairs and Department of Atomic Energy (DAE). The conference discussed issues related to Nuclear Energy and Radiation Technologies.

The nuclear energy will be a big and cost-effective source of energy in future when the other sources of power are gradually depleting.

The conference aimed at showcasing the societal applications that DAE is pursuing and the role of radio isotopes in industry and health care.

During the conference sector specific sessions were held with Panel discussions on the following topics:

 i) Health care: Nuclear Medicine and Radiation therapy – Care to cure, with themes including Cancer care (TMH), Radio-pharmaceuticals

- & Radioimmumoassay (RIA) kits, Gamma Chambers, Blood irradiators, Bhabhatron, Brachytherapy, Stereotactic Neurosurgery and international cooperation, etc.
- Food Preservation, Agricultural & Industrial Applications: From farms to factories - serving the national cause, with themes including Nisargruna, Food Irradiator, improved seeds varieties, water purification technologies, urban waste management technologies, industrial application of radioisotopes and radiation technologies particularly petroleum industry for monitoring lines, breakdown process maintenance, dredging operations sea ports, non-destructive techniques, technologies
- developed by Electronics Corporation of India Limited (ECIL) and Heavy Water Board.
- iii) Showcasing India's capabilities in Nuclear Energy: Energy Security with environmental responsibility – the onward March, with themes including Global Centre for Nuclear Energy Partnership (GCNEP) and India's Nuclear power programme.

India's Journey

India has covered a long journey since inception of Atomic Energy programme by Dr. Homi Bhabha based on the peaceful use of nuclear energy. India has achieved a unique place in the international community for progress in space technology as well as nuclear energy. India has always used technology for constructive use and never for destructive purpose.

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INTERNATIONAL

1. President Donald Trump declared a National Emergency

US President Donald Trump has declared a national emergency in a bid to fund his promised wall at the US-Mexico border without congressional approval. Trump had demanded Congress include money for the Mexico border wall, one of his biggest campaign promises, in a funding bill approved overwhelmingly by lawmakers. That bill did not give Trump the wall money he wanted, a legislative defeat for him. A national emergency, if not blocked by the courts or Congress, would allow Trump to dip into funds lawmakers had approved for other purposes in order to build a border wall.

Many presidents have declared national emergencies during their time in office. President Barack Obama declared a national emergency in 2009 during the swine flu outbreak to allow

hospitals and local governments to establish sites to deal with the virus. In 2001, President George W. Bush declared a national emergency days after the 9/11 terrorist attacks that suspends certain aspects of the law, including provisions that limit the size of the military.

Background

The President's demand for \$5.7 billion in border wall funding and the refusal of Democrats to provide it, led to a record-long, 35-day December-January partial government shutdown.

What is a National Emergency?

 A national emergency is a national crisis or a situation where circumstances threaten the country and call for an immediate

- response. What actually constitutes an emergency, though, is up for debate and requires the President to use existing law to justify a declaration.
- The President in the United States has Emergency Powers derived from the 'National Emergencies Act, 1976'. The act offers no specific definition of "emergency" and allows a President to declare one entirely at his or her discretion.
- States of emergency can be renewed annually, simply by notifying Congress.
- The Congress can revoke a declaration by majority vote, though it would take a two-thirds vote by each house to override an expected presidential veto.

2. India-Norway Marine Pollution Initiative

The Ministry of Environment, Forests and Climate Change has signed a letter of Intent establishing the India-Norway Marine Pollution Initiative together with the Norwegian ministry of Foreign Affairs. This initiative will combat marine pollution, which is one of the fastest growing environmental concerns.

Key Points

Ajoint Task Force on 'Blue Economy' with government officials, researchers and experts as well as private sector was established to develop sustainable solutions within strategic areas of the blue economy, such as maritime and

- marine sector in addition to energy sector.
- In partnership, both countries will share experiences and competence and collaborate on efforts to develop clean and healthy oceans, sustainable use of ocean resources and growth in the blue economy.
- This initiative will seek to support local governments in implementing sustainable waste management practices, develop systems for collecting and analyzing information about sources and scope of marine pollution and improve private sector investment.
- Support will also be directed towards beach clean-up efforts,

awareness raising campaigns and pilot project using plastic waste as fuel substitution for coal in cement production and developing frameworks for deposit schemes.

About Blue Economy

The 'Blue Economy' is determined to initiate appropriate programs for: the sustainable harnessing of ocean resources; research and development; developing relevant sectors of oceanography; stock assessment of marine resources; introducing marine aquaculture, deep sea/long line fishing and biotechnology; and human resource development; among others.





3. SPHEREx Telescope

Space agency NASA has unveiled a new space telescope, Spectro-Photometer for the History of the Universe, Epoch of Reionization and Ices Explorer (SPHEREX), that would begin a two-year mission in 2023 to look for life's ingredients and probe how the universe evolved.

Key Highlights

 Astronomers will use the mission to gather data on more than 300 million galaxies, as well as more than 100 million stars in our own Milky Way. It will survey hundreds of millions of galaxies near and far, some so distant, that their light has taken 10 billion years to reach Earth.

- Every six months, SPHEREX will survey the entire sky using technologies adapted from Earth satellites and Mars spacecraft, to create a map in 96 color bands.
- It will search water and organic molecules like methanol or acetonein regions where stars and being born from gas and dust, as well as disks around stars where new planets could be forming.
- It also will identify targets for more detailed study by future missions, such as NASA's James Webb Space Telescope and Wide Field Infrared Survey Telescope.
- The cost of the SPHEREx project is a hefty \$242 million, which does not include launch costs.
- It will provide new clues to one of the greatest mysteries in science that what made the universe expand so quickly less than a nanosecond after the 'Big Bang'.

4. World Employment Social Outlook Trends - 2019

The International Labour Organization (ILO) has published its flagship report titled 'World Employment and Social Outlook Trends - 2019'.

