MAY 2018

IASbaba's Monthly Magazine

Performance of SAARC

US Sanctions on Iran & associated impacts

Nagaland Peace Process

Protecting Girl Child (Katua Incident)

Rural Electrification

Civil Service Reforms

PREFACE

With the present shift in examination pattern of UPSC Civil Services Examination, 'General Studies – II and General Studies III' can safely be replaced with 'Current Affairs'. Moreover, following the recent trend of UPSC, almost all the questions are issue-based rather than news-based. Therefore, the right approach to preparation is to prepare issues, rather than just reading news.

Taking this into account, our website www.iasbaba.com will cover current affairs focusing more on 'issues' on a daily basis. This will help you pick up relevant news items of the day from various national dailies such as The Hindu, Indian Express, Business Standard, LiveMint, Business Line and other important Online sources. Over time, some of these news items will become important issues.

UPSC has the knack of picking such issues and asking general opinion based questions. Answering such questions will require general awareness and an overall understanding of the issue. Therefore, we intend to create the right understanding among aspirants – 'How to cover these issues?

This is the **36th edition** of IASbaba's Monthly Magazine. This edition covers all important issues that were in news in the month of **MAY 2018** which can be accessed from https://iasbaba.com/current-affairs-for-ias-upsc-exams-2016-2017/

Value add's from IASbaba- Must Read and Connecting the dots.
Also, we have introduced Prelim and mains focused snippets from November 2017 which shall guide you for better revision.
'Must Read' section, will give you important links to be read from exam perspective. This will make sure that, you don't miss out on any important news/editorials from various newspapers on daily basis.
Under each news article, **'Connecting the dots'** facilitates your thinking to connect and ponder over various aspects of an issue. Basically, it helps you in understanding an issue from multi-dimensional view-point. You will understand its importance while giving Mains or Interview.

Must Read Articles: We have not included them in the magazine. Those following DNA on daily basis may follow it- https://iasbaba.com/current-affairs-for-ias-upsc-exams-2016-2017/

"Today is the beginning of whatever you want"

Contents

GEOGRAPHY/MAPPING

Place in News: Golan Heights

Part of: GS Prelims – Geography or International Affairs
Observe from the figure/map below the following –

1. Sea of Galilee
2. Jordan River and Yamuk river
3. Surrounding countries -

Pic link: https://i.pinimg.com/originals/7e/bb/8b/7ebb8b5eda782c38857f988f85e54f15.jpg
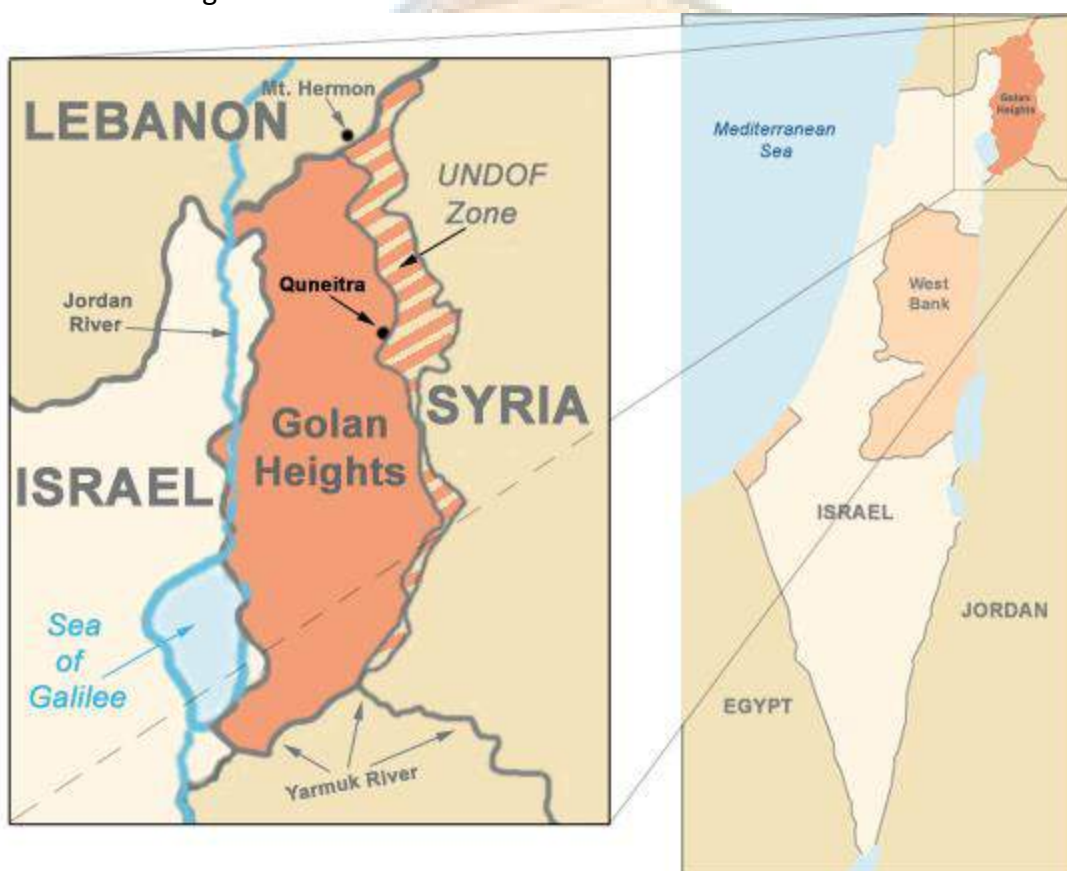
Important Value Additions:

About Golan Heights

- The Golan Heights, a rocky plateau in south-western Syria, has a political and strategic significance which belies its size. Whoever controls this area has a major strategic advantage.

- Golan Heights is the area captured from Syria and occupied by Israel during the Six-Day War, territory which Israel annexed in 1981.

- Israel unilaterally annexed the Golan Heights in 1981. The move was not recognised internationally.

Why Golan Heights is important?

- Having control of the Golan gives Israel a vantage point from which to monitor any Syrian military movements towards Israel.

- The area is a key source of water for an arid region. Rainwater from the Golan's catchment feeds into the Jordan River. The area provides a third of Israel's water supply.

- The land is fertile, with the volcanic soil being used to cultivate vineyards and orchards and to raise cattle. The Golan is also home to Israel's only ski resort.

Do you know?

- United Nations peacekeepers have been in the Golan Heights since 1974 supervising a ceasefire between Israel and Syria.

- The United States considers the Golan Heights to be Syrian territory held under Israeli occupation subject to negotiation and Israeli withdrawal.

- The United States considers the application of Israeli law to the Golan Heights to be a violation of international law, both the Fourth Geneva Convention's prohibition on the acquisition of territory by force and United Nations Security Council Resolution 242 (adopted under Chapter VI of the UN Charter).

Siachen Army Base Camp

Part of: GS Prelims – Geography

In News:

- President Ram Nath Kovind visits Siachen Army base camp (located at an altitude of 18,875 feet)
- First time by a President in 14 years

Important Value Additions:

About Siachen

- Siachen Glacier has been militarized by both India and Pakistan since 1984 as a result of the countries' conflicting claims over Kashmir, and inadequate attention to achieving a permanent border in the regions' northernmost reaches.
- The Siachen Glacier occupies the northernmost reaches of Jammu and Kashmir, the disputed territory between northern India and Pakistan.

- The Glacier is part of the Karakorum mountain range.

Do you know?

- Siachen Glacier exhibits a landscape characteristic of the Himalayas, which have been dubbed the "Third Pole" due to their comparability to the Arctic and Antarctic regions.

Place in news: GAZA STRIP

Part of: GS Prelims and Mains II – International Affairs
Key Pointers:

- In previous articles, we had covered important strategic place – **Golan heights**
- Today, we will cover Gaza Strip
- UPSC had asked Prelims question on Golan Heights, we can expect a question on Gaza Strip

About Gaza Strip:

- The Gaza Strip is a small Palestinian territory, located along the Mediterranean coast between Egypt and Israel. Palestinians are ethnic Arab and majority Muslim. It is deeply impoverished, kept in isolation by the Israeli military and ruled by Hamas, an anti-Israeli terrorist group.
- Israelis and Arabs have been fighting over Gaza on and off, for decades. It's part of the wider Arab Israeli conflict. (Link: https://iasbaba.com/2016/12/iasbabas-daily-current-affairs-29th-december-2016/)

Below pic says it all –

PALESTINIAN LOSS OF LAND 1946 TO 2014
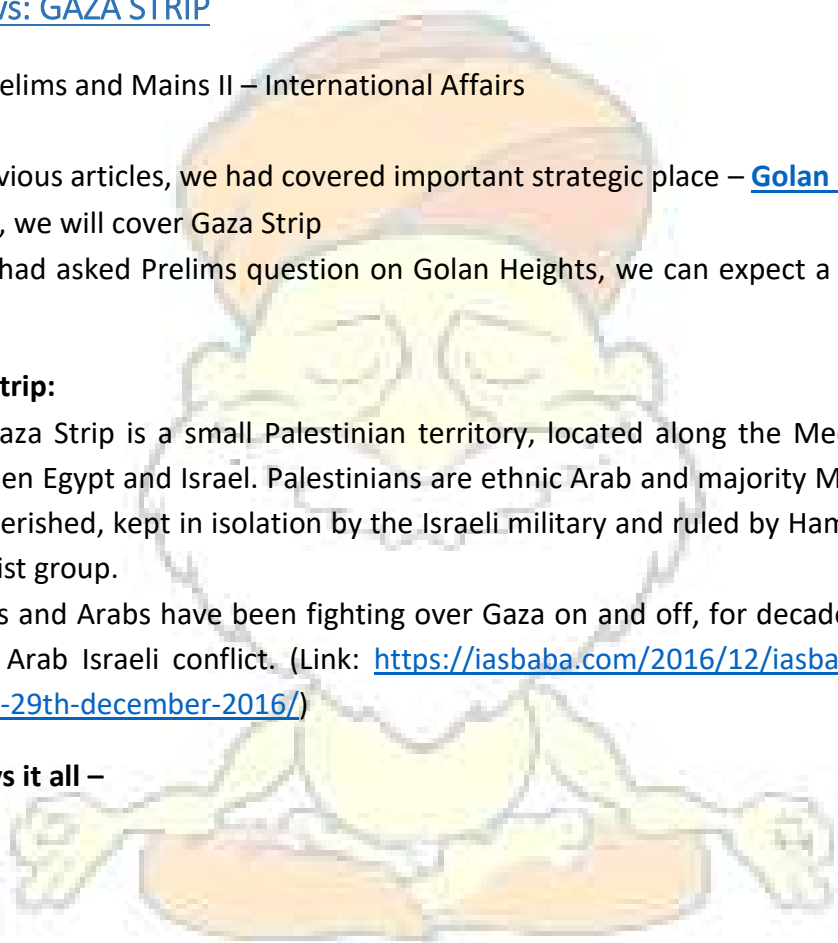
Pic link: https://www.fosna.org/sites/default/files/FrontMap_2014_72.jpg

Important Value Additions:
- According to the recently released United Nations report both Israel and Palestinian militants have committed war crimes during last year's (2014) Gaza war, which has led to unprecedented devastation and human suffering.
- Israel has denied the allegations. However, Hamas has welcomed the report as this can further their process to International Criminal Court (ICC).

Observe figure and identify the following –
1. Gaza borders both Israel and Egypt
2. Gaza touches Mediterranean Sea
3. Palestine controlled
4. Dead Sea
5. West Bank
6. Golan Heights

Pic link: https://img.washingtonpost.com/wp-apps/imrs.php?src=https://img.washingtonpost.com/blogs/worldviews/files/2012/11/w-ObamaMideast.jpg&w=480

Do you know?

- The Rafah Border Crossing or Rafah Crossing Point is the sole crossing point between Egypt and Gaza Strip. It is located on the Gaza–Egypt border, which was recognized by the 1979 Israel–Egypt Peace Treaty.

Place in news: Kishanganga hydroelectric project at Bandipore

Part of: GS Prelims and Mains II

In News:

- Prime Minister Narendra Modi to open the Kishanganga hydroelectric project at Bandipore in north Kashmir

Important Value Additions:

The Kishanganga Hydroelectric Plant is part of a run-of-the-river hydroelectric scheme that is designed to divert water from the **Kishanganga River** to a power plant in the **Jhelum River basin**.

Pic link: http://images.indianexpress.com/2018/04/kishanganga-project.jpg
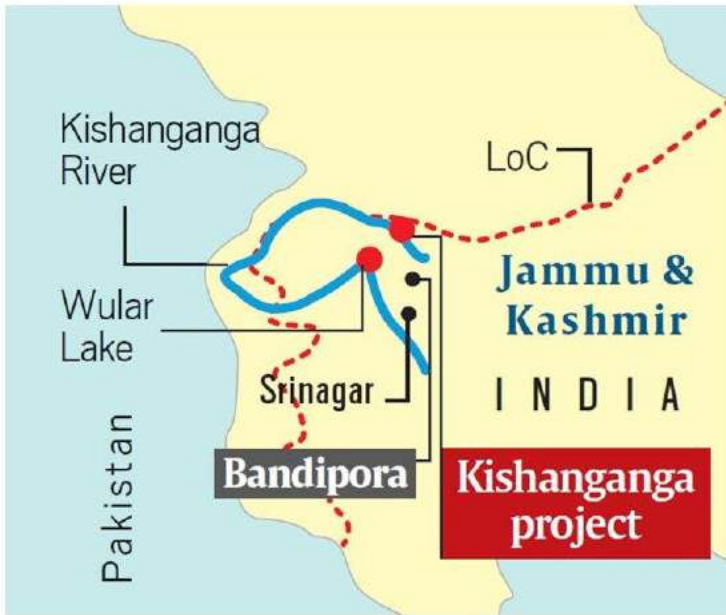
Do you know?

- Construction on the Kishanganga hydroelectric project began in 2007 and was expected to be complete in 2016.
- Construction on the dam was temporarily halted by the **Hague's Permanent Court of Arbitration (CoA)** in October 2011 due to Pakistan's protest of its effect on the flow of the Kishanganga River (called the **Neelum River in Pakistan**).
- However, in 2013, the CoA ruled that India could divert all the water leaving a minimum amount of water to the downstream of the dam on Kishanganga River for the purpose of environmental flows.

About Hague's Permanent Court of Arbitration (CoA)

- It is an intergovernmental organization, located at The Hague in the Netherlands.
- The PCA is not a court "in the traditional sense" but provides services of arbitral tribunal to resolve disputes that arise out of international agreements between member states, international organizations or private parties.
- The cases span a range of legal issues involving territorial and maritime boundaries, sovereignty, human rights, international investment, and international and regional trade.
- The organization is not a United Nations agency, but PCA is an official United Nations Observer.

World's second oldest rock is from Odisha

Part of: GS Prelims and Mains Paper II and III – Geography (Geology) and Science

In News:
- World's second oldest rock discovered in Odisha (4,240 million years old) - **Singhbhum rock**
- Rock sample recovered from Champua in Odisha's Kendujhar district
- 4.2 billion-year-old zircon in the rock offers fresh clues about the earth's origins

Where is the first oldest rock in the world?
- Oldest rock sample in the world was discovered in Jack Hill, Western Australia (4,400 million years old)

On what method the rock sample is considered as the oldest?
- Scientists have found in the rock a grain of **'magmatic zircon'** that is an estimated 4,240 million years old.
- **Zircon** is a mineral that contains traces of radioactive isotopes.
- The machine used is called **Sensitive High Resolution Ion Microprobe (SHRIMP)**. It is not available in India.

Benefit of this discovery
- Their study will add valuable information about the presence of water in the first few hundred million years of the Earth's history. It will also give us clues to when plate tectonics began.

POLITY/GOVERNANCE

The state of local democracy in India: After 25 years of institutionalization

Part of: GS Mains Paper II – Indian Polity

Background:
It's been 25 years since decentralised democratic governance was introduced in India by the 73rd and 74th Constitution Amendments, which came into force on April 24 and June 1, 1993, respectively.
The structural reforms that followed heralded an inclusive, responsive, participatory democracy which was tasked to deliver economic development and social justice at the grass-roots level.

- The creation of lakhs of "self-governing" village panchayats and gram sabhas, with over three million elected representatives mandated to manage local development, was a unique democratic experiment in the contemporary world.
- Parts IX and IXA of the Constitution, introduced the two Constitution Amendments, initiated a process with standardised features such as elections every five years; reservations for historically marginalised communities and women; the creation of participatory institutions; the establishment of State Finance Commissions (SFCs), a counterpart of the Finance Commission at the sub-national level; the creation of District Planning Committees (DPCs); and so on.
- Moving the 73rd Amendment Bill on December 1, 1992, the Minister of State in the Rural Development Ministry underscored the "duty on the Centre as well as the States to establish and nourish the village panchayats so as to make them effective-self-governing institutions."

What impact has this reform package had on democratic practices in India? Have these reforms ensured every citizen a comparable level of basic services irrespective of one's choice of residential jurisdiction?

A systemic failure:
Skipping the several success stories, which are exceptions, what happened to the third tier may be hypothesised as a systemic failure.
- There was no perceptible hand-holding and support by the States (political class and the bureaucracy) to foster decentralised governance. (The people's planning in Kerala is an exception.)

- From the beginning, whether it was postponing elections or the failure to constitute SFCs and DPCs, it became evident that States can violate the various provisions of Parts IX and IXA with impunity.
- There was no institutional decentralisation except in Kerala. The roles and responsibilities of local governments remain ill-defined despite activity mapping in several States.
- States control funds, functions and functionaries, making autonomous governance almost impossible.
- Most States continue to create *parallel bodies* (often fiefdoms of ministers and senior bureaucrats) that make inroads into the functional domain of local governments. For example, Haryana has created a Rural Development Agency, presided over by the Chief Minister, to enter into the functional domain of panchayats. Legislative approval of these parallel bodies legitimises the process of weakening decentralised democracy.
- Increasing allocations to Members of Parliament Local Area Development Scheme, or MPLADS, which started in 1993, and their State-level counterparts, known as the MLALADS, too has affected the local institutions.

Fiscal weakness of village panchayats:
- Even after 25 years, local government expenditure as a percentage of total public-sector expenditure comprising Union, State and local governments is only around 7% as compared to 24% in Europe, 27% in North America and 55% in Denmark.
- The own source revenue of local governments as a share of total public sector own source revenue is only a little over 2% and if disaggregated, the Panchayat share is a negligible 0.3% (several States like Rajasthan, Punjab and Haryana have abolished property taxes and others do not collect taxes).

Conclusion:
Local democracy in India is in deep disarray. The village panchayats have not succeeded in enhancing the well-being, capabilities and freedom of citizens. The government should thus take remedial action in the interest of democracy, social inclusion and cooperative federalism.

Connecting the dots:
- Local democracy in India is in deep disarray. The village panchayats have not succeeded in enhancing the well-being, capabilities and freedom of citizens. Comment.

Cauvery issue: Inter-state relations

Part of: GS Prelims and Mains II – Inter-state relations and Centre-States relations

In News:
- Centre has submitted a draft Cauvery water management scheme in the Supreme Court.
- The draft scheme proposes for an implementing authority to solve the issue.
- But in a situation where the riparian States of Karnataka, Tamil Nadu, Kerala or the Union Territory (UT) of Puducherry do "not cooperate", the authority would turn to the Centre for help. In that case, the decision of the Centre "in the matter will be final and binding on all parties concerned."
- In other words, the Centre will have the final say in inter-State disputes over Cauvery water. The decision of the Centre will be "binding."

Cauvery Issue: Draft Cauvery water management scheme

In News:
- Yesterday, we read that Centre had submitted a draft Cauvery water management scheme in the Supreme Court which proposes for an independent authority.
- The new authority is to monitor implementation of the Cauvery Tribunal's final award.

About the proposed Authority:
- It will be a two-tier structure, with an **apex body** charged with the power to ensure compliance with the final award, and a **regulation committee** that will monitor the field situation and water flow.
- The powers and functions of the authority are fairly comprehensive. Its powers would extend to apportionment, regulation and control of Cauvery waters, supervision of operations of reservoirs and regulation of water releases.
- The draft makes the authority's decisions final and binding.

However, there is an **ambiguous clause**: if the authority finds that any one of the States is not cooperative, it can seek the Centre's help, and the **Centre's decision will be final and binding**. This can be seen either as an enabling clause to resolve the situation when there is a stand-off, or as one that gives scope to the Centre to intervene on behalf of one State.

There may be a possibility of Centre acting in a partisan manner, therefore it would be better if it is not given the final say, but mandated to help in the implementation of the Tribunal's award at all times.

Important Value Additions:

Constitutional provisions to solve water sharing disputes:

Schedule VII – State List and Union List

* States have power to legislate (under State list) with respect to water (water supplies, irrigation and canals, drainage and embankments, water storage and water power).
* Union list – Regulation and development of inter-State rivers and river valleys.

