



12-08-2018 to 18-08-2018 AUGUST WEEK 03

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GENERAL STUDIES

















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HISTORY

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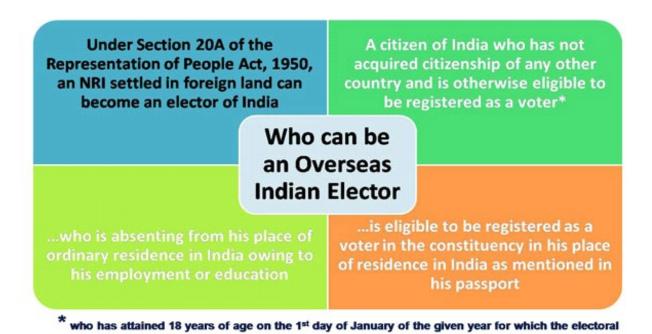
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Polity and Governance

1. Representation of the People (Amendment) Bill, 2017

Context:

Lok Sabha has passed Representation of the People (Amendment) Bill, 2017 to extend the facility of 'proxy voting' to overseas Indians, on the lines of service voters.



• The Bill seeks to amend Representation of People Act (RPA), 1950 and Representation of People Act (RPA), 1951 to allow for proxy voting and make certain provisions of these Acts gender-neutral.

rolls are being prepared; is entitled to be registered as voter. (Article 326)

- The Bill proposes to allow non-resident Indians (NRIs) to emerge as a decisive force in the country's electoral politics on their own terms.
- The amendment paves the way to remove an "unreasonable restriction" posed by Section 20A of the Representation of the People Act, which requires overseas electors to be physically present in their electoral constituencies to cast their votes.

What necessitated this move?

• Section 20A of the Act provides for registration and inclusion of overseas electors in the electoral rolls. The Registration of Electors Rules, 1960 provide for overseas electors to register themselves in the electoral rolls of their respective constituencies on the basis of self-attested copies of their passport and valid visa, and exercise their franchise in person on production of the original passport at the time of voting at the specified polling booth.

• Thus, the rules demand for the physical presence of overseas electors in their respective polling stations in India on the day of polling. This causes hardship to the overseas electors. This amendment proposes facilitating an external mode of voting, that is, voting by proxy, whereby such electors can exercise their franchise from their places of residence abroad.

Significance of this move:

• If the Bill is passed, overseas voters can appoint a proxy to cast their votes on their behalf, subject to certain conditions to be laid down in the Conduct of Election Rules, 1961. This would considerably mitigate the difficulties presently faced by overseas electors in exercising their franchise.

About voting by proxy:

• According to the provisions of 'Representation of the People Act (Amendment) Bill, 2017 overseas Indians, who are entitled to vote in India, can appoint a proxy voter to cast their votes on their behalf. Also, the overseas Indians would be allowed to use the option of proxy, which till now was only available to service personnel.

Drawbacks of the proxy voters:

- It threatens the very core of democracy as the special treatment violets the fact that there are many times more domestic migrants who also seek to have a voting right at their homes.
- The proxy voter may cast vote for the candidate who is not desired by oversea Indians.
- There can be no guarantee of NRI voters exercising their vote in a free and fair manner as there can be no check on coercion or inducement by the employers.
- There is no guarantee that votes would not be sold to the so called proxy.
- There is no fixed number of votes a proxy could cast in an election.

2. Indecent Representation of the Women (Prohibition) Act, 1986

Context:

After taking into account of the recent technological advancement in the field of communications such as social media platforms, etc, the Ministry of Women and Child Development has decided to move fresh Bill to broaden the scope of the Indecent Representation of the Women (Prohibition) Act, 1986 to cover the audio-visual media and content in electronic form.

The reformulated Bill proposes following amendments in the parent Act:

• Amendment in definition of term advertisement to include digital form or electronic form or hoardings, or through SMS, MMS etc.

- Amendment in definition of distribution to include publication, license or uploading using computer resource, or communication device or in.
- Insertion of a new definition to define the term publish.
- Amendment in section 4 to include that No person shall publish or distribute or cause to be published or cause to be distributed by any means any material which contains indecent representation of women in any form.
- Penalty similar to that provided under the Information Technology Act, 2000
- Creation of a Centralized Authority under the aegis of National Commission of Women (NCW). This Authority will be headed by Member Secretary, NCW, having representatives from Advertising Standards Council of India, Press Council of India, Ministry of Information and Broadcasting and one member having experience of working on women issues.
- **Functions:** This Centralized Authority will be authorized to receive complaints or grievances regarding any programme or advertisement broadcasted or publication and investigate/ examine all matters relating to the indecent representation of women.

Need for revisiting the law:

- The Government of India has enacted the Indecent Representation of Women (Prohibition) Act (IRWA), 1986 to prohibit indecent representation of women through advertisements, publications, writings, paintings, figures or in any other manner.
- Since the enactment of the Act, technological revolution has resulted in the development of new forms of communication, such as internet, multi-media messaging, cable television, over-the-top (OTT) services and applications e.g. Skype, Viber, WhatsApp, Chat On, Snapchat, Instagram etc.
- Therefore, these technological advancements make it necessary to widen the scope of the law so as to cover such forms of media on one hand and to strengthen the existing safeguards to prevent indecent representation of women through any media form on the other.

3. Arbitration & Conciliation (Amendment) Bill, 2018

Context:

The Lok Sabha has passed the Arbitration and Conciliation (Amendment) Bill, 2018. It will amend the Arbitration and Conciliation Act, 1996. The Act contains provisions to deal with domestic and international arbitration, and defines the law for conducting conciliation proceedings.

Key features of the Bill are:

- **Arbitration Council of India:** The Bill seeks to establish an independent body called the Arbitration Council of India (ACI) for the promotion of arbitration, mediation, conciliation and other alternative dispute redressal mechanisms.
- Its functions include: (i) framing policies for grading arbitral institutions and accrediting arbitrators, (ii) making policies for the establishment, operation and maintenance of uniform professional standards for all alternate dispute redressal matters, and (iii) maintaining a depository of arbitral awards (judgments) made in India and abroad.
- **Composition of the ACI:** The ACI will consist of a Chairperson who is either: (i) a Judge of the Supreme Court; or (ii) a Judge of a High Court; or (iii) Chief Justice of a High Court; or (iv) an eminent person with expert knowledge in conduct of arbitration. Other members will include an eminent arbitration practitioner, an academician with experience in arbitration, and government appointees.
- **Appointment of arbitrators:** Under the 1996 Act, parties were free to appoint arbitrators. In case of disagreement on an appointment, the parties could request the Supreme Court, or the concerned High Court, or any person or institution designated by such Court, to appoint an arbitrator.
- Role of courts: Under the Bill, the Supreme Court and High Courts may now designate arbitral institutions, which parties can approach for the appointment of arbitrators. For international commercial arbitration, appointments will be made by the institution designated by the Supreme Court. For domestic arbitration, appointments will be made by the institution designated by the concerned High Court. In case there are no arbitral institutions available, the Chief Justice of the concerned High Court may maintain a panel of arbitrators to perform the functions of the arbitral institutions. An application for appointment of an arbitrator is required to be disposed of within 30 days.
- **Relaxation of time limits:** Under the 1996 Act, arbitral tribunals are required to make their award within a period of 12 months for all arbitration proceedings. The Bill proposed to remove this time restriction for international commercial arbitrations.
- **Completion of written submissions:** Currently, there is no time limit to file written submissions before an arbitral tribunal. The Bill requires that the written claim and the defence to the claim in an arbitration proceeding, should be completed within six months of the appointment of the arbitrators.
- **Confidentiality of proceedings:** The Bill provides that all details of arbitration proceedings will be kept confidential except for the details

of the arbitral award in certain circumstances. Disclosure of the arbitral award will only be made where it is necessary for implementing or enforcing the award.

About Arbitration:

- Arbitration is a settlement of dispute between two parties to a contract by a neutral third party i.e. the arbitrator without resorting to court action. The process can be tailored to suit parties' particular needs.
- Arbitrators can be chosen for their expertise. It is confidential and can be speedier and cheaper than court. There are limited grounds of appeal. Arbitral awards are binding and enforceable through courts.

Significance of ADR:

- It is felt that a reliable and responsive alternative dispute resolution system is essential for rapidly developing countries like India. While business disputes need speedy resolution, litigation is the least favoured method for that.
- The Indian judicial system is marred by delays because of which businesses suffer as disputes are not resolved in a reasonable time period. Therefore, need for alternative dispute resolution processes like negotiation, mediation conciliation and arbitration is felt from time to time.

4. Kanyashree scheme

Context:

West Bengal government has announced that there would not be any ceiling for a family's annual earnings to be a beneficiary under the UN award winning Kanyashree scheme. Currently, girls who belong to families with annual family income not more than Rs 1.20 lakh is entitled to get the benefits.

• The state government would also be coming up with a "Kanyashree University" for girls soon.

About Kanyashree scheme:

Kanyashree is a conditional cash transfer scheme aiming at improving the status and well-being of the girl child by incentivizing schooling of teenage girls and delaying their marriages until the age of 18. It received the United Nations Public Service Award last year.

Performance of the scheme: Through the initiative, cash was deposited into the bank account of girls for every year they remained in school and were unmarried. This initiative led to a "drastic reduction in child marriage, increase in female education and female empowerment."

UN Public Service Awards:

• The UN Public Service Awards are given by the world body to institutions from across the world for their innovation and excellence

in providing public services.

- It highlights the pivotal role of public services in the implementation of the Sustainable Development Goals (SDGs).
- The Awards aim at discovering innovations in governance; reward excellence in the public sector; motivate public servants to further promote innovation; enhance professionalism in the public service; raise the image of public service; enhance trust in government; and collect and disseminate successful practices for possible replication.

5. Uttarakhand high court appoints itself legal guardian of cows in state

Context:

The Uttarakhand high court would henceforth act as the legal guardian of cows in the state. It has also issued some directions to the state government in this regard.