Key Highlights

- Global unemployment levels fell one percentile to a steady 5% in 2018, the lowest figures since the economic crisis that wreaked havoc on labour markets.
- ◆ The unemployment rates were anticipated to fall further to 4.9% this year, which is expected to hold steady into 2020 despite the fact that the number of jobless in real terms is estimated to rise from 172 million to 174 million in that time as the labour market expands.
- Between 2008-09, as the fallout of the near total collapse of major markets took hold, the unemployment rate jumped from 5 to 5.6%.
- Gender continued to present a real issue. The much lower labour force participation of women, which

stood at 48%, compared with 75% for men, means that around three in five of the 3.5 billion people in the global labour force were men.

- Moreover, 2 billion of the 3.3 billion people in the global labour market worked in informal employment which put their economic security at risk, according to figures in 2016.
- The poor quality of many jobs also manifests itself in the fact that, in 2018, more than one quarter of workers in low and middle-income countries were living in extreme or moderate poverty.
- ◆ Global unemployment among young people (between 15-24) stood at 11.8 per cent, higher than other age brackets.
- The organization expressed alarm at the high level of young people not in employment, education or training.
- In line with a stable aggregate unemployment rate, the outlook for men, women and young people with regard to opportunities on

the job market is also very stable. Neither the gender disparities nor the labour market challenges faced by young people are expected to abate in the coming year.

- ◆ The youth participation in the labour market had been declining steadily for the last 25 years, although highlighting that one factor for this was that more young people were entering further education.
- The report warned, however, that the increasing number of inactive people in this sense in comparison to the number of active people in the labour market could pose future challenges on how the market is organized.
- The ILO said it had registered around 114 million children aged between 5-14 involved in the global labour market, 73 million of whom were working in hazardous conditions, according to data from 2016.



5. India and Finland on Peaceful uses of Outer Space

The Union Cabinet, chaired by the Prime Minister has given its approval for Memorandum of Understanding between India and Finland on cooperation in the field of peaceful uses of outer space. It will provide impetus to explore newer research activities and application possibilities in the field of remote sensing of the Earth; satellite communication; satellite navigation; space science and exploration of outer space.



The Memorandum of Understanding shall enable the following potential interest areas of cooperation such as,

- Remote sensing of the Earth.
- Satellite communication and satellite based navigation.
- Space science and planetary exploration.
- Development, testing and operation of space objects and ground system.
- Launching of Finnish space objects by Indian launch vehicles.
- Processing and use of space data.
- Developing innovative applications and solutions based on space technologies and use of artificial intelligence.
- Cooperation around emerging new space opportunities and data ecosystems and sustainable used

of outer space.

Implementation Strategy and Targets

The participants will each nominate a coordinator for the purpose of coordinating cooperative activities under this MoU. In order to facilitate the implementation of this MoU, the participants could meet on mutual decision alternately in India or in Finland or through videoconference.

The participants or, upon their authority, the implementing agencies, may set up project teams if necessary, to manage specific cooperative projects taken up under implementing arrangements.

The move comes in the background of interest expressed by the government of Finland for cooperation in the area of space.

6. AntBot: An Insect-inspired Walking Robot

Researchers from the French National Center for Scientific Research (CNRS) claimed to have developed the first walking robot that can explore its environment and find its way home without Global Positioning System (GPS) or mapping. It opened new avenues for the navigation of autonomous vehicles. Scientists took inspiration from desert ants (Cataglyphis fortis), which are extraordinary solitary navigators, to design the AntBot.

Ants use polarised light and ultraviolet radiation to locate themselves in space. Cataglyphis desert ants in particular can cover several hundreds of metres in direct sunlight in the desert to find food, then return in a straight line to the nest, without getting lost.

Key Highlights

- tis equipped with an optical compass used to determine its heading by means of polarised light and by an optical movement sensor directed to the Sun to measure the distance covered.
- Armed with this information, AntBot has been shown to be able, like the desert ants, to explore its environment and to return on its own to its base, with precision of up to one centimetre after having covered a total distance of 14 metres.
- Weighing only 2.3 kg, this robot has six feet for increased mobility, allowing it to move in complex environments, precisely where deploying wheeled robots and drones can be complicated.

- The optical compass developed by the scientists is sensitive to the sky's polarised ultraviolet radiation. Using this "celestial compass," AntBot measures its heading with precision by clear or cloudy weather.
- AntBot brings new understanding on how desert ants navigate, by testing several models that biologists have imagined to mimic this animal.
- Before exploring potential applications in aerial robotics or in the automobile industry, for example, progress must be made, for instance in how to operate this robot at night or over longer distances.

Current Affairs: Perfect 7



7. Working Mechanism for Consultation & Coordination on India-China Border Affairs

The 13th meeting of the Working Mechanism for Consultation & Coordination (WMCC) on India-China Border Affairs was held in New Delhi on 29 January 2019.

Key Highlights

◆ During the meeting, both sides reviewed the situation in the India-China border areas with a view to ensure peace and tranquillity in accordance with the strategic guidance given by Prime Minister Modi and President Xi during the Wuhan Summit last year. In this context, both sides recognised the important role of constant exchanges between the two sides, including at the WMCC meetings, towards strengthening communication for effective border management.

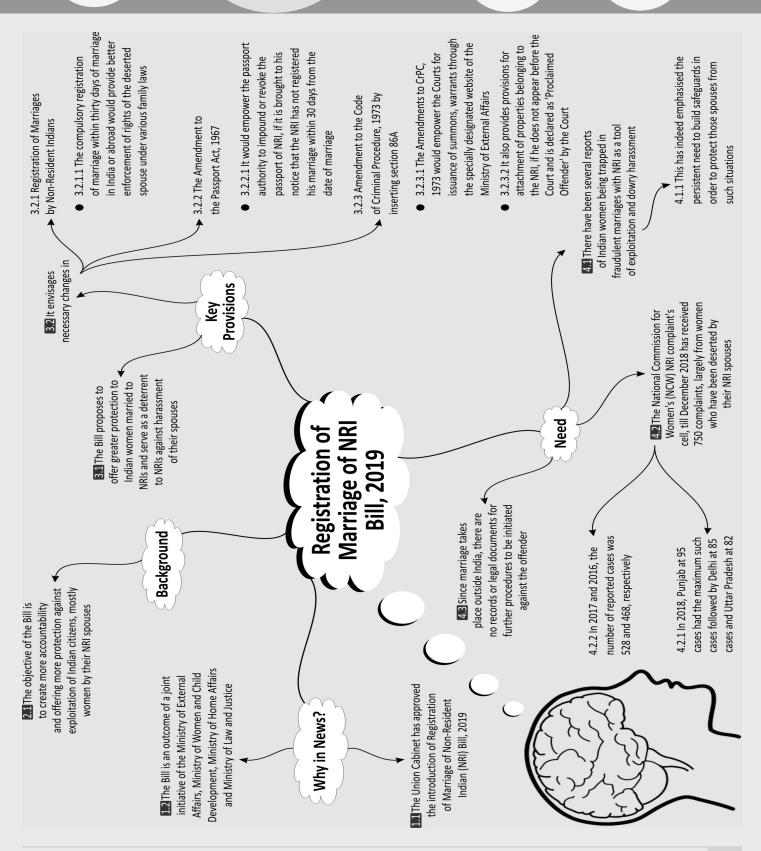
◆ The two sides also reviewed the progress on implementation of various confidence building measures (CBMs) to enhance mutual trust and understanding. The Indian side reiterated the importance of maintaining peace and tranquility in the border areas as a prerequisite to smooth development of overall bilateral relations.