Article 262 Adjudication of disputes relating to waters of inter-State rivers or river valleys. It makes two provisions:

* Parliament may by law provide for the adjudication of any dispute or complaint with respect to the use, distribution and control of waters of any inter-state river and river valley.
* Parliament may also provide that neither the Supreme Court nor any other court is to exercise jurisdiction in respect of any such dispute or complaint.

River Boards Act (1956) and the **Inter-State Water Disputes Act (1956)**

In exercise of the power conferred by article 262 of the Constitution, Parliament has enacted the above two acts.

* **River Boards Act** provides for the establishment of river boards for the regulation and development of inter-state river and river valleys.
* **Inter-State Water Disputes Act** empowers the Central government to set up an ad hoc tribunal for the adjudication of a dispute between two or more states in relation to the waters of an inter-state river or river valley. The decision of the tribunal would be final and binding on the parties to the dispute.
* Neither the Supreme Court nor any other court is to have jurisdiction in respect of any water dispute which may be referred to such a tribunal under this Act.

Article 263 contemplates the establishment of an Inter-State Council to effect coordination between the states and between Centre and states.

Why Centre has submitted a draft Cauvery water management scheme and proposes for a new independent authority?

The above provisions or the mechanisms are not adequate and there are some lacunas, because of several reasons:

* The most prominent problem faced by it is that it **does not have any effective authority for the implementation of the order of the tribunal**.

- The Tribunal can only give an award but **cannot enforce its implementation**. It has not been clothed with powers of punishment for 'contempt'.
- In the event of non-implementation of an ISWD Tribunal's award by a state government, the central government can (failing persuasion) issue a direction to the erring state and then invoke Article 356, but that seems an extreme step; besides, when a popular government comes back it may once again refuse to implement the award. There is no easy answer to this problem.
- The tribunal also lacks the power of enforcement of its decision which Supreme Court is endowed with. Thus such matters which involves public importance should be guided and decided by the court.

(Cauvery water dispute case is a classic example showcasing complicated scenario of river water management and governance in India. When there is shortage, when developmental projects grow, and riparian States do not enjoy equal access to the source, inter-state problems are bound to rise in sharing.)

Conclusion:

Therefore, the Centre plans to enact a more comprehensive parliamentary legislation to deal with Inter-State Water Disputes and also proposes for a new independent authority is to monitor implementation of the Cauvery Tribunal's final award.

Connecting the dots:

- What are the constitutional provisions to solve water sharing disputes? Are they adequate? Give your opinion on draft Cauvery water management scheme which proposes for an independent authority to monitor implementation of the Cauvery Tribunal's final award and the Centre's decision to be final and binding.

Cauvery Dispute: Lessons from international treaties

Introduction:

More than 80 per cent of Indian rivers are inter-state rivers. According to the Central Water Commission, there are 125 inter-state water agreements in India. Many of these agreements are more than 100 years old and had been executed without seriously considering socio-economic, political and geographical factors.

These treaties have now become permanent sources of problems for many states. Continuous redrawing of state boundaries during the British regime and after Independence have kept the disputes alive.

Basic principles:

- For effective settlement of these disputes, equitable sharing of benefits is more important than equitable distribution of water. The principle of downstream benefit-sharing is crucial for the successful implementation of these treaties.
- Water-sharing principles must be based on the size of the river basin, population growth, historical claims, efforts taken by the state governments for water conservation, rainfall and changes in cropping patterns, scientific use of water, priority for agriculture, allocation for industry and power generation, flood control and domestic uses.

These issues should be given due importance in negotiations.

International treaties:

- The water distribution agreement proposed by the World Bank in 1960 continues to be the basis of the Indus Water Treaty. The permanent Indus Commission regularly exchanges information and ensures cooperation between India and Pakistan on the use of river waters amicably.
- The US-Mexico International Boundary and Water Commission has been successfully implemented since 1884 with the changing course of the rivers, the Rio Grande and Colorado.

  This treaty has been amended more than seven times since its inception, based on the changes in irrigation uses, river boundaries, flood control, population growth, urbanisation, etc. The sharing of water during surplus and drought years is based on a five-year cycle of water flow data.

- The 1996 Indo-Bangladesh Treaty on Water Sharing is based on lean season water availability. The assured minimum water quota sharing between the two countries was fixed on alternate three 10-day cycles during the lean season. The joint committee decides the daily flow and in case of disputes, it will be referred to the JRC and further to the governments.

  The water sharing arrangements is reviewed at five-year intervals or earlier on request from either side. Based on the bilateral negotiations in 1977, 1982, 1985 and the recent one, the two countries reached an effective mechanism for water sharing. Now JRC and JCE settle water disputes between the two countries.

The Indo-Bangladesh treaty can be the model for the resolution of the Cauvery dispute.

The Cauvery dispute:

The bone of contention between Tamil Nadu and Karnataka is about sharing water during the lean/scarce period. This dispute is alive for more than 200 years. It started between Mysore and Madras in 1807, which led to an agreement in 1892 and 1924. Though this agreement

allowed for changes after 50 years, the linguistic re-organisation of states in 1956 triggered new problems.

Lesson from international treaties:
- There is an immediate need to constitute a permanent dispute settlement body like the JRC, JCE of Indo-Bangladesh treaty, the Indus Commission, the US-Mexico International Boundary and Water Commission etc. for the Cauvery dispute. The Cauvery Management Board proposed by the Supreme Court may act like these bodies.
- The states can even re-negotiate the existing treaty, involving mutually agreed third parties like World Bank to arrive at a permanent settlement.

Connecting the dots:
- There are 125 inter-state water agreements in India. These treaties have now become permanent sources of problems for many states. In this background, discuss how international treaties can be taken as an example to solve matters like Cauvery dispute.

Governor's role in appointment of chief minister: Karnataka Election

Part of: GS Prelims and Mains III – Polity; Appointment of chief minister and role of Governor

Key Pointers:
Appointment of chief minister
The Constitution does not contain any specific procedure for the selection and appointment of the Chief Minister.
Article 164 only says that the Chief Minister shall be appointed by the governor. However, this does not imply that the governor is free to appoint any one as the Chief Minister.
- In accordance with the convections of the parliamentary system of government, the **governor has to appoint the leader of the majority party** in the state legislative assembly as the Chief Minister.
- But, when no party has a clear majority in the assembly, then the **governor may exercise his personal discretion** in the selection and appointment of the Chief Minister.
- In such a situation, the governor **usually appoints the leader of the largest party or coalition** in the assembly as the Chief Minister and ask him to **seek a vote of confidence in the House** within a month.

Do you know?

Situational discretion (i.e., the hidden discretion derived from the exigencies of a prevailing political situation) of Governor.

Governor can use situational discretion in the following cases:

1. Appointment of chief minister when no party has a clear-cut majority in the state legislative assembly or when the chief minister in office dies suddenly and there is no obvious successor.
2. Dismissal of the council of ministers when it cannot prove the confidence of the state legislative assembly.
3. Dissolution of the state legislative assembly if the council of ministers has lost its majority.

Concept of 'Political ethics' and Bommai judgment

Former Supreme Court judge, Justice K.T. Thomas, said it is "political ethics" for the Governor to first invite the single largest party to form a "stable government."

Justice Thomas refers to the Bommai judgment of 1994 to support his argument. The **Bommai judgment** endorses the **Sarkaria Commission report of the 1988**. The Commission recommends that in case of no pre-poll alliance among parties, the Governor should give first preference to the single largest party.

However, the Bommai judgment also mentions that the Governor can either invite the "single largest party/group."

Speaker Pro Tem

Part of: GS Prelims and Mains II – Indian Polity

Key Pointers:

- As provided by the Constitution, the Speaker of the last Lok Sabha vacates his office immediately before the first meeting of the newly- elected Lok Sabha.
- Therefore, the President appoints a member of the Lok Sabha as the Speaker Pro Tem. Usually, the senior most member is selected for this.
- The President administers oath to the Speaker Pro Tem. The Speaker Pro Tem has all the powers of the Speaker.
- He presides over the first sitting of the newly-elected Lok Sabha. His main duty is to administer oath to the new members. He also enables the House to elect the new Speaker.
- When the new Speaker is elected by the House, the office of the Speaker Pro Tem ceases to exist. Hence, this office is a temporary office, existing for a few days.

Judicial reforms: Modernising Indian courts

Part of: GS Mains II - Indian Polity

Introduction:
The Indian judicial system suffers from case delay and the use of antiquated methods. The discourse on judicial reform remains focused on areas such as appointments and vacancies. Two areas that greatly affect court efficiency are: case listing practices and court infrastructure.

Number of cases listed per day:
- It is not uncommon to see over 100 matters listed before a judge in a day. When a judge is pressed for time, not only does the quality of adjudication suffer but it also means that several cases will inevitably go unheard.
- Matters listed towards the end (usually cases near the final stage of hearing) tend to be left over at disproportionate rates and often end up getting stuck in the system.
- The uncertainty around which cases will come up for hearing means neither judges nor lawyers can plan their preparation. This situation compels lawyers to waste time waiting in court.
- Registry staff must manage the massive task of re-listing leftover matters in an already bulging docket, instead of streamlining case flow.

There is a need to scientifically determine how many cases should be listed per day.

Court infrastructure:
Issues ranges from inadequate support staff for judges to the dearth of basic courtroom facilities.
- Without research and secretarial support, judges are unable to perform their functions in a timely manner.
For instance, in a private interview, a judge said that even though he managed to hear close to 70 cases in a day, it took two days for the stenographers to finish typing the orders.
- A 2016 report published by the Supreme Court showed that existing infrastructure could accommodate only 15,540 judicial officers against the all-India sanctioned strength of 20,558.
- The lack of infrastructure also raises serious concerns about access to justice.
- A recent Vidhi study on district courts in the National Capital Region found that even basic needs such as drinking water, usable washrooms, seating and canteen facilities are often not available in court complexes.

Solutions:

- Courts must become more open to applying management principles to optimise case movement and judicial time.
- In this, external support agencies competent in strategic thinking should be allowed to work with judicial officers to understand and help the institution function better.
- Judicial policymakers will also have to expand their reliance on empirical data There appears to be little quantitative evidence available to back judicial policies, from how long cases at various stages actually stay in the case pipeline to audits of judicial infrastructure.

  Recording and analysing appropriate court-related data is thus the first step in addressing any problem that plagues courts — from arriving at reasonable case listing limits to improving infrastructure.
- Court processes must be modernised, and the role of technology is critical. Courts have taken various initiatives over the years to digitise case records and filing; the case information system (CIS) 2.0 is currently being implemented across the country. But using technology in courts cannot remain limited to digitising records alone but must affect how cases actually move through the system.
- Initiatives such as CIS must be supplemented with file-tracking and knowledge management systems, to help courts achieve an optimal level of functioning.

Conclusion:

For courts in India to dispense speedy justice, there must be a change in leadership thought and the willingness to seek help where it is evidently required. Solutions for above challenges will require a fundamental shift in how courts are administered.

Connecting the dots:

- A fundamental shift is required in the way courts are administered. Discuss.

Strengthening Rajya Sabha: Reviewing the rules of procedure

Part of: GS Mains II – Indian polity

In news:

- A two-member committee has been appointed to make recommendations for revising the rules of the Upper House.
- V K Agnihotri, former secretary general of the House, is heading the committee. Media reports suggest that the committee is mandated to submit its report in three months.

The reports also indicate that the committee may give some of its recommendations before the monsoon session of Parliament.

Background:
The Rajya Sabha has been functioning for 67 years. During this time, governance has become complicated and the subjects of laws more technical. But the rules governing the functioning of the Rajya Sabha have not kept pace with the times.

Rules of procedure:
The Constitution, through **Article 118(1)**, gives the two Houses of Parliament the power to make rules to regulate their functioning. Both Houses of Parliament have their own rules of procedure. These rules govern every detail of how the Houses function on a daily basis. They determine MPs' participation in parliamentary proceedings while making laws, passing budgets, questioning the government and representing us.
These *rules are the bulwark of our parliamentary democracy*. For Parliament to be effective in its role, these rules require regular updating and strengthening.

Rules governing the Rajya Sabha:
- When the Rajya Sabha met for the first time in 1952, it did not have any rules of its own.
- **Article 118(2)** of the Constitution provided an interim mechanism for rules. Under this article, the chairman of Rajya Sabha had the power to modify and adopt rules that were in place before the commencement of the Constitution.
- In 1952, these were the rules of the Constituent Assembly, the body which had framed the Constitution. Sarvepalli Radhakrishnan, the first chairman of Rajya Sabha, amended these to be used as the rules of procedure.
- The initial version of rules among other things, provided for Question Hour in the style of the House of Lords. Ministers had to answer questions two days a week and three oral questions a day.
- The rules also created a committee of 15 MPs to suggest any change. Based on this committee's recommendation, the initial rules were amended four more times until the end of 1952.
- In 1964 the Rajya Sabha made its own rules under Article 118(1). And it is the 1964 rules that have been amended over the years and currently govern the functioning of the Upper House.

Issues regarding rules of procedure:

The Agnihotri committee has been set up at a time when the two Houses of Parliament are facing similar structural challenges. So its recommendations, while meant for the Rajya Sabha, will also influence rule-making for the Lok Sabha.

Four fundamental issues would require the committee's attention.

- First, it seems that the two Houses of Parliament meet mostly for transacting government business. There is a need to balance completion of government business with discussions raised by other political parties.

- Second, the existing mechanisms (like Question Hour) for securing the government's accountability to Parliament have lost their edge. The committee will have to suggest measures for completely overhauling these mechanisms.

- Third, issues facing Parliament are now more complex and technical than ever. In such an environment, the committee's suggestions for strengthening deliberations in the House will be crucial.

- Finally, the disruption of parliamentary proceedings has become a routine affair. The committee will have the difficult task of suggesting solutions for protecting the sanctity of parliamentary proceedings.

Conclusion:

There should be a periodic review of the rules of procedure of both Houses. The last such review for the Rajya Sabha happened in 2009. The committee has the critical task of going beyond the symptoms of dysfunction and recommending changes to strengthen Rajya Sabha.

Connecting the dots:

- V K Agnihotri committee has been appointed to make recommendations for revising the rules of the Upper House. These rules are the bulwark of our parliamentary democracy. For Parliament to be effective in its role, these rules require regular updating and strengthening. Discuss.

Civil Services Reforms: New proposal for allocation of services and cadres

Part of: GS Mains II – Polity and Governance

In news:

The government has recently mooted a radical proposal for allocating services and cadres based on the combined marks obtained in the CSE and the foundation course.

Candidates who have cleared the CSE will have to wait till the foundation course is over to know which service and cadre they are likely to get. The government has said that this is a suggestion under consideration and that no final decision has been taken yet.

Present system:

At present, successful candidates are allocated services based on their ranks in the CSE and their preferences.

Candidates qualifying for the IAS and IPS are allocated cadres (States) based on their examination ranks and preferences.

The successful candidates of the IAS, IFS, IPS and Central Services Group A undergo a 15-week foundation course in the Lal Bahadur Shastri National Academy of Administration (training academy) in Mussoorie.

The course focusses on promoting interservice camaraderie, cooperation, and capacity building of the officer-trainees.

Concerns with the proposal:

There are good reasons to believe that the new proposal is legally unsound, administratively unfeasible and has not been thought through properly.

- Articles 315 to 323 of the Constitution deal with Public Service Commissions of the Union and the States. Article 320(1) says: "It shall be the duty of the Union and the State Public Service Commission to conduct examinations for appointments to the services of the Union and the services of the State respectively." Thus, the duty of conducting the CSE is vested only in the UPSC.

  If the marks secured in the foundation course in the training academy are included for allocation for services, it would make the training academy an extended wing of the UPSC, which it is not. Therefore the new proposal violates Article 320(1).

- The Director of the training academy that conducts the foundation course is a career civil servant on deputation, and she can be summarily transferred. The faculty members of the training academy are either career civil servants on deputation or academicians. Neither do they enjoy the constitutional protection that the UPSC members enjoy nor is there any bar on their holding further posts.

  This means that the Director and faculty members will not be able to withstand pressure from politicians, senior bureaucrats and others to give more marks to favoured candidates. They will actively try to please the powers-that-be in order to advance their own career prospects.

  There is also the grave risk of corruption in the form of 'marks for money' in the training academy.

Politicisation and communalisation of the services are likely to take place from the beginning.

- The trainer-trainee ratio for the foundation course is very high, and it will be impossible to do the kind of rigorous and objective evaluation that is required under the government's new proposal.

  The difference of a few marks can decide whether a candidate will get the IAS or, say, the Indian Ordnance Factories Service.

  Therefore, the inclusion of the highly subjective foundation course marks can play havoc with the final rankings and with the allocation of services and cadres.

- While about 600-1,000 candidates are selected every year for all the services put together, nearly 60-70% of the candidates qualifying for the IPS and Central Services Group A do not join the foundation course in Mussoorie as they prepare for the civil services (main) examination again to improve their prospects. Clearly, it is not possible to evaluate such candidates in the foundation course as contemplated in the new proposal. They cannot be compelled to attend the foundation course because that would amount to depriving them of their chance of taking the examination again. So, the new proposal is administratively unworkable.

Ignoring the real problems:

The steel frame of the Indian civil services has turned somewhat rusty and needs reform. The real problems of the civil services are not with recruitment; they are with what happens after an officer joins the system.

- The system places a premium on loyalty, political connections and community/caste clout rather than on merit.
- Indecision and inaction are seldom punished, while performers stand a greater chance of getting into trouble as they take more decisions.
- Performance appraisal is based more on the personal likes and dislikes of one's superiors than on actual work done.
- Frequent, arbitrary and punitive transfers have become the order of the day.

Conclusion:

The government's proposal for the allocation of services and cadres is legally and administratively unsound. There is a need to fix the systemic shortcomings rather than unsettle the settled method of recruitment.

Connecting the dots:

- The government's recent proposal for to modify the method of allotment of services and cadres to civil servants is legally and administratively unsound. Comment.

Digital Interface between citizens and government: Building trust

Part of: GS Mains II - Governance

Introduction:
Trust in governments — even democratically elected ones — is dropping. Trust is the basis of all governance. It underpins the success of public schemes, the volume of public sector investment, and even institutional level compliance. The most effective measures a government can undertake to build trust is improving how its services reach and are perceived by citizens.

Digital interface:

Younger populations, rising smartphone access, and the private sector's consumerisation of services are changing how people interface with government services. Digital is fast becoming the de-facto citizen-government interface, and the digital service delivery quality is therefore pivotal to overall perceptions of governance. Better designed online services improve efficiencies, reduce costs, and create more accessibility.

Best practices
- The private sector has always excelled in forging a deeper connection with the masses. Brands have striven to build the best user experience.
- The National Portal of India (India.gov.in) is a notable example of a government initiative striving to meet online sensibilities. From fishery licences to tax filing, it has everything that citizens could require. Consolidating the universe of citizen-government relations, it's also easily navigable.

Considering that India's next digital billion will have preferences shaped by sophisticated online experience, the government needs to quickly develop a change management and capacity building culture.

The digital journey:
More than just serving as paperwork details, citizen data should provide context to engage with government offerings.

- For example, geolocation can enable event recommendations, or alert people of service touchpoints. In emergencies, we can immediately be alerted of relief shelters and aid sites. For such services to develop a following, local language support can bring more citizens into the digital fold.
- Similarly, with greater mobile penetration, the government should use a mobile-first approach to communicate, measure, and optimise services and information dissemination.
- Building trust also requires transparency, which almost every major government globally has struggled with. For India, enabling citizens to benefit from government commitments is one of the simplest ways of showcasing commitment.
- To make development a dialogue, citizens should be able to provide feedback on service quality, and be apprised of corresponding changes, increasing belief in transparency.
- Governments should have a clear imperative: match technology's march, and its ability to increase the range and quality of digital services; capture the next digital opportunities; and anticipate citizen needs and design services, moving away from traditional reactive approaches.

Conclusion:

The governments today need to build deeper, more personalised relationship by enriching the online experience. A digital interface, that is incredibly fluid and easily navigable, is required. Government services online must aspire to become effortless, seamless, and easy on every device.

Connecting the dots:

- For more responsible governance, governments today must provide a more enriching digital interface with their citizens. Comment.