Significance of the judgment:

This is the first time in India that a court has had invoked the 'parens patriae' doctrine for cow protection.

Parens patriae: The court did this by invoking the 'parens patriae' doctrine. Parens patriae in Latin means 'parent of the country' and is a doctrine that grants the court inherent power and authority to act as guardian for those who are unable to take care for themselves.

Implications of the judgment:

- The court can now act as the legal guardian of the cows in the state and keep a tab on all issues related to cows especially its directions with regard to their protection.
- If there are any violations in laws and rules regarding cows, the court can take suo moto cognisance and issue directions to the state.

Background:

- The judgment came as a response to a public interest litigation claiming that stray cattle were being slaughtered and waste from a slaughter house was flowing into water bodies, posing a health threat to the villagers.
- The court cited animal welfare law, national and international documents and Hindu religious texts to say that animal welfare was part of "moral development of humanity".

Important Directions issued by the Court:

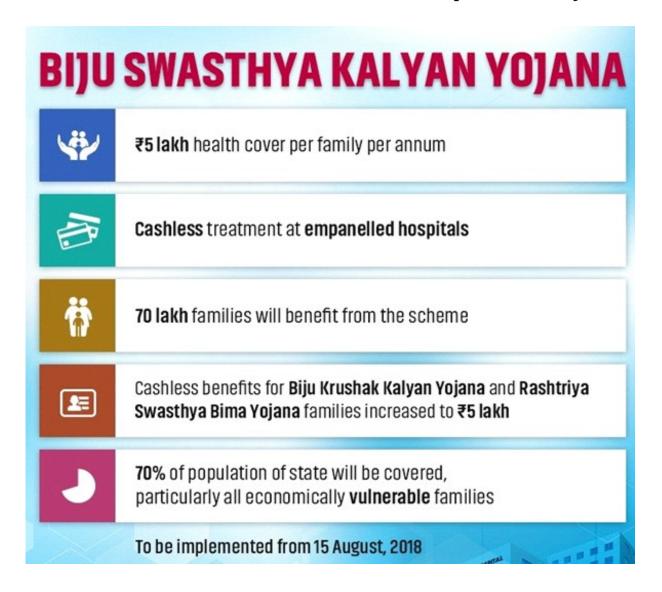
• All civic bodies in the state shall construct "gaushalas/gausadans" or shelters/homes for housing cows and other stray cattle within one year.

- No commercial charges shall be levied for supplying the electricity and water connections to gaushalas/shelters.
- The state government shall register cases against people who abandon cows and owners of cattle found on the streets, roads and public places under the Indian Penal Code, Prevention of Cruelty to Animals Act, 1960 and Uttarakhand Protection of Cow Progeny Act, 2007.
- The state government shall also set up a special squad to be headed by an officer not below the rank of deputy superintendent of police in both the Kumaon and Garhwal regions with one veterinary doctor to protect cows.
- The court banned slaughter of cows, bulls, bullocks, heifers or calves in the state and ruled that no person shall sell beef or beef products in any form in Uttarakhand.

6. Biju Swasthya Kalyan Yojana

Context:

Odisha government has launched Biju Swasthya Kalyan Yojana, a health for all scheme, on the occasion of the 72nd Independence Day.



Highlights of the scheme:

- It will provide Rs. 5 lakh per family per annum for all Secondary and Tertiary Cashless Health Care Assistance. Women beneficiaries can get health cover upto Rs. 7 lakh.
- This scheme will benefit 3.5 crore people (70 lakh families) at any govt. and private empanelled hospitals.
- All beneficiaries currently enrolled under the Rashtriya Swasthya Bima Yojana (RSBY), as well as other low-income families, are covered under the BSKY.

Challenges in implementation:

- **Trust model:** Odisha purposes to form a Trust to implement the scheme, which will reimburse the hospitalisation cost and will not pay premiums to insurance companies. Though the Trust model saves money, the major constraints are weak in-house capacity, poor governance structure and susceptibility to outside interference.
- **Governance structure:** Another uphill task for the Trust is to improve the governance structure. Riddled with weak IT system and poor administration, the uptake of the ongoing health insurance programmes is far from satisfactory.
- **Procedural challenges:** The Odisha State Treatment Fund has several procedural challenges, which, increases the predicament of patients. The same issues will have a major bearing on the BKSY implementation, unless the Trust carefully introduces measures to lessen these problems. The financial implication of such a humongous scheme needs deliberation. The current resource absorption for RSBY, BKKY and OSTF is not hefty. The claims ratio for RSBY is 65-68 per cent. This is unlikely to rise significantly, unless architectural correction is made.4

The most important question is: Can BSKY improve the persistent health financing problem?

- Currently, Odisha spends around 4.5% GDP on healthcare, of which only 1.05% is by the government. Out of pocket (OOP) expenditure constitutes 76% of total health expenditure, which is unexpectedly high. On the contrary, the utilization from the public healthcare facilities is quite high, the proportion being 72.55% for outpatient visits.
- Furthermore, a significant proportion of OOP is due to outpatient care, mainly due to drugs and diagnostics services (58% and 12%, respectively). Dubbed as a step towards achieving Universal Health Coverage (UHC), BSKY may provide breathing space to millions of households burdened by costly health care.
- However, a large part of OOP, which occurs due to outpatient visits (71%), will not be alleviated by any insurance mechanism, as it is meant only for hospitalization.

Way ahead:

• For effective implementation of the scheme, the state needs to design the Trust structure by hiring experts to suggest packages, costs and criteria for empanelment of private hospitals.

7. Delhi Police gets India's first all-women SWAT team

Context:

Delhi will be the first police force in the country to have an all-women SWAT team.

Key facts:

- Trained by specialists from India and abroad, 36 women constables from northeastern states have been inducted into the squad after rigorous, 15-month training.
- The maximum numbers of members (13) are from Assam and five each from Arunachal Pradesh, Sikkim and Manipur.
- These commandos will be stationed at strategic locations in central and south Delhi. Amids intel inputs of women fidayeens planning to target the capital, this all-women unit would helm the security apparatus around Red Fort and India Gate as well. Many of them would be posted in anti-terror vans called Parakram.
- The women are trained to handle challenges unique to the capital—like climbing multi-storey buildings or carrying out hostage rescue operations at hotels, buses or metro.
- The formation of this team is being considered a big achievement as most western countries do not have all-women SWAT teams due to the kind of training required to become one.

8. Amendments to Triple talaq bill

Context:

The Union Cabinet has approved a few amendments in the instant triple talaq bill. The amended triple talaq bill will be tabled in Rajya Sabha for its approval.

In December, the Lok Sabha passed the Muslim Women (Protection Bill, 2017), which criminalizes the practice of talaq-e-bidda. This came after the Supreme Court on August 22, 2017, struck down triple talaq, calling the Islamic practice unconstitutional.

Changes in the triple Talaq Bill- The Cabinet made three amendments to the triple talaq law:

1) Provision for bail:

 While the proposed law will remain "non-bailable" offence, the accused can approach a magistrate even before the trial to seek bail. Under a non-bailable offence, bail cannot be granted by police at the police station. A provision has been added to allow the magistrate to grant bail 'after hearing the wife'. "But the offence of instant triple talaq under the proposed law remains non-bailable.

• The magistrate would ensure that bail is granted only after the husband agrees to grant compensation to the wife as provided in the bill. The quantum of compensation will be decided by the magistrate, as per the bill.

2) Check misuse:

Another amendment makes it clear that the police would lodge FIR
only if approached by the victim (wife), her blood relations or people
who become her relatives by virtue of her marriage. This would settle
fears that even a neighbour can file FIR as is the cases in any cognizable
offence. This would check misuse.

3) A compoundable offence:

• The third amendment makes the offence of instant triple talaq "compoundable". Now, a magistrate can use his powers to settle the dispute between a husband and his wife. Under a compoundable offence, both parties have the liberty of withdrawing the case. However, the jail term for a Muslim man who resorts to triple talaq remains three years and only a magistrate, and not a local police officer, can release the accused on bail.

Original Bill includes:

- If a Muslim man resorts to triple talaq then he will face a jail term of three years, as instant triple talaq will now be considered a non-bailable, cognisable offence.
- Opting for triple talaq could also attract fine and the amount would be the magistrate's call who would be hearing the case.
- A Muslim wife can also approach a magistrate and ask for subsistence allowance for herself and her minor children.
- A victim of triple talaq can seek the custody of her minor children from the magistrate who will take the final decision on the issue. Only Jammu and Kashmir will be out of the ambit of the proposed law.

About instant triple talaq:

There are three forms of talaq (divorce) in Islam: Ahsan, Hasan and Talaq-e-Biddat (triple or instant talaq). Ahsan and Hasan are revocable but Biddat is irrevocable. Biddat is considered sinful but is permissible in Islamic law. It has been banned in more than 20 Muslim countries, including Pakistan and Bangladesh.

9. Sexual Harassment of Women at Workplace Act

Context:

As per the latest amendment to the Companies (Accounts) Rules, 2014, it



is now mandatory to disclose compliance under the Sexual Harassment of Women at Workplace Act in the Annual Reports of Private companies.

• This is a major step towards making the workplace safe for the women in the private sector. This will cast as ever higher responsibility on the Directors of the

Companies for implementation of the Act.

THE SEXUAL HARASSMENT OF WOMEN AT WORKPLACE (PREVENTION, PROHIBITION AND REDRESSAL) ACT 2013:

The Act seeks to cover all women, irrespective of their age or employment

Dirty Picture

A 2012 poll conducted by Oxfam India & Social and Rural Research Institute found that the women most vulnerable to workplace harassment were those working as/in:



status and protect them against sexual harassment at all workplaces both in public and private sector, whether organized or unorganized. It came into force on December 9, 2013.

Some important provisions of the Act:

- The Act defines sexual harassment at the work place and creates a mechanism for redressal of complaints. It also provides safeguards against false or malicious charges.
- The definition of "aggrieved woman", who will get protection under the Act is extremely wide to cover all women, irrespective

of her age or employment status, whether in the organized or unorganized sectors, public or private and covers clients, customers and domestic workers as well.

