

GENERAL STUDIES-1

INDIAN CULTURE

INDIAN HARVEST FESTIVALS

<u>Makar Sankranti:</u> The festival of Makar Sankranti is being celebrated today when the Sun enters the Makar zodiac and the days begin to lengthen compared to nights.

Pongal: In South India, particularly Tamil Nadu

Magha Bihu: In Assam and many parts of the North East. It sees the first harvest of the season being offered to the gods along with prayers for peace and prosperity. People in Assam celebrate this festival wearing colourful and bright clothes.

<u>Uttarayan:</u> Gujarat celebrates it in the form of the convivial kite festival of Uttarayan

<u>Maghi:</u> In Punjab, Makar Sankranti is celebrated as Maghi. Bathing in a river in the early hours on Maghi is important

<u>Saaji:</u> In Shimla District of Himachal Pradesh, Makara Sankranti is known as Magha Saaji. Saaji is the Pahari word for Sakranti, start of the new month. Hence this day marks the start of the month of Magha.

Kicheri: The festival is known as Kicheri in Uttar Pradesh and involves ritual bathing.

'BHARAT KE VEER'

Why in news? The government has launched an official anthem for "Bharat Ke Veer", an initiative with a corpus fund to help the families of paramilitary troopers killed in the line of duty. The anthem is sung and composed by singer Kailash Kher.

About Bharat ke Veer:

It is a web portal and mobile application. The portal is an IT based platform, with an objective to enable willing donors to contribute towards

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the family of a braveheart who sacrificed his/her life in line of duty. This website is technically supported by National Informatics Centre (NIC) and powered by State Bank of India.

What it does?

This domain allows anyone to financially support the bravehearts of his choice or towards the "Bharat Ke Veer" corpus. The amount so donated will be credited to the account of 'Next of Kin' of those Central Armed Police Force/Central Para Military Force soldiers.

To ensure maximum coverage, a cap of 15 lakh rupees is imposed and the donors would be alerted if the amount exceeds, so that they can choose to divert part of the donation to another braveheart account or to the "Bharat Ke Veer" corpus.

Who will manage the fund?

"Bharat Ke Veer" corpus would be managed by a committee made up of eminent persons of repute and senior Government officials, who would decide to disburse the fund equitably to the braveheart's family on need basis.

SOCIAL ISSUES AND INDIAN SOCIETY

PROTECTING MARRIAGES ACROSS CASTES

Eight years after the National Commission for Women (NCW) proposed a special law to punish honour killings incited by khap panchayats, the Supreme Court has said that adults are free to marry persons of their own choice and hurting couples, or summoning them before clan members, groups, or a khap, is "absolutely illegal".

India registered 251 honour killings in 2015, recording a big spike in murders carried out by people professing to be acting in defence of their family's reputation.

<u>What is Honour Killing?</u> An honour killing or a shame killing is the homicide of a member of a family, due to the perpetrators' belief that the victim has brought shame or dishonour upon the family, or has

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violated the principles of a community or a religion, usually for reasons such as refusing to enter an arranged marriage, being in a relationship that is disapproved by their family, having sex outside marriage, becoming the victim of rape, dressing in ways which are deemed inappropriate.

- Honour killing involves, most often, the murder of a woman or girl by male family members.
- In patriarchal societies, the activities of girls and women are closely monitored.
- The significant feature is the connection of honour killings to the control of individual's behaviour, in particular in regard to sexuality/marriage, by the family as a collective.
- Another characteristic of honour killings is that the perpetrators often do not face negative stigma within their communities, because their behaviour is seen as justified.
- Honour killings have been reported in northern regions of India, mainly in the Indian states of Punjab, Rajasthan, Haryana and Uttar Pradesh, as a result of people marrying without their family's acceptance, and sometimes for marrying outside their caste or religion.
- Honour killings are also widespread in South India and the western Indian states of Maharashtra and Gujarat. (Recently, young Dalit engineering student was brutally murdered in full public view in Tirupur district, Tamil Nadu)

Efforts to undermine this menace

In 1990 the National Commission for Women set up a statutory body in order to address the issues of honour killings among some ethnic groups in North India.

This body reviewed constitutional, legal and other provisions as well as challenges women face. The NCW's activism has contributed significantly towards the reduction of honour killings in rural areas of North India.

Reasons for Honour Killing

A crime in the name of 'honour' is one of a range of violent or abusive acts. This includes emotional, physical and sexual abuse and other coercive acts.

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1. <u>Stratification:</u> Sociologists believes that the honour killing continues to take place is because of the continued rigidity of the caste system. Hence in the fear of losing the caste status, which they gain many benefits, makes them commit this heinous crime.

- 2. <u>Mentality:</u> The mentality of the people till now such that they will not be ready to accept the marriages which have taken place in the same gotra or outside. The society still negatives the right of choice in marriage. And especially for the women it is illegal to right to choice of marriage even imagine it.
- 3. <u>Lack in Governance:</u> The root of the cause for the increase of it is because the formal governance has not been able to reach the rural areas.
- 4. <u>Khap Panchayat:</u> The absence of the formal institutions as panchayat Smiti or a constitution gathering leads to the brutal governance of the illegal and extra-constitutionalized panchayat.
- 5. <u>Sex ratio</u>: The increase in the difference in sex ratio is reason to it. Honour killing are happening in the area where the sex ratio is low and girls are being bought for marriages. One important explanation may lie in the gender imbalance in the society signified by the very low sex ratios which are being further exacerbated by the fewer number of girls being born in the region.
- 6. <u>Illiteracy:</u> Unknown about the rights which are made to protect them in our constitution incapacity due to lack in education. The honour crime violates Article 14, 15 (1) & (3) 19, 21 and 39 (f) of the Constitution of India.
- 7. <u>Politician future:</u> Reason to protect Khap Panchayat by politician is mostly for their own future votes because majority in those areas are ironically basis for their livelihoods.
- 8. <u>Inter, intra-caste marriage:</u> Love in itself is considered as a social crime. Here reputation and ideals of once as draconian who will not allow that marriages.
- 9. *Status*: A person's ascribed status is more important than the achieved status.
- 10. <u>Prestige of every caste:</u> it is not limited to the higher caste but in a section even among oppressed communities like Dalit's and tribal too are indulging in "honour" crimes in a bid to prove that they are no less "honour bound" than the upper caste.

Khap Panchayats were primarily called upon by the affluent and upper caste people who desired to consolidate their power and position. They have become highly male-dominated.

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Khaps exercise their authority in various ways: they demand payment from couples, impose social or economic sanctions on them, order that they or their families be boycotted, divest the couple of any land or property that belongs to them, and harass, intimidate, or murder them.

Long road to legal protection

In August 2010, the legal cell of the All India Democratic Women's Association (AIDWA), in consultation with many women's organisations and individuals, drafted a comprehensive law entitled "The Prevention of Crimes in the Name of Honour and Tradition Bill" and gave it to the government.

- The Bill defines honour crimes in relation to a violation of the rights of the couple.
- It reads, "All persons including young persons and women have the right to control their own lives, a right to liberty and freedom of expression, and a right of association, movement and bodily integrity.
- Every man and woman has a right to choose her/his own partner in marriage or otherwise and any action listed below to prevent the exercise of this right shall amount to an offence under the provisions of this Bill.
- The Bill lists the various types of crime, in addition to murder; it suggests preventive measures, it provides for punishment of varying degrees, it includes khap panchayats or other bodies acting in the name of caste or community, it ensures accountability of the police and administration.
- The Bill was supported by the National Commission of Women, which gave a similarly named Bill to the government.

Law commission report on Honour Killing

Two years later, in 2012, the Law Commission of India, to which a reference had also been made by the government, brought out its own version of the Bill in its Report no 242.

- Although it stated that its draft was closer to the one submitted by the National Commission of Women, in fact it was extremely narrow and conservative in its approach.
- Entitled "Prohibition of Unlawful Assembly (Interference with the Freedom of Matrimonial Alliances) Bill, 2011", the Bill dealt

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primarily with the "unlawful assemblies" called by caste panchayats to prevent a self-choice

Supreme Court on Honour Killing

Eight years after the National Commission for Women (NCW) proposed a special law to punish honour killings incited by khap panchayats, the Supreme Court has said that adults are free to marry persons of their own choice and hurting couples, or summoning them before clan members, groups, or a khap, is "absolutely illegal".

Holding honour killings as a slur on the nation, and terming it a barbaric, feudal practice that ought to be stamped out, the Supreme Court directed courts to view such cases as in "rarest of rare" category for awarding death penalty to the convicts.

GEOGRAPHY

HAVRE

It is the world's largest deep ocean volcanic eruption that happened in New Zealand. It was recently confirmed by the researchers.

Details

The deep ocean volcanic eruption was first discovered in 2002.

- ➤ A solidified volcanic rock known as pumice raft found floating in the ocean near New Zealand in 2012 showed that underwater eruption had occurred.
- ➤ The eruption involved 14 aligned vents causing a "massive rupture".

NUNA

<u>Why in news?</u> A recent study suggests new information regarding Australia's history, indicating that a small area of the country was once part of Canada – forming a supercontinent named Nuna.

<u>Details</u>

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Research shows that about 1.7 billion years ago, Georgetown rocks were deposited into a shallow sea when the region was part of North America.

- ➤ Georgetown then broke away from North America and collided with the Mount Isa region of northern Australia around 100 million years later.
- ➤ This was a critical part of global continental reorganisation when almost all continents on Earth assembled to form the supercontinent called Nuna.

About Nuna:

Nuna, also known as Columbia, was estimated to be around 12900 km from North to South at the widest part, reports Space Daily. Nuna was made up of more than just Canada and parts of Australia, however, with the eastern coast of India attached to western North America as well. At this point in our planet's history, South America was rotated in such a way that the western edge of Brazil ended up lined up with eastern North America. The stitching together of these combined land masses gave us the supercontinent known as Nuna. Nuna predates Pangea dating back to 1.5-2.5 billion years ago.

GENERAL STUDIES-2

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POLITY

DISQUALIFICATION OF 20 MLAs

Why in news?