GOVERNMENT SCHEMES/WELFARE PROGRMMES

SC directs HCs to set panels for monitoring POCSO act trials:

Part of: Mains GS Paper I- Social issues

Key pointers:

Justice delayed
Nearly 32% of cases filed under the POSCO Act, which deals with sexual abuse of minors, were pending police investigation at the end of 2016 while 89% were pending trials

48,060 — Cases sent for investigation in 2016*

15,283 — Cases pending at the end of 2016

* includes pending cases and trials from previous years

1,01,326 — Cases sent for trial in 2016*

90,205 — Cases pending trial at the end of 2016

Directions from the Supreme Court

- HCs have to issue a direction to special court Judges not to grant adjournments during the trial of child abuse cases. They should also fast track the trials

- HCs may constitute a committee of three Judges to regulate and monitor the trials
- DGPs or police officer of same rank of all States and UTs should ensure that the cases were probed expeditiously and the witnesses produced in the courts for recording of testimonies

SOURCE: NCRB

Pic credits: http://www.thehindu.com/todays-paper/article23742506.ece/alternates/FREE_660/TH01-SC-POCSOAG9M3TGAJ31jpgjpg

- Shocked by the high rate of pendency of child sexual assault cases, the Supreme Court directed High Courts to set up panels of its judges to regulate and monitor trials under the Protection of Children from Sexual Offences (POCSO) Act.
- The Supreme Court, which had ordered a review of the backlog under POCSO, found that States such as Uttar Pradesh have over 30,000 cases pending despite the child protection law coming into existence as early as 2012.
- Many States have not yet even set up Special Courts to try POCSO cases as mandated by the law.
- The Bench issued a series of directions which supplement the ordinance. These include: The State police chiefs should constitute special task forces to investigate cases. High Courts should ensure that they are tried and disposed of by the designated Special Courts under the Act.

POCSO judges will give no adjournments and make every effort to fast-track trial. Witnesses should be produced in court on the day of the hearing and high courts should make every effort to provide a child-friendly atmosphere in tune with the spirit of the Act.

Minimum Wages Act, 1948

Part of: GS Prelims and Mains Paper II (Labour laws and social issue)
About:
The Minimum Wages Act 1948 is an Act of Parliament concerning Indian labour law that sets the minimum wages that must be paid to skilled and unskilled labours.
The act binds the employers to pay their workers the minimum wages fixed under the Act from time to time.

Important Value additions:
In the Minimum Wages Act, 1948 the minimum wages are fixed or revised via two methods as follows:

- **Committee Method**: A committee or a Sub-Committee is set up to give advice or make an enquiry.
- **Notification Method**: The government body responsible for it publishes the proposal and an official date in the Official Gazette.

The revision of the Minimum Wages is made on the basis of the **'Cost of Living Index'.**
A cost of living index compares the cost of living in a major city as compared to a corresponding metropolitan area. The index incorporates the expense of various components that comprise basic human needs, creating an aggregate measure to which new entrants into the workforce may refer.

Do you know?
Geetam Singh case:

- A much known **case of Geetam Singh** (Central Secretariat Club vs Geetam Singh) exemplifies "Payment of wages below the minimum wage rate amounts to forced labor and attracts criminal liability".

The Protection of Human Rights (Amendments) Bill, 2018

Part of: GS Paper II – Social/Welfare issue

In news:

On April 4, the Union Cabinet approved the Protection of Human Rights (Amendments) Bill, 2018, in order to protect and promote better human rights in India. The Bill intends to give the NHRC teeth as well as claws to act against human rights violations.

Background:

The National Human Rights Commission (NHRC) has been often described as a paper tiger, unable to protect ordinary citizens from human rights violations, committed at times by the state machinery.

In one such case, the NHRC, disillusioned by its helplessness in bringing justice in the alleged extrajudicial killings of 1,528 persons in Manipur, had last year referred to itself as a "toothless tiger" before the Supreme Court.

The Protection of Human Rights (Amendments) Bill, 2018: Salient features

- To ensure that the NHRC is more inclusive, the Bill proposes to include one member of the National Commission for Protection of Child Rights within its fold as a deemed member as well as a woman member.
- It proposes to enlarge the scope of eligibility and selection of the Chairperson of the NHRC as well as of State Human Rights Commissions.
- It proposes to incorporate a mechanism to look into cases of human rights violations in Union Territories.
- It proposes to amend the term of office of the Chairperson and members of the NHRC and the State Human Rights Commissions to ensure that it is in consonance with the terms of the Chairpersons and members of other commissions.

The Amendment Bill seeks to strengthen human rights institutions so that they can discharge their roles and responsibilities effectively.

Sync with agreed global standards and benchmarks:

The amended Act will be in sync with the agreed global standards and benchmarks on ensuring rights relating to life, liberty, equality and dignity of individuals in the country. The amendment to the Protection of Human Rights Act, 1993 will make the NHRC and State Human Rights Commissions more compliant with **the Paris Principle** "concerning its autonomy, independence, pluralism and wide-ranging functions in order to effectively protect and promote human rights".

Connecting the dots:

- The National Human Rights Commission (NHRC) has been often described as a paper tiger. In this light discuss the salient features of the Protection of Human Rights (Amendments) Bill, 2018.

Food Safety: New norms for labelling food

Part of: GS Prelims and Mains GS Paper II- Government interventions in key sectors

In News:
Food Safety and Standards Authority of India (FSSAI) has drafted following regulations –
- All packaged food with at least 5% content from genetically engineered sources need to be labelled so.
- Foods that exceed norms of sugar and fat will need to carry 'red' and 'green' labels specifying the extent to which they do so.

Do you know?
- Current laws, however, prohibit any GM food — unless cleared by the Genetic Engineering Appraisal Committee, a Union Environment Ministry body — from being sold in India.
- Through a 2007 notification, the Environment Ministry had exempted processed foods from this requirement. This has been stayed by the courts.
- There was also dispute between the FSSAI, a Union Health Ministry body, and the Environment Ministry on who checks if a particular food had a GE provenance.

Important Value Additions:
- FSSAI was already in news.
- FSSAI launched **'Project Dhoop'** in April 2018 – an initiative aimed at shifting the school assembly time to noon to ensure maximum absorption of Vitamin D in students through natural sunlight.

fssai

FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA

Inspiring Trust, Assuring Safe & Nutritious Food

Ministry of Health and Family Welfare, Government of India

Pic link:
http://www.fssai.gov.in/.resources/fssai/webresources/images/FSSAI_Logo_More_27_09_2017.png

About FSSAI

- FSSAI is established under **FSS Act, 2006**
- It is a **statutory body** for laying down science based standards for articles of food and regulating manufacturing, processing, distribution, sale and import of food so as to ensure safe and wholesome food for human consumption.
- **Ministry of Health & Family Welfare**, Government of India is the Administrative Ministry for the implementation of FSSAI.

India gets $200 million loan for nutrition mission

Part of: GS Prelims and Mains GS Paper II- Government interventions in key sectors; Social issue and Welfare Schemes

In News:

- India and **World Bank** signs agreement for a $200 million loan for implementing National Nutrition Mission.

Key pointers:
About National Nutrition Mission

- Targeted mission - NNM targets to reduce stunting, under- nutrition, anemia (among young children, women and adolescent girls) and reduce low birth weight by 2%, 2%, 3% and 2% per annum respectively.
- It also strives to reduce the prevalence of stunting from the current level of 38.4% (as per the National Family Health Survey 4) to 25% by 2022.
- Aims at reaching **10 crore beneficiaries**.
- **Beneficiaries** are mainly children up to the age of six years, pregnant women and lactating mothers and adolescent girls.
- Will be implemented in three phases **between 2017 and 2020** across all districts of the country.

Important Value Additions:

- POSHAN Abhiyaan (National Nutrition Mission) is a flagship programme of the Ministry of Women and Child Development (MWCD)

- The National Nutrition Mission (NNM) has been set up with a three year budget of Rs.9046.17 crore commencing from 2017-18.

Real Estate (Regulation & Development) Act, 2016: Implementation

Part of: GS Mains II – Government schemes

In news:
Recently, the Central government notified June 30 as the date by which all States have to do away with dilutions and bring in all incomplete projects within the ambit of RERA. This date is also the deadline by when permanent regulators have to be formed and for the websites of all States to become functional.

Background:
It is a year since the Real Estate (Regulation and Development) Act, 2016 (RERA) came into effect (May 1).
Stocktaking presents a dismal picture as far as its implementation and expected benefits are concerned.
There is still a long way to go before the real estate sector operates in an "efficient and transparent manner and protect the interest of consumers", as set forth in the statute's preamble.

A record of extremes:
- Only 20 of the 28 States (the Act is not applicable in Jammu and Kashmir) have framed the rules stipulated under RERA to carry out its legal mandate.
- In some States such as Uttar Pradesh, the Act's provisions have been watered down in favour of builders by altering the definition of "on-going projects" which need registration under RERA.
  There is also a dilution on the penalties for non-compliance.
- The speedy dispute redress mechanism envisaged by the Act is yet to take shape.
- Apart from Maharashtra, only Punjab and Madhya Pradesh have appointed a permanent regulatory authority (to be established within a period of a year). To ease the transition, RERA allows State governments to designate an existing body as the regulatory authority until a permanent one is established. This has resulted in 13 States working with only a designated regulatory authority.
- Only six States have set up the online portal contemplated by the Act.

- In the Northeastern States, RERA has been challenged on certain constitutional grounds — of land belonging to the community and autonomous councils.

Maharashtra Real Estate Regulatory Authority: An example

In contrast, Maharashtra, which has established both the regulatory authority (Maharashtra Real Estate Regulatory Authority, or MahaRERA) and the appellate tribunal, has shown that with earnest action, the Act and the establishment of the permanent regulator can have a positive impact in reassuring real estate purchasers.

MahaRERA's online portal has led to builders registering projects and a high degree of compliance in terms of registration by real estate agents.

This along with fast track adjudication of consumer complaints has made the MahaRERA an example of how other States need to implement the Act.

Focus on the consumer:

- Besides procedural compliances, implementation of the Act eventually needs to focus on consumer interests. In these efforts, rudimentary compliance must be eliminated and practicality adopted.

  For example, in U.P., a large number of new projects are concentrated in Ghaziabad or Gautam Budh Nagar/Noida. However, even though the Act provides for State governments to establish more than one regulatory authority, the interim regulator designated in U.P. is located in Lucknow. This has led to consumers being inconvenienced as they need to travel to Lucknow to file their complaints.

- One of the most notable provisions of the RERA is the requirement to keep 70% of funds received for a project in a separate escrow account, a step to prevent a diversion of funds which usually happens and in turn results in project delays. Because of this stipulation and the overall ill-health of the real estate sector, many developers are now facing insolvency proceedings under the new Insolvency and Bankruptcy Code (IBC).

  There appears to be a potential conflict developing between the IBC and RERA which needs to be checked as it would be against consumer interests.

Conclusion:

RERA provides for the regulation and maintaining of records of real estate projects, the objective being to facilitate the growth and promotion of a "healthy, transparent, efficient and competitive real estate sector".

Given that the Central government is keen to curb black money, a large part of which has its origins in or finds its way into real estate, it needs to ensure that States give full effect to RERA.

Connecting the dots:

- It is a year since the Real Estate (Regulation and Development) Act, 2016 (RERA) came into effect (May 1). However, the implementation is dismal and expected benefits are not yet achieved. Comment.

Impact of women's health on stunting of children

Part of: Mains GS Paper I, III- Social issues, Inclusive growth

Key pointers:

Worrying figures

As of May 2018, the prevalence of stunting in India is high at 38.4% and varies considerably across districts, from 12.4% to 65.1%

- 239 of the 640 districts in the country have stunting levels above 40%
- 202 have prevalence of 30-40%
- Only 29 districts have levels between 10% and 20%
- High stunting districts are heavily clustered in the north and the centre of the country
- Inter-district differences are strongly explained by a multitude of economic, health, hygiene and demographic factors
- All the southern States fare much better

Top five districts with lowest stunting rates

Ernakulam 12.4%
Pathanamthitta 13.3%
Kollam 14.4%
Alappuzha 14.5%
Idukki 15.1%
(All In kerala)

Top five districts with highest stunting rates

Bahraich (U.P.) 65.1%
Shrawasti (U.P.) 63.5%
Balrampur (U.P.) 62.8%
Pashchimi Singhbhum (Jharkhand) 59.4%
Siddharthnagar (U.P.) 57.9%

Factors contributing to stunting:
Household size 5%
Antenatal care 6%
Age at marriage 7%
Open defecation 7%
Assets 7%
Children's adequate diet 9%
Women's education 12%
Women's low body mass index 19%

Source: IFPRI study

Pic credit: http://www.thehindu.com/todays-paper/tp-national/3ixi1r/article24008841.ece/alternates/FREE_660/th27-jagriti--WGH442GCVQ1jpgjpg

- A first of-its-kind study across all 640 districts of the country, highlights the impact of women's health on stunting of children.
- The study was carried out by the International Food Policy Research Institute (IFPRI). It analysed data from the National Family Health Survey (NHFS)- IV.
- As per the study, parameters related to women account for 50% of the difference between districts with high and low levels of stunting among children below the age of five.

Four parameters:

The four crucial parameters in women that together contribute to a 44% reduction in stunting among children are-

- Levels of body mass index accounting for 19% of the difference between districts.
- Education accounting for 12% of the difference.
- Age at marriage contributing a 7% reduction.
- Ante-natal care adding 6%.

Regional variation: Southern states does better

- India accounts for approximately a third of the world's stunted children at 63 million.
- Across the country, in 239 districts more than 40% of the children are stunted, while 441 districts record between 30% and 40 % of stunting.
- While levels have improved in the country from 48% in 2006 to 38.4% in 2016, there are wide variations among different districts ranging between 12.4% and 65.1%.
- The populous northern States account for more than 80% of stunted children at 52.6 million.
- In comparison, all of the southern States together have 8.1 million stunted children and the north-eastern and island States account for nearly 2.4 million.

Way ahead:

- There is a need for targeted policy intervention to combat stunting, with a focus on addressing critical determinants in individual districts.
- Women related parameters are great drivers and these have to be focussed upon. This will involve interventions through the course of a girl's life such as her education, nutrition, marriage as well as when she is a mother.
- Better nutrition, education of mother can reduce growth impairment in children.

Sexual harassment probe panels in courts soon

Part of: GS Prelims and Mains II – Social and Welfare issue; Women safety

In news:

- Supreme Court asked Chief Justices of High Courts across the country to set up anti-sexual harassment at workplace committees in High Courts and district courts within two months.

- The committees should be constituted in accordance with the mandate of **The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act** of 2013 and the **Vishaka case guidelines** of the Supreme Court to protect women in workplaces.

Important Value Additions:

- The Supreme Court-issued **Vishaka Guidelines in 1997** that outlined procedural guidelines to be followed by establishments where a case of sexual harassment had occurred.
- In December 2013, Vishakha was superseded by the **Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act**, which kept the essence of the Guidelines and added more provisions.
- The Act mandates that employers must constitute a four-member **internal complaint committee (ICC)** in any branch or office that employs more than 10 people of any gender.
- The law imposes a penalty of upto Rs 50,000 on employers who do not implement the Act in the workplace or even fail to constitute an ICC.

Domestic Violence Act for divorced women too

Part of: GS Prelims and Mains II – Welfare and Women Issues; Government policies
In News:
Supreme Court held that the Domestic Violence Act — meant to punish men who abuse women in a relationship — extends to all man-woman relationships, and also protects divorced women from their former husbands.
Key pointers:

- According to the recent order, 'domestic relationship' includes "consanguinity, marriage, a relationship in the nature of marriage, adoption or as family members living together as a joint family".
- In other words, 'domestic relationship' is not confined to the "relationship as husband and wife or a relationship in the nature of marriage, but it includes other relationship as well such as sisters, mother, etc.".
- The court held that domestic violence can continue even after divorce. A divorcee husband could resort to violence by entering the workplace of his former wife to commit an act of violence, or even attempt to communicate with her, or threaten or cause violence to her relatives or dependents or any other person. It amounts to

domestic violence if the former husband tried to dispossess the woman from a jointly-owned property or refuse to return her 'stridhan' or valuable security or other property.

The Act brings all these acts of violence within its ambit.
The purpose of the enactment of this Act is to protect rights of women who are victims of violence of any kind occurring within the family.
Article Link: Domestic Violence Act for divorced women too: Supreme Court

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Can having a DNA database increase rape case convictions?

Part of: GS Mains – Social or Welfare issue; Good Governance

In News:
- According to the National Crime Records Bureau, only about a quarter of rape cases ended in conviction in 2016.
- Since identifying the rapist is the first step to serving justice, government is of the belief that India needs a sex offenders' database or a DNA database of those accused and charged with rape.
- India has developed a draft Bill for such a DNA database and the Andhra Pradesh government even announced that it has signed up with a private agency for collecting DNA from all its citizens.

Concerns
Based on experience in other countries, building such a database is not easy, does not always offer justice, and is an ethical landmine of sorts. (says experts)
Experts who routinely use DNA databases express serious concerns about DNA databases and profiling.
- DNA identification technologies have advanced so much that even minor genetic differences, such as those among family members, may be used to distinguish individuals and identify a person from his or her unique DNA.
- However, planting of DNA in a crime scene, misinterpretation of tests, and errors in analyses have all taken place in cases where DNA has been used to implicate a suspect, resulting in the miscarriage of justice. Besides, everybody leaves traces of DNA in numerous places, as cells are shed, leading to ridiculous mistakes.
- Protecting innocent people's privacy and their civil liberties and rights are the main concerns.
- DNA information could be misused just as their personal information and profiles are being misused by many data mining companies.

- There are instances of Police department involving in unethical and unlawful collection of DNA samples without warrants. Such samples later get included in forensic DNA databanks, thus violating people's civil liberties.

Some people have said that having everyone's DNA in the database would be a good thing, since anyone can be apprehended if matched to a crime scene. But experience with the U.K. and U.S. databanks has shown that having more innocent people's DNA stored increases the chances of a false positive and has not increased the chances of finding a guilty match.

Way ahead:

Regarding a DNA database for India, at the very least, the following should be ensured:

1. It is absolutely essential that the people from whom DNA is taken give their informed consent.
2. Taking DNA secretively should be prohibited.
3. A court order should be required for obtaining DNA without informed consent and the DNA should only be compared with the crime scene DNA for the suspect.
4. Those who are cleared for a crime should not have their DNA information stored.
5. DNA gathered from offenders should be destroyed after identification so that such information is not used for profiling in future.
6. A court order should be necessary to access medical records for genetic data.

Connecting the dots:

- According to the National Crime Records Bureau, only about a quarter of rape cases ended in conviction in 2016. Can having a DNA database of all citizens help increase convictions of rape accused?

Separate division within MHA to deal with issues of women's safety

Part of: Mains GS Paper I- Social issues, Women empowerment

Key pointers:

- MHA has set up a separate division to deal with issues of women's safety in coordination with relevant ministries, departments and state governments.
- The division will encompass matters related to crimes against women, Scheduled Castes and Scheduled Tribes; crimes against children and elderly persons.
- It will also have an anti-trafficking cell, issues dealing with prison legislation and prison reforms.

- The women's safety division will look into Nirbhaya Fund, Crime and Criminal Tracking and Network System and National Crime Records Bureau as well.
- In order to address offences against women, particularly rape, in a holistic and time-bound manner, the new division would focus to enhance capacity of the existing administrative, investigative, prosecution and judicial machinery, along with appropriate measures for rehabilitation of victims and bringing attitudinal changes in society.
- The current list of initiatives include setting up of special Fast Track Courts (FTCs), strengthening of forensic setup and building up of a national registry of sexual offenders, appointing additional public prosecutors and providing appropriate medical and rehabilitation facilities to victims.
- They will also address issues like sensitization of children through appropriate changes in school curriculum, a media campaign for raising awareness, checking proliferation of pornography materials and online contents.
- The division will collect, collate and analyse data on crime against women and children along with the National Crime Records Bureau (NCRB), which may also be used later for drawing up a national framework for the safety of women and children, said a senior government official.
- The decision to set up a women's safety division in the Ministry of Home Affairs came after the infamous Kathua and Unnao rape cases that enraged the entire country and criticism poured in from international platforms as well.

Gender Bias leading to excess deaths: Lancet Global Health

Part of: GS Mains II - Welfare
Key pointers:
According to Lancet Global Health journal –

- There have been 2,39,000 "excess deaths" per year of girls under the age of five in India.
- 29 out of 35 States and Union Territories in the country contributed to this mortality.
- Around 22% of the overall mortality burden of under-five females is therefore due to gender bias
- Problem is most pronounced in northern India, where the four largest States in the region, Uttar Pradesh, Bihar, Rajasthan, and Madhya Pradesh, accounted for two thirds of the total excess deaths of females under five.
- The worst affected areas were all rural, agricultural areas with lower levels of education, high population densities, low socio-economic development and high levels of fertility.
- Many deaths of females under five were partly due to unwanted child bearing and subsequent neglect.