Companies	No. of Cases	YoY % Change
Wipro	111	11.0
CICI Bank	87	-7.4
nfosys	62	17.0
rcs	34	100.0
Axis Bank	32	-5.9
SBI	27	92.9
Tech Mahindra	26	NA
ndusInd Bank	20	233.3
Tata Steel	18	-25.0
Cipla	14	-17.6

Definition of workplace: While the "workplace" in the Vishaka Guidelines is confined to the traditional office set-up where there is a clear employeremployee relationship, the Act goes much further to include organizations, department, office, branch unit etc. in the public and private sector, organized and unorganized, hospitals, nursing homes, educational institutions, sports institutes, stadiums, sports complex and any place visited by the employee during the course of employment including the transportation. Every employer is required constitute Internal an Complaints Committee at each

office or branch with 10 or more employees. The District Officer is required to constitute a Local Complaints Committee at each district, and if required at the block level.

- **Functions of the committee:** The Committee is required to complete the inquiry within a time period of 90 days. On completion of the inquiry, the report will be sent to the employer or the District Officer, as the case may be, they are mandated to take action on the report within 60 days.
- **Powers:** The Complaints Committees have the powers of civil courts for gathering evidence. The Complaints Committees are required to provide for conciliation before initiating an inquiry, if requested by the complainant. Penalties have been prescribed for employers. Noncompliance with the provisions of the Act shall be punishable with a fine of up to 50,000. Repeated violations may lead to higher penalties and cancellation of licence or registration to conduct business.

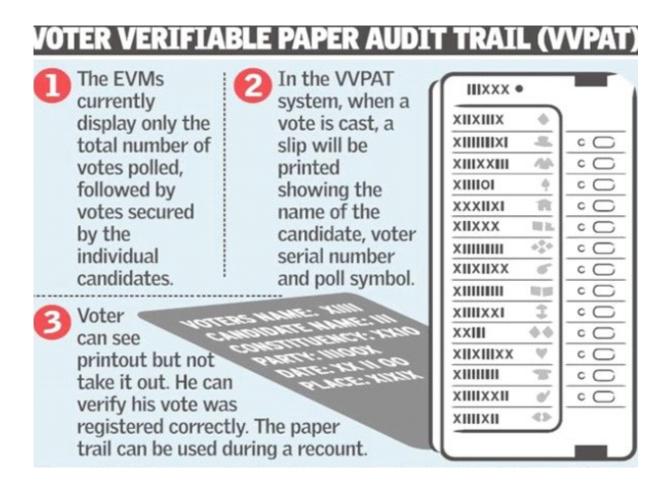
10. EC sets right glitches in paper trail machines

Context: EC sets right glitches in paper trail machines. The move comes after many machines failed in the recent bypoll

- A small hood was installed on the sensor so that even if it comes under direct light, it would not malfunction
- Humidity-resistant paper rolls will be used

VVPAT (The Voter Verified Paper Audit Trail)

- The Voter Verified Paper Audit Trail is a method that provides feedback to voters.
- It is an independent verification printer machine and is attached to electronic voting machines.
- It allows voters to verify if their vote has gone to the intended candidate.



How do VVPAT machines work?

- When a voter presses a button in the EVM, a paper slip is printed through the VVPAT.
- The slip contains the poll symbol and name of the candidate.
- It allows the voter to verify his/her choice.
- After being visible to the voter from a glass case in the VVPAT for seven seconds, the ballot slip will be cut and dropped into the drop box in the VVPAT machine and a beep will be heard.
- VVPAT machines can be accessed by polling officers only.
- VVPAT is a machine which dispenses a slip with the symbol of the party for which a person has voted for.
- The slip dropped in a box but the voter cannot take it home.

Advantages in VVPATs:

- Enables to verify vote: Instant feedback to voter that vote polled has been allocated to the intended candidate
- Enables authorities to count the votes manually if there is a dispute in the electronically polled votes
- Operates under a Direct Recording Election system (DRE) which detects fraud and existent malfunctions
- Will ensure greater transparency in voting process
- Gives both the voters and political parties an assurance

11. Appellate Tribunal for Electricity (ATE)

Context:

Justice Manjula Chellur is the new Chairperson of Appellate Tribunal for Electricity (ATE).

Appellate Tribunal for Electricity (APTEL):

- Appellate Tribunal for Electricity is a statutory body constituted for the purpose of hearing cases against the orders of the Regulatory Commissions and the Adjudicating officer.
- By virtue of Section 110 of The Electricity Act, 2003, an Appellate Tribunal for Electricity having jurisdiction through out India has been set up to hear appeals or original petitions against the orders of the Adjudicating officer or The Central Regulatory Commission or State Regulatory Commission or Joint Commission.
- The Tribunal is conferred with original jurisdiction to hear petitions under Section 121 of the Act and issue directions to all Commissions for the performance of its statutory functions.
- **Composition:** The Appellate Tribunal shall consist of a Chairperson and three other Members. Every Bench constituted by the Chairperson shall consist of at least one Judicial Member and one Technical Member.

International Relations

12. Australia recommences its adoption programme with India Context:

The Government of Australia has decided to recommence the Adoption Programme with India, as per Hague Convention on Inter-Country Adoption.

- The adoptions from India had earlier been put on hold by the Government of Australia eight years ago, on the reported charges of trafficking of children for Inter-country adoption by some of the recognized Indian placement agencies (the Adoption agencies mandated to place children in Inter-country adoption at that point of time).
- **Significance:** The recommencement of the adoption programmes will now enable large number of prospective adoptive parents including those of Indian origin settled in Australia in fulfilling their desire of adopting a child from India.

Safety measures put in place by India:

- The regulation of Inter-country adoptions have been made strict by the Government of India with the enactment of Juvenile Justice Act, 2015 and notification of Adoption Regulations, 2017.
- The Ministry of Women & Child Development along with Central Adoption Resource Authority (CARA) have been constantly monitoring the implementation of these laws.

What is the Hague Convention?

• The Hague Convention protects children and their families against the risks of illegal, irregular, premature or ill-prepared adoptions abroad.

To do this, the Hague Convention puts:

- Safeguards in place to make sure that all intercountry adoptions are in the best interests of the child and respects their human rights,
- A system in place of cooperation among countries to guarantee that these safeguards are respected, and to prevent the abduction of, sale of, or traffic in children.

Implementation:

- For Hague adoptions, the authorities in both countries must agree to go ahead with the adoption. For non-Hague adoptions, requirements may vary from one country to another.
- The Hague Convention does not allow private adoptions in the child's home country. Adoption is a handled by the provinces and territories, and they all have and follow laws implementing the Hague Convention.

About CARA:

- Central Adoption Resource Authority (CARA) is a statutory body of Ministry of Women & Child Development, Government of India.
- It functions as the nodal body for adoption of Indian children and is mandated to monitor and regulate in-country and inter-country adoptions.
- CARA is designated as the Central Authority to deal with inter-country adoptions in accordance with the provisions of the Hague Convention on Inter-country Adoption, 1993, ratified by Government of India in 2003.

13. Nepal's Postal Highway

Context:

The Indian government has handed over a cheque amounting Rs 33 crore to the Nepal Government for construction of a Postal Highway.

- The amount has been released towards 25% of the tendered cost (including 10% mobilization advance) of the two road packages of Birgunj-Thori Road being implemented under Postal Highway Project in Nepal with Government of India's grant assistance.
- With this payment, the Government of India has released a total of Rs 117.63 Crores to the Government of Nepal for implementing 14 packages of the Postal Highway Projects.

About the Postal Highway project:

- Postal Highway also called Hulaki Rajmarg runs across the Terai region of Nepal, from Bhadrapur in the east to Dodhara in the west, cutting across the entire width of the country.
- It is the Oldest highway in Nepal constructed by Juddha Shumsher Jung Bahadur Rana & Padma Shumsher Jung Bahadur Rana to aid transportation and facilitate postal services throughout the nation.

14. China is holding a million Uighurs - Reports

Context:

A UN human rights committee has heard there are credible reports that China is holding a million Uighurs in "counter-extremism centres".

- The Uighurs are a Muslim ethnic minority mostly based in China's Xinjiang province. They make up around 45% of the population there. Xinjiang is officially designated as an autonomous region within China, like Tibet to its south.
- Human rights groups including Amnesty International and Human Rights Watch have submitted reports to the UN committee documenting

claims of mass imprisonment, in camps where inmates are forced to swear loyalty to China's President Xi Jinping.

- The World Uyghur Congress said in its report that detainees are held indefinitely without charge, and forced to shout Communist Party slogans.
- It said they are poorly fed, and reports of torture are widespread. Most inmates have never been charged with a crime, it is claimed, and do not receive legal representation. China is said to carry out the detentions under the guise of combating religious extremism.

Reasons for unrest:

- Over the decades, waves of Han Chinese migrants arrived in the region, displacing Uighurs from their traditional lands and fueling tensions.
- Xinjiang is now home to more than eight million Han Chinese, up from 220,000 in 1949, and 10 million Uighurs. The newcomers take most of the new jobs, and unemployment among Uighurs is high.
- They complain of discrimination and harsh treatment by security forces, despite official promises of equal rights and ethnic harmony.

Why is China concerned about the Uighurs?

• Beijing says Uighur groups want to establish an independent state and, because of the Uighurs' cultural ties to their neighbours, leaders fear that elements in places like Pakistan may back a separatist movement in Xinjiang.

15. US Space Force

Context:

NASA Administrator recently expressed full support for President Donald Trump's proposed military "Space Force" but added that it will have a role separate from NASA.

• U.S. President Donald Trump is planning to create a "space force" or a sixth branch of the American armed forces. The space force plan requires congressional approval. Military leaders and experts have questioned the wisdom of launching an expensive, bureaucratic new service branch.

What is Space Force?