The Election Commission has recommended that 20 MLAs of the Aam Aadmi Party in Delhi be disqualified as they held offices of profit while being legislators. President Ram Nath Kovind will make the final decision based on the recommendation.

Backgrounder

In 2016, the Congress had approached the Election Commission, alleging that 21 MLAs of the AAP had been appointed parliamentary secretaries in 2015. In 2016, the Delhi High Court set aside their appointments as parliamentary secretaries.

What is an 'office of profit'?

If an MLA or an MP holds a government office and receives benefits from it, then that office is termed as an "office of profit". A person will be disqualified if he holds an office of profit under the central or state government, other than an office declared not to disqualify its holder by a law passed by Parliament or state legislature.

What are the basic criteria to disqualify an MP or MLA?

Basic disqualification criteria for an MP are laid down in Article 102 of the Constitution, and for an MLA in Article 191. They can be disqualified for: a) Holding an office of profit under government of India or state government; b) Being of unsound mind; c) Being an undischarged insolvent; d) Not being an Indian citizen or for acquiring citizenship of another country.

<u>Underlying principle for including 'office of profit' as criterion for disqualification:</u> Makers of the Constitution wanted that legislators should not feel obligated to the Executive in any way, which could influence them while discharging legislative functions. In other words, an MP or MLA should be free to carry out her duties without any kind of governmental pressure.

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RESTORING ORDER IN THE COURT

The issue

In an unprecedented move, the four senior-most judges of the Supreme Court held a press conference and raised a banner of revolt against the Chief Justice of India. They alleged that the CJI has been assigning cases, which have far-reaching consequences to the nation, selectively to Benches of his preference, thus ignoring well established convention.

In justification of their otherwise objectionable conduct on these issues, they said they had been left with no other option. They said there was an immediate need to preserve the judiciary system in the country if democracy has to be protected.

Divided opinion

Naturally, this incident has sent shock waves across the country in general and in the legal circles in particular.

- Many former judges, eminent jurists, and senior counsel have found the conduct of the four judges to be highly disagreeable.
- They feel that the image and reputation of the judiciary has been tarnished, and the confidence of the people in the judiciary shaken.

However, a few former judges and lawyers have sought to justify the action by asserting that the judges had no other choice as their repeated pleas to the CJI did not bring about the desired result.

- They also feel that it is more important to address the issues raised by the judges rather than find fault with them for going public.
- According to them, disapproval of the form of protest must not cloud the substance of the grievances.

Momentous and unfortunate

Regardless of who is right in the current dispute over the administrative functioning of the CJI, the reverberations of what took place will not easily

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subside and will be felt for a long time to come. The question is whether it could have been handled internally rather than be dragged into the open like this.

It is clear that 4 judges' grievances are rooted in their perception that CJI is misusing his administrative powers to assign cases with far-reaching consequences "selectively", disregarding conventions on allocation of judicial work.

Logically, this is an internal matter of the judiciary, one that is best settled through deliberations in a full court meeting of all the Supreme Court judges themselves.

Cause of differences among judges

Judicial work is primarily allocated based on a roster, and individual cases are allotted to Benches based on the category under which they fall. Once the roster is fixed, the CJI should ordinarily see that it is duly followed. Exceptions must be rare, and that too only for compelling reasons.

In an unusual order, regarding controversial Prasad Education Trust case, a Division Bench went ahead to delineate the composition of the Bench to hear the case, in which charges of judicial corruption were made, coupled with hints that there would be a conflict of interest if CJI were to hear it.

Eventually, a five-judge Bench headed by CJI overturned the order and asserted that the CJI was indeed the master of the roster and that he alone could assign cases and decide on the composition of benches.

Government must stay away

The conduct of the government in maintaining silence on the developments is commendable. The Central government has also rightly made its position clear that this being an internal matter of the judiciary, it will not intervene.

Rather than be inexplicably silent, it must disclose its position on the Memorandum of Procedure for judicial appointments and communicate this clearly to the Supreme Court. They have suggested that since the Centre had not responded to the MoP, effectively it was deemed to have been accepted.

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A solution can be worked out

The CJI is the first among equals and he is the captain who has to carry the whole team with him, while enjoying their goodwill and support.

- Rather than brush away the concerns of the four judges, the Chief Justice must convene a meeting of the full court and give them a patient and careful hearing.
- Disapproval of the form of their protest must not cloud the substance of their grievances.
- The stand taken by the Bar Council of India and the Supreme Court Bar Association is also praiseworthy. Both have urged the Supreme Court judges to discuss the issues and settle them amicably by themselves.
- It is best that there is no more airing of differences in public and that this incident is regarded by posterity as an aberration rather than a precedent.

In conclusion

About a year ago, the executive and the judiciary were publicly, and often very strongly, disagreeing over judicial appointments. An internal rift in the judiciary is far more serious. It poses the risk of diminishing the image of the judiciary and the esteem it enjoys in society. This institution has illumined national life for more than six decades, but a dark shadow hangs over it now. It is a moment for collective introspection.

MODEL CODE

Why in news?

The Election Commission (EC) has set up a 14-member committee to suggest changes to Section 126 of the Representation of the People (RP) Act, which prohibits poll campaign in the last 48 hours leading to voting. The committee, chaired by Deputy Election Commissioner Umesh Sinha, will submit its report within three months.

Terms of reference:

 Apart from suggesting modifications to the election law, the committee will also study the impact of new media and social media during the "silence period". Page | 11



• It has also been tasked to examine the difficulties faced in regulating media platforms during the prohibitory 48 hours in a multi-phase election.

Model Code of Conduct(MCC)

These are the guidelines issued by the Election Commission of India for conduct of political parties and candidates during elections mainly with respect to speeches, polling day, polling booths, election manifestos, processions and general conduct.

Aim: To ensure free and fair elections.

<u>When it comes into force?</u> The Model Code of Conduct comes into force immediately on announcement of the election schedule by the commission. The Code remains in force till the end of the electoral process.

<u>Status:</u> The need for such code is in the interest of free and fair elections. However, the code does not have any specific statutory basis. It has only a persuasive effect. It contains what is known as "rules of electoral morality". But this lack of statutory backing does not prevent the Commission from enforcing it.

<u>Evolution:</u> The Commission issued the code for the first time in 1971 (5th Election) and revised it from time to time. This set of norms has been evolved with the consensus of political parties who have consented to abide by the principles embodied in the said code and also binds them to respect and observe it in its letter and spirit.

The salient features of the Model Code of Conduct

It lays down how political parties, contesting candidates and party(s) in power should conduct themselves during the process of elections i.e. on their general conduct during electioneering, holding meetings and processions, poll day activities and functioning of the party in power etc.

COLLEGIUM SELECTS WOMAN ADVOCATE FOR SC JUDGE

Who?

Senior Advocate Indu Malhotra

Significance

She will be the first woman lawyer to be directly elevated from the Bar to the Supreme Court as a judge. Her name was recently cleared unanimously by the Supreme Court Collegium.

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Malhotra will be the seventh woman judge since Independence to make it to the Supreme Court.

GOVERNANCE ISSUES AND POLICIES

HAI SUBSIDY

<u>Why in news?</u> The government has abolished the subsidy being given to Haj pilgrims every year. The government said it will use the subsidy funds to empower the minorities.

Backgrounder: The policy to support Muslims in making the pilgrimage to Mecca in Saudi Arabia, can be traced back to 1932, when the British enacted the Port Haj Committees Act. In the ensuing decades, the Act has undergone numerous changes. And in recent years it has called for significant criticism from various parties.

In 2012, a Supreme Court order directed the Haj subsidy to be gradually phased out in the coming ten years. In 2017, a Central Haj Committee meeting decided to do away with the subsidy by the following year

<u>Haj subsidy:</u> It refers to discounted airfares given by the governmentowned airlines, Air India. It also includes for domestic travel to reach specially designed Haj departure airport terminals, lodging, medical care and meal.

<u>Criticisms against the Haj subsidy</u>

- Monopoly formed by Air India in carrying out the pilgrimage.
 Allegedly, the government subsidies have resulted in major profits for Air India, benefiting the airlines far more than the pilgrims.
- According to several critics of the subsidy, if booked months in advance, it is possible to buy cheaper air tickets, thereby doing away with the need for subsidy.
- > Some of the political parties have also called the subsidy as minority appearement.

Other religious pilgrimages with subsidy

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- The state and central governments spend considerable amounts on the pilgrim facilities at the four Kumbh melas in Haridwar, Ujjain, Nashik and Allahabad.
- ➤ The Kailash Manasarovar yatra from North India to the mountains of Tibet is yet another pilgrimage which is organised by the government with arrangements being made for security and health facilities.

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DEFENCE ACQUISITION COUNCIL (DAC)

<u>Why in news?</u> The Defence Acquisition Council (DAC) has simplified 'Make II' procedure, which prescribes guidelines to be followed to develop and manufacture defence equipment through Indian Industry.

Defence Acquisition Council (DAC)

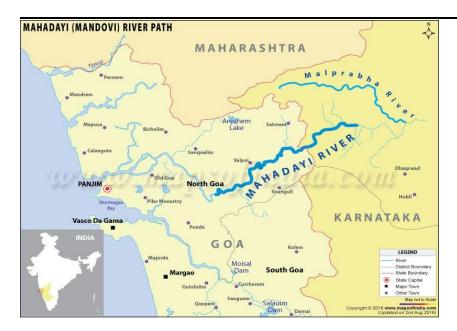
To counter corruption and speed up decision- making in military procurement, the government of India in 2001 decided to set up an integrated DAC. It is headed by the Defence Minister.

<u>Objective</u>: The objective of the DAC is to ensure expeditious procurement of the approved requirements of the Armed Forces, by optimally utilizing the allocated budgetary resources.

Functions: The DAC is responsible to give policy guidelines to acquisitions, based on long-term procurement plans. It also clears all acquisitions, which includes both imported and those produced indigenously or under a foreign license.

MAHADAYI ROW





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Why in news?

The row between Goa, Karnataka and Maharashtra over the sharing of the Mahadayi (Mandovi) river has escalated. The Mahadayi Water Disputes Tribunal setting a February date for the final hearing and with Karnataka elections around the corner, political parties in both States have upped the ante.