Reality check

More than 90% of the districts had excess female mortality (Under 5 mortality rate, U5MR), but U.P., Bihar, Rajasthan and M.P., accounted for two-thirds of the total female deaths

- 29 of 35 States/UTs were affected by a significant amount of excess U5MR

- All States and UTs include at least one district with excess female mortality in childhood

- The highest rates of U5MR were recorded in northern India

- The mean of excess female U5MR exceeds 20 per 1,000 live births in U.P., Bihar, Rajasthan, M.P., Haryana, Delhi, Meghalaya, and Nagaland

Excess female under-5 deaths per year
- 5000
- 2500
- 500
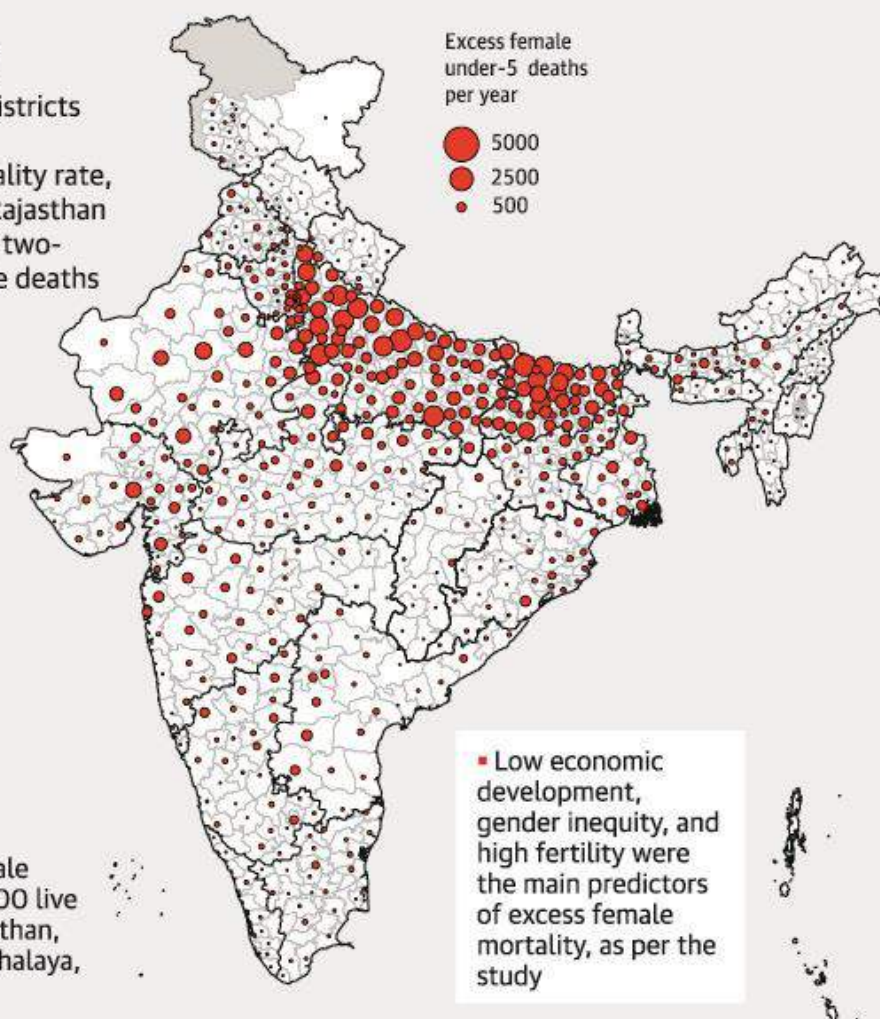
- Low economic development, gender inequity, and high fertility were the main predictors of excess female mortality, as per the study

SOURCE: LANCET, DATA BASED ON CENSUS 2011

Pic link: https://d39gegkjaqduz9.cloudfront.net/TH/2018/05/15/DEL/Delhi/TH/5_07/6fdc528f_2101786_101_mr.jpg

Digital literacy programme for women: Fb in partnership with NCW

Part of: Mains GS Paper I- Social issues, Women empowerment

Key pointers:

- Facebook has entered into a partnership with National Commission for Women (NCW) to launch a digital literacy programme aimed at training 60,000 women in universities across India on safe use of the Internet, social media and email in a year.

- Launched in collaboration with Cyber Peace Foundation, the pilot programme will enable trainees to differentiate between credible and questionable information.
- The training will be conducted in vernacular languages.
- The digital literacy programme will benefit women in universities across major cities in Haryana, Delhi-NCR, Manipur, Sikkim, Meghalaya, Maharashtra, and Tamil Nadu.
- With more women going online, NCW has witnessed a surge in cyber crime related complaints registered at the Commission in the past three years. There is a need to ensure that while online, the women feel safe and secure on the Internet.

MGNREGA analysis: A triple blow to job guarantee scheme

About:

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) scheme, one of the most ambitious schemes aimed at removing poverty and biggest social welfare programmes in the world, aims at guarantying 100 days of work to people in rural areas.

The programme has arguably lifted lakhs of people out of poverty however there are few lacunas that needs to be addressed.

Among those lacunas, lack of sufficient funds, rampant payment delays and abysmal wage rates act as triple blow to the job guarantee scheme.

Lack of sufficient funds

The program has made fundamental difference for people who could now do much better than before. The issue of finance has to be addressed properly.

- On one side we have a set of a states performing extremely well, on the other side there are states that are performing very low due to paucity of funds. There is an urgent need for the centre to address the issue of finance for effective implementation of scheme.

- Budget allocation over the years has been insufficient. The real budget of 2018-19 is much lower than that of 2010-11 (after adjusting for inflation).

- In August 2017, the Ministry of Rural Development demanded a supplementary MGNREGA budget of ₹17,000 crore, but the Ministry of Finance approved only ₹7,000 crore, that too in January 2018.

Rampant payment delays

- The scheme is meant to be **demand-driven** in the sense that the **government is mandated to provide work within 15 days of a worker seeking work**. Otherwise the worker is entitled to an unemployment allowance.

- A second key provision of the Act pertains to payment of wages within 15 days of completion of work, failing which a worker is entitled to a delay compensation of 0.05% per day of the wages earned.

However, both these provisions have been routinely violated. Lack of funds has led to a subverting of these provisions in letter and spirit.

- The total amount of wages pending under the MGNREGA scheme for the whole country (2016-17) was around ₹11,000 crore.

- Only 21% of payments in 2016-17 and 32% of payments in the first two quarters of FY17-18 were made on time.

The principal reasons for payment delays were "infrastructural bottlenecks, (un)availability of funds and lack of administrative compliance".

Abysmal wage rates

- The third issue is about stagnating MGNREGA wages. Delinking of MGNREGA wage rates from the Minimum Wages Act (MWA), 1948 has contributed to this.

- MGNREGA wages are a less lucrative option for the marginalised, being lower than the minimum agricultural wages in most States.

- This can push primary beneficiaries of the Act, women, Dalits and Adivasis to choose more vulnerable and hazardous employment opportunities as they get paid more than MGNREGA work. Such contravention of the MWA is illegal.

Conclusion:

All the above lacunas reflect that there is only a legal and moral crisis created by the Centre. The poor are paying a heavy price for this throttling of funds by the Centre. The fight is not even for a living wage but one for subsistence.

Connecting the dots:

- Lack of sufficient funds, rampant payment delays and abysmal wage rates have acted as triple blow to the job guarantee scheme. Do you agree? Critically analyze.

- Examine the issues that needs to be addressed properly for effective implementation of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) scheme.

The Pradhan Mantri Jan-Dhan Yojana: An assessment

Introduction:

The Pradhan Mantri Jan-Dhan Yojana (PMJDY), one of the flagship schemes of the present government, was launched in August 2014.

The 'J' in JDY is the 'J' in 'JAM' (Jan Dhan-Aadhaar-Mobile) through which the Economic Survey of 2015 claimed that "every tear from every eye" could be wiped. A critical evaluation of the scheme is in order.

Background:

The recently released World Bank Global Findex data show that 80% of Indian adults now have a bank account, which is being celebrated as the success of the JDY. While the increase in the proportion of adults having bank accounts is indeed impressive (80% in 2017 from 53% in 2014), 48% of those who have an account in a financial institution made no withdrawal or deposit in the past one year.

An analysis:

- Financial inclusion is not just about opening bank accounts, but also about using these accounts and providing access to formal credit. In fact, the major limitation of the JDY has been that while it has managed to get many people to open bank accounts, there is no commensurate increase in the use of these accounts, availability of formal credit, or savings in financial institutions, especially among the country's marginalised and poorer sections.

- Access to formal credit:
  As per various data and surveys, there is no sign of increased access to formal credit that the PMJDY is supposed to have ensured for its beneficiaries. Poor households in India, in the absence of access to formal credit, have to deal with moneylenders who charge exorbitant rates of interest. This is one of their biggest worries. The Household Survey on India's Citizen Environment and Consumer Economy, 2016 shows that while for the top 1% of the population, one in six are exposed to informal credit, within the poorest section of the population, the figure is four times as high, with two in three taking credit from informal sources.
  Access to bank accounts seems to have had little effect on their dependence on private money lenders.

Conclusion:

The precarious conditions of indebtedness that poor people find themselves in has little signs of abating as a result of the JDY. Thus, more efforts needs to be made in this direction.

Connecting the dots:

- PMJY has failed to promote financial inclusion. Critically analyze.

'Samagra Shiksha' Programme

Part of: Mains GS Paper II – Government welfare schemes

Key pointers:
- It aims to make school education an integrated whole from pre-school to Class-12.
- The programme will subsume three existing schemes: Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shikskha Abhiyan (RMSA) and Teacher Education (TE).
- The programme will focus on quality education and enhancing learning outcomes of students, bridging social and gender gaps in the school education, and promoting vocalisation of education.
- Focus will also be on empowerment of girls. The upgradation of Kasturba Gandhi Balika Vidyalayas (KGBVs) has been extended from class VI-VIII to class VI-XII.
- CWSN (Children With Special Needs) girls from Class I to XII would be given a stipend of ₹200 per month.
- To focus on the importance of libraries, schools would be given an annual grant of ₹5,000 to ₹20,000 under the initiative.
- As part of the scheme, the Centre will give government schools grants for buying sports equipment so as to promote sports in schools, so that one hour can be devoted to sports daily.

Higher educational institutions can now offer degree courses online: UGC

Part of: Mains GS Paper II- Government interventions in key sectors

Key pointers:
- Higher education institutes can now offer certificate, diploma and degree programmes in full-fledged online mode. The decision was taken by the University Grants Commission.
- The certificate, degree and diploma would be given only for those disciplines which the institute has been offering the similar programmes/ courses at graduation level in regular mode (of classroom teaching) or in Open and Distance Learning mode and from which at least one batch has been graduated and approved by the statutory councils, as applicable.
- The online learning shall have minimum four quadrants: video-lectures, e-content, self-assessments and discussion forum to clarify doubts.

- Examinations would be conducted in the proctored mode and in conformity with any norms for such examinations stipulated by the UGC.

First national sports university to be set up in Manipur

Part of: Mains GS Paper II- Government interventions in key sectors

Key pointers:
- The Union Cabinet has approved an ordinance to set up the country's first national sports university in Manipur.
- The Manipur government has already allocated land for the proposed university.
- As of now, there are some institutes which offer various courses for athletes and coaches. A void exists in the sports environment of the country in various areas such as sports science, sports technology, high performance training. The proposed university is expected to bridge this gap.

Refugee Issue: Unanswered Aadhar Services

In News:
Supreme Court is currently hearing a petition against the government's order which sought to deport/expel Rohingya refugees.

Why this case is important?
At current, India lacks a refugee specific legislation or a clear domestic asylum law.
India currently hosts 32,000 refugees fleeing war, violence and severe persecution in countries such as Afghanistan, Myanmar, Somalia, Iraq, etc. This is in addition to the 175,000 long-staying refugees from Tibet and Sri Lanka who have been given asylum over decades.
With conflicts around the world having intensified, fresh arrivals of refugees are only expected to increase.
However, India is yet to enact a coherent and uniform law addressing the issue of asylum. In fact, the term "refugee" finds no mention under domestic law.
Therefore, this case offers a great opportunity for the Court to lay down basic principles on refugee recognition and protection that reflect India's constitutional values and its international commitments.

Key issues to be solved:

- There is a need for a coherent asylum and refugee policy.
- There is a need for providing access to essential services to the refugees during their stay in India.
- Most of the facilities and services to refugees are now ineffective owing to the linking of these services to Aadhaar. The question of Aadhaar for refugees still remains unanswered.

Aadhar's true intention

Aadhaar was primarily conceived as a tool for socio-economic inclusion. Unique Identification Authority of India (UIDAI) has designed a simple enrolment system that accepts a wide range of documents as proof of identity and residence so as to make it easy to procure an Aadhaar.

For example, for those without any documents, UIDAI accepts a "Letter of Introduction" from a wide set of people who are pre-designated as introducers.

In the interest of inclusiveness — UIDAI did not link Aadhaar to citizenship. The Aadhaar Act states that any individual who has resided in India for at least 182 days in the year immediately preceding the date of application is eligible for Aadhaar.

UIDAI has clarified that foreigners fulfilling the above requirement can obtain an Aadhaar, subject to the submission of the prescribed documents.

No access to Aadhaar nor essential services:

Thus, based on the above, it would follow that refugees, who are registered with the government and/or the UN Refugee Agency (and are thus not "illegal immigrants"), should be issued Aadhaar if they meet both the residence and the documentation requirements.

However, most Aadhaar centres are not clear about whether refugees are eligible to apply for Aadhaar.

Refugees from the Afghan, the Burmese and the Congolese communities living in New Delhi report that they are being turned away by local centres due to the lack of clarity on the issue.

Further, the documents held by them are not being recognised as valid proof of identity or residence. Many eligible refugees have also been scared to apply for Aadhaar due to the fear of being wrongly prosecuted as local authorities often incorrectly equate them with illegal immigrants.

In recent months, with Aadhaar increasingly being enforced as a precondition to access any service, refugees are not even being able to avail of services that they once had.

Many refugees report facing day-to-day difficulties like getting a SIM card, opening a bank account, renting accommodation, seeking livelihood opportunities or even accessing private hospitals.

This is resulting in refugees being steadily excluded from mainstream systems and leaving them extremely vulnerable to exploitation. Such problems of exclusion of Aadhaar are being faced by many Indians as well.

Way ahead:

Government should consider issuing uniform documentation to refugees so as to confirm their status as legal residents and UIDAI must adhere to its commitment to inclusion by allowing more flexibility to refugees so as to establish their identity.

Further, officials must be sensitised about refugees, and the existing systems to establish identity (like establishing identity through introducer systems etc.) must be extended to this group.

Connecting the dots:

* Why there is a need for India to have a robust refugee policy? What actions can India take to provide hassle-free basic services to refugees?

Nepal: First in WHO's South-East Asia Region to defeat Trachoma

Part of: Mains GS Paper II- Government interventions in key sectors

Key pointers:

* The World Health Organization (WHO) has validated Nepal for having eliminated trachoma as a public health problem – a milestone, as the country becomes the first in WHO's South-East Asia Region to defeat the world's leading infectious cause of blindness.
* Trachoma was the second leading cause of preventable blindness in Nepal in the 1980s.
* In 2002, the Government of Nepal stepped up efforts to eliminate the disease with the establishment of a national trachoma programme. From 2002 to 2005, following the implementation of sustained control activities, the prevalence of active (inflammatory) trachoma fell by 40%.
* To increase awareness, the national trachoma programme collaborated with the Ministry of Education to include a module on trachoma in the school curriculum.
* Between 2002 and 2014, eye hospitals and dozens of eye centres and clinics with trained staff were established across Nepal.

INTERNATIONAL RELATIONS

Free Trade Agreements: An analysis

Introduction:

Eminent economist Jagdish Bhagwati in his 2008 book, *Termites in the Trading System: How Preferential Agreements Undermine Free Trade*, lamented how an ever-increasing number of free trade agreements (FTAs) are a threat to the world trading system.

But why does Bhagwati consider FTAs to be bad?

In an FTA, two or more countries agree to lower import tariffs and other trade barriers on each other's products.

Good for them at one level but bad for the overall trade, because of the two effects that take place as a result.

Economists term these trade diversion and trade creation. Trade diversion favours less efficient producers while trade creation stresses local producers.

Example: Diversion and creation

To understand, let us take the example of a shirt.

Trade diversion:

Let's presume that all shirts are identical and have the same quality and a consumer will buy from the cheapest source. Cost of one shirt sold by the US is Rs. 1,000 and the EU, Rs. 1,100. If the import duty in India on the shirt is 20 per cent, cost of one shirt imported from the US will be Rs. 1,200 and that from the EU, Rs. 1,320. Now, since the price of shirts from the US is lower, Indian consumers will prefer to buy them.

The game changes if India signs an FTA with the EU and eliminates import duty on shirts from the EU. So, shirts from the EU can now enter India at Rs. 1100, while shirts from the US will continue to come at Rs. 1,200.

So, India will stop buying from the US and start buying from the EU. As the shirts from the EU cost more, but duty elimination through the FTA makes them less expensive. Since the India-EU FTA diverted trade from the more efficient US to less efficient EU producer, the effect is termed trade diversion. It is considered bad as the FTA rewards a less efficient producer.

Trade creation:

Let us now understand the impact of an FTA on the local industry. Consider the shirt example again. A shirt produced in India sells at Rs. 1,150. Pre-FTA, no imports will take place as this price is lower than the duty paid price of shirts from the US (Rs. 1,200) and EU (Rs. 1,320).

But position changes after the FTA. Now the shirts from the EU (at Rs. 1,100 per piece) will cost less than the shirts produced in India (at Rs. 1,150 per piece).

The phenomenon is called trade creation as the FTA created new trade in the form of imports from the EU.

Soon imports from the EU will replace locally produced shirts. After some time, Indian shirt makers would shut shop.

To what extent these effects distort world trade:

Since FTAs allow trade at zero import duty on most products and world over 280-plus FTAs are operational, it is widely believed that most world trade happens through the FTA route. A data check shows that the share of most countries' trade with their FTA partners is 20-40 per cent of their total global trade. But even most of this trade takes place outside of the FTA. Global and bilateral export-import data show that much of world trade takes place outside the FTAs.

Conclusion:

Above analysis shows that the FTAs had the potential to damage the multilateral trading system and world trade, they could not.

Reason: Most (about 83-85 per cent) world trade takes place outside the FTAs. Only 15-17 per cent of trade is on preferential terms.

But as the US action of increasing the tariffs and China's response shows tariffs are still the central means of regulating imports. And these should be reduced through the FTAs only when economic benefits can be clearly demonstrated.

Connecting the dots:

- What are free trade agreements? How does FTAs create trade diversion and trade creation? Should be considered as a threat to world trade? Discuss.

200th anniversary of the birth of Karl Marx

Karl Marx

- German philosopher and revolutionary socialist Karl Marx
- 5 March 2018 - 200th anniversary of the birth of Karl Marx

Important works –

- He published *The Communist Manifesto* and *Das Kapital*
- *Anti-capitalist works* that form the basis of 'Marxism'
- Author of *Das Kapital* and the leading spirit of the *International Workingmen's Association* (known as the First International).

Key takeaways from the editorial –
- Karl Marx's writings had and still have tremendous influence on most important thinkers of the twentieth century.
- He is regarded as revolutionary prophet.
- **Importance of reading Marx and his theories closely, with precision and patience** - The writer of the editorial believes that Karl Marx and his writing still matters. His ideas may help us to understand the economic and political inequality of our time.

Is Marx evil?
- Even today, three decades after the fall of the Soviet empire, many still blame Marx for the cruel atrocities that happened around the world in the name of Marxism.
- For those who suffered the communist regimes or simply believed in an anti-communist crusade, Marx continues to be a dangerous mind who should be banned from our schools and universities.
- Recently there were instances of statues of Marx being torn down bitterly and indistinctively.

But despite what happened in the past hundred years in the communist countries, **Marx remains an important thinker** and a central figure of the modern canon around the world. In other words, he should be read closely, with precision and patience.
His writings were so complex and so antithetical. Any loosely philosophical approach or iconic view of Marx would turn the critical edge of his analysis of modernity and capitalism into wrong principles of a wrong struggle.

Aspirants with following optional subject should therefore read about Marx and his theories –
- History - Rise of socialist ideas (up to Marx); spread of Marxian Socialism.
- Sociology - Karl Marx- Historical materialism, mode of production, alienation, class struggle; Marxist sociology.
- Philosophy - Political Ideologies: Anarchism; Marxism and Socialism
- PSIR - Theories of the Marxist and Marxism (Political ideologies)

Marxism–Leninism

Marxism believes that 'capitalism can only thrive on the exploitation of the working class'. Marxism believes that there was a real contradiction between human nature and the way that we must work in a capitalist society.

Marxist theories believed – "class struggle is the basic agency of historical change, and that capitalism will ultimately be superseded by communism".