About WMCC

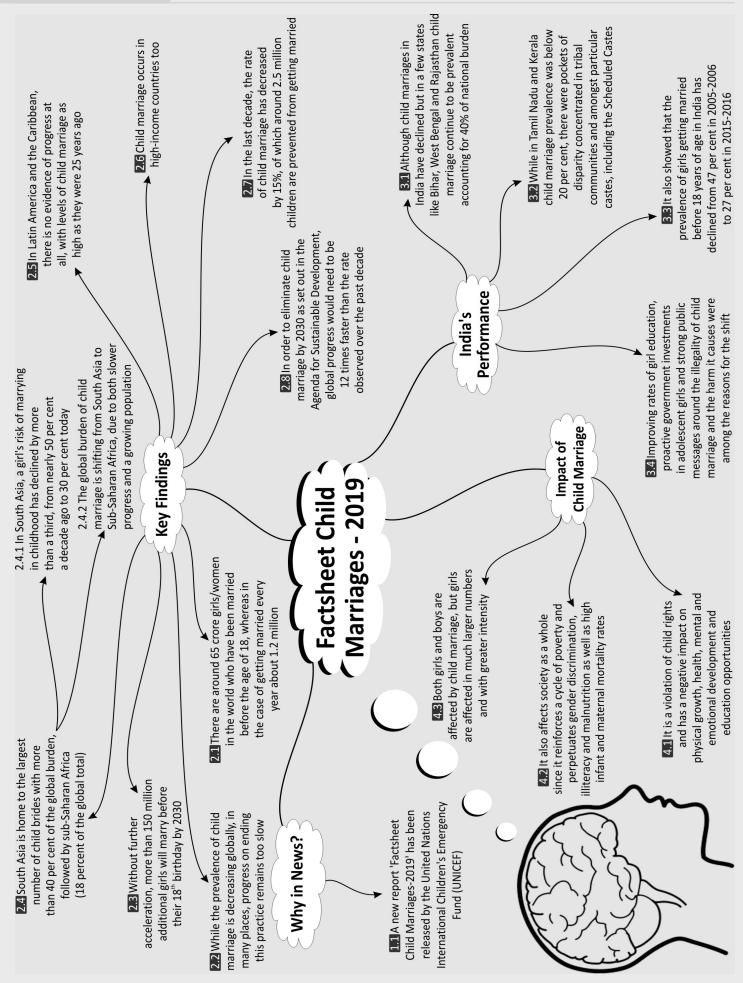
The WMCC was established in 2012 as an institutional mechanism for consultation and coordination for management of India-China border areas, as well as to exchange views on strengthening communication and cooperation, including between the border security personnel of the two sides.

The two sides agreed to hold the next meeting of the WMCC at a mutually convenient date.