The Mahadayi row

Karnataka seeks to divert water from tributaries of the river through the Kalasa-Bhanduri Nala project towards the parched Malaprabha river basin (a tributary of River Krishna), which is being strongly opposed by Goa. This has led to a long-drawn farmers' agitation in Karnataka.

Goa's main contention is that Karnataka cannot divert water from an already-deficit Mahadayi basin to the Malaprabha river basin. It has said that any attempt to divert water from one river basin to the other will cause irreparable environmental damage. Karnataka claims the river is water-surplus.

Location

The 80-km-long river rises from the forests of the Western Ghats at Devgaon in northern Karnataka. It enters Goa where it is a lifeline, both for the people and the rich flora and fauna of its forests.



WELFARE SCHEMES AND DEVELOPMENTAL GROUPS

PRADHAN MANTRI SURAKSHIT MATRITVA ABHIYAN (PMSMA)

Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) has crossed one crore mark in antenatal check-ups. The programme has been successful in reaching out to the difficult and remote areas of India, since out of the 1 crore checkups across the country, more than 25 lakh check-ups were conducted in high priority districts identified by the Health Ministry for focussed attention.

PMSMA:

Launched by: Ministry of Health & Family Welfare (MoHFW), Government of India.

Aim: To provide assured, comprehensive and quality antenatal care, free of cost, universally to all pregnant women on the 9th of every month.

Provisions

PMSMA guarantees a minimum package of antenatal care services to women in their 2nd/3rd trimesters of pregnancy at designated government health facilities.

 The programme follows a systematic approach for engagement with private sector which includes motivating private practitioners to volunteer for the campaign; developing strategies for generating awareness and appealing to the private sector to participate in the Abhiyan at government health facilities.

Backgrounder:

Data indicates that Maternal Mortality Ratio (MMR) in India was very high in the year 1990 with 556 women dying during child birth per hundred thousand live births. MMR of India has now declined to 167/lakh live births against a global MMR of 216/lakh live births (2015).

While India has made considerable progress in the reduction of maternal and infant mortality, many of these deaths are preventable and many lives can be saved if quality care is provided to pregnant women during their Page | 16



antenatal period and high risk factors such as severe anemia, pregnancy-induced hypertension etc are detected on time and managed well.

ACCESSIBLE INDIA CAMPAIGN

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Why in news?

In a path breaking initiative to empower Persons with Disabilities, 100 Accessible websites of various State Governments/UTs under Accessible India Campaign have been launched.

What are accessible websites?

Accessible Websites are those websites into which Persons with Disabilities can perceive, understand, navigate, and interact with the Web, and that they can contribute to the Web.

Backgrounder:

The Department of Empowerment of Persons with Disabilities (Divyangjan) initiated a "Website Accessibility Project" for State Government/Union Territories under Accessible India Campaign through ERNET India, an autonomous scientific society under the Ministry of Electronics & Information Technology (MeitY). Now 100 accessible websites are made accessible under the project.

About Accessible India Campaign:

Accessible India Campaign (AIC) is the nationwide flagship campaign of the Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice and Empowerment.

<u>Aim:</u> The aim of the Campaign is to make a barrier free and conducive environment for Divyangjans all over the country. The campaign has the vision to build an inclusive society in which equal opportunities are provided for the growth and development of Persons with Disabilities (PwDs) so that they can lead productive, safe and dignified lives.

Implementation: For creating universal accessibility for Persons with Disabilities, the campaign has been divided into three verticals: Built



Environment; Transport and Information & Communication Technology (ICT) ecosystem.

The Built Environment Accessibility component of Accessible India Campaign entails following targets:

- Completing accessibility audit of at least 25-50 most important government buildings in 50 cities and making them fully accessible by the end of this year.
- Making 50% of all the government buildings of NCT and all the State capitals fully accessible by December 2018.
- Completing accessibility audit of 50% of government buildings and making them fully accessible in 10 most important cities/towns of States not covered in targets (i) and (ii) by December 2019.

Accessible India Campaign is in line with the Article 9 of UNCRPD(UN Convention on the Rights of Persons with Disabilities) to which India is a signatory since 2007.

GIAN PROGRAM

Why in news? The First Global Initiative on Academic Network GIAN course on Sustainable Urban planning using remote sensing and Geographic Information System, GIS has been launched at Indian Institute of Technology Kanpur's outreach center in NOIDA.

Course by: Ministry of Human Resource Development and actively supported by NITI Aayog and Ministry of Housing and Urban Affairs.

<u>Details:</u> This course aims to give participants state-of-the-art remote sensing and GIS skills which will allow them to rise to the challenge of managing the rapidly changing urban environment of Indian cities.

Significance: This course is expected to contribute significantly to build trained manpower for the Smart Cities Mission and application of 'Smart' Solutions.

Global Initiative of Academic Networks (GIAN):

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Global Initiative of Academic Networks (GIAN) in Higher Education was launched in 2015. GIAN aims at tapping the talent pool of scientists and entrepreneurs to engage with the institutes of higher education in India to augment the country's existing academic resources, accelerate the pace of quality reforms, and further strengthen India's scientific and technological capabilities.

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GIAN is envisaged to achieve the following objectives:

- To increase the footfalls of reputed international faculty in the Indian academic institutes.
- ➤ Provide opportunity to our faculty to learn and share knowledge and teaching skills in cutting edge areas.
- ➤ To provide opportunity to our students to seek knowledge and experience from reputed International faculty.
- > To create avenue for possible collaborative research with the international faculty
- > To increase participation and presence of international students in the academic Institutes.
- Opportunity for the students of different Institutes/Universities to interact and learn subjects in niche areas through collaborative learning process.
- ➤ Provide opportunity for the technical persons from Indian Industry to improve understandings and update their knowledge in relevant areas.
- Motivate the best international experts in the world to work on problems related to India.
- Develop high quality course material in niche areas, both through video and print that can be used by a larger body of students and teachers.
- ➤ To document and develop new pedagogic methods in emerging topics of national and international interest.

ALL ABOUT THE RTE

Since its enactment, the RTE Act has been lauded and criticized. There are clauses in the Act which have enormous catalytic potential to plug the lacunae but that have gone largely untouched and unnoticed.

School education in India



According to the 2011 census, literacy rate in India was found to be 74.04 per cent. Among the states, Kerala leads the literacy rate followed by Goa, Tripura, Mizoram. The lowest literacy rate in India is seen in the state of Bihar.

India has made phenomenal progress since independence in the field of education. Following the Millennium Development framework, by the measure of the Net Enrolment Ratio (NER), India had crossed the cut-off target of universal primary education for all children aged 6-10 years in 2007-08.

The present education system in India is guided by different objectives and goals but is based around the policies of yesteryears.

- Immediately after independence, a Department of Education under the Ministry of Human Resource Development was set up with a mandate to expand the educational facilities.
- After 1960, the focus shifted towards quality. With that vision, the National Policy on Education was formulated in 1968.
- Over subsequent years, several policies have been formulated to ensure that the literacy level is gradually increased with a close monitoring of the quality of education as well.
- Retention of children in schools was of paramount importance in the years that followed with the gender gap of education also showing a dipping.
- More recently, two prominent policies of the Indian government—the Sarva Shiksha Abhiyan (SSA) in 2001 and the Right of Children to Free and Compulsory Education (RTE) Act, 2009 have seen education priorities rise amongst households and catalysed improvements in educational performance.
- Education continues to remain a top priority for the Government of India with rising budgetary allocations.

Major Challenges:

- Steep dropout rates after the elementary and middle school level
- Increasing enrolment gap from elementary to higher secondary
- Disadvantaged groups are worse off with the dropout rates for Scheduled Castes and Scheduled Tribes higher than the national average.
- High pupil-teacher ratio
- Lack of professionally trained teachers
- Poor level of student learning resulting in weak learning outcomes at each stage of education.

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Some of the Initiatives of Government of India on School Education The emphasis on education in the Central Budget has been on the rise in the recent years. n.

- The budget has special focus on education of the girl child with the Beti Bachao Beti Padhao scheme
- Providing girls toilets and drinking water facilities.
- modernisation of the madrasas
- School Assessment Programmes
- Pandit Madan Mohan Malviya's Teacher Training Programme
- Setting up of virtual classrooms as Communication Linked Interface for Cultivating Knowledge (CLICK) and Massive Open Online Courses (MOOC) and a national e-library.
- The Twelfth Five-Year Plan (2012–2017) targeted to increase the mean years of schooling to seven years and to eliminate gender and social gaps in school enrolment.
- Mid-Day Meal programme to provide free lunch on working days for children in Primary and Upper Primary Classes. The primary objective of the scheme is to improve the nutritional status of children, encouraging poor children, belonging to disadvantaged sections, to attend school more regularly and help them concentrate on classroom activities, thereby increasing the enrolment, retention and attendance rates.
- Under 86th Constitutional Amendment Right to Education was added to the Indian Constitution (Article 21A).
- Scheme for setting up 6000 Model Schools at Block Level as benchmark of excellence.
- Rashtriya Madhyamik Shiksha Abhiyan (RMSA) to achieve a Gross Enrolment Ratio (GER) of 75 per cent at secondary stage and universal retention by 2020.

Right to Education Act:

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, there are several challenges existing in our education system. A focus on below three of these provisions can result in an immediate and noticeable impact.

1. Focus on retention

Tracking dropouts and preparing and mainstreaming them into ageappropriate classes has been subsumed into existing scheme activities. Even seven years after its enactment, there are still children on the streets, in fields and in homes. Page | 21



Strategies to ensure retention need to change from the earlier approach of enrolling the un-enrolled. As children out of the fold of schooling are the most hard to reach, such as girls, the disabled, orphans and those from single parent families, the solutions have to be localised and contextualised.

2. Pupil-teacher ratio

The most critical requirement, which has also got the least public attention, is the pupil-teacher ratio (PTR). It is impractical to expect quality education without this.