Leninism comprises socialist political and economic theories, developed from Marxism and Lenin's interpretations of Marxist theories, for practical application to the socio-political conditions of the Russian Empire of the early 20th century.

Marx remains an important thinker

On the one hand, Marx is a philosopher who **believes in the autonomy of human beings**, since he affirms that **human beings make their own history**, that the emancipation of the workers will be the work of the workers themselves.

On the other hand, he is **obsessed by the Hegelian idea of making a total system**, dominated by the universal law of **social transformations in history**.

It was precisely this second Marx, the **theorist of historical materialism**, who was elevated by Engels, Lenin, Stalin and many others as a prophet of a secular religion called socialism. But, the great mistake of several generations of Marxists was to consider Marx's philosophy of history as a readymade revolutionary recipe for action.

In other words, writer believes that - Marxist revolutionaries such as Lenin, Stalin, Mao, Castro, etc. adapted those ideas of Marx which suited best the needs of their revolutions and bureaucratic powers.

They were responsible (in the form of Marxism-Leninism ideology) to turn the materialist and historicist philosophy of Marx into a revolutionary eschatology and in many cases into thermodynamics of terror.

Marx should be viewed as a critical mind with the great intellectual courage of a Socratic gadfly ("a person who persistently annoys or provokes others with criticism, schemes, ideas, demands, requests, etc.") who continues to defy our way of thinking and living in a market-driven world.

Writer believes that we should celebrate the 200th anniversary of the birth of a major thinker of human history who has found his place in the pantheon of great philosophers next to Kant, Schelling, Fichte and Hegel.

Connecting the dots:

- 150 years of 'Das Kapital': How relevant is Marx today?
- Is Karl Marx still relevant today? What are his major contributions?

Poor performance of SAARC: Reasons and Way ahead

Introduction:
Prime Minister Narendra Modi's response on the 19th South Asian Association for Regional Cooperation (SAARC) Summit in Islamabad, conveys that India is not keen on reviving the now-defunct SAARC.
Citing cross-border terrorism perpetrated by Pakistan, Mr. Modi is reported to have indicated that it is difficult to proceed with SAARC in these circumstances.

Background:
The 19th SAARC Summit was originally scheduled to be held in Islamabad in November 2016. However, following the pull-out of India and three other countries (Bangladesh, Bhutan, and Afghanistan) after the Uri terrorist attack, the Summit was postponed indefinitely. In March 2018, during his visit to Kathmandu, Pakistan Prime Minister sought the help of Nepal, the chair of SAARC, to revive the organisation by convening the pending Summit in Islamabad. Pakistan has also solicited the support of Sri Lanka in this regard.

About SAARC:
- SAARC was founded in 1985 with seven South Asian countries — Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.
  The membership grew to eight when Afghanistan joined in 2007.
- SAARC occupies a land area larger than the European Union (EU) and the Association of Southeast Asian Nations (ASEAN). In terms of population as well, it is superior with approximately 22.5 per cent of the world populace.
- The organisation aims to achieve peace, freedom, social justice, and economic prosperity by promoting a shared understanding, good neighbourly relations, and meaningful cooperation.
- Improving the quality of life in the member countries by fostering self-reliance, promoting mutual assistance, and strengthening collaboration with other regional and international organisations are its core objectives.

Poor performance:
The mismatch between SAARC's ambitions and achievements has been profound. No tangible economic or political benefits have been realised by SAARC.
It has failed to achieve a majority of its stated objectives. South Asia, at present, is "one of the least integrated regions" in the world.

Promoting intra-regional connectivity through trade is one of the primary focus areas of SAARC However, even after three decades of existence, intra-SAARC trade stands at a meagre five percent of South Asia's total trade.

Reasons behind poor performance:
- For the member countries, SAARC was an unwanted child.
- Various structural and organisational issues make SAARC not only vulnerable but reforms implausible as well.
- Conflict and power asymmetry among members impede it from making any progress in regional cooperation.

An unwanted child:
South Asia was one of the few regions that did not make any attempt to build a regional organisation until the 1980s and the idea of SAARC was borne out of this dilemma.
It was not the pursuit of economic and developmental cooperation as a means to lift the region out of poverty or shared threat perception or even shared identity that pushed South Asian countries to establish a regional organisation.
In the last 33 years, SAARC has held only 18 Summits, and many have been postponed or cancelled due to various issues.
Further, in the last decade, the frequency of summits has also reduced compared to the first two decades.

Structural problems:
SAARC's emphasis on the principle of unanimity for decision making and exclusion of contentious bilateral issues from deliberations makes the organisation fragile and vulnerable.
Its Charter says: "decisions at all levels shall be taken on the basis of unanimity" and "bilateral and contentious issues shall be excluded from the deliberations."
- While the unanimity clause enables any member at any time to veto any proposal, the prohibition on the raising of bilateral issues reduces the possibility of solving conflicts among, and addressing concerns of, the member states.
- Given the level of suspicion, power asymmetry and persistence of bilateral conflicts, it has seemingly proven hard for SAARC countries to come to a unanimous agreement on vital issues.
  The trans-South Asian road connectivity project is a case in point of how one member(Pakistan) could hinder a regional initiative that was supported by the rest.
- In the EU, one of the most successful cases of regional integration, a decision requires only 55 per cent of member states (16 out of 28) to vote in favour. Besides, to block a decision at

the European Council, four members representing at least 35 per cent of the EU population is necessary.

These structural characteristics not only make the decision-making process in the EU relatively easy but vetoing a decision hard as well.

Conflicting interests of members:

Since its inception, the regular activities of SAARC have been restrained by the tense bilateral relationships including violent conflicts among its members.

When one of the constituents is too big and powerful compared to the rest, it will naturally affect the progress of cooperation.

In the region, the basis of power-asymmetry is India's preponderance, which represents more than "two-thirds of the region's area and more than three-fourths of the region's population, GDP, and military strength."

- India's dominance causes mistrust and suspicion about its motives in the smaller South Asian countries.
- While India considers its neighbours as an integral part of its security system, the latter perceive it as a threat to their security.

  This perception among the smaller countries of South Asia has enabled external powers such as the United States and China to acquire a role in the region, which, in turn, introduces a further stumbling block for regional cooperation.

- The most important factor for making SAARC dysfunctional is the conflict between India and Pakistan.

  While SAARC has survived various Indo-Pak crises, the organisation could not isolate itself from their ill effects completely.

Way ahead:

- India-Pakistan rivalry should not lead to formation of SAARC minus one. This could lead to serious drawbacks.

  First, without involving Pakistan, the possibility of integrating South Asia and resolving the economic and security challenges that the region faces will be almost impossible. The most pressing issue in the region is terrorism and Pakistan stands at its core as both perpetrator and victim.

  Moreover, the other members of the organisation, who have a good relationship with Pakistan, are not likely to favour the idea of a SAARC minus Pakistan.

- South Asian countries are beset by many inter-state and intra-state conflicts. These conflicts, especially hostile bilateral relationships, affect the regional integration process. Unless and until all members discuss bilateral disputes with an intention to resolve them,

the chances of enhancing regional cooperation will remain dim. The discussion of bilateral issues at its summits should thus be allowed.

- Since the unanimity principle of the organisation provides veto power to each member, amending the Charter should be examined.
- The organisation was a product of the functionalist optimism that economic cooperation will circumvent political issues. Economic integration will lead to peace and that the 'peace dividend' will bring progress and development to the whole region is far from reality. The organisation should thus focus on strengthening economic cooperation.

Connecting the dots:

- The SAARC has failed as an organisation. To revive the organsiation the member needs to rise above intra-regional rivalries and focus on economic aspects rather than political issues. Comment.

India to face impact of U.S. decision on Iran

Part of: GS Prelims and Mains II and III – International Relations and Economy

In News:

- U.S. President Donald Trump decides to pull out of the Joint Comprehensive Plan of Action (JCPOA) on Iran.

Impacts of sanctions on India:

- Iran is India's third biggest supplier (after Iraq and Saudi Arabia) of crude oil, and any increase in prices will hit both inflation levels and the rupee.
- New U.S. sanctions could slow or even bring India's plans to develop Shahid Beheshti Port in Chabahar to halt.
- Plans for International North South Transport Corridor (INSTC) gathered momentum after the JCPOA was signed in 2015 and sanctions on Iran were lifted. But with new sanctions INSTC plans may slow down.
- On 9 June 2017, at a summit in Astana, India and Pakistan officially joined SCO as full-fledged members.
- China is considering inducting Iran into the eight-member Eurasian security organisation. If the proposal is accepted, India will become a member of a bloc that will be seen as anti-American.
- **For more details on SCO** – click this link - https://iasbaba.com/2016/06/iasbabas-daily-current-affairs-11th-june-2016/

Key Pointers:

- India is a founder member of the 18-year-old **International North South Transport Corridor (INSTC)** that starts from Iran and aims to cut right across Central Asia to Russia over a 7,200-km multi-mode network.

- **For more details on INSTC** – click this link - https://iasbaba.com/2016/10/iasbabas-daily-current-affairs-25th-october-2016/

U.S. withdrawal from Iran nuclear deal: Reason behind and Consequences

In news:
President Donald Trump recently decided to unilaterally pull the U.S. out of the Iran nuclear deal and to re-imposing nuclear sanctions against that country. It is a huge setback to multilateral diplomacy and the rules-based international order.

Iran nuclear deal (The Joint Comprehensive Plan of Action):
The agreement, signed in 2015 by Iran with the five permanent members of the UN Security Council, Germany and the EU, curtailed its nuclear programme in return for withdrawing economic sanctions.
It was reached after 18 months of painful negotiations. Under the deal, most of Iran's enriched uranium was shipped out of the country, a heavy water facility was rendered inoperable and the operational nuclear facilities were brought under international inspection.

Reason behind the decision:
Mr. Trump's decision is not about Iran acquiring nuclear weapons. If it was the actual concern, it would have supported a deal that closes the path towards nuclear weapons for Iran. Instead, the bigger concern for Mr. Trump as well as Washington's closest allies in West Asia — Israel and Saudi Arabia — is *Iran's re-accommodation in the global economic mainstream*. They fear that if Iran's economic profile rises, it will embolden it to increase its regional presence, posing a strategic threat to the interests of the U.S.-Saudi-Israel axis.

Iran's response:
Iranian President Hassan Rouhani declared that his government remains committed to a nuclear deal with world powers, despite the US decision to withdraw, but is also ready to resume uranium enrichment should the new sanctions against Iran become effective. Undoubtedly, the US exit from the nuclear deal comes as a great defeat for Rouhani against the Iranian hardliners who warned him against diplomacy with the Americans.

Fallout:

In Iran, the moderate government of President Hassan Rouhani went ahead with the deal despite strong opposition from hardliners. Mr. Trump has wrecked all the efforts, despite numerous reports, including from American intelligence agencies, that Iran is 100% compliant with the terms of the agreement.

- The U.S. action doesn't necessarily trigger an immediate collapse of the agreement. For now, Europe, Russia and China remain committed to it. But the challenges will emerge, not only for Europe but also for other nations with strong trade ties with Iran, including India, once American sanctions are in place.
- Trump's decision to reinstate US nuclear-related sanctions against Iran could cripple the Iranian economy and most probably create new urban riots around the country. But, worsening domestic problems in Iran could spell widespread geo-political trouble for the whole region.
- Trump's decision could make a war scenario much more likely, unless there is a regime change in Iran, which is very unlikely.

For India:

The reintroduction of sanctions against Iran is bad news. Iran is now India's third largest source of oil. Apart from supply disruptions, a further surge in crude prices will worsen India's current account imbalance and fuel inflation, at a time when the economy is just beginning to show signs of returning to a high growth trajectory.

For global corporations too, there will be considerable pain. For example, there are said to be around 200 French companies operating in Iran and some like Renault have plants there. They will now have a 90-day period to wind down operations. India's Chabahar port project in Iran, which was just showing signs of moving forward, could be in trouble.

Way ahead:

The U.S. stands isolated in its decision. Europe and other powers (UN permanent members) should stick together to respect the mandate of an international agreement. Any sanctions imposed by U.S. will hurt the global economy and may force Iran to stock nuclear weapons, further complicating the situation. Thus, the need of the hour is to standby with the agreement even after the U.S. has withdrawn.

Connecting the dots:

- The U.S. has unilaterally decided to withdraw from the Iran nuclear deal. Discuss the reason behind. Also, analyse the consequences of such a decision and how it would impact India.

Between the Elephant and the Dragon

Introduction:
- Iran, one of the major exporters of oil and natural gas to India and global markets will have a tough time in exporting its natural resources.

What are the possible impacts of US's decision to reinstate sanctions on Iran? Will it impact India's trade relations with Iran?

- Experts say sanctions on Iran will not have much impact on India's trade relations with Iran.
- However, what will impact India is the upward movement in international crude prices in the coming days, as the sanctions raise concerns that the global supply of oil will be squeezed.

- If the European Union (EU) were to continue status quo and not re-impose sanctions, Iranian supplies to India will continue unhindered.

- India pays its third largest oil supplier (Iran after Iraq and Saudi Arabia) in Euros using European banking channels and unless these are blocked, imports will continue.

Major concern for India: China's role in development of the Chabahar port
- Iran is attempting to woo Chinese investment in Chabahar.
- Development of Chabahar port is often projected as India's pet project (and a response to Gwadar in Pakistan)
- Iran's attempt to invite Chinese investment is perceived as an attempt to dilute Indian influence.

Key shifts:
- For Iran, Chabahar means business.
- Post-sanctions, the development of the Chabahar port reflects Iranian quest for multilateralism, and China by default is an important player in the Iranian scheme of things.
- Given the negative ties between US and Iran, Iran will push to maintain cordial relationship with a rising power like China.

China and Iran
- China is one of the few countries which never severed its ties with Iran.

- China had played a crucial role in bringing Iran to the diplomatic table to negotiate the P5+1 nuclear deal.
- China was also one of the countries that maintained steady trade relations with Iran even during the sanctions era.
- Iran may eye for further participation in China's connectivity projects.
- A large chunk of China-Iran trade is petroleum-based products. China is the largest importer of Iranian oil.
- Over the years, China has emerged as Iran's leading trade partner.
- Post-sanctions, Chinese President, Xi Jinping was the first head of state to visit Iran, in January 2016. Both countries decided to increase their bilateral trade to $600 billion in the coming decade.
- Iran, with its massive infrastructural needs, sees China as its most valued partner and Beijing has been investing in Iran in crucial sectors like railways.
- China International Trust and Investment Corporation (CITIC), a state owned investment wing has extended $10 billion credit line to Tehran. Besides, China Development Bank has also signed a memorandum of understanding with the Iranian government worth around $15 billion.
- Chinese investments in Iran are part and parcel of its ambitious $1 trillion Belt and Road Initiative (BRI). Iran also perceives the BRI as a project that would make it an indispensable transit hub for countries like China, India and Russia and an effective antidote to the U.S. sanctions.
- In addition to their economic partnership, China and Iran share substantial defence cooperation with each other. After the 1979 revolution, Tehran has been dependent on Beijing for meeting its defence requirements.
- China, being permanent member of the Security Council with veto power, could be of great strategic help for Iran when it comes to vetoing any proposal against Iran in the United Nations.
- A parallel, China-dominated global order suits Iran more than the U.S.-centric world order.

India's policy options:
- This strong relationship between Tehran and Beijing makes it pertinent for New Delhi to navigate its interests in the region accordingly.
- To assume that Iran would help India counter Chinese influence in the region might be wishful thinking. India needs to resist the temptation of falling prey to "excessive securitisation" in the case of Chabahar agreement in particular and India-Iran relations in general.

The way ahead for India:

- For India, to be an influential player in the region, economics and politics should complement and not substitute each other.
- India will have to capitalise upon the existing synergies. India should offer favourable terms of trade in the region vis-à-vis China.
- To consolidate its strategic depth in the region, India should focus on initiatives like frequent joint naval exercises in the Persian Gulf.
- India should adopt a nuanced approach towards Chinese investment in Iran, especially now when Iran's reliance upon China is likely to grow (with Trump's decision to pull out of the Joint Comprehensive Plan of Action (JCPOA)).
- India might also consider option of joint cooperation with China in Chabahar project. Some form of Chinese participation in the Chabahar project would be helpful for the future of the project, especially if the terms and conditions are clearly specified.
- Just like how India and China are exploring joint economic projects in Afghanistan; they can also extend this engagement to the Chabahar.

Connecting the dots:

- The U.S. has unilaterally decided to withdraw from the Iran nuclear deal. Discuss the reason behind. Also, analyse the consequences of such a decision and how it would impact India.

India blocks Australia from Malabar naval exercise

In news:

Indian government decides to go ahead with this year's 'Malabar' naval exercises trilaterally without including the Australian Navy.

For three years, Australian officials have been lobbying to take part in the annual Malabar Exercise - but India has refused, under pressure from China.

The war-gaming exercise includes the US and Japan and will take place off Guam this June.

Key pointers:

- The annual Malabar exercise started in 1992 as a bilateral event between the navies of India and the United States. It was an important step in the process of reviving India's relation with USA, as both countries had occupied opposite ends of the spectrum during the Cold War.

- Malabar exercise is done annually between India and US Navy. Earlier it was carried on west coast but from 2007 onwards, India is holding exercise in Bay of Bengal and alternatively in Sea of Japan.
- Japan have joined exercise 7 times before, but in 2017 they were formally inducted into the exercise. Malabar 2017 featured 95 aircraft, 16 ships and two submarines, making it one of the largest naval exercises in the region in recent times.

Experts views:

- Australia's exclusion has been viewed by experts as a casualty of India's warming ties with China and a blow to efforts to revive the Quadrilateral Security Dialogue, which the Australian Turnbull government has been keen to promote.
- Australian experts have said if all four quad countries — India, Australia, the US and Japan — were to be involved in military drills such as Exercise Malabar it would bolster the grouping.
- There is a fear that including Australia in the Malabar exercises will come out as signal against the Chinese. (says Experts)

"Pitch Black" Air exercises

India has stepped up bilateral naval exercises with Australia in the past two years, with the Indian Air Force will be taking part in the **"Pitch Black" Air exercises** in Australia for the first time in August 2018.

In June 2017, the two nations held the **AUSINDEX naval drills** off the Western Australian coast, with a focus on increasing interoperability between their navies.

Conclusion:

In a way, the Indian government appears to be backtracking on the Quad while keeping bilateral defense ties with Canberra, Tokyo and Washington alive. India is playing a delicate geopolitical game, in which it has to take China's perceptions into account. And New Delhi's vetoing of a quadrilateral framework for naval drills with the US, Japan and Australia should be read as a sign of its unwillingness to join a multilateral front that Beijing could perceive as hostile.

Connecting the dots:

- The Malabar exercise is a critical security exercise between countries who see china as a fierce challenger. Do you agree? Give reasons for your answer.

Improving connectivity in South Asia: India and China

Introduction:
One of the key non-military issues that does not just bedevil India-China relations but also significantly affects many countries in the region is the inability of the two Asian giants to communicate, cooperate and coordinate on matters of regional trade and connectivity which could have benefited all.

Poor connectivity in South Aisa:
Poor connectivity is the major reason why intra-regional trade is among the lowest in South Asia.

- South Asia, with its 1.8 billion population, is only capable of conducting around 5% intraregional trade as connectivity remains a constant barrier.
- Non-tariff barriers (NTBs) continue to plague the region and addressing infrastructure deficits can do away with 80% of the NTBs.

In addition to enhancing trade, connectivity can significantly improve people-to-people interaction leading to better understanding, greater tolerance\ and closer diplomatic relations in the region.

Regional initiatives:
States in South and Southeast Asia are involved in multiple regional initiatives led by India and China but are unable to get the benefit due to their slow progress. The South Asian Association for Regional Cooperation remains moribund with little hope of it becoming functional in the near future.

BIMSTEC:
The India-led Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) involving Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand, has made little progress.
Serving as a funnel to the Malacca Straits, one of the world's busiest waterways, the Bay of Bengal has now become one of the most important strategic hotspots for global trade. All countries in BIMSTEC are losing out due to this prolonged period of dormancy.

The organisation till now has only had meetings, negotiations and leaders' summit and stalled free trade agreement negotiations.

There has been some progress through the establishment of the BIMSTEC Energy Centre and a task force on Trans Power Exchange and Development Projects, established to develop a memorandum of understanding for the establishment of the BIMSTEC Grid Interconnection.

Initiatives by China and India: Complementary rather than competing

China is leading its own regional ambition with its BRI. A portion of the Maritime Silk Route crosses the Bay of Bengal and involves Bangladesh, Myanmar and Sri Lanka. Both China and India are pursuing regional initiatives on their own which could lead to benefit for all involved states. Regional agendas could have been pursued efficiently if the initiatives were complementary rather than competing. The BRI, BIMSTEC and BBIN should be developed through coordination and consultation, led by the two Asian giants, so that the projects under the schemes can be implemented more efficiently.