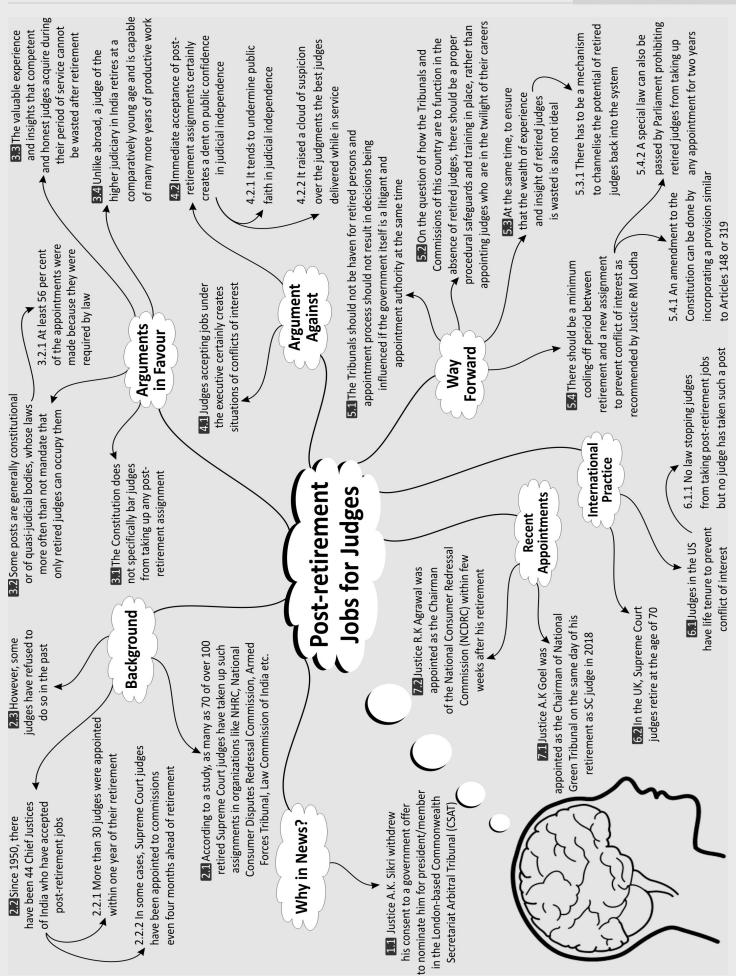
SEVEN BRAIN BOOSTERS



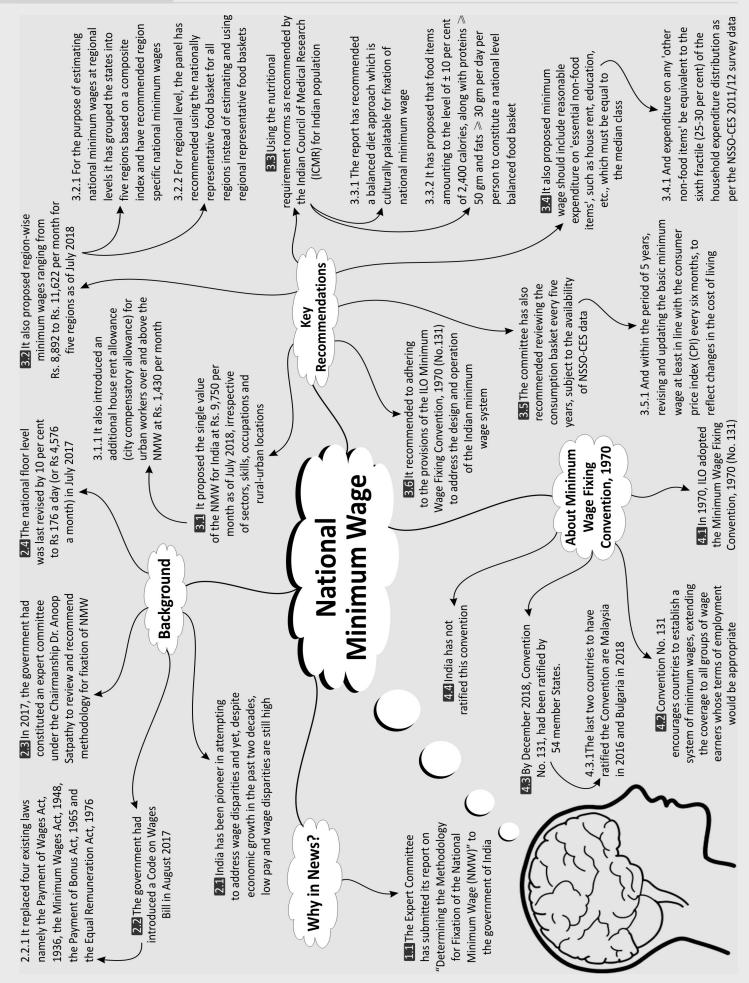




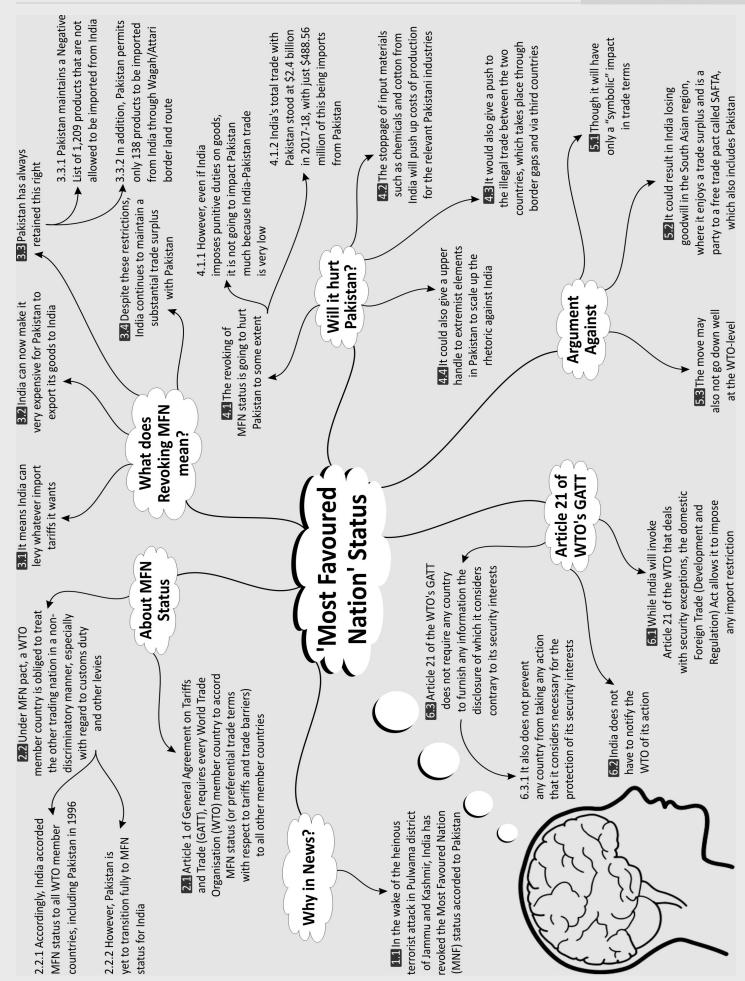




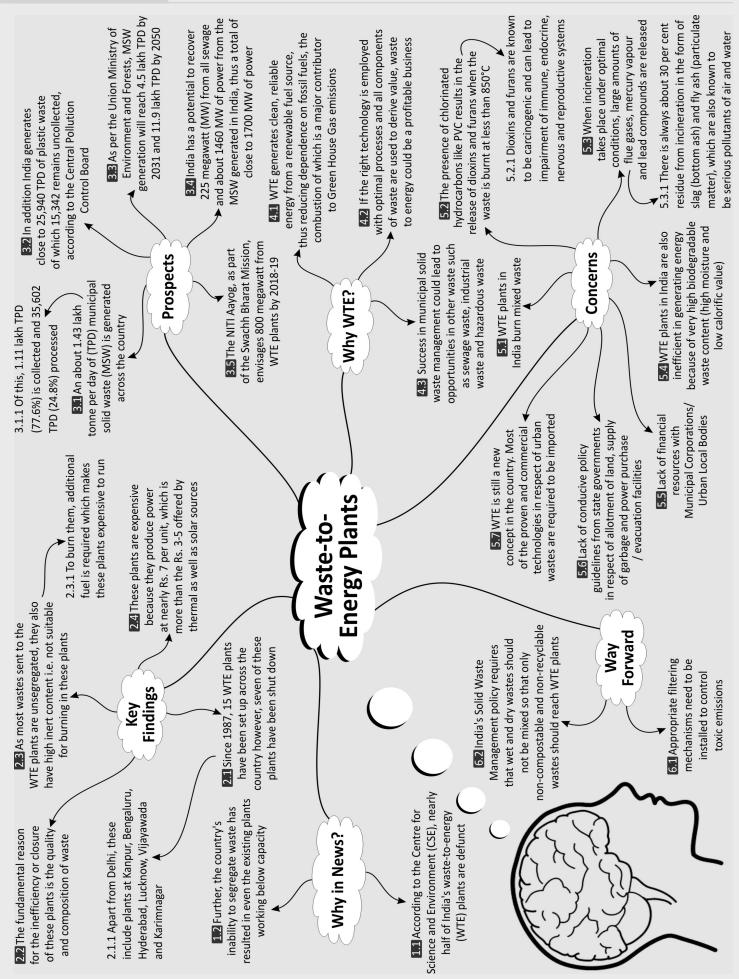




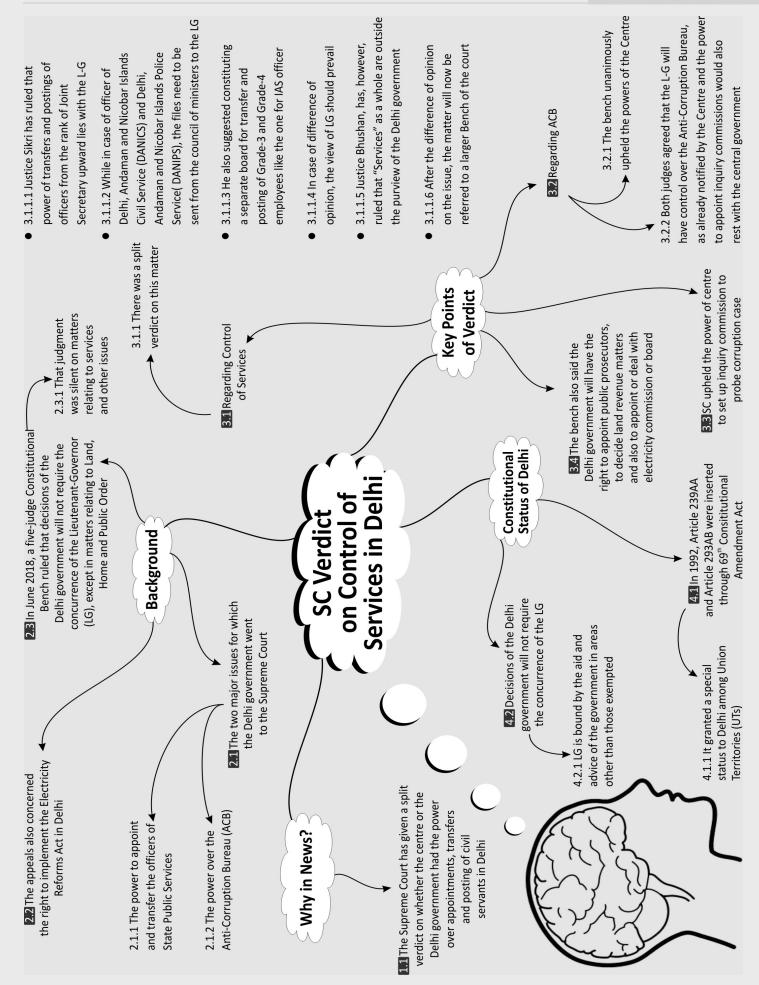












SEVEN CURRENT AFFAIRS BASED MCOS WITH DEARCANATHON

- Q1. Recently 'High Ambition Coalition' (HAC) was in news. Q3. With Regards to 'Trans-Regional Maritime Network In this context consider the following statements:
 - 1. It is a group of developing and developed countries that aim to raise their carbon emission reduction targets under the Paris Climate Agreement.
 - 2. India is a member of 'High Ambition Coalition'.

Which of the statement(s) given above is/are not correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

Ans: (b)

Explanation Zone: In the light of a IPCC special report on the impact of 1.5 degree Celsius of warming across the globe, the EU and 27 countries came together to form a 'High Ambition Coalition' (HAC) and decide to raise their Paris Agreement targets of carbon emissions reduction by 2020.

Big developing countries like China and India are not part of the HAC.

Why is this Question Important?

Member countries of HAC are not formally required to increase their targets until 2025, they have put an ambitious goal to raise their targets substantially by 2020.

Q2. Recently, in which of the following country has thousands of people come on the street, initially to protest against the tax hikes on transport fuel, which is popularly known as 'Yellow Vests' protests?

(a) Venezuela

(b) France