- All other forward-looking provisions of the Act such as continuous assessment, a child learning at her own pace, and 'no detention' policies are contingent on a school with an adequate number of teachers.
- No meaningful teaching-learning is possible unless trained teachers are physically present at school.
- States shy away from recruiting or posting more teachers keeping in mind higher salaries and finances

Teacher provisioning should be the first option to fund as no educationally developed country has built up a sound schooling foundation without a professionally-motivated teaching cadre in place.

3. Think decentralisation

The third provision is that the academic calendar will be decided by the local authority, which, for most States and Union Territories, is the panchayat.

- This provision recognises the vast cultural and regional diversities within the country such as local festivals, sowing and harvesting seasons, and even natural calamities as a result of which schools do not function academically.
- Not all festivals and State holidays declared by the State headquarters may be locally relevant. So if panchayats, perhaps at the district level, decide the working days and holidays, this would not only exponentially increase attendance and teaching-learning but also strengthen local panchayats, being closest to the field, to take ownership of their schools.

For inexplicable reasons, the educational bureaucracy has not allowed the decentralisation of academic schedules even in districts.

Open-minded adoption of these provisions, keeping the child in mind, can go a long way in radically transforming our school education sector.

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INDIA AND ITS INTERNATIONAL RELATIONS

iCREATE

Prime Ministers of India and Israel recently dedicated to the nation the iCreate facility located on the outskirts of Ahmedabad

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What is it?

iCreate is an independent centre created with the objective of facilitating entrepreneurship through a blend of creativity, innovation, engineering, product design and leveraging emerging technologies to deal with major issues such as food security, water, connectivity, cybersecurity, IT and electronics, energy, bio-medical equipment and devices etc.

<u>Aim:</u> iCreate aims to develop an ecosystem in India to generate quality entrepreneurs.

INTERNATIONAL AFFAIRS

AUSTRALIA GROUP

Why in news?

India was recently admitted as the 43rd member of the Australia Group, an informal bloc of countries that keeps a tight control over exports of substances used in the making of chemical weapons.

Significance

With its admission into the Australia Group, India is now part of three of the four key export control groups in the world. This includes

1. the Missile Technology Control Regime—an informal and voluntary partnership among 35 countries that regulates trade in sensitive equipment and technologies to ensure there is no proliferation of missile and unmanned aerial vehicle technology capable of carrying payloads above 500kg for more than 300km.



2. India joined the Wassenaar Arrangement, which is also an informal grouping of 42 countries, exercising control over the export of dual-use goods and technologies.

The only export control group that India is not a part of is the elite Nuclear Suppliers Group (NSG), which controls the export of sensitive nuclear technologies and equipment, with the aim of preventing nuclear weapons' proliferation.

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The Australia Group:

The Australia Group works to counter the spread of materials, equipment and technologies that could contribute to the development or acquisition of chemical and biological weapons (CBW) by states or terrorist groups. It was established in 1985.

INTERNATIONAL SOLAR ALLIANCE

Why in news?

In one of its first outreach programmes post-ratification, the International Solar Alliance (ISA) is hosting an event 'International Solar Alliance Forum' at the Future World Energy Summit (WFES) 2018.

ISA

The Paris Declaration establishes ISA as an alliance dedicated to the promotion of solar energy among its member countries. The ISA's major objectives include global deployment of over 1,000GW of solar generation capacity and mobilisation of investment of over US\$ 1000 billion into solar energy by 2030.

- As an action-oriented organisation, the ISA brings together countries with rich solar potential to aggregate global demand, thereby reducing prices through bulk purchase, facilitating the deployment of existing solar technologies at scale, and promoting collaborative solar R&D and capacity building.
- When the ISA Framework Agreement entered into force in December, 2017, ISA formally became a de-jure treaty based



International Intergovernmental Organization, headquartered at Gurugram, India.

 As of now the ISA Framework Agreement has been signed by 48 countries, with 19 of them also depositing the instruments of ratification with the Ministry of External Affairs, Government of India.

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RAISINA DIALOGUE 2018

Venue: New Delhi.

Theme: 'Managing Disruptive Transitions: Ideas, Institutions & Idioms'.

Organized by: Ministry of External Affairs and Observer Research Foundation (ORF)

About the Raisina Dialogue: This is an annual geo-political event, designed to explore prospects and opportunities for Asian integration as well as Asia's integration with the larger world. It is predicated on India's vital role in the Indian Ocean Region and how India along with its partners can build a stable regional and world order.

Participants: The conference is a multistakeholder, cross-sectoral meeting involving policy and decision-makers, including but not limited to Foreign, Defence and Finance Ministers of different countries, high-level government officials and policy practitioners, leading personalities from business and industry, and members of the strategic community, media and academia.

Significance: The Raisina Dialogue was born two years ago, in 2016, in the belief that the Asian century that the world was talking about was not about any exclusive geographical region. It was rather about the engagement of global actors with Asia and of Asia with the world.

So, this dialogue took birth as a platform, where the old and the new could work together, to discover their connections, their inter-dependence. It has today become a crucible for conversations and ideas that while located in India can be owned by the world.



WORLD ENERGY AND ENVIRONMENT CONFERENCE

Why in news? The World Energy and Environment Council is organising the 5th Series World Energy and Environment Conference and Exhibition 2018 at Bahrain.

Theme: "Shifting to Clean, Renewable Energy in Time of Transition".

About the conference

WEEC is a world platform that address serious issues about environment and the challenges to turn to clean, renewable and sustainable energy.

WEEC aims for commitment from governments, its leaders, for lawmakers to do intelligent thinking, get brilliant ideas in directing laws and regulations. With the private sectors cooperation and participation, creating a roadmap toward sustainability for the benefit of all.

GENERAL STUDIES-3

INDIAN ECONOMY

NATIONAL INVESTMENT AND INFRASTRUCTURE FUND (NIIF)

Why in news?

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The National Investment and Infrastructure Fund (NIIF), India's first sovereign wealth fund, and Dubai-based ports operator DP World Pvt. Ltd, have announced the creation of an investment platform to invest up to \$3 billion in ports, terminals, transportation and logistics businesses in India. This is the first investment platform from NIIF.

<u>Other areas:</u> The platform will also look at opportunities beyond sea ports such as river ports and transportation, freight corridors, port-led special economic zones, inland container terminals and logistics infrastructure, including cold storage.

About NIIF:

NIIF was set up in 2015 as an investment vehicle for funding commercially viable greenfield, brownfield and stalled projects in the infrastructure sector. NIIF will invest in areas such as energy, transportation, housing, water, waste management and other infrastructure-related sectors in India.

- The corpus of the fund is proposed to be around Rs40,000 crore, with the government investing 49% and the rest to be raised from third-party investors such as sovereign wealth funds, insurance and pension funds, endowments etc.
- NIIF's strategy includes anchoring equity, quasi-equity and debt funds in partnership with investors targeting investments across the relevant sectors in India.

INDAS

Why in news?

Banks and non-banking financial companies are due to switch to Indian Accounting Standards (IndAS) from 1 April 2018. However, the government and the Reserve Bank of India (RBI) may postpone the implementation of new accounting standards for banks because of the

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legislative changes and additional capital requirements the process would entail.

Backgrounder:

Banks and non-banking financial companies currently follow generally accepted accounting principles (GAAP) standards. Other corporate entities started complying with IndAS with effect from 1 April 2016.

What is it?

Ind AS or Indian Accounting Standards govern the accounting and recording of financial transactions as well as the presentation of statements such as profit and loss account and balance sheet of a company. For long, there has been a heated debate about Indian companies moving to the globally accepted International Financial Reporting Standards (IFRS) for their accounts. But firms have resisted this shift, stating that this will lead to too many changes in the capture and reporting of their numbers. Ind AS has been evolved as a compromise formula that tries to harmonise Indian accounting rules with the IFRS.

Implementation

The implementation of IndAS for public sector banks requires an amendment to the Banking Regulation Act. The schedule in BR Act relating to financial statement disclosures needs to be changed to the IndAS format.

 BR Act deals with the accounts and balance sheets of public sector banks. Private sector banks are covered by the Companies Act, which is based on the new accounting standards.

FINANCIAL SECTOR ASSESSMENT PROGRAM

Why in news?

The two main Reports of the 2017 India Financial Sector Assessment Programme (FSAP) – the Financial System Stability Assessment (FSSA) and Financial Sector Assessment (FSA), were recently released by the

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International Monetary Fund (IMF) and the World Bank. Last FSAP for India was conducted in 2011-12.

The Report providing 'Detailed Assessment of Observance—Basel Core Principles for Effective Banking Supervision' has been released by the IMF and the World Bank and the Report providing 'Detailed Assessment of Observance of Clearing Corporation of India Limited (CCIL) Central Counter Party (CCP) and Trade Repository (TR)', was released by the World Bank.

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<u>Highlights of the report:</u>

The FSAP report acknowledges many efforts by Indian authorities like tackling Non-Performing Assets (NPAs), recent recapitalization measures for banks and introduction of special resolution regime, formalization of National Pension System (NPS) and making the pension sector regulator statutory, passing of Insolvency and Bankruptcy Code and setting up of Insolvency and Bankruptcy Board of India (IBBI), to name a few.

Appreciation

It appreciates initiatives such as 'no frills' account (under Jan Dhan Yojana), promoting digitization, introduction of unique biometric identification number (AADHAR), currency exchange initiative etc. It also recognizes the improved inter-agency co-operation since the establishment of Financial Stability and Development Council (FSDC), supported by its Sub-Committee and four technical groups and progress in setting up of Financial Data Management Centre (FDMC).

About Financial Sector Assessment Program (FSAP):

The Financial Sector Assessment Program (FSAP), established in 1999, is a comprehensive and in-depth assessment of a country's financial sector. It is a joint program of the International Monetary Fund and the World Bank.

FSAPs analyze the resilience of the financial sector, the quality of the regulatory and supervisory framework, and the capacity to manage and resolve financial crises. Based on its findings, FSAPs produce recommendations of a micro- and macro-prudential nature, tailored to country-specific circumstances.



'IPRISM'

What is it? It is one of its kind Intellectual Property (IP) Competition for college and university students.

Launched by: The Cell for IPR Promotion and Management (CIPAM), Department of Industrial Policy and Promotion (DIPP), in collaboration with ASSOCHAM and ERICSSON India.