With the minimum required cooperation in pursuing regional initiatives, India and China can significantly enhance trade, investment and connectivity in the region. This would not only would be a win-win for the two giants but also enormously benefit smaller countries.

The BBIN: An example

In South Asia, most multi-country connectivity initiatives are usually deemed to be mere talk shops, one recent positive development has been the trial run of a Bangladesh-Nepal bus service through India under the Bangladesh-Bhutan-India-Nepal (BBIN) motor vehicles agreement.

Although Bhutan failed to ratify the agreement due to opposition from its parliament, instead of halting progress, the country asked other stakeholders to move ahead and expressed hope of joining the initiative if and once it gets clearance from the parliament. Bhutan's positive go-ahead demonstrated the immense potential to be realised through simple cooperation and showed that it is possible to implement pragmatic plans even when all members are not able to participate at the same time.

Conclusion:

Slow moving regional projects end up hurting the resource-constrained citizenry of the region who are deprived from the benefits emanating from well-thought-out and carefully strategised regional connectivity projects.

India and China must forge a pragmatic understanding on the efficacy of regional initiatives through greater communication, enhanced cooperation and better coordination.

Connecting the dots:

- States in South and Southeast Asia are involved in multiple regional initiatives led by India and China but are unable to get the benefit due to their slow progress. Discuss the need of improving connectivity in the region and also discuss the need of making the initiatives complementary rather than competing.

Windrush Scandal

Part of: GS Prelims (International Affairs)

In News:

- Windrush scandal or Windrush Generation is in news often.
- It deals with scandal over the ill treatment of Caribbean and other Commonwealth nationals by UK's tough immigration policy.
- Windrush generation were migrants from the Commonwealth Caribbean who came to Britain before 1973 (1971 legislation no longer gave them automatic settlement after that date).

Do you know?

The scandal also includes those who came from many other Commonwealth countries, including India, Pakistan, Bangladesh and countries in West Africa.

Shangri-La dialogue and Shanghai Cooperation Organisation (SCO) summit

Part of: GS Prelims and Mains II – India and the world, International relations

In News:

- Prime Minister Narendra Modi is expected to make a "major" speech on India's defence and security outlook at the **Shangri-La dialogue in Singapore** (which will be held on June 1 and 2).
- PM will also fly to Qingdao city in China for the **Shanghai Cooperation Organisation (SCO) summit** which will be held on June 9 and 10.

Important Value Additions:

About Shangri-La Dialogue (SLD):

- SLD is a "Track One" inter-governmental security forum held annually by an independent think tank, the International Institute for Strategic Studies (IISS).

- The event is attended by defense ministers, permanent heads of ministries and military chiefs of 28 Asia-Pacific states.
- The forum gets its name from the Shangri-La Hotel in Singapore where it has been held since 2002.

Shangri-La dialogue is run by the London-based think tank International Institute of Strategic Studies and funded and hosted by the Singapore government.

Over the years ministers have used the Dialogue to propose and advance initiatives on important security issues.

About SCO:

- China will host 2018 Shanghai Cooperation Organization (SCO) Summit.
- The Shanghai Cooperation Organisation (SCO) is a Eurasian political, economic, and security organisation.
- Creation of SCO was announced on 15 June 2001 in Shanghai, China.
- SCO Members: China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Uzbekistan, India and Pakistan
- India and Pakistan joined SCO as full members on 9 June 2017 at a summit in Astana, Kazakhstan.
- Afghanistan, Belarus, Iran and Mongolia have observer status at present.

The groupings main objective is military cooperation between members. It also works towards intelligence-sharing, counter-terrorism operations in Central Asia. It is primarily centred on its member nations' Central Asian security-related concerns, often describing main threats it confronts as being terrorism, separatism and extremism.

Article link: A tightrope walk over China for Narendra Modi

Palestine to join the Chemical Weapons Convention

Part of: Mains GS Paper III- International relations

Key pointers:

- The Palestinians have joined the global convention to halt the spread of toxic arms, the Organisation for the Prohibition of Chemical Weapons (OPCW).
- Palestine will become the 193rd state to join the CWC
- Palestinians are campaigning for the creation of their own state of Palestine, and have stepped up a campaign in recent years to win recognition from international organisations.
- Israel however is vehemently opposed to these attempts and has pursued intense diplomatic efforts to stop them.

- In 2012, the United Nations upgraded the Palestinians to a non-member observer state.
- Interpol, the International Criminal Court, UNESCO, and now the OPCW all refer to the Palestinian territories as a state.

About the OPCW and the CWC:
- The Organisation for the Prohibition of Chemical Weapons (OPCW) is an intergovernmental organisation and the implementing body for the Chemical Weapons Convention, which entered into force on 29 April 1997.
- The OPCW has its seat in The Hague, Netherlands, and oversees the global endeavour for the permanent and verifiable elimination of chemical weapons.
- Only four countries, including Israel, have yet to sign up to the CWC, which aims to eliminate an entire category of weapons of mass destruction.
- The CWC prohibits the development, production, acquisition and stockpiling of chemical weapons by its member states.

15th Asia Media Summit 2018

Part of: GS Prelims

Key Pointers:
- This is the first time the summit has been organised in India.
- The theme is 'Telling Our Stories Asia and More.'
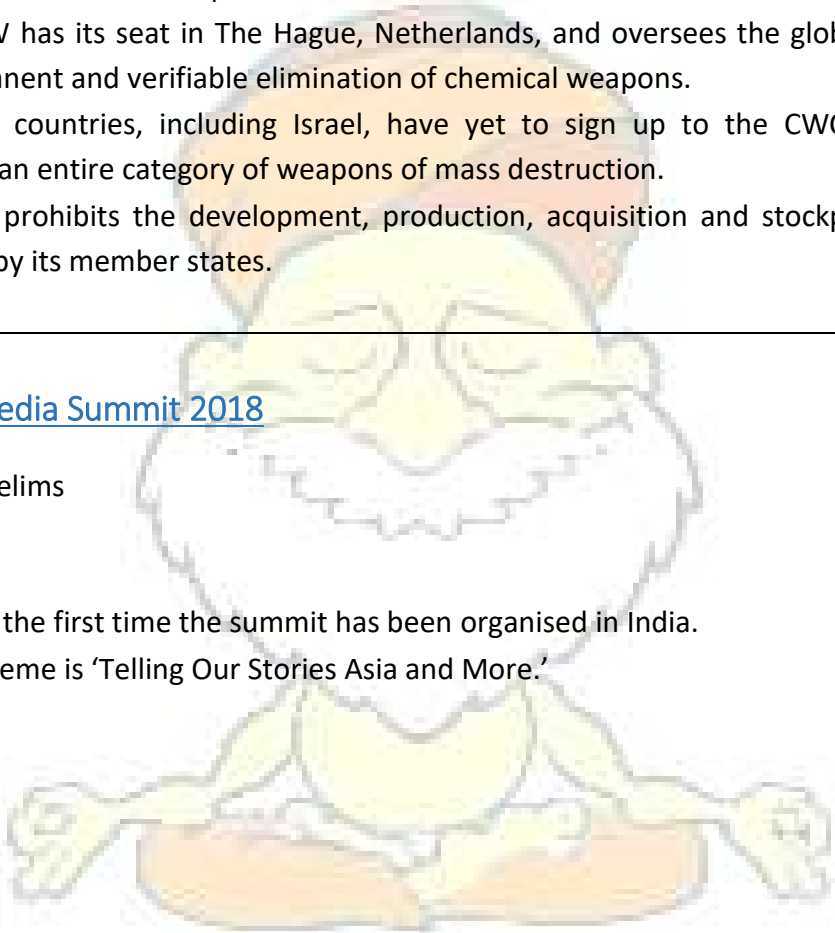
India and the World

Vice President to visit Guatemala, Panama and Peru

Part of: Prelims (IR and Geography Map) and GS Mains II (IR, India and the world)
In News:

- Vice-President M. Venkaiah Naidu to visit Guatemala, Panama and Peru.

Article link: **Vice-President to leave for South America tomorrow**

Important Value Additions:
About Gautemala
Observe figure below and identify the following –

1. It is in between Pacific ocean and Caribbean Sea (Gulf of Honduras)
2. It is country of Central America.
3. Capital – Gautemala city

India and Guatemala

Unique features –

- dominance of an Indian culture within its interior uplands
- origin of the name Guatemala is Indian
- volcanic eruptions
- Both nations are part of the Non-Aligned Movement and G-77
- Spice war - There is increased competition between in the production of cardamom between India and Guatemala
- Illegal immigration - Due to the visa-free entry that Guatemala offers to Indian citizens, human trafficking network operates (which transports people from India to the United States)
- Important forum – India and Central American Integration System (SICA)

About Panama:

Observe figure below and identify the following –

1. It is country of Central America.
2. Panama connects other Central American countries with South America
3. It is also in between Pacific ocean and Caribbean Sea
4. Capital – Panama City

India and Panama:

- Indian-Panamanian connection is the oldest in the Central American region
- Sikh immigrants worked on the construction of Panama railways and later the Panama Canal in the early 20th century
- Panama has largest concentration of overseas Indians in Central America
- Part of India-SICA cooperation
- Panama papers leak – Undisclosed incomes of Indians in Panama papers
- Panama is also a member of NAM and G-77

About Peru

Observe figure below and identify the following –

1. It is country of South America
2. Capital – Lima
3. Lake Titicaca (borders Peru and Bolivia) - largest lake in South America and world's highest navigable body of water.
4. Andes Mountain
5. Pacific Ocean

India and Peru

- Peru - Asia-Pacific Economic Cooperation Member (India has requested membership in APEC, and received initial support from the United States, Japan, Australia and Papua New Guinea. However, officials have decided not to allow India to join for various reasons, considering that India does not border the Pacific Ocean, which all current members do.)

- Peru is also a member of NAM and G-77.

India and Serbia celebrating their 70th year of cooperation

Part of: GS Prelims and Mains Paper II – India and the world, International Relations
In news:
- India and Serbia are celebrating their 70th year of cooperation.
- India and Serbia should revive ties from the non-alignment era, as their relations are not as well developed as in the past.

Important Value Additions:
- India and Serbia (Successor State of former Yugoslavia) have traditionally enjoyed deep friendship as co-founders of the Non-Aligned Movement.

India and Serbia:
- Serbia has abolished visa requirements for Indians, unilaterally (along with visas for China, Turkey, Iran, Indonesia and other countries we have historical ties with).
- India-Serbia trade is very low at about $160 million.
- Serbia is a bridge between the east and the west, is on the road to joining the European Union.
- Serbia supports India in multilateral for a including India's membership of NSG, permanent and non-permanent membership of UNSC and Indian candidatures to various international organizations.
- Serbian leadership has expressed solidarity with India in the fight against terrorism.

Map work:
Observe figure/map below and try to locate the following –
1. Serbia is a landlocked country.
2. Capital – Belgrade
3. Situated in Europe but not part of EU

Pic: https://www.worldatlas.com/img/areamap/ed1e3c271889be3bec460884d74ae740.gif

Scaling up of India-Nepal bilateral relationship

In news:
Prime Minister Narendra Modi will be visiting Nepal from 11-12 May.
This visit is taking place approximately a month after Nepalese Prime Minister K.P. Sharma Oli visited New Delhi.
These back-and-forth visits indicate that India and Nepal are working towards scaling up their bilateral relationship.
Modi was the first Indian PM to visit Nepal after a gap of 17 years in 2014. The upcoming visit will be his third, also a record for any major leader. Most importantly, this is the first time any top Indian leader will start a Nepal tour from a city other than Kathmandu.

Facts:
To reaffirm the shared cultural heritage between the two countries-
- Modi will be the first Indian prime minister to visit the Sita temple in Janakpur, the mythical birthplace of Sita at the Madhesi heartland, in the Terai region.
- He will also visit Muktinath (Mustang district) in the northern part of Nepal. The Muktinath temple is revered by both Hindus and Buddhists.

By visiting cultural destinations in Nepal's south as well as north, Modi will be emphasizing the depth of cultural linkages between the two nations.

Significance of the visit:

- For those in Janakpur and around, it is an opportunity to put the city on the world tourism map as Modi will kick-off the Ramayana circuit.
  The two PMs will also inaugurate a bus service between Janakpur and Ayodhya (UP), the mythical birthplace of Rama.
- For Modi and Oli this will also be an opportunity to give India-Nepal relations a renewed push.

Background:

- In the year 2015, India-Nepal relations hit a low over the promulgation of the constitution and the Madhesi agitation.
- Oli, who assumed power in October 2015, emerged as the most popular leader of Nepal, accusing Delhi of enforcing a nearly six-month-long 'blockade' between end 2015 and early 2016, in support of Madhesis.
- In April, the Nepalese PM made his first foreign tour to India. Apart from entering a host of bilateral agreements, including the ambitious river transport deal; Oli promised cooperation for India-sponsored projects. This was an important step as Indian projects had suffered during Oli's first term between October 2015 and August 2016 and China had taken advantage of that.

Reasons behind revival:

- The left alliance government in Nepal, headed by Oli, enjoys a strong presence in the national parliament as well as in provincial governments. Given the current domestic political stability, there is greater confidence in Nepal's external engagements.
- There seems to be a growing recognition in India as well as in Nepal that deterioration in relations between the two countries, with close socio-economic-cultural relations, is not desirable.
- There is a strong opinion that India is reaching out to Kathmandu because of China's growing presence in Nepal.
- Some also suspect a Chinese hand behind Nepal's thaw in relations with India. Beijing can connect Kathmandu by rail from the Northern border but the Belt and Road will be incomplete, if not unviable, until India grants connectivity.

The Challenge:

Given its location, Nepal would play one major power against the other to maintain its autonomy.

Even during the Cold War, Nepal received assistance from the US and its allies, as well as from the erstwhile Soviet Union.

Like India, which sought to use its non-alignment policy to benefit economically from both camps during the Cold War, Nepal also deployed its foreign policy for economic gain from all powers.

Given Nepal's power asymmetry with India and China, it seeks to swing between the two nations to maintain autonomy.

Countering China:

- While China does not have people-to-people interactions on a par with India, it has a long history of deploying overseas assistance to Nepal.
  In the 1960s and 1970s, it was involved in developing the Kodari-Kathmandu road and Kathmandu-Pokhara road.
- Unlike the earlier projects, recent proposed Chinese projects, such as the proposal to build a railway line connecting Tibet with Kathmandu, will have significant geopolitical as well as geo-economic implications for India.

Acceleration of Indian projects:

In his second term, Nepalese PM Oli has made concerted efforts to improve ties.

- In the last few months the Nepalese government cleared hurdles for the Rs. 5,723-crore Arun-III (900MW) hydel project.
- Recenty, the Satluj Jal Vidyut Nigam Ltd got the much awaited generation license and both the leaders will soon lay the foundation stone for the project.
- Nepal has also promised all cooperation to India's plan to build a rail link to Kathmandu. A survey will be launched soon in this regard.
- India-sponsored Raxaul-Birgaunj integrated check-post became operational last month. Work has also started for the laying of an oil pipeline to Nepal.

Conclusion:

PM Modi's visit to Nepal will significantly improve ties after the relationship hit the low in 2015.

Connecting the dots:

- India and Nepal are working towards scaling up their bilateral relationship. Comment.

India-Nepal Relations

Part of: GS Prelims and Mains Paper II – India and Nepal; India and its neoghbours; IR

In News:
- In above article, we had covered editorial on India-Nepal Relations. (Scaling up of India-Nepal bilateral relationship)
- Nepal government's vision is to transform their land-locked Himalayan nation into a land-and-water-linked country and looks up to India to meet that vision.

Key areas:
Cultural Linkages
- **Sita temple in Janakpur** - Modi will be the first Indian prime minister to visit this temple, the mythical birthplace of Sita.
- **Muktinath temple** - revered by both Hindus and Buddhists.
- **Ramayana circuit** - Modi will kick-off the Ramayana circuit; inaugurate a bus service between Janakpur and Ayodhya (UP), the mythical birthplace of Rama.

Energy
- Arun-III (900MW) hydel project
- India-sponsored Raxaul-Birgaunj integrated check-post
- Work has also started for the laying of an oil pipeline to Nepal.
- India also plans to build a rail link to Kathmandu.

Do you know?
The government has identified 15 destinations in India for development under the Ramayana Circuit theme — Ayodhya, Nandigram, Shringverpur and Chitrakoot (Uttar Pradesh), Sitamarhi, Buxar and Darbhanga (Bihar), Chitrakoot (Madhya Pradesh), Mahendragiri (Odisha), Jagdalpur (Chhattisgarh), Nashik and Nagpur (Maharashtra), Bhadrachalam (Telangana), Hampi (Karnataka) and Rameswaram (Tamil Nadu).

Pic link: https://static-news.moneycontrol.com/static-mcnews/2017/08/Ramayana-circuit-743x435.jpg

India-Nepal relations: A new beginning

Background:

During the just-concluded visit to Nepal, termed "historic" by Prime Minister Narendra Modi himself, he and his host, Nepalese Premier KP Sharma Oli, reiterated their resolve to effectively implement the bilateral initiatives proposed during Prime Minister Oli's recent visit to India, including in "agriculture, railway linkages and inland waterways development". The visit reflected the realisation that the relationship had deteriorated in recent years and there was an urgent need to arrest the slide.

Key takeaways:

• Mr. Modi described it as a visit by the 'Prime Pilgrim'. With prayers offered in Janaki Mandir, Muktinath and Pashupatinath, the focus was on religious and cultural commonalities.

  A bus service between Janakpur and Ayodhya was inaugurated.

• Only one of the earlier commitments, the 900 MW Arun III hydel project, has progressed and both Prime Ministers jointly laid its foundation stone.

- The joint statement is short. It prioritises cooperation in agriculture, inland water-ways, a survey for a railway line from Raxaul to Kathmandu and increasing air connectivity.

The "catalytic role of connectivity":
The two sides specially emphasised the "catalytic role of connectivity". With cross-border connectivity being a crucial factor to "enhance people-to-people linkages and promote economic growth and development", the two leaders lent a renewed dynamism to several infrastructural schemes and projects.

- The two Prime Ministers jointly inaugurated an integrated check post at Birgunj in Nepal to facilitate cross-border movement of people and cargo.
- The ground-breaking of the Motihari-Amlekhgunj pipeline done for petroleum supplies from India to Nepal.
- Decided to develop "cost-efficient", economical movement of cargo through inland waterways, besides providing sea-connectivity to landlocked Nepal.

India commands the centre-stage in South Asia, with 51 per cent of the region's surface area, 71 per cent of population, and 40 per cent of GDP. Most of its neighbours share borders not only with India, but also in most cases with one more country in the region. They perforce depend on India for region-wide connectivity.

Bilateral rail connectivity (Raxaul-Katmandu): A game-changer
The most momentous project ever contemplated by India for its close neighbour was the joint pronouncement "to construct a new electrified rail line, with India's financial support", to connect Raxaul to Kathmandu, for which a preparatory survey will be conducted within one year.

While assuring that Phase I cross-border rail lines (Jayanagar-Janakpur/Kurtha and Jogbani-Biratnagar) will be completed in 2018, the ongoing final location survey for the three additional rail links (New Jalpaiguri-Kakarbitta, Nautanwa-Bhairahwa, and Nepalgunj Road-Nepalgunj) will also be expedited.

Challenge: India's bureaucratic sloth
What particularly irks India's neighbours is lack of progress in implementing even minor projects. India doesn't deliver on promises made even at the highest levels.

For example, the 15-km missing rail link between Agartala on the Indian side and Akhaura rail-head in Bangladesh, that has been languishing since Bangladesh Prime Minister Sheikh Hasina graciously responded to India's long-pending request for its construction during her visit in January   2010.

Likewise, Myanmar is the only ASEAN country sharing a land border with India. For long, India

has talked of improving road and rail connections and a new port on Myanmar's Arakan coast, but the progress is minimal.

In sharp contrast, China:
China shares land borders with five SAARC countries and has a long border with Myanmar. China has for long wanted to fill the South Asian space that nature gifted to India. China views Nepal and Pakistan to be critically important for its security and territorial integrity in Xinjiang and Tibet. It is busy building a web of road and rail links, also 'String of Pearls' in Sri Lanka, Myanmar, Pakistan, and Bangladesh.

Way ahead:
Now that India has shown rare vision and courage to proceed towards building the Raxaul-Kathmandu rail link, it should seize the occasion to build its self-confidence and among its neighbours by completing the project in record time.
The Raxaul-Kathmandu rail link has the potential of having a 'transformational impact' on the region.

Conclusion:
A new beginning based on the principles of "equality, mutual trust, respect and mutual benefit", phrases that Mr. Oli now insists on including in every joint statement, has started and will require time. Sustained effort by India in ensuring implementation of long-pending economic cooperation projects is required and must be given priority.