(c) Mexico

(d) Saudi Arabia

Ans: (b)

Explanation Zone: Thousands of people in France came on street initially over an anti-pollution tax on transport fuel.

Later the protest snowballed into wider opposition to President Macron's pro business agenda and style of governing.

Why is this Question Important?

This protest is popularly known as 'Yellow Vests' protests. President Emmanuel Macron has announced a series of concessions to defuse the 'yellow vest' explosive crisis.

- (T-RMN)', consider the following statements:
 - 1. The network facilitates information exchange on the movement of commercial traffic on the high seas and helps in keeping a tab on any suspicious activity.
 - 2. It is a multilateral grouping comprising of 30 countries and is steered by Italy.
 - 3. India has signed the accession pact to join the Trans Regional Maritime Network.

Which of the statements given above is/are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Ans: (d)

Explanation Zone: India has signed the accession agreement to the Trans Regional Maritime Network (T-RMN) which facilitates information exchange on the movement of commercial traffic on the high seas.

The multilateral construct comprises of 30 countries and is steered by Italy.

The pact will give India the access to information on ships which pass through the Indian Ocean region that will greatly help the security forces in keeping a tab on any suspicious activity.

Why is this Question Important?

Recently, Commodore KM Ramakrishnan signed the agreement at Rome in Italian Naval Headquarters on behalf of Indian Navy.