<u>Details:</u> The competition aims to foster a culture of innovation and creativity in the younger generation. It will provide young creators a unique opportunity to see their creations recognized on a national platform.

- This competition invites students to submit films on piracy & counterfeiting under two categories of 30 and 60 seconds.
- Another category in the competition is for a mobile gaming app on IP.

Backgrounder: Counterfeiting and Piracy cause significant loss to the industry and pose serious safety threats to the consumers. Generating awareness can help in tackling such crimes since limited knowledge about their adverse social and economic impact leads to circulation and consumption of pirated content and fake goods.

About CIPAM:

Cell for IPR Promotion and Management (CIPAM) has been created as a professional body under the aegis of DIPP to take forward the implementation of the National IPR Policy that was approved by the Government, with the slogan – "Creative India; Innovative India".

CIPAM is working towards creating public awareness about IPRs in the country, promoting the filing of IPRs through facilitation, providing inventors with a platform to commercialize their IP assets and coordinating the implementation of the National IPR Policy in collaboration with Government Ministries/Departments and other stakeholders.

GLOBAL MANUFACTURING INDEX

Released by: The World Economic Forum (WEF)

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Significance

This is WEF's first 'Readiness for the future of production report'. The report has been developed in collaboration with A T Kearney and calls for new and innovative approaches to public-private collaboration are needed to accelerate transformation.

<u>Details</u>

The report has categorised 100 countries in four major groups for its ranking:

- Leading (strong current base, high level of readiness for future).
- High Potential (limited current base, high potential for future).
- Legacy (strong current base, at risk for future).
- Nascent (limited current base, low level of readiness for future).

Performance of various countries:

- Japan has topped the list. Japan is followed by South Korea, Germany, Switzerland, China.
- Among BRICS nations, Russia is ranked 35th, Brazil 41st and South Africa at 45th place.
- China figures among the WEF's "leading countries".
- "Legacy" group includes Hungary, Mexico, Philippines, Russia, Thailand and Turkey, among others
- Brazil as well as South Africa are among the "nascent" ones.
- India is at the 30th position, five places below China, but higher than the other BRICS members Brazil, Russia and South Africa. India has been placed in the "Legacy" group.
- In terms of scale of production and market size, India has been ranked higher. While for complexity it is at 48th place. The country is ranked poorly (90th or even lower) include female participation in labour force, trade tariffs, regulatory efficiency and sustainable resources.
- Other countries ranked below India include Turkey, Canada, Indonesia, New Zealand, Australia, Hong Kong, Mauritius and the UAE.

Backgrounder

India's manufacturing sector has grown by over 7% per annum on average in the past three decades and accounts for 16-20% of India's GDP. Home to the second-largest population in the world and one of the fastest growing economies, the demand for Indian manufactured products is rising

<u>In conclusion</u>

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India has room for improvement across the drivers of production, except for demand environment where it ranks in the top 5. Human capital and sustainable resources are the two key challenges for India and the country needs to continue to raise the capabilities of its relatively young and fast-growing labour force. This entails upgrading education curricula, revamping vocational training programmes and improving digital skills.

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AGRICULTURE AND CROPPING PATTERNS

2018 AS 'NATIONAL YEAR OF MILLETS'

Nutrient-rich millets have got a boost with the Union government deciding to declare 2018 as the 'national year of millets'. This decision has been taken following a request by Karnataka, which is the country's leader in the millet sector.

Significance of this move:

Dedicating a year for millets will not only increase awareness about its health benefits, but also result in higher demand for these drought-resistant varieties, resulting in remunerative prices for poor and marginal farmers.

What are Millets?

Millet is a common term to categorize small-seeded grasses that are often termed nutri-cereals or dryland-cereals, and includes sorghum, pearl millet, ragi, small millet, foxtail millet, proso millet, barnyard millet, kodo millet and other millets.

Benefits of Millets:

An important staple cereal crop for millions of small holder dryland farmers across sub-saharan Africa and Asia, millets offer nutrition, resilience, income and livelihood for farmers even in difficult times. They have multiple untapped uses such as food, feed, fodder, biofuels and brewing. Therefore, millets are Smart Food as they are Good for You, Good for the Farmer and Good for the Planet.

 Nutritionally superior to wheat & rice owing to their higher levels of protein with more balanced amino acid profile, crude fiber &



- minerals such as Iron, Zinc, and Phosphorous, millets can provide nutritional security and act as a shield against nutritional deficiency, especially among children and women.
- The anaemia (iron deficiency), B-complex vitamin deficiency, pellagra (niacin deficiency) can be effectively tackled with intake of less expensive but nutritionally rich food grains like millets.
- Millets can also help tackle health challenges such as obesity, diabetes and lifestyle problems as they are gluten free, have a low glycemic index and are high in dietary fibre and antioxidants.
- Adapted to low or no purchased inputs and to harsh environment of the semi-arid tropics, they are the backbone for dry land agriculture.
- Photo-insensitive & resilient to climate change, millets are hardy, resilient crops that have a low carbon and water footprint, can withstand high temperatures and grow on poor soils with little or no external inputs. In times of climate change they are often the last crop standing and, thus, are a good risk management strategy for resource-poor marginal farmers.

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INDUSTRY, INFRASTRUCTURE AND INVESTMENT

GOVERNMENT NAMES NINE NEW SMART CITIES

Government has named nine new smart cities. The number of cities picked under the project now stands at 99.

The nine cities chosen in the fourth round are -Bareilly, Moradabad and Saharanpur in Uttar Pradesh, Erode in Tamil Nadu, Bihar Sharif in Bihar, Silvasa in Dadra and Nagar Haveli, Diu in Daman and Diu, Kavarati in Lakshadweep and Itanagar in Arunachal Pradesh. Silvasa topped the list of winners in this round.

About Smart City mission-

The scheme was launched in 2014, according to which around 100 cities in the country will be developed.



Selection of cities: The selection is based on the scores cities get for carrying out urban reforms in areas including sanitation and governance. Cities that score the highest will be picked for the project, to be implemented over a 10-year period.

<u>Development:</u> These cities will be developed to have basic infrastructure through assured water and power supply, sanitation and solid waste management, efficient urban mobility and public transport, IT connectivity, e-governance and citizen participation. Bottom-up approach has been the key planning principle under Smart City Mission.

Funding: Under the scheme, each city will get Rs 500 crore from the Centre for implementing various projects. An equal amount, on matching basis, will have to be contributed by the state or urban local bodies. The mission will provide central funding of Rs 48,000 crore to the selected cities.

Implementation: The implementation of the Mission at the City level will be done by a Special Purpose Vehicle (SPV) created for the purpose. The SPV will plan, appraise, approve, release funds, implement, manage, operate, monitor and evaluate the Smart City development projects. Each smart city will have a SPV which will be headed by a full time CEO and have nominees of Central Government, State Government and ULB on its Board.

SMART STAR-RATING FOR GARBAGE FREE CITIES

Ministry of Housing and Urban Affairs has launched the 'Protocol for Star Rating of Garbage-Free Cities' in Goa.

About the star rating initiative:

The star-rating initiative, developed by the Swachh Bharat Mission – Urban will be rating cities on a 7-star rating system based on multiple cleanliness indicators for solid waste management.

<u>Indicators:</u> These include Door to Door Collection, bulk generator compliance, source segregation, sweeping, scientific processing of waste, scientific land filling, plastic waste management, construction and demolition management, dump remediation & citizen grievance redressal system etc.

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<u>Vision:</u> Vision statement of the star-rating protocol states that "All cities achieve "Garbage Free" status wherein at any point of time in the day, no garbage or litter is found in any public, commercial or residential locations (including storm drains and water bodies) in the city (except in litter bins or transfer stations);

- ➤ 100% of waste generated is scientifically managed;
- ➤ all legacy waste has been remediated and city is scientifically managing its municipal solid waste, plastic waste and construction & demolition waste.
- Additionally, there must be a steady reduction in the waste generated by the city and visible beautification of the city to achieve a clean & aesthetically pleasing city".

Rating: Cities can be rated as 1, 2, 3, 4, 5 and 7 star based on their compliance with the protocol conditions specified for each of the rating. Further city should be ODF(Open Defecation Free) before it could be given rating of 3 star or above.

While cities may self-declare themselves as 1-star, 2-star or 4-star, MoHUA will carry out an additional verification through an independent third party to certify cities as 3-star, 5-star or 7-star. Cities will need to get recertified themselves every year to retain their star-status.

Significance of the initiative: The most significant feature of the rating protocol is that it provides stakeholders with a single metric to rate a city's cleanliness, rather than separately evaluating multiple factors which contribute to a city's overall cleanliness and garbage free status. The distinctive feature of Star Rating System will be that many cities can have higher stars as compared to only one city can be "Cleanest city" under Swachh Survekshan.

ENERGY GLOBE WORLD AWARD

Why in news? Kalinga Institute of Social Sciences (KISS) has won the 18th Energy Globe World Award -2017 as the one and only organisation from India.

<u>Why?</u> KISS won the award in 'Fire' Category for green initiatives undertaken by this institute that reduces the ecological footprint for large scale cooking.

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What is it? It is an international award in the field of environment instituted by the Energy Globe Foundation annually to recognise projects that make careful and economical use of resources and employ alternative energy sources.

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Why in news?

A Memorandum of Understanding has been signed between Ministry of Water Resources, River Development and Ganga Rejuvenation, State of Bihar and State of Jharkhand for completion of balance works of North Koel reservoir project

Also, a supplementary Memorandum of Agreement has been signed between the aforesaid signatories and National Water Development Agency and NABARD for funding of the state share under Long Term Irrigation Fund (LTIF) for North Koel reservoir project.

North Koel Reservoir Project

The project is situated on North Koel river which is a tributary of Sone river finally joining the river Ganga. The North Koel Reservoir is located in the most backward tribal areas in Palamau and Garhwa districts of Jharkhand State.

- North Koel river rises on Ranchi plateau and flows through Iharkhand.
- The North Koel, along with its tributaries, meanders through the northern part of Betla National Park.
- The principal tributaries are the Auranga and the Amanat.