Connecting the dots:
- A new beginning has been initiated in India-Nepal relations. Sustained effort by India in ensuring implementation of long-pending economic cooperation projects is required and must be given priority. Comment.

India and Myanmar

Part of: GS Prelims and Mains Paper II – India and its neoghbours; IR

In News:
- India urges Myanmar to ensure the safe return of Rohingya citizens now staying in refugee camps in Bangladesh.
- A landmark land border-crossing agreement with the country was sealed.

- The agreement will allow people from both sides to cross the border with passport and visa for health and educational needs and tourism.

Bangladesh has repeatedly urged India to intervene and pressure Myanmar to take back its citizens who are living in difficult circumstances on Bangladeshi territory.

Both Myanmar and Bangladesh are members of the BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) regional grouping, which is expected to hold a summit later this year.

Important Value Additions:

- Myanmar is witnessing a brutal episode of violence since August 25, 2017 between Rohingya Muslims and Rakhine Buddhists.
- Some 2600 houses have allegedly been burnt, more than 100,000 Rohingyas have been forced to flee to neighbouring Bangladesh and approximately 1000 lives have been lost. Given the scale of death and destruction in such a short span of time, this latest phase of internal violence can easily be termed as the most horrifying in Myanmar's recent history.
- The systematic deprivation and gross violations of basic human rights have forced Rohingyas to flee their native land and seek refuge in neighbouring states including Bangladesh, Indonesia, Thailand, Malaysia and India.
- They have been unable to rebuild their lives in most of these countries due to the lack of opportunities provided by the host nations to contribute to the economy of that country even through semi-skilled and unskilled labour work as well, due to the growing fear of their linkages with Islamic extremism.

About BIMSTEC:

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a regional organization comprising **seven Member States** namely Bangladesh, Bhutan, India, Nepal, Sri Lanka, Myanmar and Thailand.

The regional group acts as a bridge between **South and South East Asia** and represents a reinforcement of relations among these countries.

India- Indonesia: Enhancing the strategic partnership

In news:

Prime Minister Narendra Modi will make his first visit to Indonesia next week, the first by an Indian PM since 2013. PM Modi has been to half the ASEAN countries and the biggest of them, Indonesia, finally gets its turn.

Modi's summit with Indonesian President Joko Widodo, known as Jokowi, is an important one. They have met annually since their first meeting at the East Asia Summit (EAS) in Myanmar in 2014.

Similarities:

- Both India and Indonesia have among the world's largest Muslim populace, which are youthful, aspirational and have a commitment to development.
- Both are members of the G-20, NAM, EAS and the like.
- India and Indonesia have a common heritage, cultural and trade linkages going back to antiquity. Hinduism, Buddhism and Islam, all came through these exchanges to Indonesia.

Differences:

Despite these similarities and the rather short distance between the Andamans and the Western State of Aceh in Indonesia, the distance in the mind is rather long.

- India and Indonesia were allies in the fight against imperialism but in the 1970s, they started looking away from each other, till the return of multiparty democracy to Indonesia.
- Since 2011, India and Indonesia are strategic partners, and an ambitious agenda of cooperation has been on the table but has not been implemented in a fulsome manner.

Enhancing the strategic partnership:

On the political front, there are signs of thaw in our engagement. Many stalled bilateral fora have successfully met in the last year. The governments needs to rationalise their calendar and implement decisions in a timely way.

- More consultation on regional and global issues — G-20, EAS and maritime security and sustainable development, for instance will give greater cohesion in regional and global outlook.
- Indonesia has a view of China and the BRI which is at variance with ours. But it recognises India's balancing role in maritime security, has cooperated on the Indian Ocean Rim Association (IORA) and is not supportive of the Organisation of Islamic Cooperation (OIC) on its anti-Indian rhetoric.
  Political need is to focus on commonalities, discuss issues frankly and establish political trust.
- India-Indonesia maritime cooperation, exercises and patrolling between the Andamans and the Malacca straits have developed well. The engagement between the Indian navy and coast guard with the Indonesian navy has improved.

We can now focus on supplying defence equipment to Indonesia and to look at joint production and development of such equipment.

We could invest in a strategic port in Sumatra, which could support exports like coal and palm oil and support to Indian naval assets which require deep draught ports.

A cooperative effort against terrorism and radicalisation needs to be high on the agenda.

- On the trade and investment side, it is not advisable to curb trade for a balance since imports by India of coal and palm oil give Indonesia a surplus. This can be compensated by Indonesian investment in India and allowing better access to Indian entrepreneurs to the growing Indonesian market for infrastructure, healthcare, mining and power.

- A special fast-track facility should be sought from Indonesia to support Indian business houses to secure and maintain business interest in Indonesia. Most Indian businesses feel that Indonesia is partial to China. Indonesia needs to be equitable in their engagements with India.

Indonesia, which has opened its market to Indian beef and found its positive economic impact needs to do the same for pharmaceuticals, rice, sugar and infrastructure machinery.

- Around human resource development and education, much can be done by the two countries to fulfil each other's aspirations.

Most Indonesian students coming to India pursue religious studies, hardly any Indian students go to Indonesia. There is a need to develop a system of twinning universities to have common projects, faculty and student exchanges.

- Our common cultural heritage needs to be updated. Common archaeology projects can be undertaken.

An Indonesia-India Ramayana festival held periodically should encourage development in the related dance forms over ASEAN countries and beyond.

Moreover, the mainstream Muslim organisations, Nahdlatul Ulama and Muhammadiyah need to be more closely engaged as they are the best bulwark against radicalisation. Greater space to such civil society cooperation efforts will give a long-term and popular base for the new thrust expected to the India Indonesia relationship through the PM's forthcoming visit.

Conclusion:

PM Modi's upcoming visit to Indonesia is a welcome one. The engagement needs to recognise the positive factors and the contradictions which impede it, to create a new paradigm.

Connecting the dots:

- Despite many similarities, the India-Indonesia relationship is marked with contradictions. In this light it is necessary to take calculated measure to engance the strategic partnership the two countries have with each other. Disucss.

India-Indonesia: Re-engagment

Historical background:
Despite their proximity, physical and cultural, the strategic distance between Delhi and Jakarta has been incredibly vast. Barring a brief moment in the mid 20th century, when anti-colonial solidarity brought them together, modern India and Indonesia have barely figured in each other's mental maps.

- The Bandung conference was held in April 1955. After Bandung, India turned its back on Asia and focused on the non-aligned movement. Jakarta moved towards the minor variant of Asianism in South East Asia.
- Intense friendship between Delhi and Jakarta turned into mild hostility in the early 1960s. After that the two sides settled down to an extended period of mutual neglect. A variety of internal, regional and global political developments widened the political gulf between India and Indonesia.

Transforming relationship:

- There is an increasing self-awareness in Delhi and Jakarta of their growing regional and international weight. India and Indonesia are slowly but surely breaking out of the foreign policy mindsets shaped for long by non-alignment.
- The new maritime impulse is shaping the worldview of Delhi and Jakarta amidst an extraordinary power shift in Asia and its waters.
- At the heart of this transformation is the change in their economic weight. With its GDP at $2.6 trillion, India is the fifth largest economy in nominal terms and the third biggest in PPP. Indonesia's GDP has crossed the one trillion-dollar mark last year. As its potential for a larger regional and global role comes into view, Jakarta is looking to complement the centrality of ASEAN with a larger vision of the Indo-Pacific, a geopolitical construct that India too has adopted.
- Both of them have begun to rediscover their long-neglected maritime destiny. Prolonged inward economic orientation and border disputes in the north west and the north meant India had no time for its seas in the 20th century. After two-and-a-half decades of reform that has globalised the Indian economy, Delhi is paying more attention to maritime issues.

- With thousands of islands, Indonesia is a massive archipelagic nation. But Jakarta until recently saw no reason to think maritime. The benign external environment secured by the United States meant Jakarta could devote most of its energies on internal territorial consolidation.

  Now, as the Asian waters open up to great power contestation, Jakarta can no longer remain sea blind. A little over three years ago, President Jokowi unveiled the ambition to turn Indonesia into a "global maritime fulcrum" by taking advantage of its special geographic position as the land bridge and sea link between the Indian and Pacific Oceans.

China, the common concern:

The Indonesian government has offered to grant India access to its Sabang port for the development of the port and an economic zone.

Located at the mouth of the strategically important Strait of Malacca, Sabang is only 100 nautical miles from the southern tip of the Andaman and Nicobar Islands. India and Indonesia share multiple common concerns, one of which is China's growing maritime footprint in the eastern Indian Ocean.

Sabang, with its naval base, naval air station, and maintenance and repair facilities, has the potential to serve as the focal point of a budding strategic partnership between the two countries.

Maritime cooperation: Areas of engagement

- Information sharing on white shipping, and enabling India to partner Indonesia in tracking commercial cargo ships at choke points such as Malacca which are getting increasingly congested.
- In the past, cooperation between India and Indonesia has been limited to anti-piracy patrols, search and rescue exercises and joint hydrographic exploration. It is important for the two countries to move to a more concerted and intensive engagement.
- India should leverage this opportunity and seek its inclusion in the Malacca Strait Patrols programme. India's inclusion in the programme would augment India's existing maritime domain awareness in the region, while the eyes-in-the-sky component will allow India to jointly patrol the region with its maritime surveillance aircraft.
- Chinese presence in the SLOCs is well known, and India's ability to monitor Chinese naval movements in the locale will be a great boost to the Indian Navy's security missions.
- A strategic confluence needs an economic direction. The development of the port and economic zone in Sabang can serve as blueprint for a connectivity partnership between the two nations, and more importantly, provide an alternative to China's Belt and Road Initiative.

The proposed cruise tourism circuit between the Andaman and Nicobar Islands and Sabang would further enhance such economic linkages.

- A partnership that includes collaboration in defence industries and maritime training and education can ensure a dynamic maritime collaboration.

An opportunity:

- India needs to supplement efforts in Jakarta and leverage its existing strategic relations with Singapore and other like-minded regional states if it is to cement its position as a 'net security provider' in the Indian Ocean.
- A closer logistical partnership with countries such as Singapore, Australia and Indonesia can be the starting point of an extensive strategic linkage that will help establish India as a regional provider of maritime security.

Conclusion:

The time has come for India to realise the potential of a strategic alignment with the archipelagic state that is geo-politically positioned at the centre of the Indo-Pacific, and an upgrade in maritime relations is the logical way forward.

Connecting the dots:

- A more concerted and intensive engagement will serve both India and Indonesia well especially with regards to maritime cooperation. Comment.
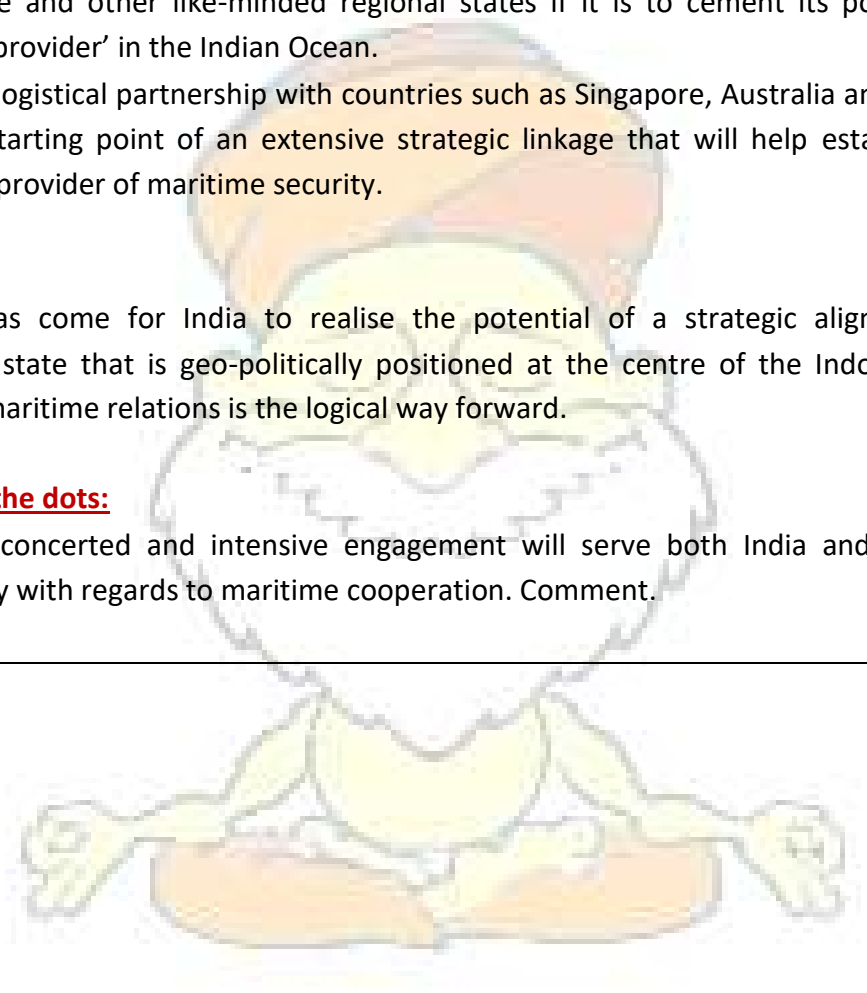
ECONOMY

Key decisions at 27th GST Council

Part of: GS Prelims (Indian Economy) and Mains GS III

In News: Outcomes of 27th GST Council

GST Council decides –

- to convert the GST Network into a **100% government enterprise**.
- to implement a single form for GST filing from the current three.
- to create a Group of Ministers to review the plan for imposition of a cess on sugar.
- to create another GoM to consider implementation of a 2% incentive for digital transactions.

Why cess on sugar?

The cess was meant to subsidise sugarcane farmers as their production cost is much higher than the selling price.

Important Value Additions:

About GST Council

1. It is a constitutional body (**Article 279A**)
2. It makes recommendations to the Union and State Government on issues related to GST.

Composition:

- The GST Council is chaired by the Union Finance Minister and other members are the Union State Minister of Revenue or Finance and Ministers in-charge of Finance or Taxation of all the States.

Do you know?

As per **Article 279A** of the amended Constitution, the GST Council which will be a joint forum of the Centre and the States, shall consist of the following members –

Chairperson	Union Finance Minister
Member	Union Minister of State in charge of Revenue or Finance
Members	Minister in charge of Finance or Taxation or any other Minister nominated by each State Government

UN Economic and Social Survey of Asia and the Pacific 2018

Part of: GS Prelims and Mains III – Economy and World Affairs; International Organizations
In News:
Economic and Social Survey of Asia and the Pacific 2018 – is the latest flagship publication of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP).
UN report on the Asia-Pacific region has urged –

- regional powers to invest in inclusive and sustainable growth
- regional countries to take advantage of high growth rate and share the benefits with the national society
- The report described South and Southwest Asia as the fastest growing sub-region of the Asia-Pacific region and urged the countries to increase social spending.
- For less developed countries, the role of external sources of finance, such as official development assistance, South-South cooperation, and global development partnerships... remains critical.

The report was launched at the Indian Council for Research in International Economic Relations (ICRIER)
Important Value Additions:
The Economic and Social Survey of Asia and the Pacific 2018 contains an examination of how Governments of countries in the Asia-Pacific region could increase domestic public financial resources and leverage private capital to strengthen their long-term economic prospects.

Walmart to buy control of Flipkart

Part of: GS Prelims and Mains Paper III – Indian Economy
In News:

- Walmart to buy control of Flipkart - $16 bn deal - largest ever Indian acquisition by a foreign firm
- The deal will help Walmart (world's largest retailer) to compete with its U.S. rival Amazon.com in a battle for dominance of India's online marketplace.

Do you know?

- Previous biggest acquisition was by Vodafone in 2007
- Vodafone spent $13 billion to buy Hutchison's Indian business

- India is one of the most attractive retail markets in the world, given its size and growth rate

Important Value Additions:
Role of SEBI
Securities and Exchange Board of India ("SEBI") regulates Mergers and Acquisitions transactions involving entities listed on recognised stock exchanges in India.
Listed public companies, unlike unlisted companies, are required to be in compliance with applicable SEBI laws and the listing regulations.
The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011 (in short - Takeover Code) regulates both the direct and indirect acquisition of shares, voting rights and control in listed companies that are traded over the stock market.
Article Link: Walmart to buy control of Flipkart - Today's Paper - The Hindu

Need for proper definition of Shell companies

Part of: GS Prelims and Mains III – Indian Economy; basic economic terminologies
In news:
Concern with definition of Shell Companies
As multiple agencies and regulators probe the suspected use of **'only-on-paper' firms** for financial irregularities, the government is looking to put in place a proper definition for 'shell companies' so that investigations are not hampered and prosecution can withstand scrutiny in courts of law.
Current definition for 'shell companies' — a term generally used for companies that are set up for financial manoeuvrings only or are kept dormant for some future use.
Officials express that these companies generally **exist only on paper** and may be used for nefarious activities. Therefore, definition of shell companies should be in line with OECD definition –
OECD defines a shell company as 'being formally registered, incorporated or otherwise legally organised in an economy but which does not conduct any operations in that economy other than in a pass-through capacity'.

RBI: Prompt Corrective Action (PCA) plan

Part of: GS Prelims and Mains III – Indian Economy; Monetary Policy; RBI reforms; NPA issue
What is Prompt Corrective Action?

To ensure that banks don't go bust, RBI has put in place some trigger points to assess, monitor, control and take corrective actions on banks which are weak and troubled. The process or mechanism under which such ac tions are taken is known as Prompt Corrective Action, or PCA.

In News:

- Eleven of India's 21 listed government-owned banks were placed under the Reserve Bank of India's watch due to large bad loans, weak capital levels and low return on assets. (during Jan 2018)

- The Centre has expressed that it will ensure every possible support to strengthen the resolve of these banks to come out of the PCA framework as quickly as possible.

- Indiscriminate lending of the past has caused this distress the banking sector is facing.

Do you know?

- RBI had come out with 'Prompt Corrective Action (PCA) Framework' for banks (in Apr 2017). Earlier, the PCA framework was applicable only to commercial banks and not extended to co-operative banks, non-banking financial companies (NBFCs) and FMIs.

- However, in May 2017, RBI issued revised PCA framework , which could be applicable to all banks operating in India including small and foreign banks. PCA is aimed at improving banks' health. It also helps to contain NPAs.

- Recently, National Bank of Agriculture and Rural Development (Nabard) has come out with a 'Prompt Corrective Action (PCA) Framework' for regional rural banks (RRBs).

Urbanization issues

Part of: GS Prelims and Mains III – Indian Economy; Urbanization issues
In News:
UN **Department of Economic and Social Affairs (UN-DESA)** has released its 2018 Revision of the **World Urbanization Prospects**
Highlights:

- Forecasting for the year 2050, the UN agency estimates that the percentage of urban residents in India would be 52.8, compared to 34 today.
- Delhi would be world's most populous city by 2028.
- India, China and Nigeria are expected to lead other countries and account for 35% of the projected growth in urban population by mid-century.

Concerns with Urbanization

Report says – 'Even with only a third of the population living in cities, civic anarchy is rampant in the country'.

- Rapid increase in the number of slums;
- lack of enforcement of building norms;
- heavily congested metros;
- poor investment in public transport;
- unsustainable levels of private vehicle use

– are some of the issues.

Recent data released by the World Health Organisation show – 14 Indian cities among the top 20 worldwide with the worst air quality profiles (especially with regard to PM 2.5)

Most cities are also unable to collect and dispose municipal waste scientifically, and simply dump them in the suburbs.

Integrating green spaces, open commons and wetlands will make cities cleaner and aesthetically richer.

Improving ease of doing business: Focusing on micro-policy enforcement

Introduction:

The government must be commended for their focus on incremental reforms that resulted in India breaking into the top 100 in the World Bank's Doing Business rankings for the first time. However, despite this success India continues to perform relatively poorly in many perception-based surveys of trade facilitation and 'open-ness' despite all these major reform initiatives.

The governance challenge:

Three broad institutional challenges in the Indian system.

Poor quality of enforcement and lack of transparency:

Mismatch between the intent of reforms and quality of actual enforcement and transparency on the ground, — the governance challenge.

- All businesses, Indian and foreign, complain that risk management and transparency related reforms that are boldly announced by senior officers in ministries are not adopted in spirit and content by their junior colleagues responsible for enforcement. This is true for a wide array and departments and services ranging from fire and safety inspectors and indirect tax officials to road transport regulators and municipal officers.
- Part of the problem is that a high level of discretion still exists with the officer enforcing rules on the ground. This is aggravated by the lack of a time-bound grievance redress

mechanism, and the absence of independent 'auditors' who monitor on-ground enforcement quality and ensure there is accountability for poor decisions made in the field.