- The United States Space Force, as proposed by the Trump administration, would be a new branch of the military by 2020, on par with the army, navy, air force, marines and coast guard.
- An independent branch can't be created until Congress approves it, but the administration can take several steps on its own to prepare for the launch of a new force, the first since the air force was formed shortly after the second world war.

- Officials plan to create a Space Operations Force an "elite group of war fighters specializing in the domain of space" drawn from various branches of the military, in the style of existing special operations forces, Pence said.
- They'll also create a United States Space Command and a Space Development Agency, and appoint an assistant secretary of defense for space.

The need:

- The White House points to galactic threats from US adversaries, particularly Russia and China, which could develop weapons to jam, blind or destroy satellites that are crucial to communications systems. In 2007, China destroyed one of its own satellites, in a test of a weapon that could be used to target others.
- Russia has also tested a missile that could be used to track and destroy satellites. Not everyone is convinced, however, with critics saying threats on earth are much more real than the prospect of wars in space.

Does it already exist?

- There is no independent military branch focused on space, but there is a sizable space command within the air force. Created in 1982, it is headquartered at Peterson air force base in Colorado and oversees 30,000 people.
- It includes the Space and Missile Systems Center, oversees Department of Defense satellites, and uses radar to monitor ballistic missile launches to guard against a surprise attack on the United States.

Would military action in space be legal?

- In a word, yes. But if a U.S. Space Force ever came online, legal experts say that international law would limit what it could do.
- All major space powers, including the U.S., Russia, and China, have signed the Outer Space Treaty of 1967. The pact says that nothing in space can be claimed as a single country's territory, and it bars countries from stationing nuclear weapons or weapons of mass destruction anywhere in outer space, including in orbit around Earth.
- The treaty gets stricter when it comes to "celestial bodies" such as the moon and Mars. Parties can't build military bases, conduct military maneuvers, or test weapons of any kind—even conventional weapons—on another world.
- But the Outer Space Treaty does give countries some wiggle room. The
 treaty doesn't explicitly forbid intercontinental ballistic missiles, which
 enter and exit space on their way toward their targets. The treaty also
 doesn't specify whether conventional weapons can be used in open
 space or on space stations.

Why it may not feasible to have a space force?

- The fundamental difficulty of a space corps is that the physical environment of space is not conducive to the conduct of military operations without incurring serious losses in the form of spacecraft and debris.
- And despite efforts to make spacecraft more fuel efficient, the energy requirements are enormous.
- The technical demands of defending assets in space make the possibility of dominance and space as a domain for war-fighting a sort of chimera.

16. World Congress of Philosophy

Context:

24th World Congress of Philosophy will be held in Beijing, China.

• The World Congress of Philosophy is organized every five years by the International Federation of Philosophical Societies (FISP) in collaboration with one of its member societies. It was first organized in 1900.

Aims of the 2018 Congress include an emphasis on exploring dimensions of the human and inquiring into the challenges facing humanity:

- To globalize philosophical investigations to encompass the diverse forms of philosophizing by past and present thinkers across cultures, with special attention to critical reflections on philosophy itself and the tasks and functions of philosophy in the contemporary world.
- To open the philosophical area to enable philosophers to address emerging global issues through fruitful interactions with other disciplines in the humanities, social sciences, and natural sciences, with other activities in economic, social, political, and religious spheres, as well as with diverse cultures and traditions.
- To encourage philosophical reflections to become public discourses on recurrent human concerns, such as ecology, justice, and peace.

Economy

17. National Payments Corporation of India (NPCI)

Context:

The National Payments Corporation of India (NPCI) has said the recent incident of cyber-attack in Pune-based Cosmos Cooperative Bank, that has caused an over ¹ 90-crore loss, is due to a malware attack on the bank's system.

 Hackers transferred over Rs. 90 crore out on August 11 and 13 through the malware attack on the bank's server by cloning debit cards of the bank's customers. The transactions were carried through automated teller machines (ATMs) in 28 countries, including Canada, Hong Kong and India. Visa and Rupay debit cards were cloned.

What's the Difference Between Malware, Trojan, Virus, and Worm?

Malware is defined as a software designed to perform an unwanted illegal act via the computer network. It could be also defined as software with malicious intent. Malware can be classified based on how they get executed, how they spread, and/or what they do. Some of them are discussed below.

Virus: A virus is a program that can infect other programs by modifying them to include a possible evolved copy of itself. A virus can spread throughout a computer or network using the authorization of every user using it to infect their program. Every program so infected may also act as a virus and thus the infection grows. Viruses normally affect program files, but in some cases they also affect data files disrupting the use of data and destroying them completely.

Worms: Worms are also disseminated through computer networks, unlike viruses, computer worms are malicious programs that copy themselves from system to system, rather than infiltrating legitimate files. For example, a mass mailing e-mail worm is a worm that sends copies of itself via e-mail. A network worm, on the other hand makes copies of itself throughout a network, thus disrupting an entire network.

Trojans: Trojan is another form of Malware, trojans do things other than what is expected by the user. Trojan or trojan horse is a program that generally impairs the security of a system. Trojans are used to create backdoors (a program that allows outside access into a secure network) on computers belonging to a secure network so that a hacker can have access to the secure network.

Unlike viruses, Trojan horses do not replicate themselves but they can be just as destructive. One of the most insidious types of Trojan horse is a program that claims to rid your computer of viruses but instead introduces viruses onto your computer.

Hoax: Hoax is an e-mail that warns the user of a certain system that is harming the computer. The message thereafter instructs the user to run a procedure (most often in the form of a download) to correct the harming system. When this program is run, it invades the system and deletes an important file.

Spyware: Spyware invades a computer and, as its name implies, monitors a user's activities without consent. Spywares are usually forwarded through unsuspecting e-mails with bonafide e-mail i.ds. Spyware continues to infect millions of computers globally.

NPCI:

- National Payments Corporation of India (NPCI) is an umbrella organization for all retail payments system in India. It was set up with the guidance and support of the Reserve Bank of India (RBI) and Indian Banks' Association (IBA). NPCI has ten promoter banks.
- Its recent work of developing Unified Payments Interface aims to move India to a cashless society with only digital transactions.
- It has successfully completed the development of a domestic card payment network called RuPay, reducing the dependency on international card schemes.

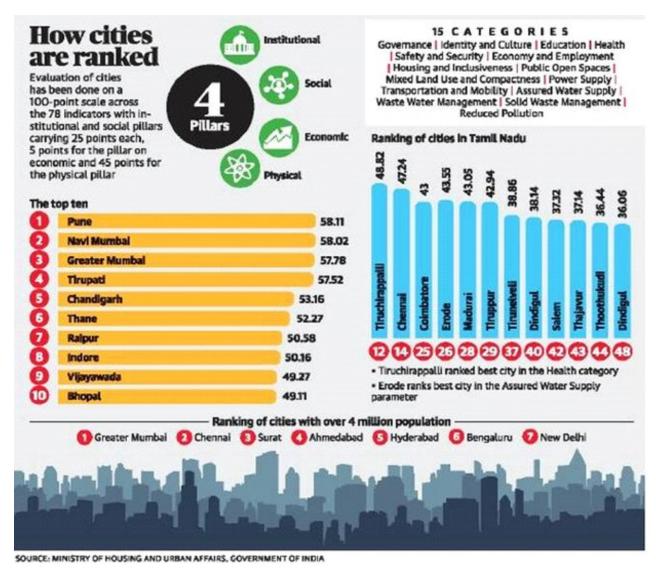
18. Ease of Living index

Context:

Ministry of Housing and Urban Affairs has released Ease of Living Index.

About the index:

- The index has been developed to allow city managers to get a grip on the city's baseline and compare its performance across key indicators.
- The index covers 111 cities that are smart city contenders, capital cities, and cities with population of 1 million plus.
- The index captures the quality of life based on the data collected from the urban local bodies on four parameters, which were further broken down into 15 categories.
- The four parameters include institutional (governance), social (identity, education, health, security), economic (economy, employment) and physical factors (waste water and solid waste management, pollution, housing/inclusiveness, mixed land use, power and water supply, transport, public open spaces).
- Institutional and social parameters carry 25 points each, physical factors have a weightage of 45 points and economic factors five points totalling to a 100 mark scale on which cities were evaluated.



Performance of states:

- Pune has ranked first while two more Maharashtra cities Navi Mumbai and Greater Mumbai — figure in the second and third spots.
- Tirupati, Chandigarh, Thane, Raipur, Indore, Vijaywada and Bhopal also figure in the top 10 list in that order. Among other major cities, Chennai holds 14th rank, Ahmedabad 23rd, Hyderabad 27th, and Bengaluru 58th.
- Rampur in Uttar Pradesh has ranked the worst on the scale with Kohima and Patna on the bottom two and three ranks while Varanasi stands at 33.
- Kolkata is excluded from the index.

19. Iris Scan Authentication feature for Aadhaar-based transactions by Axis bank

Context:

Axis Bank has become the first bank in the country to introduce Iris Scan Authentication feature for Aadhaar-based transactions through its micro ATM tablets.

- The bank has deployed highly secure iris powered micro ATM tablets which are STQC certified and UIDAI compliant registered devices with completely integrated iris sensors.
- Micro ATMs completely eliminate the requirement of debit cards, passwords, PINs, and user IDs, and empower consumers to avail banking services using only their Aadhaar numbers and biometrics (iris scan/fingerprint scan).
- This service, which requires a customer to scan their iris on a tablet, will boost the bank's financial inclusion efforts by making Aadhaar authentication process hassle-free and offering easier access to digital banking for consumers especially in the rural parts of the country.
- Iris scan technology is completely contactless and provides up to 98.2% authentication success rate (as per study conducted by the International Centre for Biometric Research) and offers an edge over other prevalent biometric modes.

20. NITI Aayog launches "Pitch to MOVE"

Context:

NITI Aayog has launched "Pitch to MOVE" – a mobility pitch competition that aims to provide budding entrepreneurs of India a unique opportunity to pitch their business ideas to a distinguished jury.