- The construction was originally started in the year 1972 and continued till 1993 when it was stopped by the Forest Department, Govt. of Bihar. Since then, the work on dam is at a standstill.
- The project aims to provide irrigation

LTIF

LTIF was announced in the Union Budget 2016-17 with an initial corpus of Rs 20,000 crore for funding and fast tracking the implementation of incomplete major and medium irrigation projects. LTIF has been instituted in NABARD as a part of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY).

SAKSHAM-2018:

Saksham (Sanrakshan Kshamta Mahotsav) is an annual flagship event of Petroleum Conservation Research Association (PCRA) under the aegis of Ministry of Petroleum & Natural Gas, Govt. of India , with active involvement of the Oil & Gas PSUs along with other stakeholders like State Governments

Objective: For creating focused attention on fuel conservation through people centric activities and to sensitize the masses about the conservation and efficient use of petroleum products leading to better health and environment.

SFOORTI APPLICATION

Launched by: Ministry of Railways

Purpose: To help plan the traffic flows and optimize freight operations

Smart Freight Operation Optimisation & Real Time Information (SFOORTI) App for Freight Managers provides features for monitoring and managing freight business using Geographic Information System (GIS) Views and Dashboard.

<u>Details</u>

- Both passenger and freight trains can be tracked over Zones/Divisions/ Sections in single GIS View.
- Performance of each zone and divisions with respect to loading and utilization of freight assets can be viewed.

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Importance of Freight traffic:

Freight traffic is the major source of revenue for Indian Railways. Only one-third of the 13000 trains running daily on IR are freight trains, but it accounts 65% of total revenue of IR. Railway Freight traffic is vital for economic and industrial progress of the country.

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SCIENCE AND TECHNOLOGY

ICBM AGNI-V

Agni- 5 is the intercontinental surface-to-surface nuclear capable ballistic missile. It is the latest in India's "Agni" family of medium to intercontinental range missiles.

- Agni-5 has a range of over 5,000 km and can carry about a 1,000-kg warhead.
- ➤ It can target almost all of Asia including Pakistan and China and Europe
- ➤ It weighs about 50 tonnes and is a very agile and modern weapon system.
- ➤ The surface-to-surface missile is a fire-and-forget system that cannot be easily detected as it follows a ballistic trajectory.
- ➤ India describes the Agni 5 missile system as a 'weapon of peace'.
- ➤ India has already joined an elite club of nations that possess the ICBM launch capability when the maiden test-firing of Agni-V was successfully conducted in 2012.
- ➤ Only the five permanent members of the United Nations Security Council China, France, Russia, the United States and Britain, along with Israel, have so far possessed such long-range missiles.

PARKER SOLAR PROBE

Why in news? NASA has begun testing its new probe- Parker solar probethat will 'touch the sun', when it launches into space this summer.

All about Parker Solar Probe:



Parker Solar Probe will travel through the sun's atmosphere, closer to the surface than any spacecraft before it, facing brutal heat and radiation conditions and ultimately providing humanity with the closest-ever observations of a star.

<u>Aims</u>: Study the outer atmosphere of the sun, known as the corona. Collecting vital information about the life of stars and their weather events.

<u>Benefits</u>: This will help scientists improve how we predict dangerous solar flares, which can disrupt satellites and power supplies here on Earth.

Observations from this new vantage point will also help to uncover the physics of how stars work, and could improve our ability to predict space weather.

Why study the corona? The corona is the sun's outer atmosphere. It is unstable and produces solar wind and flares. Millions of tons of highly magnetised material can erupt from the sun at speeds of several million miles an hour.

Impact of solar flares

- Solar flares can damage satellites and have an enormous financial cost
- ➤ The charged particles can also threaten airlines by disturbing the Earth's magnetic field.
- Very large flares can even create currents within electricity grids and knock out energy supplies.
- ➤ Geomagnetic storms are more disruptive now than in the past because of our greater dependence on technical systems that can be affected by electric currents.

KILOPOWER

Why in news?

NASA has announced new tests are underway for the Kilopower project, a program designed to create small nuclear power sources to fuel further space exploration. A prototype, which was created by NASA and the

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Department of Energy, has completed non-nuclear tests and is now running with a real reactor core at a facility in Nevada.

About Kilopower:

The Kilopower project is a near-term technology effort to develop preliminary concepts and technologies that could be used for an affordable fission nuclear power system to enable long-duration stays on planetary surfaces.

Goal: The principal goal of the project is to sufficiently develop and test nuclear power system technologies by 2018 so fission power can be a viable option for NASA decision makers to consider when making their informed selection of exploration surface systems.

Significance: Kilopower tackles a few different problems in spacecraft design: existing nuclear power systems rely on a fuel we've essentially run out of, solar power becomes increasingly feeble the further from the sun the spacecraft goes, and more complicated space activities—like those involving humans—would require significantly stronger power supplies than current projects.

Benefits: The technology could power habitats and life-support systems, enable astronauts to mine resources, recharge rovers and run processing equipment to transform resources such as ice on the planet into oxygen, water and fuel. It could also potentially augment electrically powered spacecraft propulsion systems on missions to the outer planets.

2002 AI129

It is an asteroid larger than the tallest building on Earth, Burj Khalifa. As per reports, the asteroid will pass Earth in February. It has been classified as a "near-Earth object" and "potentially hazardous" by US space agency NASA.

What are asteroids?

Asteroids are celestial objects that are smaller than planets, which are irregularly shaped and lack fixed orbits. In our solar system, most

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asteroids originate from the asteroid belt, a zone between Mars and Jupiter, where these objects are scattered about.

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KALA AZAR

Why in news?

India missed the 2017 deadline that Finance Minister had announced for elimination of Kala Azar (black fever/ Visceral Leishmaniasis) in his Budget speech last year.

Distribution

Kala-azar is endemic to the Indian subcontinent in four countries (Bangladesh, Bhutan, India and Nepal). This disease is the second-largest parasitic killer in the world.

About Kala-azar:

Visceral leishmaniasis (VL), also known as kala-azar, black fever, and Dumdum fever, is the most severe form of leishmaniasis and, without proper diagnosis and treatment, is associated with high fatality.

- Caused by protozoan parasites of the Leishmania genus. Migrates to the internal organs such as the liver, spleen (hence "visceral"), and bone marrow
- Signs and symptoms include fever, weight loss, fatigue, anemia, and substantial swelling of the liver and spleen.

ISRO's NUMBER 100

What is it about?

Space agency ISRO has successfully sent up a rocket carrying India's 100th satellite along with 30 others.

Details

The PSLV-C40 placed 31 satellites, originating from seven countries. This is the 42nd flight of the PSLV. The 31 onboard include 3 satellites from India and 28 satellites from six countries

➤ The Cartosat-2 satellite, the third in the series, was deployed to relay high resolution scene specific spot imageries. The images will be useful for cartographic applications, urban and rural applications, coastal land use and regulation, road network monitoring, water distribution, creation of land use maps and



- change detection to bring out geographical Land Information Systems and Geographical Information System applications.
- ➤ The mission is a unique one, since the satellites were launched in two orbits- 30 into one and one into a different orbit. This was done through what scientists call the "multiple burn technology" under which the rocket's engine is switched off and then switched on to control its height.

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CHANDRAYAAN-2

Why in news?

To prepare for landing on the moon, the Indian Space Research Organisation is planning to conduct landing simulation tests for Chandrayaan-2 spacecraft at Mahendragiri.

About the mission: Chandrayaan-2 includes soft-landing on Moon and moving a rover on its surface. It is an advanced version of the previous Chandrayaan-1 mission. It consists of an orbiter, lander and rover configuration.

- The Orbiter spacecraft when launched from Sriharikota will travel to the Moon and release the Lander, which will in turn deploy a tiny Rover to roam the lunar surface — all three sending data and pictures to Earth.
- It is planned to be launched into the earth parking orbit (EPO) of 170 X 18,500 km by GSLV-Mk II.

STATION EXPLORER FOR X-RAY TIMING AND NAVIGATION TECHNOLOGY

Why in news?

NASA has invented a new type of autonomous space navigation that could see human-made spacecraft heading into the far reaches of the Solar System, and even farther – by using pulsars as guide stars. It's called SEXTANT (named after an 18th century nautical navigation instrument).

<u>Details</u>

SEXTANT works like a GPS receiver getting signals from at least three GPS satellites, all of which are equipped with atomic clocks. The receiver measures the time delay from each satellite and converts this into spatial coordinates.

➤ The technology uses X-ray technology to see millisecond pulsars, using them much like a GPS uses satellites.



➤ The electromagnetic radiation beaming from pulsars is most visible in the X-ray spectrum, which is why NASA's engineers chose to employ X-ray detection in SEXTANT.

Applications: SEXTANT could be used to calculate the location of planetary satellites far from the range of Earth's GPS satellites, and assist on human spaceflight missions, such as the space agency's planned Mars mission.

What are pulsars?

Pulsars are highly magnetised, rapidly rotating neutron stars – the result of a massive star's core collapsing and subsequently exploding.

- ➤ As they spin, they emit electromagnetic radiation.
- ➤ If an observer is in the right position, they can appear as sweeping beams, like a cosmic lighthouse.
- They're also extraordinarily regular in the case of some millisecond pulsars, which can spin hundreds of times a second, their regularity can rival that of atomic clocks.

INSV TARINI

An all-woman Indian Navy team on Indian Naval Sailing Vessel (INSV) Tarini has successfully crossed the notoriously rough Drake Passage, as they rounded Cape Horn off the Southern tip of South America, sometimes called the Mount Everest of sailing.

About INSV Tarini:

INSV Tarini is a vessel built in Goa. It was inducted into the Indian Navy in 2017. It has Raymarine navigation suite and an array of satellite communication systems for perfect navigation anywhere in the world. It showcases the 'Make in India' initiative on the International forum.

Navika Sagar Parikrama:

The voyage of Navika Sagar Parikrama began from Goa coast in 2017 and will be finishing around March 2018. The project is considered essential towards promoting Ocean Sailing activities in the Indian Navy

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- ➤ It also aims to showcase 'Nari Shakti' on the world platform and help revolutionise societal attitudes and mindset towards women in India by raising visibility of their participation in challenging environs.
- > The crew would monitor and report marine pollution on the high seas.