- Recently 'Bhasha Sangam Program' was in news. In this context, which of the following statements is/ are correct?
 - 1. It is an initiative under the 'Ek Bharat Shrestha Bharat' that aims to create awareness among the students about cultural, ethnic and linguistic diversity of India.
 - 2. Bhasha Sangam Program is an initiative of the Ministry of Culture.

Select the correct answer using the code given below.

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

Ans: (a)

Explanation Zone: The Department of School Education & Literacy (Ministry of HRD) has initiated



Bhasha Sangam Program. It is a Celebration of Linguistic Diversity which marks the appreciation of the unique symphony of languages of our country. The Bhasha Sangam initiative under the 'Ek Bharat Shrestha Bharat' aims to make the students aware of the unique cultural, ethnic and linguistic diversity of our country.

Why is this Question Important?

The Bhasha Sangam programme was conducted from 20th November to 21st December 2018.

Q5. Consider the following statements:

- 1. In India, state governments have the power to decide the medium of instruction in schools.
- 2. As per the provisions of the RTE Act, 2009 the medium of instruction in schools shall be in the child's mother tongue.

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

Ans: (c)

Explanation Zone: Since education is in the Concurrent List, States have the liberty to decide the medium of instruction in schools. Section 29(2)(F) of the Right of Children to Free and Compulsory Education (RTE) Act, 2009 states that "medium of instruction shall, as far as practicable, be in child's mother tongue".

Why is this Question Important?

The RTE Act is a game-changer in that it establishes that the onus to ensure free and compulsory education lies on the state. However, the 'compulsory' and 'state liability' part needs to be imbibed by the educational bureaucracy, which is now lacking.

Q6. In the context of socio-economic characteristics of the Tribal population in India, consider the following statements:

- 1. In India, nearly 90 per cent of the tribal population of the country lives in rural areas.
- 2. Little over two-third of the tribal population is working in the primary sector and is heavily dependent on agriculture.
- 3. Numerically, Madhya Pradesh has the highest number of tribal population in India.

Which of the statements given above is/are correct?

(a) 1 and 3 only

(b) 2 only

(c) 1 and 2 only

(d) 1, 2 and 3

Ans: (d)

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Explanation Zone: In India, almost 90% of the tribal population of the country lives in rural areas. As per Census, 2011 over two-thirds of the tribal population

is working in the primary sector (as against 43% of the non-tribal population) and are heavily dependent on agriculture either as cultivators or as agricultural labourers.

There are 90 districts or 809 blocks with more than 50% tribal population and they account for nearly 45% of the Scheduled Tribe (ST) population in the country. In other words, almost 55% of the tribal population lives outside these 809 tribal majority blocks.

Numerically, Madhya Pradesh has the highest number of Tribal population (15 million) in India.

Why is this Question Important?

According to the 2011 census, Scheduled Tribes form 8.6 per cent of the country's populations. Many of these tribes live in the most inaccessible geographical regions of the country. About 55 per cent of the country's tribal population now resides outside their traditional habitats. It is known that migration of tribal population, increasingly distress-driven, has been increasing.

Q7. Consider the following statements:

- 1. The General Assembly (GA) is the main deliberative, policy making and representative organ of the United Nations.
- In General Assembly, each permanent members of UN Security Council have one extra vote compared to other members.
- 3. Vijay Lakshmi Pandit was the first woman president of the UN General Assembly.

Which of the statements given above is/are correct?

(a) 1 and 3 only

(b) 2 only

(c) 2 and 3 only

(d) 1, 2 and 3

Ans: (a)

Explanation Zone: The General Assembly (GA) is the main deliberative, policy making and representative organ of the UN.

Decisions on important questions, such as those on peace and security, admission of new members and budgetary matters, require a two-thirds majority.

Why is this Question Important?

The General Assembly is one of the six main organs of the United Nations (UN), the only one in which all Member States have equal representation: one nation, one vote. All 193 Member States discuss and work together on a wide array of international issues covered by the UN Charter, such as development, peace and security, international law, etc.

45

SEVEN IMPORTANT HIGHINGHIS FROM PIB

1. SETTING UP OF A NEW COMPANY UNDER DEPARTMENT OF SPACE (DoS)

The Union Cabinet chaired by Prime Minister has given its approval to the setting up of a new company under Department of Space (DoS), to commercially exploit the research and development (R&D) work carried out by Indian Space Research Organization (ISRO) Centers and constituent units of DoS.

Key Features

- The following areas avenues provide opportunities for commercial exploitation of ISRO programmes:
- Small satellite technology transfer to industry, wherein the new company shall take license from DoS/ISRO and sub-license to industries.
- Manufacture of small satellite launch vehicle (SLV) in collaboration with the Private Sector.
- Productionisation of Polar SLV through industry.
- Productionisation and marketing of Space-based products and services, including launch and applications.
- Transfer of Technology developed by ISRO Centers and constituent units of DoS.

 Marketing of some spin-off technologies and products, both in India and abroad.

Significance

- It will the private sector to indulge more in production of launchers and satellites.
- In recent years, ISRO has been engaging the private sector in the manufacturing of satellite launchers so that it can focus more on R&D work.
- It will give boost the privatisation of the SSLV project.

Key Facts

Currently, 80-90% of work relating to launch vehicles are being done by the industry, including private and public sector companies, only, critical components are manufactured by ISRO such as propellant casting and vehicle integration.

ISRO currently focuses on vehicle integration, vehicle engineering, mission design (marking trajectory), launch and quality assurance. But gradually ISRO wants vehicle parts vendors to become part of the system through joint ventures.

2. 20TH BHARAT RANG MAHOTSAV

The 20th edition of Bharat Rang Mahotsav (BRM), the international theatre festival of India, was organized by National School of Drama (NSD), one of the prominent training institutions in the world.

Key Highlights

The 20th BRM came with 111 national and international acts in its basket that includes folk and other traditional theatre forms, invitee plays, and productions by the students of the National School of Drama.

The festival, which entered its 20^{th} edition this year, celebrated the 150^{th} birth anniversary of Mahatma Gandhi.