- "Pitch to MOVE" is organised by NITI Aayog in collaboration with Invest India and Society of Indian Automobile Manufacturers (SIAM).
- **Aim:** The competition aims to identify and reward the start-ups offering innovative solutions for shared, connected, and environment friendly mobility. It also aims to incentivise the startups, which will help the Government realize its vision of Shared, Connected, Intermodal and Environment Friendly Mobility for India. The objective is to harness the latest disruption for generating employment and growth in our country.
- The Startups can be from the domain of Public Mobility, Electric Vehicles, Shared Transport, Last Mile Connectivity, Passenger Transportation, Battery Technology, Automotive IoT, Freight & Logistics, Powertrain/Drivetrain, Experiential, Travel, Mobility Infrastructure and Automotive Electronics etc.

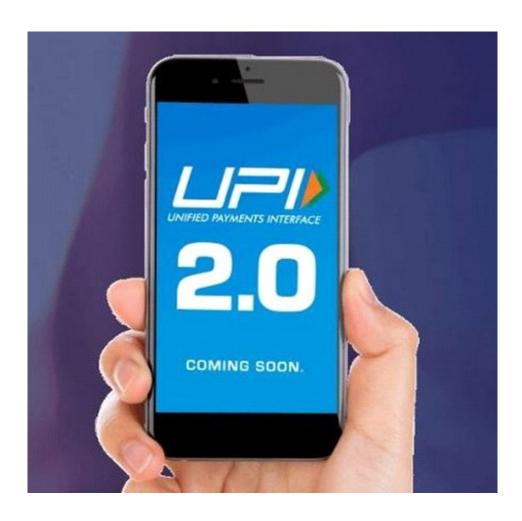
21. NPCI launches UPI 2.0

Context:

National Payments Corporation of India (NPCI) has launched UPI 2.0, an upgraded and renewed version of Unified Payments Interface (UPI).

New features:

• The latest edition has four new features to make it attractive and safer for users. These new features will allow users to link their overdraft account to UPI, creation of one-time mandates and pre-authorisation of transactions for payment at later date and checking the invoice sent by merchant prior to making payment.

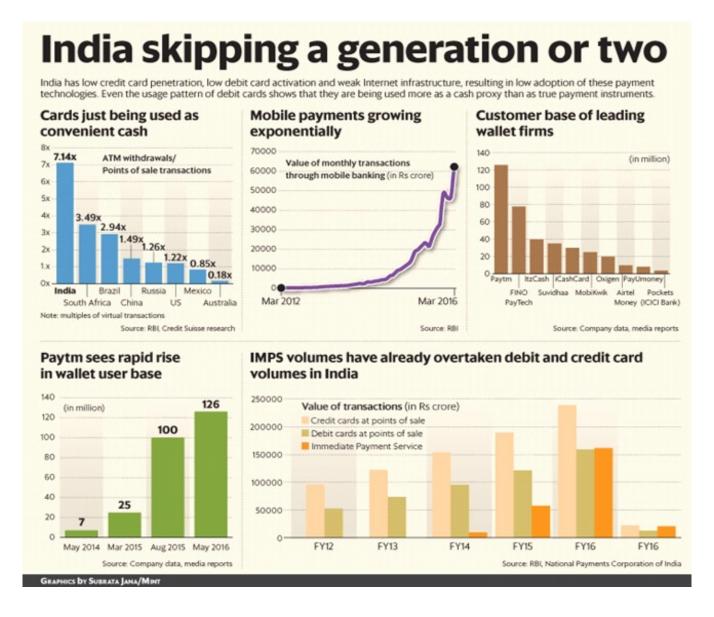


What exactly is UPI?

• The Unified Payments Interface (UPI) is a system developed by the NPCI and the RBI to aid instant transfer of money using a cashless system. Using UPI services, one just requires a smartphone and a banking app to send and receive money instantly or to pay a merchant for retail purchase. In the long run, UPI is likely to replace the current NEFT, RTGS, and IMPS systems as they exist today.

The UPI ecosystem functions with three key players:

- Payment service providers (PSPs) to provide the interface to the payer and the payee. Unlike wallets, the payer and the payee can use two different PSPs.
- Banks to provide the underlying accounts. In some cases, the bank and the PSP may be the same.



 NPCI to act as the central switch by ensuring VPA resolution, effecting credit and debit transactions through IMPS.

How does it work?

• UPI, built on IMPS, allows a payment directly and immediately from bank account. There is no need to pre-load money in wallets. It allows payments to different merchants without the hassle of typing one's card details or net-banking password.

Geography and Environment

22. PARIVESH

Context:

• It is an environmental single window hub for Environment, Forest, Wildlife and CRZ clearances launched recently. This Single-Window Integrated Environmental Management System has been developed in pursuance of the spirit of 'Digital India' initiated by the Prime Minister and capturing the essence of Minimum Government and Maximum Governance.



PARIVESH: Pro-Active and Responsive facilitation by Interactive, Virtuous and Environmental Single-window Hub.

Key features:

- "PARIVESH" is a workflow based application, based on the concept of web architecture. It has been rolled out for online submission, monitoring and management of proposals submitted by Project Proponents to the Ministry of Environment, Forest and Climate Change (MOEFCC), as well as to the State Level Environmental Impact Assessment Authorities (SEIAA).
- It seeks to give various types of clearances (e.g. Environment, Forest, Wildlife and Coastal Regulation Zone Clearances) from Central, State and district-level authorities.
- The system has been designed, developed and hosted by the Ministry of Environment, Forest and Climate Change, with technical support from National Informatics Centre, (NIC).
- It provides single registration and single sign-in for all types of clearances (i.e. Environment, Forest, Wildlife and CRZ), unique-ID for all types of clearances required for a particular project and a single Window interface for the proponent to submit applications for getting all types of clearances (i.e. Environment, Forests, Wildlife and CRZ clearances).

Significance and benefits of the platform:

- PARIVESH offers a framework to generate economic growth and strengthens Sustainable Development through e- Governance. With automatic highlighting of non-compliance by the system, PARIVESH helps in improving the overall performance and efficiency of the whole appraisal process.
- It also helps the processing authorities, as it has a Single Window System for Central, State and District level clearances.
- The facility of Geographic Information System (GIS) interface for the Appraisal Committee will help them in analyzing the proposal efficiently, automatic alerts (via SMS and emails) at important stages to the concerned officers, committee members and higher authorities to check the delays, if any.
- It also enables project proponents, citizens to view, track and interact with scrutiny officers, generates online clearance letters, online mailers and alerts to state functionaries in case of delays beyond stipulated time for processing of applications.

23. Zero Budget Natural Farming

Context:

Indian Council of Agricultural Research (ICAR) under Network Project on Organic Farming (NPOF) and All India Coordinated Research Projects (AICRP) on Integrated Farming Systems, has initiated an experiment on "Evaluation of zero budget farming practices in basmati rice-wheat system" at Modipuram (Uttar Pradesh), Ludhiana (Punjab), Pantnagar (Uttarakhand) and Kurukshetra (Haryana) from rabi 2017 to study the zero budget farming practices on productivity, economics and soil health including soil organic carbon and soil fertility.

FOUR PILLARS OF ZERO BUDGET NATURAL FARMING

FIRST WHEEL

Bijamrita
(Seed treatment)

SECOND WHEEL

Jiwamrita
(No fertilizers No Pesticides)

THIRD WHEEL

Mulching
(Soil, straw & live)

THIRD WHEEL

Waaphasa
(Soil moisture)

- Zero Budget Natural Farming, as the name implies, is a method of farming where the cost of growing and harvesting plants is zero. This means that farmers need not purchase fertilizers and pesticides in order to ensure the healthy growth of crops.
- It is, basically, a natural farming technique that uses biological pesticides instead of chemical-based fertilizers. Farmers use earthworms, cow dung, urine, plants, human excreta and such biological fertilizers for crop

protection. It reduces farmers' investment. It also protects the soil from degradation.

Government initiatives to support ZBNF:

- Government of India has been promoting organic farming in the country through the dedicated schemes of Paramparagat Krishi Vikas Yojana (PKVY) since 2015-16 and also through Rashtriya Krishi Vikas Yojana (RKVY).
- In the revised guidelines of PKVY scheme during the year 2018, various organic farming models like Natural Farming, Rishi Farming, Vedic Farming, Cow Farming, Homa Farming, Zero Budget Natural Farming (ZBNF) etc. have been included wherein flexibility is given to states to adopt any model of Organic Farming including ZBNF depending on farmer's choice.
- Under the RKVY scheme, organic farming/ natural farming project components are considered by the respective State Level Sanctioning Committee (SLSC) according to their priority/ choice.

24. Mahadayi verdict

Context:

The Mahadayi Water Disputes Tribunal which has been hearing the tussle over sharing of the Mahadayi or Mandovi river between Goa, Karnataka and Maharashtra, has delivered its final verdict.

The final verdict:

• The tribunal has allowed Karnataka access to 13.4 tmc of water for its consumptive use (5.4 tmc) and power generation (8.02 tmc).



- The share of Goa was pegged at 24 tmc with the Tribunal allowing it for the state's municipal water needs, irrigation water requirements and industrial water demands.
- Maharashtra got the lowest share of 1.33 tmc for meeting its in-basin needs with respect to five projects.
- The tribunal also directed the Centre to set up the Mahadayi Water Management Authority to implement its report and final decision.

About the dispute:

• The Mahadayi river basin drains an area of 2032 square kilometres of which 375 square km lies in Karnataka, 77 sq km in Maharashtra and the remaining in Goa.

• The dispute arose since Goa was opposed to Karnataka's plans to divert waters from the tributaries of the river, which Karnataka justified was for drinking water purposes. The tribunal was constituted in November 2010.

25. Central Silk Board recently Developed Races of Silk Worm Seed

Context:

Central Silk Board (CSB) has notified recently developed races of silkworm seed of mulberry and Vanya silk for increasing the productivity of cocoons and to increase the income of the farmers engaged in sericulture.