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The Drake Passage

It is the body of water between South America's Cape Horn and the South Shetland Islands of Antarctica. It connects the southwestern part of the Atlantic Ocean (Scotia Sea) with the southeastern part of the Pacific Ocean and extends into the Southern Ocean.

The passage between Cape Horn and Livingston Island is the shortest crossing from Antarctica to any other landmass. There is no significant land anywhere around the world at the latitudes of Drake Passage, which is important to the unimpeded flow of the Antarctic Circumpolar Current which carries a huge volume of water through the Passage and around Antarctica.

BEIDOU

Why in news?

China has sent twin satellites into space on a single carrier rocket, as part of efforts to enable its BeiDou system to provide navigation and positioning services to countries along the Belt and Road by the end of 2018.

All about BeiDou

The BeiDou Navigation Satellite System is a Chinese satellite navigation system.

> BeiDou has been described as a potential navigation satellite

- system to overtake GPS in global usage, and is expected to be more accurate than the GPS once it is fully completed.
- ➤ The current third generation of BeiDou claims to reach millimeter-level accuracy (with post-processing), which is ten

<u>List of Global Navigation</u> <u>Satellite Systems:</u>

- GPS of the United States of America.
- GLONASS or Global Navigation Sputnik System of Russia.
- Galileo of the European Union.
- IRNSS or NAVIC of India.
- Quasi-Zenith Satellite System (QZSS) of Japan.



times more accurate than the finest level of GPS.

SPARCS

What is it?

Star-Planet Activity Research CubeSat, or SPARCS is a new NASA-funded space telescope and will be launched in 2021. The mission, including spacecraft design, integration and resulting science, is led by Arizona State University's School of Earth and Space Exploration (SESE).

<u>Details:</u> It will be launched into the Earth's orbit that will monitor the flares and sunspots of small stars to assess how habitable the environment is for planets orbiting them.

- The stars that SPARCS will focus on are small, dim, and cool by comparison to the Sun.
- Both the telescope and camera will be optimised for observations using ultraviolet light, which strongly affects the planet's atmosphere and its potential to harbour life on the surface.

M dwarfs and habitable zones

Astronomers have discovered that essentially every M dwarf star has at least one planet orbiting it, and about one system in four has a rocky planet located in the star's habitable zone. This is the potentially life-friendly region where temperatures are neither too hot nor too cold for life as we know it, and liquid water could exist on the planet's surface.

Since M dwarfs are so plentiful, astronomers estimate that our galaxy alone contains roughly 40 billion rocky planets in habitable zones around their stars. This means that most of the habitable-zone planets in our galaxy orbit M dwarfs.

IAMES WEBB SPACE TELESCOPE

Being built at NASA, James Webb Space Telescope the world's premier infrared space observatory which can function in the extremely cold and airless environment in space in 2019.

Other details

It is the largest space telescope ever built. It is an international collaboration between of about 17 countries including NASA, European Space Agency (ESA) and the Canadian Space Agency (CSA).

➤ It will be able to peer back in time 3.5 billion years, teaching us more than ever before about the start of the universe.

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➤ The telescope will be used to look back to the first galaxies born in the early universe more than 13.5 billion years ago, and observe the sources of stars, exoplanets, and even the moons and planets of our solar system.

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ENVIRONMENT

MITINI

What is it? To forge a relationship of brotherhood or sisterhood with trees through a practice locally known as Mith/Mit or Mitini in Sikkim

Why in news? Under Sikkim Forest Tree (Amity & Reverence) Rules 2017, the Government of Sikkim has come up with a unique way of preserving trees by encouraging people to not just preserve its forest cover but also forge amity between people and trees

Sikkim Forest Tree (Amity & Reverence) Rules 2017

A person can also adopt a tree "as if it was his or her own child in which case the tree shall be called an adopted tree." Another way to forge a relationship with a tree is by "preserving a tree in remembrance of a departed relative in which case the tree shall be called a smriti tree."

- In case an individual wants to forge a relationship with a tree which does not stand on his or her land but another's, the person concerned shall execute an agreement with the owner and compensate him or her in terms of the market value of the timber or the wood contained in the tree.
- If the person desires to enter into a relationship with a tree located on public land then permission from the said department or agency needs to be taken.
- The Rules also prohibit felling or damage to any tree registered as Mith/Mit or Mitini, adopted or smriti and points out that any such violation shall be treated as a forest offence.

URBAN HEAT ISLAND

Why in news?

A new study says that a phenomenon called urban heat island is burning holes in the winter fog shrouded over New Delhi and other cities on the Indo-Gangetic Plain.

Impacts:



The urban heat island effect is so strong in Delhi, that it saw 50% less fog than surrounding areas. In Delhi, the heat island effect also appears to be suppressing the very formation of fog.

Reasons behind this:

The analysis found a correlation between the size of the urban population to the intensity of urban heat islands and that of the fog hole.

Importance of the findings

The findings from the study are important since dense and polluted winter fog envelopes north India, Pakistan, Nepal and Bangladesh every year affecting air quality and disrupting air, rail and road traffic. The study will be very useful in understanding the process of why fog occurs and ultimately to predict its occurrence.

A NEW WEAPON IN THE CARBON FIGHT

Policy is usually focussed on reducing greenhouse gas (GHG) emissions from the electricity sector, transport and industry. There has, however, been a renewed interest in understanding how soils can serve as a sink for carbon dioxide since atmospheric concentrations of carbon dioxide have crossed 410 parts per million and oceans are already turning acidic.

Besides, increasing soil carbon offers a range of co-benefits and this would buy us time before other technologies can help us transition to a zerocarbon lifestyle.

Soil organic matter

Significant carbon pools on earth are found in the earth's crust, oceans, atmosphere and land-based ecosystems. Soils are the largest terrestrial pool. Organic matter makes up just $2{\text -}10\%$ of the soils mass but has a critical role in the physical, chemical and biological function of agricultural soils.

Soil organic matter (SOM) is mainly composed of carbon, hydrogen and oxygen but also has small amounts of nutrients such as nitrogen, phosphorous, sulphur, potassium, calcium and magnesium contained within organic residues.

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Organic matter contributes to nutrient turnover, soil structure, moisture retention, degradation of pollutants, greenhouse gas emissions and soil buffering.

A solution: Soil Organic Carbon

Storing the carbon contained in organic matter within the soil is seen as one way to mitigate climate change by reducing greenhouse gas emissions (in this case carbon dioxide) but to do this an increase in the more stable or resistant fractions of organic matter is required.

Soil organic carbon (SOC) comes from plants, animals, microbes, leaves and wood, mostly found in the first metre or so. Soil organic carbon (SOC) is dynamic, however, and anthropogenic impacts on soil can turn it into either a net sink or a net source of GHGs.

After carbon enters the soil in the form of organic material from soil fauna and flora, it can persist in the soil for decades, centuries or even millennia. Eventually, SOC can be lost as CO2 or CH4 emitted back into the atmosphere, eroded soil material, or dissolved organic carbon washed into rivers and oceans.

The Intergovernmental Panel on Climate Change (IPCC) provides guidelines for measuring, reporting and verifying national SOC stock inventories.

Role of SOC in Human Well-being:

- 1. <u>Achieving the SDGs:</u> As an indicator for soil health, SOC is important for its contributions to food production, mitigation and adaptation to climate change. Maintaining SOC storage at equilibrium or increasing SOC content towards the optimal level for the local environment can contribute to achieving the SDGs.
- 2. <u>SOC and biodiversity:</u> SOC improves soil structural stability by promoting aggregate formation which, together with porosity, ensures sufficient aeration and water infiltration to support plant growth. It also determines the number and activity of soil biota that interact with plant roots. Through accelerated SOC mineralization, soils can be a substantial source of greenhouse gas (GHG) emissions into the atmosphere.

Climate change effects on SOC

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Temperature and precipitation are the most significant factors controlling SOC dynamics. Rising temperatures and increased frequency of extreme events are likely to lead to increased SOC losses.

 SOC hot-spots, which are respectively areas of high SOC content (e.g. peatlands, black soils, permafrost lands, grasslands and forest soils) and large surface areas of low SOC content (e.g. drylands) constitute major zones of concern. With climate change and unsustainable management, these areas are likely to become net sources of GHG emissions.

However, if managed wisely, they have the potential to sequester large amounts of carbon in their soils, thus contributing to climate change mitigation and adaptation. The ability of soils to sequester carbon is a winwin strategy for farmers, people and for climate change and it is time we stopped ignoring these at the policy levels.

Climate Change mitigation and adaptation

Climate change mitigation refers to efforts aimed at restraining, halting and/or reversing climate change through management strategies, behavioural changes and technological innovations that reduce the emission of GHGs.

Climate change adaptation, on the other hand, refers to efforts aimed at achieving higher resilience towards unprecedented climatic events and conditions. It implies the anticipation of climate change and its adverse effects, and strives to manage them through appropriate actions that minimize the associated risks and negative impacts.

Urban heat island effect

The urban heat island is a phenomenon when the heat gets trapped near the earth's surface as a result of a decline in green cover, rapid urbanisation, energy-intensive activities, and concrete structures.

UHIs often have lower air quality because there are more pollutants (waste products from vehicles, industry, and people) being pumped into the air. These pollutants are blocked from scattering. When warm water from the UHI ends up flowing into local streams, it stresses the native species that have adapted to life in a cooler aquatic environment.

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CHIRU GOAT

Why in news?



The environment ministry has ruled out the possibility of conservation breeding of the Chiru goat, a 'near threatened' species.

What's the concern?

Chiru goat, which is also known as the Tibetan antelope, has long been hunted for its underfur (Shahtoosh), which is renowned for its quality and has traditionally been transported to Srinagar, where it is woven into an extremely fine fabric used to make shawls.