About Bharat Rang Mahotsav

Bharat Rang Mahotsav (BRM), was established two decades ago to stimulate the growth and development of theatre across India.

Originally a national festival showcasing the work of the most creative theatre workers in India, BRM has evolved to international scope, hosting theatre groups from around the world, and is now the largest theatre festival of Asia.

Till date, BRM was celebrated in New Delhi and has travelled to several cities in India, presenting an overwhelming 1787 plays, and riveted thousands of audiences who basked in the glory of heart-winning stories and superior performances.



3. MOU BETWEEN INDIA AND FINLAND IN THE FIELD OF BIOTECHNOLOGY

The Union Cabinet has approved MoU between India and Finland for collaborating based on mutual interest in the field of Biotechnology, for funding and implementing ambitious industry-led innovative and transnational projects within the broad scope of research development and innovation (R&D&I).

Key Highlights

- Identifying innovation as the cornerstone of the collaboration, both Department of Biotechnology (DBT) and Business Finland have agreed to cooperate with Biotechnology Industry Research Assistance Council (BIRAC) for funding and implementing ambitious industry-led innovative and transnational projects. Based on their mutual interest following research areas have been identified,
 - i. Mission Innovation.
 - ii. Biofuture platform: biofuels, bioenergy and biomass based products.
- 2. Environmental and energy applications of biotechnology.
- 3. Business development of start-up and growth companies.

4. Education technologies and games in life sciences vi. Other fields of life science industry.

Significance

- It will support creation of long-term research, development & innovation collaboration mechanism and to establish and strengthen cooperative network between Indian and Finnish organizations.
- By funding need-oriented, ambitious joint projects of high international standards, the two countries aim to help reach world-class innovations beneficial to both countries.
- It will also facilitate knowledge sharing and knowledge generation among scientists, researchers and industry in the two countries.

Background

The MoU was signed in accordance with the Agreement between the Government of the Republic of Finland and the Government of the Republic of India on Co-operation in the fields of Science and Technology. It was signed in Helsinki on March 25th 2008. Both countries were agreed to promote long-term R&D&I cooperation between Finnish and Indian organisations.

4. PAN-INDIA EMERGENCY NUMBER '112'

The government has launched the Women Safety initiative of Emergency Response Support System (ERSS) in 16 States/ UTs and Mumbai city. People in these states and UTs can now call a single pan India number '112' for any emergency. In addition, Investigation Tracking System for Sexual Offences (ITSSO) and Safe City Implementation Monitoring Portal were also launched.

The 16 States/UTs where the ERSS has been launched are Andhra Pradesh, Uttarakhand, Punjab, Kerala, Madhya Pradesh, Rajasthan, UP, Telangana, Tamil Nadu, Gujarat, Puducherry, Lakshadweep, Andaman, Dadra & Nagar Haveli, Daman & Diu, J&K.

Key Points

- It will be implemented across the country gradually.
- One can dial 112 or use Panic Button on their phones or 112 India Mobile App to connect to a single emergency services number 112 which will combine Police, Fire, Health and other helplines through an Emergency Response Centre in the State.
- ERSS had already been successfully implemented in the States of Himachal of Pradesh and Nagaland.

- The ERSS can be triggered in the following manners:
- On the smart phones, the power button (which is dedicated panic button) when pressed three times guickly.
- Dialing 112 from any phone.
- In case of feature phones, long press of the touch key 5 or 9.
- Using 112 India Mobile App which is available for free downloading.
- For women and children, 112 India App provides a special SHOUT feature which alerts registered volunteers in the vicinity of victim for immediate assistance

Need

To improve the ecosystem of women safety in the country, we have to not only strengthen the Judicial System but also to change the mind-set of the society towards women.

The women safety is a sensitive issue and each one in the society should take responsibility for it so that women can equally and freely contribute for strengthening the economy, politics and society of the country.



5. GOVERNMENT LIBERALIZED THE E-VISA REGIME

Recently, government has made series of amendments in e-visa regime, liberalizing it further and making it more tourist friendly. The Ministry of Tourism has been working very closely with Ministry of Home Affairs for easing of the Visa Regime in the country over a period of time. The e-Tourist Visa which was introduced in September 2014 with 46 countries has now been made applicable for 166 countries.

Important modifications made are highlighted as under:

Duration of stay in India of e-Tourist and e-Business Visas is maximum upto 1 Year with multiple entry subject to the stay stipulations. Also, the existing restriction of allowing foreigner for a maximum of three times has also been removed.

Changes in e-Tourist Visa

- On e-Tourist Visa continuous stay during each visit shall not exceed 90 days in case of nationals of all countries who are eligible for grant of e-visa except nationals of USA, UK, Canada and Japan.
- In case of nationals of USA, UK, Canada and Japan

continuous stay during each visit shall not exceed 180 days. In all cases no registration will be required.

Changes in e-Business Visa

- Continuous stay during each visit shall not exceed 180 days in case of nationals of all countries who are eligible for grant of e-visa.
- No registration will be required if the stay is for a period of less than 180 days.

Other Changes

- e-Visa is valid for entry through 2 (two) more designated Airports (Bhubaneswar and Port Blair) raising the total number of such airports to 28.
- Attending Destination wedding under normal e-Tourist visa or Tourist visa- No separate category of Destination Wedding Visa.
- Foreign nationals who fall sick during their stay in India can now avail medical treatment without converting their visa into Medical Visa. This would take care of sudden medical emergencies.
- Visa-on-Arrival facility extended to the nationals of Republic of Korea.

6. ECO CIRCUIT

Ministery for Tourism has inaugurated the project 'Development of Eco Circuit: Pathanamthitta — Gavi — Vagamon — Thekkady' under the Swadesh Darshan scheme.

Eco Circuit is one of the fifteen thematic circuits identified for development under Swadesh Darshan Scheme. This Eco Circuit project was sanctioned in December 2015 for Rs. 76.55 crores. Major works carried out under the project includes Eco Adventure Tourism Park at Vagamon, Cultural Centre at Kadamanitta, Eco Log Huts at Peerumedu, Idukki, Approach Roads, Walking trails, Rain Shelters at Pine Valley



Forest, Thekkady, Kumily, Moozhiyar Dam, Penstock and Kakki Dam.