Key facts:

- Tropical Tasar Silkworm (BDR-10) race developed by the CSB have 21% more productivity than the traditional Daba breed. Farmers can get upto 52 kg cocoons per 100 disease free layings (dfls).
- Thissilkworm breed will help the tribal farmers of Jharkhand, Chattishgarh, Odisha, West Bengal, Andhra Pradesh, Maharastra, Madhya Pradesh, Bihar, Telangana and Uttar Pradesh.
- Multivoltine x Bivoltine Mulberry hybrid (PM x FC2) race of silkworm can produce 60 kg per 100 Dfls and the race is better than earlier race PM x CSR. Due to high quality silk and significant egg recovery, this race is suitable for the farmers of Karnataka, Andhra Pradesh, Tamil Nadu, Telangana and Maharastra.
- Eri Silkworm (C2) race has been found better than local breed and it can produce 247 numbers of Eri cocoons per 100 Dfls. This race is suitable for the farmers in Arunachal Pradesh, Assam, Bihar, Maharastra, Madhya Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Sikkim, Uttar Pradesh, Uttarakhand and West Bengal.

Significance:

Silk worm breeds for specific agro-climatic condition are essential for increasing the productivity of cocoons. The recently notified silkworm races will improve the income of the farmers by its enhanced productivity and quality.

CSB:

Central Silk Board (CSB) is a Statutory body established in 1948 by an Act of Parliament. It is working under the administrative control of Ministry of Textiles, Government of India.

26. India's first genetic bank for wildlife conservation

Context:

In a step that would further the cause of conservation of endangered and protected animals, India has got its first scientific and most modern national wildlife genetic resource bank.

- It is located in Hyderabad at the Laboratory for the Conservation of Endangered Species (LaCONES), a research wing of the Centre for Cellular and Molecular Biology (CCMB).
- The state-of-the-art bank is equipped with sophisticated equipment to preserve the genetic resources that could be utilised to virtually resurrect an animal species in case it goes extinct.
- The bank that contains genetic resources of about 250 wildlife species.
- The Genetic Resource Bank will store genetic material of Indian species. It will also help in protecting India's biodiversity and environment.

Achievements of Laboratory for the Conservation of Endangered Species (LaCONES):

- It is India's only research facility engaged in conservation and preservation of wildlife and its resources. It was established in 1998 with the help of Central Zoo Authority of India, CSIR and the government of Andhra Pradesh.
- Lacones has helped the Mouse Deer Conservation Breeding Centre at Nehru Zoological Park to increase the population of mouse deer in Telangana forests. Amrabad forest, for instance, ran out of mouse deer and through the efforts of Lacones, the animal is now reintroduced in Amrabad Tiger Reserve.
- Earlier, LaCONES has developed universal DNA based marker for identification of wild animals from parts and remains. It has a DNA banking of more than 250 species of mammals, birds and reptiles.

27. International Nitrogen Initiative

Context:

Indian scientist Nandula Raghuram has been elected as the Chair of the International Nitrogen Initiative (INI), a global policy making initiative. He



is the first Indian and Asian to be elected to the Chair of INI.

About International Nitrogen Initiative:

• The International Nitrogen Initiative (INI) is an international program, set up in 2003 under sponsorship of the Scientific Committee on Problems of the

Environment (SCOPE) and from the International Geosphere-Biosphere Program (IGBP).

- The initiative aims to optimise nitrogen's beneficial role in sustainable food production and minimise nitrogen's negative effects on human health.
- INI is coordinated by a Steering Committee, led by a chair and six regional centre directors representing, Africa, Europe, Latin America, North America, South Asia and East Asia.
- The INI holds a conference once in every three years, inviting members of the international nitrogen community to meet up and discuss ideas and exchange knowledge on nitrogen issues.
- The program is currently a sustained partner of Future Earth, an international organisation that works to accelerate transformations to global sustainability through research and innovation.

Nitrogen:

- Nitrogen is one of the five major chemical elements that are necessary for life. While nitrogen is the most abundant of these, more than 99% of it occurs as molecular nitrogen, or N2, which cannot be used by most organisms.
- This is because breaking the triple bond holding the two nitrogen atoms together requires a large amount of energy, which can be mustered only through high-temperature processes or by a small number of nitrogen-fixing microbes.
- Most living organisms can only make use of reactive nitrogen, which
 includes inorganic forms of nitrogen like ammonia, ammonium,
 nitrogen oxide, nitric acid, nitrous oxide, and nitrate, and organic
 compounds like urea, amines, proteins, and nucleic acids. It includes
 any nitrogen compound that is radiatively, chemically or biological
 active.

Why care about it?

- In the prehuman world, a small amount of usable reactive nitrogen was created from N2 by lightening and biological nitrogen fixation, but the spread of reactive nitrogen was held in check by denitrification, a process that converts reactive N back to N2.
- This is no longer the case. Human beings have dramatically altered the nitrogen balance, breaking into the vast reservoir of molecular nitrogen and releasing reactive forms into the environment. We have done so by cultivating legumes, rice, and other crops that promote nitrogen fixation, by burning fossil fuels, and by transforming nonreactive atmospheric nitrogen to ammonia to sustain food production and some industrial processes.

- During the last few decades, the global increase of reactive nitrogen by all human sources has far outstripped production from all natural terrestrial systems, and since the 1960s, the rate of increase has accelerated sharply.
- This unprecedented growth in reactive nitrogen has impacted the health and welfare of people and ecosystems worldwide. On the positive side, approximately 40 percent of the world's population is fed by crops sustained by human-induced formation of reactive nitrogen.
- At the same time, this reactive nitrogen can cascade through a variety of environmental systems, damaging them significantly and exacting a toll on human health. Reactive nitrogen is implicated in the high concentration of ozone in the lower atmosphere, the eutrophication of coastal ecosystems, the acidification of forests, soils, and freshwater streams and lakes, and losses of biodiversity. In the form of nitrous oxide, a greenhouse gas, nitrogen contributes to global warming and stratospheric ozone depletion.

28. Swadesh Darshan Scheme

Context:

First project under the Swadesh Darshan Scheme the 'North East Circuit: Imphal & Khongjom' in Manipur has been inaugurated.

'North East Circuit: Imphal & Khongjom':

- The project covers two sites i.e. Kangla Fort and Khongjom.
- Kangla Fort is one of the most important historic and archaeological site of Manipur located in the heart of the Imphal city. It served as the seat of Manipur's power till 1891. Kangla has a special place in the hearts and minds of the people of Manipur.
- The old Govindajee Temple, outer and inner moat and other relics are perfect reflections of the rich art and architectural heritage of Manipur.

About Swadesh Darshan Scheme:

• The Tourism Ministry had launched 'Swadesh Darshan' scheme with an objective to develop theme-based tourist circuits in the country. These tourist circuits will be developed on the principles of high tourist value, competitiveness and sustainability in an integrated manner.

Features of Swadesh Darshan Scheme:

- The scheme is 100% centrally funded for the project components undertaken for public funding.
- To leverage the voluntary funding available for Corporate Social Responsibility (CSR) initiatives of Central Public Sector Undertakings and corporate sector.

- Funding of individual project will vary from state to state and will be finalised on the basis of detailed project reports prepared by PMC (Programme Management Consultant).
- A National Steering Committee (NSC) will be constituted with Minister in charge of M/O Tourism as Chairman, to steer the mission objectives and vision of the scheme.
- A Mission Directorate headed by the Member Secretary, NSC as a nodal officer will help in identification of projects in consultation with the States/ UTs governments and other stake holders.
- PMC will be a national level consultant to be appointed by the Mission Directorate.

29. International year of millets

Context:

Continuing its efforts to get 'millets' a global recognition for its promotion among consumers, India has written to Food and Agriculture Organisation (FAO) of the United Nations proposing declaration of the upcoming year as "International Year of Millets".



Significance of this move:

- Adoption of this proposal by FAO with the support of its member nations will enable it to be moved to the United Nations General Assembly (UNGA) for declaration of the upcoming year as International Year of Millets.
- Dedicating a year for millets will not only increase awareness about its health benefits, but also result in higher demand for these droughtresistant varieties, resulting in remunerative prices for poor and marginal farmers.

Efforts by government to promote millets:

- In order to promote 'millets', India had on its part notified these climate resilient crops as "Nutri-Cereals" and allowed its inclusion in the Public Distribution System (PDS) for improving nutritional support in April.
- Recognizing millets' anti-diabetic properties, the notification called it a "powerhouse of nutrients" and identified several varieties of millets for promotion. The millets in the category of "Nutri-Cereals" include Sorghum (Jowar), Pearl Millet (Bajra), Finger Millet (Ragi), Foxtail Millet (Kangani/Kakun) and Buckwheat (Kuttu) among others.
- Besides, the government had in July substantially hiked the minimum support price (MSP) of millets so that more and more farmers may opt for cultivation of these less water consuming crops.

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 resourcepoor marginal farmers.

30. Indian Army Mountaineering Expedition to MT Kamet and MT Makalu

Context:

In pursuit of achieving greater heights in the field of mountaineering, Indian Army is planning to attempt Mt Makalu (8485M), the fifth highest mountain peak in the world in 2019. As a precursor to it, an expedition to Mount Kamet (7756M), Joshimath District Chamoli, Uttarakhand is being conducted under the aegis of Army Adventure Wing in August-September 2018.

About Mt Makalu:

- Among the eight mountains in Nepal above 8000m, Mt. Makalu is the fourth tallest in Nepal and fifth highest Peak on the Earth with its height 8,463m.
- Mt. Makalu resides in the eastern Himalayas range just 19Km southeast of the giant Mt. Everest in the border of Nepal and China.
- At the base of Mt. Makalu, there lies a natural wonder: The Barun Valley.