The Tibetan antelope is the sole species in the genus Pantholops. Endemic to the Tibetan Plateau, the Tibetan antelope inhabits open alpine and cold steppe environments

Backgrounder:

The parliamentary standing committee on science & technology, environment & forests had recommended to the ministry of environment, forest and climate change (MoEFCC) to conserve and breed the Chiru goat, which can then be given to the shawl makers. The panel said this would provide a sustainable livelihood opportunity to the people of Jammu and Kashmir.

Why the government is not in favour of conservation breeding of Chiru goat?

The government believes that any relaxation in the protection regime of the animal would lead to a rapid population decline due to commercial poaching.

- Also, Chiru inhabits the high-altitude Tibetan plateau and requires large expanse of land for its movement and ranging patterns to fulfil its feeding and breeding requirements.
- ➤ Rearing the goat in captivity is extremely difficult. Besides, any attempt to do conservation breeding of Chiru at very high altitude regions of Ladakh (more than 3,800m) may neither be economical nor feasible as humans cannot be posted there continuously for more than 2-3 months.

SAVING THE REEF FROM FISH!

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<u>Why in news?</u> In a push to preserve the World Heritage-listed ecosystem, a campaign has been launched by Australia to stop the predatory crown-of-thorns starfish devouring the Great Barrier Reef.

What is the issue all about? The coral-eating starfish are naturally occurring but have proliferated due to pollution and agricultural run-off at the struggling reef. Their impact has been profound. The reef is also reeling from significant coral bleaching due to warming sea temperatures linked to climate change.

<u>The Great barrier reef:</u> The Great Barrier Reef is the world's largest coral reef system. The reef is located in the Coral Sea, off the coast of Queensland, Australia.

The Great Barrier Reef can be seen from outer space and is the world's biggest single structure made by living organisms. This reef structure is composed of and built by billions of tiny organisms, known as coral polyps. It was selected as a World Heritage Site in 1981.

SECURITY CHALLENGES

CYBER SURAKSHIT BHARAT

Recognizing the need to strengthen the cybersecurity ecosystem in India, the Ministry of Electronics and Information Technology (MeitY) has announced the Cyber Surakshit Bharat initiative in association with National e-Governance Division (NeGD) and industry partners.

About the Cyber Surakshit Bharat:

Conceptualized with the mission to spread awareness about cybercrime and building capacity for safety measures for Chief Information Security Officers (CISOs) and frontline IT staff across all government departments, Cyber Surakshit Bharat will be operated on the three principles of Awareness, Education and Enablement. The primary objective is to keep our data safe and protected.

Working: It will include an awareness program on the importance of cybersecurity; a series of workshops on best practices and enablement of

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the officials with cybersecurity health tool kits to manage and mitigate cyber threats.

<u>Significance:</u> Cyber Surakshit Bharat is the first public-private partnership of its kind and will leverage the expertise of the IT industry in cybersecurity.

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BUDAPEST CONVENTION ON CYBER SECURITY

<u>Why in news?</u> Making a strong pitch to sign the Budapest Convention on cyber crime, the Ministry of Home Affairs recently flagged the need for international cooperation to check cyber crime, radicalisation and boost data security.

A backgrounder

India was reconsidering its position on becoming a member of the Budapest Convention because of the surge in cyber crime, especially after a push for digital India. The move, however, is being opposed by the Intelligence Bureau (IB) on the grounds that sharing data with foreign law enforcement agencies infringes on national sovereignty and may jeopardise the rights of individuals.

What is Budapest convention?

The Convention on Cybercrime, also known as the Budapest Convention on Cybercrime or the Budapest Convention, is the first international treaty seeking to address Internet and computer crime by harmonizing national laws, improving investigative techniques, and increasing cooperation among nations.

- ➤ It was drawn up by the Council of Europe in Strasbourg, France, with the active participation of the Council of Europe's observer states Canada, Japan, South Africa and the United States.
- ➤ The Convention has 56 members, including the US and the UK.

What it seeks to achieve?

The Budapest Convention provides for the criminalisation of conduct, ranging from illegal access, data and systems interference to computer-related fraud and child pornography, procedural law tools to make investigation of cybercrime and securing of e-evidence in relation to any



crime more effective, and international police and judicial cooperation on cybercrime and e-evidence.

CYBER CRIME COORDINATION CENTRE

Why in news? The government has set a deadline of February this year to operationalise the Indian Cyber Crime Coordination Centre. The Home Minister had announced the setting up of I4C in 2016 to deal with all types of cyber crime at the national level.

Indian Cyber Crime Coordination Centre (14C): It will be set up under the newly created Cyber and Information Security (CIS) division of the MHA. CIS will have four wings namely

- 1. security clearance
- 2. cybercrime prevention
- 3. cyber security
- 4. information security.

The I4C will assist in centralising cyber security investigations, prioritise the development of response tools and bring together private companies to contain the menace.

Need for surveillance:

Asia is the region most targeted by cyber-attackers, resulting in significant economic losses. As the region continues to play a key role in the global economic market, these cyber threats are expected to increase. Over 460 million people in India currently use the internet, leaving them vulnerable to online criminals – both individuals and organised syndicates.

Efforts in this direction

The government has decided to hire IT experts from premier public and private institutes, including IITs, to help fight new age crimes like online fraud, hacking, identity theft, dark net, trafficking, child pornography, online radicalisation and cyber-terrorism and prepare a roadmap for Indian Cyber Crime Coordination Centre.

CRIME AND CRIMINAL TRACKING NETWORK SYSTEM (CCTNS)

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Why in news?

Coimbatore police, as part of the Crime and Criminal Tracking Network System (CCTNS), under National e-Governance plan, have launched the facility to serve summons to witnesses through Short Messaging Service (SMS) on mobile phones.

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CCTNS project

Crime and Criminal Tracking Network and Systems (CCTNS) is a project initiated in 2009 which aims at creating a comprehensive and integrated system for enhancing the efficiency and effectiveness of policing at the Police Station level.

- ➤ This will be done through adoption of principles of e-Governance, and creation of a nationwide networked infrastructure for evolution of IT-enabled state-of-the-art tracking system around "investigation of crime and detection of criminals".
- CCTNS is a Mission Mode Project (MMP) under the National e-Governance Plan of Govt. of India.

Details

The Project will interconnect about 15000 Police Stations and additional 5000 offices of supervisory police officers across the country and digitize data related to FIR registration, investigation and charge sheets in all Police Stations.

- It will not only automate Police functions at Police station and higher levels but will also create facilities and mechanism to provide public services like registration of online complaints, ascertaining the status of case registered at the police station, verification of persons etc.
- In 2015, an additional objective of establishing a basic platform for an Inter-operable Criminal Justice System (ICJS) was added to the Project.

Benefits:

The Full implementation of the Project with all the new components would lead to a Central citizen portal having linkages with State level citizen portals that will provide a number of citizen friendly services like



Police Verification for various purposes including passport verification, reporting a crime including cyber-crime and online tracking of the case progress etc.

The project will enable National level crime analytics to be published at increased frequency, which will help the policy makers as well as lawmakers in taking appropriate and timely action, it will also enable Pan-India criminal/accused name search in the regional language for improved inter-state tracking of criminal movement. This would lead to development of a national database of crimes and criminals.

'VAJRA PRAHAR'

It is a Indo-US Special Forces joint training exercise conducted alternately in India and the US.

The upcoming edition: It will be held at Joint Base Lewis-McChord (JBLM) in Seattle. The exercise will mainly focus on special operations in urban areas.

<u>Aim and objectives</u>: The aim of the exercise is to promote military relations between the two countries by enhancing interoperability and mutual exchange of tactics between Special Forces.

The objectives of the joint training is to share the best practices between the two armies and to develop joint strategies by sharing expertise of conducting operations in a counter-insurgency and counter-terrorism environment, while capitalising on the rich repository of experiences of each other armies.

Significance: Though the exercise began in 2010, there was a gap of three years between 2012 and 2015. The last edition was held in Jodhpur in 2017.

DISASTER MANAGEMENT

INTERNATIONAL DAM SAFETY CONFERENCE

Why in news?

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India will be hosting the International Dam Safety Conference – 2018 at Thiruvananthapuram. Central Water Commission is organizing the event in association with Kerala Water Resources Department (KWRD), Kerala State Electricity Board, National Institute of Technology Calicut and College of Engineering, Trivandrum.

Dam safety conferences are organized as an annual event under the Dam Safety Rehabilitation and Improvement Project (DRIP) project.

<u>DHARMA:</u> A software programme – Dam Health and Rehabilitation Monitoring Application (DHARMA)- will also be launched during the conference. It will help to document authentic asset and health

DRIP:

The Ministry of Water Resources (MoWR), Government of India, with assistance from the World Bank, is implementing the DAM REHABILITATION AND IMPROVEMENT PROJECT (DRIP), which would be a six-year project.

- The project originally envisaged the rehabilitation and improvement of dams within four states and later included 3 more states.
- The Central Dam Safety Organisation of Central Water Commission, assisted by a Consulting firm, is coordinating and supervising the Project implementation.

The project development objectives of DRIP are: (i) to improve the safety and performance of selected existing dams and associated appurtenances in a sustainable manner, and (ii) to strengthen the dam safety institutional setup in participating states as well as at central level.

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inform ation pertaining to the large dams in the country

NATIONAL DISASTER RESPONSE FORCE (NDRF)

Why in news?



The National Disaster Response Force (NDRF) celebrated its 13th Raising Day on January 19th, 2018.

NDRF:

The Disaster Management Act has made the statutory provisions for constitution of National Disaster Response Force (NDRF) for the purpose of specialized response to natural and man-made disasters

Backgrounder:

Two national calamities in quick succession in the form of Orissa Super Cyclone (1999) and Gujarat Earthquake (2001) brought about the realization of the need of having a specialist response mechanism at National Level to effectively respond to disasters. This realization led to the enactment of the DM Act on 26 Dec 2005.

Role and mandate

- Specialized response during disasters.
- Proactive deployment during impending disaster situations.
- Acquire and continually upgrade its own training and skills.
- Liaison, Reconnaissance, Rehearsals and Mock Drills.
- Impart basic and operational level training to State Response Forces (Police, Civil Defence and Home Guards).
- Community Capacity Building Programme.
- Organize Public Awareness Campaigns.

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