The Ministry of Tourism recognizing the tourism potential of the State has sanctioned 7 projects in the State of Kerala under the Swadesh Darshan and PRASHAD schemes for an approximate amount of Rs. 550 crores.

About Swadesh Darshan Scheme

Swadesh Darshan scheme is one of the flagship schemes of Ministry of Tourism for development of thematic circuits in the country in a planned and prioritised manner. Under this scheme the Government is focussing on development of quality infrastructure in the country with objective of providing better experience and facilities to the visitors on one hand and on other hand fostering the economic growth.

Around 30 projects / major components of projects are expected to be completed during the current financial year, of which 12 projects worth Rs.1024.49 crore, covering the states of Manipur, Meghalaya, Nagaland, Arunachal Pradesh, Andhra Pradesh, Madhya Pradesh, Chhattisgarh Kerala and Sikkim have already been inaugurated.



7. SHEHRI SAMRIDHI UTSAV

Recently, Shehri Samridhi Utsav was organised by Ministry of Housing & Urban Affairs (MoHUA). It aimed to extend the outreach of Deendayal Antyodaya Mission — National Urban Livelihoods Mission (DAY-NULM), to the most vulnerable, showcased its initiatives and facilitate access of Self-Help Group (SHG) members to the other government schemes.

Key Highlights

Through Shehri Samridhi Utsav, SHG members across cities are being linked to national government schemes viz. Swachchh Bharat Mission (U), Pradhan Mantri Awas Yojana (U), Pradhan Mantri Ujjwala Yojana, Pradhan Mantri Jan Dhan Yojana, Pradhan Mantri Suraksha Bima Yojana, Pradhan Mantri Jeevan Jyoti Yojana and National Nutrition Mission.

The major highlight of Shehri Samridhi Utsav was the national exhibition cum sale of SHG products and organisation of 'National Street Food Festival'.

A new platform called 'Shehri Sahabhagita Manch' has been proposed for regular meetings of urban local bodies (ULBs) officials with SHG federations. This would increase participation of these collectives of the urban poor in resolution of local issues and create a mechanism for ULBs to identify gaps in provision of basic services in urban poor settlements.

About DAY-NULM

DAY-NULM addresses multiple dimensions of urban poverty by developing strong community-based organizations, providing placement oriented skill training, providing subsidized loans for self-employment ventures, supporting street vendors' livelihoods and establishing shelter for the homeless. The Mission has made significant progress on all these fronts:

- Over 34 lakh urban poor women have been organized into Self Help Groups and their federations.
- Over 8.9 lakh candidates have been skill trained and certified with over 4.6 lakh provided placement.
- Over 8.5 lakh individuals and groups have been supported to access subsidized loans.
- 1,098 shelters have been made functional creating capacity for more than 60,000 urban homeless.
- 16 lakh street vendors have been identified through survey in 2,430 cities and half of them have been given identity cards.

OOO

SEVEN PRACTICE QUESTIONS FOR MAINS EXAM



- Q1. Comment on the growing trend of joining politics by bureaucrats. Is it healthy phenomenon for Indian democracy?
- Q2. What is 'Vote on account'? How it is different from Annual Financial Statement?
- Q3. Direct Income Benefit will not solve the fundamental problems of farmers. Critically analyze the statement.
- Q4. What is 'Polar Vortex'? How does it affect the weather in high latitudes?
- Q5. Critically evaluate the performance of defence PSU's in India.
- Q6. Discuss the reasons for low productivity of Indian Parliament. What reforms are needed for effective functioning of the Parliament?
- Q7. 'The Coastal Regulation Zone notification of 2018 will increases the vulnerability of coastal people to climate disasters'. Critically comment.

CCC







AN INTRODUCTION

Dhyeya IAS, a decade old institution, was founded by Mr. Vinay Singh and Mr. Q.H. Khan. Ever since its emergence it has unparallel track record of success. Today, it stands tall among the reputed institutes providing coaching for Civil Services Examination (CSE). The institute has been very successful in making potential realize their dreams which is evidents from success stories of the previous years.

Quite a large number of students desirous of building a career fro themselves are absolutely less equipped for the fairly tough competitive tests they have to appear in. Several others, who have a brilliant academic career, do not know that competitive exams are vartly different from academic examination and call for a systematic and scientifically planned guidance by a team of experts. Here one single move my invariably put one ahead of many others who lag behind. Dhyeya IAS is manned with qualified & experrienced faculties besides especially designed study material that helps the students in achieving the desired goal.

Civil Services Exam requires knowledge base of specified subjects. These subjects though taught in schools and colleges are not necessarily oriented towards the exam approach. Coaching classes at Dhyeya IAS are different from classes conducted in schools and colleges with respect to their orientation. Classes are targeted towards the particular exam. classroom guidance at Dhyeya IAS is about improving the individuals capacity to focus, learn and innovate as we are comfortably aware of the fact that you can't teach a person anything you can only help him find it within himself.

DSDL Prepare yourself from distance

Distance learning Programme, DSDL, primarily caters the need for those who are unable to come to metros fro economic or family reason but have ardent desire to become a civil servant. Simultaneously, it also suits to the need of working professionals, who are unable to join regular classes due to increase in work load or places of their posting. The principal characteristic of our distance learning is that the student does not need to be present in a classroom in order to participate in the instruction. It aims to create and provide access to learning when the source of information and the learners are separated by time and distance. Realizing the difficulties faced by aspirants of distant areas, especially working candidates, in making use of the institute's classroom guidance programme, distance learning system is being provided in General Studies. The distance learning material is comprehensive, concise and examoriented in nature. Its aim is to make available almost all the relevant material on a subject at one place. Materials on all topics of General Studies have been prepared in such a way that, not even a single point will be missing. In other words, you will get all points, which are otherwise to be taken from 6-10 books available in the market / library. That means, DSDL study material is undoubtedly the most comprehensive and that will definitely give you added advantage in your Preliminary as well as Main Examination. These materials are not available in any book store or library. These materials have been prepared exclusively for the use of our students. We believe in our quality and commitment towards making these notes indispensable for any student preparing for Civil Services Examination. We adhere all pillars of Distance education.

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