About Mt Kamet:

- Mount Kamet is the second most elevated top in the Garhwal district after Nanda Devi. Kamet Peak is the third most astounding mountain crest in India and the twenty-ninth most noteworthy crest on the planet.
- Kamet is considered as the piece of the Zaskar Range, which lies to the north of the Himalayas between the Suru River and the upper Karnali River.
- Three huge crests bound Kamet, the Mukut Parbat in the northwest of Kamet, Abi Gamin and Mana, which is in the south-southeast of Kamet.

31. Report on cleanliness of the country's railway stations

Context:

Third Party Survey Report on Station Cleanliness has been released. It ranks 407 railway stations including 75 A1 category stations, 332 A category stations on basis of cleanliness performance.

• The survey was conducted by the Quality Council of India (QCI) to increase level of cleanliness under Swachh Bharat Abhiyan by identifying unclean spots, improve cleanliness standards and propel healthy competition among railway stations.

Key facts:

- Top 10 A1 category Stations (out of 75): Jodhpur (1st), Jaipur (2nd), Tirupati (3rd), Vijayawada (4th), Anand Vihar Terminal (5th), Secunderabad Junction (6th), Bandra (7th), Hyderabad (8th), Bhubaneshwar (9th) and Vishakhapatnam (10th).
- Top 10 A category stations (out of 332): Marwar (1st), Phulera (2nd), Warangal (3rd), Udaipur (4th), Jaialmer (5th), Nizamabad (6th), Barmer (7th), Machiryal (8th), Mysore (9th) and Bhilwara (10th).
- Top 10 Zonal Railways Rankings: North Western Railway (1st), South Central Railway (2nd), East Coast Railway (3rd), South East Central Railway (4th), Western Railway (5th), Southern Western Railway (6th), Southern Railway (7th), Central Railway (8th), West Central Railway (9th) and Northeast Frontiers Railway (10th).

32. Odisha to showcase its biodiversity

Context:

The Odisha government is setting up a world-class interpretation centre at Dangamal near Bhitarkanika National Park to showcase its efforts in protecting crocodiles and preserving its rich mangrove diversity. The centre will be developed both as a tourist attraction and a place for students to learn about the environment.

• The project, which has been approved under the Integrated Coastal Zone Management Project, will be taken up at an estimated cost of ¹ 3 crore.

Bhitarkanika and the need for conservation:

- Bhitarkanika, one of the State's finest biodiversity hotspots, receives close to one lakh visitors every year. The tourist inflow has seen an increase lately.
- The park is famous for its green mangroves, migratory birds, turtles, estuarine crocodiles and countless creeks. It is said to house 70% of the country's estuarine or saltwater crocodiles, conservation of which was started way back in 1975.

'BAULA' PROJECT AT DANGAMAL:

- 'Baula' is the Oriya term for Saltwater Crocodile. At Dangmal in Bhitarkanika sanctuary, salt-water crocodile eggs have been collected locally; and young crocodiles have been released in the creeks and the estuaries; and more than 2200 crocodiles have been released in phases since 1977.
- This operation has been reasonably successful and the crocodile population in the Bhitarkanika river system has gradually been built up. Above 50 released female Saltwater Crocodiles have laid eggs in the wild and bred successfully.

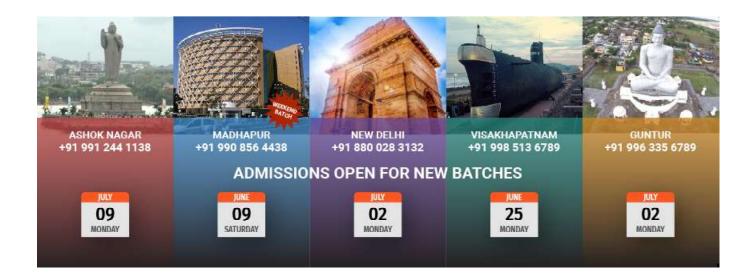
• The annual census conducted in the river systems of Bhitarkanika wildlife sanctuary in January 2004 indicated that there were 1308 Saltwater crocodiles and is on increasing trend.

About Gharial:

- Critically Endangered— IUCN Red List.
- Gharial (Gavial or fish eating crocodile).
- The male gharial has a distinctive boss at the end of the snout, which resembles an earthenware pot known in Hindi as Hence the name.
- Habitat foremost flowing rivers with high sand banks that they use for basking and building nests.
- Gharials once inhabited all the major river systems of the Indian Subcontinent, from the Irrawaddy Riverin the east to the Indus River in the west. Their distribution is now limited to only 2% of their former range.
- India: Girwa River, Chambal River, Ken River, Son River, Mahanadi River, Ramganga River.
- Nepal: Rapti-Narayani River.

Conservation:

- Schedule 1 species under Indian wildlife act, 1972.
- Project Crocodile began in 1975 (Government of India+ United Nations Development Fund + Food and Agriculture Organization) intensive captive breeding and rearing program.



Science & Technology

33. Aerogel-Super-insulating gel

Context:

Scientists have developed a transparent heat-resistant gel- called aerogelusing beer waste.

Features of aerogel:

The "aerogel" looks like a flattened plastic contact lens. The transparent gel is highly resistant to heat.

The gel is cheaper to produce because it comes from beer waste. Aerogels are at least 90% gas by weight, but their defining feature is air. Their thin films are made up of crisscrossing patterns of solid material that trap air inside billions of tiny pores, similar to the bubbles in bubble wrap. It is that trapping capacity that makes them such good insulators.

Potential applications:

It may one day be used to build greenhouse-like habitats for human colonised on Mars.

It could also be used on buildings on Earth to help make huge savings on energy costs.

34. Giant Metrewave Radio Telescope (GMRT)

Context:

Astronomers have used an Indian telescope to discover the most distant radio galaxy ever known, located at a distance of 12 billion light-years.

- The galaxy, from a time when the universe was only 7% of its current age was found using the Giant Metrewave Radio Telescope (GMRT) in Pune.
- The distance to this galaxy was determined using the Gemini North telescope in Hawaii and the Large Binocular Telescope in Arizona.

What are radio galaxies?

- Radio galaxies are very rare objects in the universe. They are colossal galaxies with a supermassive black hole in their centre that actively accretes gas and dust from its surroundings.
- This activity initiates the launch of high-energy jet streams, which are capable of accelerating charged particles around the supermassive black hole to almost the speed of light.
- The discovery of such galaxies at extremely large distances is important for our understanding of the formation and evolution of galaxies.

About GMRT:

- The Giant Metrewave Radio Telescope (GMRT), located near Pune in India, is an array of thirty fully steerable parabolic radio telescopes of 45 metre diameter, observing at metre wavelengths.
- It is operated by the National Centre for Radio Astrophysics, a part of the Tata Institute of Fundamental Research, Mumbai.
- At the time it was built, it was the world's largest interferometric array offering a baseline of up to 25 kilometres (16 mi).
- One of the aims for the telescope during its development was to search for the highly redshifted 21-cm line radiation from primordial neutral hydrogen clouds in order to determine the epoch of galaxy formation in the universe.

35. Parker Solar Probe

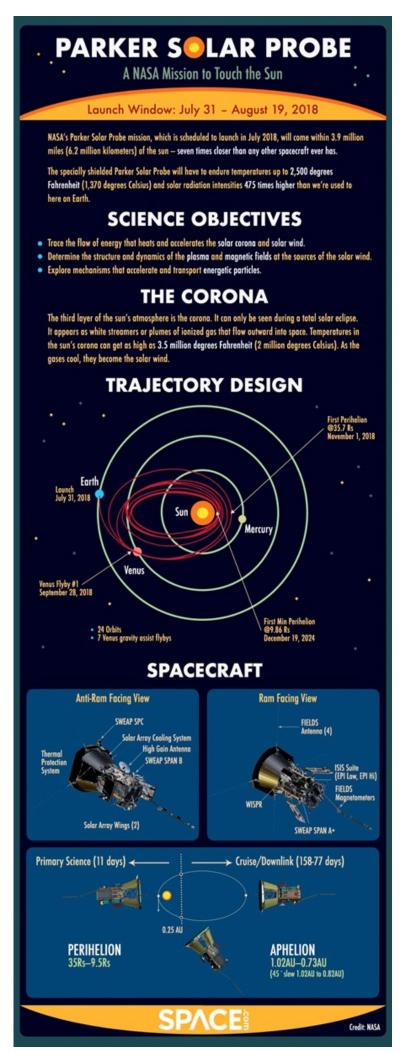
Context:

NASA has launched the Parker Solar Probe – the space agency's first mission to the sun – that will explore the sun's atmosphere and its outermost atmosphere, the corona. The project, with a \$1.5 billion price tag, is the first major mission under Nasa's Living With a Star program.

- NASA's historic Parker Solar Probe mission will revolutionize our understanding of the sun, where changing conditions can propagate out into the solar system, affecting Earth and other worlds.
- 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.
- **Journey:** In order to unlock the mysteries of the sun's atmosphere, Parker Solar Probe will use Venus' gravity during seven flybys over nearly seven years to gradually bring its orbit closer to the sun. The spacecraft will fly through the sun's atmosphere as close as 3.9 million miles to our star's surface, well within the orbit of Mercury and more than seven times closer than any spacecraft has come before.
- **Goals:** The primary science goals for the mission are to trace how energy and heat move through the solar corona and to explore what accelerates the solar wind as well as solar energetic particles.

Parker Solar Probe has three detailed science objectives:

- Trace the flow of energy that heats and accelerates the solar corona and solar wind.
- Determine the structure and dynamics of the plasma and magnetic fields at the sources of the solar wind.
- Explore mechanisms that accelerate and transport energetic particles.



Why study corona?

The corona is hotter than the surface of the sun. The corona gives rise to the solar wind, a continuous flow of charged particles permeates the solar system. Unpredictable solar winds cause disturbances in our planet's magnetic field and can havoc with play communications technology on Earth. Nasa hopes the findings will enable scientists to forecast changes in Earth's space environment.

Why do we study the sun and the solar wind?

- The sun is the only star we can study up close. By studying this star we live with, we learn more about stars throughout the universe.
- The sun is a source of light and heat for life on Earth. The more we know about it, the more we can understand how life on Earth developed.
- The sun also affects Earth in less familiar ways. It is the source of the solar wind; a flow of ionized gases from the sun that streams past Earth at speeds of more than 500 km per second (a million miles per hour).
- Disturbances in the solar wind shake Earth's magnetic field and pump energy into the radiation belts, part of a set of changes in near-Earth space known as space weather.
- Space weather can change the orbits of satellites, shorten

their lifetimes, or interfere with onboard electronics. The more we learn about what causes space weather – and how to predict it – the more we can protect the satellites we depend on.

• The solar wind also fills up much of the solar system, dominating the space environment far past Earth. As we send spacecraft and astronauts further and further from home, we must understand this space environment just as early seafarers needed to understand the ocean.

Note:

- The previous closest pass to the Sun was by a probe called Helios 2, which in 1976 came within 27 million miles (43 million km).
- By way of comparison, the average distance from the Sun for Earth is 93 million miles (150 million km).

36. NASA's New Horizons mission

Context:

Scientific data sent back by National Aeronautics and Space Administration's (NASA) New Horizons spacecraft suggests that there could be a hydrogen

wall at the end of our solar system.

What does the presence of Hydrogen wall indicate?

- It is believed that this hydrogen wall is a "signature of the furthest reaches of sun's energy".
- Technically speaking, the charged particles which the sun sends outwards causes hydrogen to release characteristic ultraviolet light. But as one keeps going away from the sun its influence wanes, which might create a pileup of interstellar hydrogen.

About New Horizons Mission:

- New Horizons was launched on 19 January 2006, and has been travelling through space for the past nine years.
- Just over a year after launch, it passed Jupiter and used the giant world's gravity to



boost its velocity, as well as making scientific observations. This boost shortened the time to reach Pluto by years.

- The mission will complete what NASA calls the reconnaissance of the classical solar system, and it makes the U.S. the first nation to send a space probe to every planet from Mercury to Pluto. The probe has traveled more than 3 billion miles to reach Pluto.
- New Horizon's core science mission is to map the surfaces of Pluto and Charon, to study Pluto's atmosphere and to take temperature readings.
- The spacecraft was launched in 2006, before the big debate started over Pluto's status as a planet. In August of that same year, the International Astronomical Union reclassified Pluto as a dwarf planet.

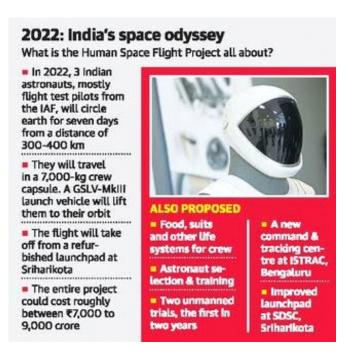
37. Human space flight Programme

Context:

In his address to the nation on India's 72nd Independence Day, Prime Minister Narendra Modi announced that India will send an astronaut to space in the year 2022.

Indian Human Space Flight Programme:

 India plans to build a crew vehicle that can accommodate 2 or 3 astronauts and human rate its GLSV Mk-III launcher. In 2004, ISRO prepared a document with the road-map for developing technologies relevant to human spaceflight.



- Initially, a manned space flight was proposed before 2017, at a budget of Rs 12.4 billion (\$242 million), using a fully autonomous orbital vehicle carrying two or three crew members to 400-km (250 miles) low Earth orbit for up to 7 days and back. The planning commission approved the mission and the government sanctioned Rs 95 crore to study all aspects of the manned space mission.
- ISRO has initiated pre-project Research and Development activities focusing on critical technologies for Human Space Fight Program.

Technological Challenges:

• Three major areas that ISRO needs to master are, environmental control and life support (ECLS) system, crew escape system and flight suite and it's currently working on them, under pre-project studies for which the Government sanctioned Rs 145 crore.

Recent technological advancements:

- In what appears to be a preparation for the Gaganyaan mission, ISRO last month conduced its first 'pad abort' test that was successful.
- The 'pad abort' test or Crew Escape System is an emergency escape measure that helps pull the crew away from the launch vehicle when a mission has to be aborted. The test was conducted at the Satish Dhawan Space Centre, Sriharikota.
- The Pad Abort Test demonstrated the safe recovery of the crew module in case of any exigency at the launch pad.

Way ahead:

- A manned space mission is very different from all other missions that ISRO has so far completed. In terms of complexity and ambition, even the missions to the Moon (Chandrayaan) and Mars (Mangalyaan) are nowhere in comparison.
- For a manned mission, the key distinguishing capabilities that ISRO has had to develop include the ability to bring the spacecraft back to Earth after flight, and to build a spacecraft in which astronauts can live in Earth-like conditions in space.

38. Laser Interferometer Gravitational Wave Observatory (LIGO) project

Context:

The Environment Ministry has allowed scientists to test the suitability of land in Maharashtra's Hingoli district to host the India wing of the ambitious Laser Interferometer Gravitational Wave Observatory (LIGO) project.

- The LIGO (Laser Interferometer Gravitational-wave Observatory) is a massive observatory for detecting cosmic gravitational waves and for carrying out experiments. The objective is to use gravitational-wave observations in astronomical studies.
- The project operates three gravitational-wave (GW) detectors. Two are at Hanford in the state of Washington, north-western US, and one is at Livingston in Louisiana, south-eastern US. The proposed LIGO India project aims to move one advanced LIGO detector from Hanford to India.

About LIGO- India project:

- Known as the LIGO-India project, it is piloted by Department of Atomic Energy (DAE) and Department of Science and Technology (DST).
- The LIGO-India project will be jointly coordinated and executed by three Indian research institutions: the Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune and Department of Atomic Energy organisations: Institute for Plasma Research (IPR), Gandhinagar

and the Raja Ramanna Centre for Advanced Technology (RRCAT), Indore.



Benefits for India:

- The project will bring unprecedented opportunities for scientists and engineers to dig deeper into the realm of gravitational wave and take global leadership in this new astronomical frontier.
- The LIGO-India project will also bring considerable opportunities in cutting-edge technology for the Indian industry which will be engaged in the construction of the eight-km long beam tube at ultra-high vacuum on a levelled terrain.
- With its establishment, India will join the global network of gravitational wave detectors.
- Establishing an observatory in India also assumes importance because the further the distance between the observatories, the greater will be the accuracy in locating gravity waves.

What are Gravitational Waves?

• Gravitational waves are the ripples in the pond of space time. The gravity of large objects warps space and time, or "space time" as physicists call it, the way a bowling ball changes the shape of a trampoline as it rolls around on it. Smaller objects will move differently as a result – like marbles spiraling toward a bowling-ball-sized dent in a trampoline instead of sitting on a flat surface.

Way ahead:

• Dubbed as the breakthrough of the century, the international team of scientists believes that the detection of gravitational waves will open an unprecedented new window to the cosmos.

Miscellaneous

39. PENCIL Portal

- The government has launched a web portal called 'PENCIL' for effective implementation of the National Child Labour Project, (NCLP).
- PENCIL (Platform for Effective Enforcement for No Child Labour) an electronic platform for no child labour in the country has been developed by the Labour Ministry.
- PENCIL portal has five components Child Tracking System, Complaint Corner, State Government, National Child Labour Project and Convergence.



40. Operation 'Madad'

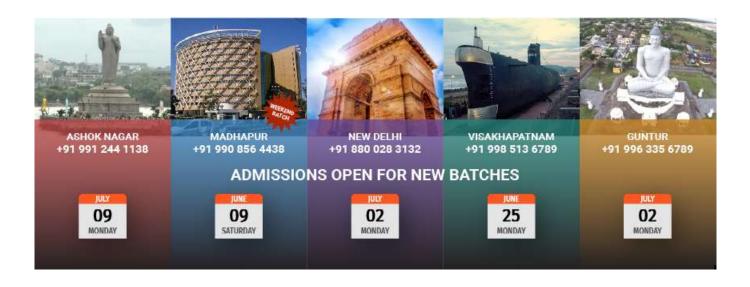
 Operation "Madad" has been launched by the Southern Naval Command (SNC) at Kochi since 09 Aug 2018 for assisting the state administration and undertaking disaster relief operations due to the unprecedented flooding experienced in many parts of Kerala, owing to incessant rainfall and release of excess water from Idukki and other dams.

41. Niryat Mitra

- Ministry of Commerce and Industry has launched this app to provide wide range of information required to undertake international trade.
- The information includes policy provisions for export and import, applicable GST rate, available export incentives, tariff, preferential tariff.
- ITC (HS) code refers to Indian Trade Clarification (ITC) and are based on Harmonized System (HS) of Coding, It was adopted in India for import-export operations.
- This app works internally to map the ITC HS code of other countries with that of India and provides all the required data without the users bothering about the HS code of any country.

42. Maharshi Badrayan Vyas Samman Award

- The Maharshi Badrayan Vyas Samman distinction is conferred on persons once a year on the Independence Day in recognition of their substantial contribution in the field of Sanskrit, Persian, Arabic, Pali, Prakrit, Classical Oriya, Classical Kannada, Classical Telugu and Classical Malayalam.
- The award introduced in the year 2002, is given to selected young scholars in the age group of 30 to 45 years. It carries a certificate of honour and a one time cash prize of Rs.1 lakh.





Abhyasa Program Structure

	Multiple Choice Questions (PRELIMS)	Descriptive Questions (MAINS)	Total Marks
Daily Test	10 (10*1 = 10 marks)	1 (1*10= 10 Marks)	20
Weekly Test	20 (20*1 = 20 marks)	2 (2*10= 20 Marks)	40
Fortnightly Test	30 (30*1 = 30 marks)	3 (3*10= 30 Marks)	60
Monthly Test	50 (50*1 = 50 marks)	5 (5*10= 50 Marks)	100
3 Months Test	100 (100*1 = 100 marks)	10 (10*10= 100 Marks)	200
Total Questions	4250+	500+	



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