The design challenge

The second problem can be called the 'design challenge'.

Procedures are often designed to cater to the few instances of failure or non-compliance and not for efficiency and facilitation.

Examples-

- India is perhaps the only country in the world that requires a boarding pass to be stamped after security check at airports (earlier even luggage tags needed the stamp). This entire activity is to ensure that no one 'slips' through the security system and is eventually apprehended at the boarding gate.
- Despite GST, if a truck is caught with a shipment about which authorities have some doubt, the entire vehicle is held up at the check-post.

What is required is confidence in the government's own enforcement ability.

The management challenge:

The third problem is the management challenge.

- There is a tendency to blame poor quality of government services on lack of infrastructure or human resources.
- This often over-looks the fact that there are many examples of better services with effectively less resources.

Example- The problem of quality of policing in India. Per capita police personnel deployed is one of the lowest in India. But this cannot be an excuse to make the simplest of tasks, the filing of a formal complaint (i.e. FIR), to become an insurmountable challenge for the common person.

Similarly, many efficient ports and cargo terminals in other countries have higher square-meter per ton ratio compared to Indian counterparts that are much less efficient. These management challenges add to transaction costs.

Way ahead:

The extent of India's macro-policy reforms has borne results, it is time start focusing on the micro-policies of enforcement. Top down macro reforms can only be effective if they are twinned with bottom-up micro reforms. Unless the day-to-day experience of doing business improves, we will continue to under-perform relative to our true potential.

Connecting the dots:

- While macro policy initiatives have helped us in improving overall ease of doing rankings, it is time that the enforcement of policy at micro-level and transparency is focused on.

The Permanent Residency Status Scheme

Part of: Mains GS Paper III- Indian Economy

Key pointers:

What is PRS scheme
A look at the Permanent Residency Status scheme

- The scheme promises facilities for foreigners who invest at least ₹10 crore under the FDI route
- Cleared by the Union Cabinet in 2016 to boost "Make in India"
- Open to foreign investors who pump in a minimum of ₹10 crore within 18 months or ₹25 crore in 36 months, since the date of inception, 2016
- The FDI should result in generating employment to at least 20 Indians in every financial year

MAKE IN INDIA

- PRS card holders are also eligible to buy residential property in India.
- PRS will be granted for a period of 10 years with multiple entry and can be renewed for another 10 years

Pic **credits:**
http://www.thehindu.com/news/national/fu19hy/article23944217.ece/alternates/FREE_660/21THFDIcol

- In news- Two years after it was launched by the Union government, the Permanent Residency Status (PRS) scheme is yet to find a single applicant.
- The Union Cabinet had cleared the PRS in 2016 to boost its "Make in India" policy. The scheme is open for foreign investors who invest a minimum of ₹10 crore within 18 months or ₹25 crore in 36 months.
- Except Pakistani citizens or third-country nationals of Pakistani origin, the scheme is open for citizens of every country.

- Most European Union countries, the U.S., Canada and others offer permanent residency to foreign investors.
- The U.S. offers the EB-5 visa programme where foreigners could apply for permanent residency if they created employment opportunities for 10 people with a minimum investment of ₹6.5 crore.

The Charkha is getting a new spin

Part of: Mains GS Paper III- Indian Economy, Inclusive growth

Key pointers:
- The *charkha* , a tool and symbol of India's freedom struggle, is getting a new spin — with a bit of help from the corporate sector and various trusts.
- At about Rs. 15,000 apiece, the *charkha* is a rather expensive tool. The Khadi and Village Industries Commission (KVIC), therefore, is on an aggressive mission to tap funding so that the spinning wheel can be donated to rural artisans.
- The *charkhas* had attracted very little attention earlier. However, over the past three years, the Commission has taken to approaching trusts and large corporates for their CSR (corporate social responsibility) funds.
- KVIC obtains the funds under various schemes and uses them to donate *charkhas.*
- At times, companies (such as ONGC) are required to rehabilitate people at project sites. One option is to donate funds to buy spinning wheels, which offer an alternative source of livelihood to the displaced people.
- Today's *charkha* is an evolved version of what Mahatma Gandhi used: It is made of steel. While the early versions had a single spindle, the modern ones come with eight spindles, and can provide employment to an entire family. Today's version, produced by KVIC, is referred to as the 'New Model Charkha', but it continues to be driven by hand.

GI Tag for rural crafts in W.B.

Part of: Mains GS Paper III- Inclusive growth

Key pointers:

- The Chau mask of Purulia, the wooden mask of Kushmandi, the Patachitra, the Dokras of Bengal, and Madhurkathi (a kind of mat) have been presented with the Geographical Indication (GI) tag by the Geographical Indication Registry and Intellectual Property India.
- GI tags for these five rural crafts will help the artisans create their own brand and will provide legal protection to artisans practising the crafts against attempts to duplicate them in other regions.

GI Tags:
- GI tags are given on the basis of the Geographical Indications of Goods (Registration and Protection) Act, 1999.
- A GI tag connects the quality and authenticity of a given product to a particular geographical origin, thereby ensuring that no one other than the authorised user can use the popular product's name.
- The first product to be included in the list was Darjeeling Tea.
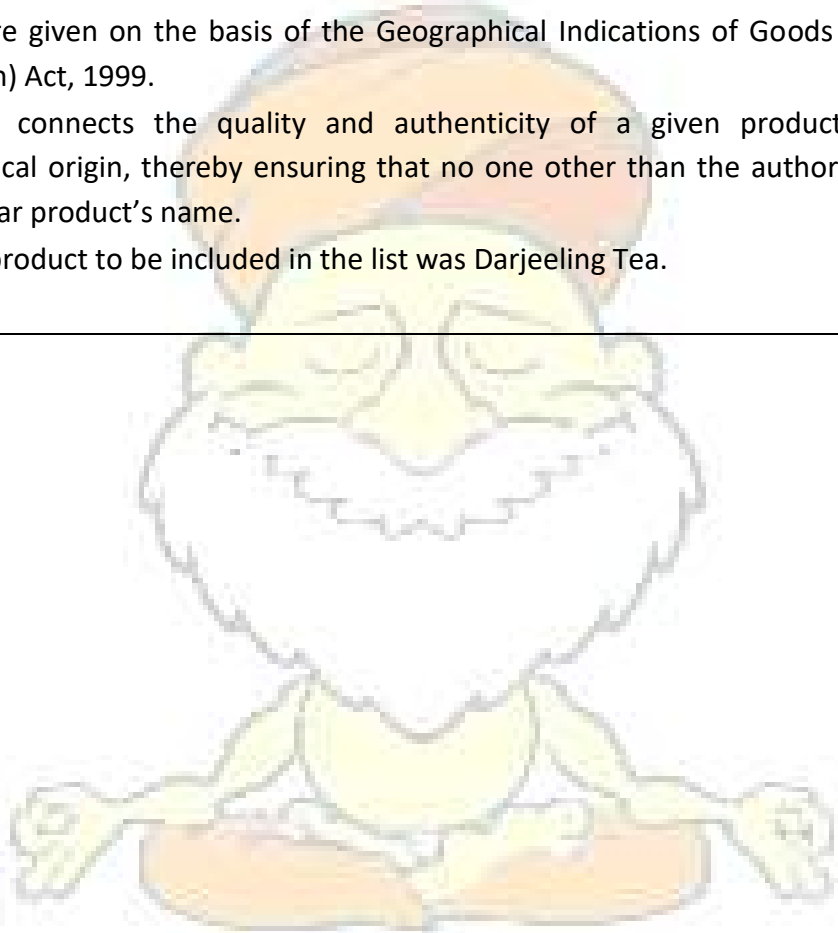
AGRICULTURE

NATIONAL/AGRICULTURE

Minimum Support Price: How effective it has been?

Background:
Under Indian conditions, agriculture faces several risks — weather, production, quality and market, to name a few. While crop production is often seasonal and regional, consumption is round the year and across the country. Because of this, market prices usually tend to be volatile. For instance, prices tend to collapse during the harvest season glut and heavy arrivals.

The rationale behind minimum support price (MSP):
It provides the assurance of a minimum price that ensures the farmer recovers his cost of production and receives a decent return on investment.
MSP is a kind of sovereign guarantee that farmers will not be allowed to suffer losses if crop prices fall below the specified minimum price.
MSP works as an options contract. If price were to fall below the specified MSP, the government has the obligation to purchase from farmers at the MSP. At the same time, the farmer is under no obligation to sell to the government if the price stays above MSP. In the event, the farmer is free to sell in the open market at price higher than MSP.

Calculating MSP:
For arriving at the MSP, the Commission for Agricultural Costs and Prices (CACP) (formerly, Agricultural Prices Commission set up in 1965) undertakes an exercise every year examining the cost of production of select crops (numbering about 23), overall demand-supply, domestic and international prices, inter-crop price parity, terms of trade between agri and non-agri sectors, and so on.
According to the government, the CACP also ensures rational utilisation of production resources like land and water.
However, the CACP's recommendations on MSP are not binding on the government. Although often accepted, the government occasionally tinkers with the recommended prices.

Ineffective instrument:
Over the years, MSP has ceased to be an instrument to influence crop diversification or area allocation.
Often, growers do not get to know the MSP as there are challenges relating to information

dissemination; and when growers get to know, they do not care because it didn't mean much to them.

What has the MSP regime achieved so far? Little.

- A majority of growers in the country do not receive the specified MSP (barring, of course, for wheat and rice that too in some States). They are upset and disillusioned and the farm crisis is worsening.
- There is a mistaken belief that higher MSP will translate to higher production. MSP not backed by a robust procurement policy and associated logistics is doomed not to succeed, especially in the context of our production-centric approach. In the case of rice and wheat, grain mono-cropping and open-ended procurement at support price in agriculturally important States of Punjab, Haryana and Uttar Pradesh are leading to disastrous environmental impacts. Soil health has deteriorated and the water table has gone down to alarmingly low levels.

So, the lesson is:

MSP alone will achieve little. We need a holistic approach. Along with MSP we need a robust procurement system. We need an appropriate foreign trade (export/import) policy and tariff (Customs duty) policy in a way that will protect domestic growers without compromising the interests of consumers.

OECD experience:

For our policy-makers, there is a lot to learn from the OECD experience. The OECD countries (30 of the wealthy industrialised nations) support agriculture with a humongous $500 billion a year. Of this, about $80-90 billion is invested in what is described as general services — agri infrastructure and innovation systems, inspection and control systems, market development, and so on.

These are crop-neutral initiatives that seek to build lasting assets as well as scientific post-harvest systems.

Conclusion:

In sum, we need an integrated approach to agriculture and food policies; and a lack of it will continue to result in uncertain output, suspect quality, price volatility and distorted markets.

Connecting the dots:

- What is the rationale behind MSP? How is it calculated and how effective it has been for Indian farmers? Discuss.

India at WTO: Poverty, Hunger versus WTO rules

Background:
In an attempt to combat rural distress, the Union budget announced this year promised a new deal to farmers—minimum support prices (MSP) that would be 150% of the cost of production. The new MSP policy could pull India into a confrontation at the World Trade Organization (WTO). Higher MSPs will likely make Indian farm subsidies breach the limit that the WTO finds acceptable.

US versus India:
The US has announced that it will be dragging India to the WTO because it claims India has under-reported the market price support (MPS) for rice and wheat. According to the US, the MPS for wheat and rice, respectively, appears to be over 60% and 70% of the total value of production, against the permissible cut-off of 10%. India is planning to officially respond at the WTO's committee on agriculture meeting in June.

US versus India's export promotion schemes:
The US has also launched a case against India's export promotion schemes. These schemes—
- Market access initiative (MAI)
- Market development assistance (MDA)
- Merchandise exports from India scheme (Meis)

-are primarily aimed at promoting better export-oriented infrastructure facilities, capacity building, and export competitiveness.
They also assist exporters of agriculture and processed food products, thereby indirectly benefitting small and marginal farmers.
These schemes are, therefore, critical in keeping agriculture remunerative in India and hence are worth defending at the WTO.

Questioning WTO:
India needs to question the foundation of the entire subsidy regime defined by the WTO. The relevant question is not how much support a government can provide to farmers to avoid distorting trade. It is how much it should provide to feed a country that is home to a fourth of the world's hungry population.
Also, small farmers and poor consumers in developing countries are the most vulnerable to volatile price movements in commodity markets.

Calculation of subsides:

The government needs to question the way WTO calculates subsidies, as well as the way the rich countries support their farmers.

For example, for the purpose of calculating current subsidies, the WTO uses the average of 1986-88 global prices as the base. Therefore, the difference between the ongoing MSP and these reference prices looks too high.

The way rich countries support their farmers:

Last year, before the 11th ministerial committee meeting of WTO at Buenos Aires, India and China jointly submitted a paper to the WTO.

The paper highlighted the subsidies that developed countries dole out to their farmers.

- Developed countries-
  The six industrialized nations are entitled to an overall cap for their farm subsidy called aggregate measurement of support (AMS), which entails subsidy up to 10% of the value of total production.
  This gives them an opportunity to *manipulate the subsidies for individual products*. For instance, product-specific support in the US and the European Union crosses over 50% for a number of crops and reaches as high as 89% for rice in the US.
- Developing countries-
  On the other hand, are trapped with a product-specific *de minimis* limit of 10%—for no crop can the AMS be higher than 10% of its value of production.

India, along with other developing countries, should make persistent efforts to fight the way WTO rules have been rigged to suit the developed countries.

Conclusion:

India needs to make it clear at the WTO that it needs to stand by its poor at this stage of development, and that trade law should not meddle with the fight against poverty and hunger.

Connecting the dots:

- India's new minimum support prices (MSP) policy breaches the rules set by the WTO. Comment critically.

Land administration in India and boosting farmers' income

Background:

Recently, over 30,000 farmers marched nearly 200 km to Mumbai to share their grievances with the Maharashtra government. Only weeks ago, thousands of more farmers led a

comparable demonstration in Shimla. While loan waivers and better MSP (Minimum Support Price) were part of these agendas, land remains the common agenda.

The agricultural sector dialogue focuses on supply chain efficiency or improving the quality of inputs like seeds and fertilisers. Land is one key issue that often remains unfocussed.

Land and agriculture:

- The land market in India inhibits agricultural productivity.

  According to the 2010-11 Report on Agriculture Census, 85 per cent of India's total operational land holdings are less than 2 hectares in area. The yield from such small plots is barely enough to feed the farmer's family, leaving very little produce to sell in the market. Consolidation of land holdings can drive higher efficiency and yields, but this requires a land market that allows people to buy or lease land.

- Existing laws constrain formal land leasing. A 2013 NSSO report estimates 13 per cent of household lease land, but other reports by NGOs suggest this could well be 50 per cent due to informal tenancy arrangements.

Non-existence of accurate land records:

Issue:

It makes difficult for farmers to access critical welfare schemes.

The government spends close to one per cent of GDP on fertiliser subsidies every year, while other huge subsidies exist for seeds, pesticides, crop insurance, and farm loans. But, if underlying land records don't reflect the true names of owners, lessors, and cultivators or the correct size of the plots, the benefits won't reach the targeted beneficiaries. The reasons behind absence of accurate records are varied, ranging from unregistered sale, inheritance, and tenancy, to decades-old official maps no longer reflecting ground reality.

Way out:

We need to elevate the importance of efficient government systems for land administration to the forefront of the agriculture sector conversation; however, it's a complex subject.

Its systemic issues cannot be fixed with public policy alone and will require new thinking and collaboration among multiple stakeholders, including governments, philanthropic institutions, entrepreneurs, and civil society.

Integrating land records:

- Philanthropic institutions and state governments should take a holistic view of the role of land and land records. These large-scale programmes need to allocate part of the resources to help their target farmer population obtain accurate land records.

Role of tech:
- The availability of geospatial and mobile technology is revolutionising the way we update land records, offering new and cheap ways to capture household and plot level information. Odisha is already setting the example as the first State to use drones to capture information on about thousands of slum households to provide title documents.

Entrepreneurial solutions:
- Given the scale of the problem, there is a huge opportunity for millions of innovators and entrepreneurs to step in and solve it.

Conclusion:
These above suggested solutions can create a more dynamic, proactive approach to land administration. This is important as improving the system of land administration in the country will help boost farmers' income.

Connecting the dots:
- Poor land administration in India is one of the key issue affecting agricultural productivity as well as farmers' income. Discuss.

Need for policy which focus on Availability and Accessibility of Certified Seeds

In news:
Global attention has been devoted to water scarcity and its effect on Indian farmers. However, new analysis from Indian researchers suggests that far more good could come **if irrigation were combined with seed improvement**.
New studies and researches were conducted by noted experts from India and around the world to provide **possible measures to be taken that would help Indian states respond to major challenges** and improve their competitiveness, economic performance, and the well-being and prosperity of citizens.
Two new research papers provides about how to boost agricultural performance. It examines policies that would reduce the effects of water scarcity in Rajasthan and Andhra Pradesh.
Outcome of First Research Paper:
The research (by Dinesh Kumar, executive director of the Institute for Resource Analysis and Policy (Irap), Hyderabad) highlights that –
- Both Andhra and Rajasthan has some hot and dry region, with frequent droughts. Only about one-third of the crops are irrigated, and the rest are dependent on rain-fed cultivation, which is susceptible to the vagaries of the weather.

- The research paper stresses on reviving traditional water harvesting system such as Tanks, Nalas and Kunds.

Policy should focus on reviving traditional water harvesting system

- **Tanks are an important source** of water for the rural economy, but—as in other areas—an explosion of well-irrigation has reduced the surface run-off into these tanks. The biggest victims are poor, small, marginal farmers, who depend on tanks for supplementary irrigation for their kharif crop.
- The research talks about **major water transfer projects** (being implemented in Andhra Pradesh) – which involves moving surplus water into the tanks, so that they are full. This approach ensures farmers can continue crop production when the tanks do not receive inflows.

The annualized cost of the infrastructure and drainage required to fill the tanks is estimated to be about Rs4,500 per hectare, as well as another Rs2,000 for the annual operation and maintenance of the system.

Farmers, however, will earn more: The annual incremental net return is estimated to be about Rs9,000 per hectare. There would be further indirect benefits from energy savings because farmers wouldn't need to pump groundwater, as well as from the incremental return from the increase in yield of wells and consequent expansion in the area served, and more intensive watering of irrigated crops. These benefits together add up to Rs15,000 per hectare per year.

This means that every rupee spent on the policy in Andhra Pradesh would generate benefits worth nearly four rupees.

- Likewise, the research highlights that renovating the traditional water harvesting system in Rajasthan would return three rupees for every rupee invested, while, in Andhra Pradesh, investment in drip irrigation and mulching of high-value crops would generate about five rupees.

Outcome of Second Research Paper:

But second new research (by agricultural economist Surabhi Mittal, independent consultant and non-resident fellow, Tata-Cornell Institute for Agriculture & Nutrition (TCI), Technical Assistance and Research for Indian Nutrition & Agriculture (Tarina)), suggests another approach may help farmers a lot more.

The researcher looks at various methods of improving farm productivity and farmer income.

- One of these aims to help solve the problem of the high cost and unavailability of labour through an **increase in the level of mechanization** by using custom hiring centres, using public-private partnerships.

- Another approach focuses on **relying on information and communication technology (ICT) enabled extension services**, which play a crucial role in supporting agricultural activities by taking research, technology and know-how to farmers to improve adoption.
- Third, the author looks at **improving soil health**; and,
- finally, considers improving the **availability of certified seeds**.

The research paper highlights that the last idea would generate powerful returns.

Focus on Availability and Accessibility of Certified Seeds
- In India, farm-saved seed from previous crops remains the most prominent source of seeds, year after year, accounting for nearly three-quarters of all seed usage. This means low crop productivity as optimal yield potential is a function of the quality of seeds used.

- Although many improved varieties of seeds have been released for cultivation, their full impact has not been realized owing to poor adoption rates as well as poor seed replacement rates.

The way forward:
- The solution to this challenge involves spending money on **producing more quality seeds** (for all the major crops in each state) and promoting these among farmers.
- This will lead to better crop yields, increased production, and higher incomes.
- Every rupee spent will have benefits to Andhra Pradesh worth around 15 times the costs, and 20 times in Rajasthan.
- Improving agricultural productivity is important in order to improve farmer incomes, and it requires increases in yield, better productivity through the efficient utilization of resources, reduction in crop losses, and ensuring that farmers receive fair prices for output.

The phenomenal benefits from focusing on improving access to seeds highlight the need to prioritize policies that will achieve the most for farmers.

Connecting the dots:
- Critically analyze the strategies outlined by the Indian government to achieve the target of doubling farmers' income by 2022. Elaborate on the need to make structural changes in Indian agriculture and what more is required to achieve the target.
- The state of agricultural productivity in India is still poor. Discuss. Also suggest what steps are needed to improve agricultural produce.

An analysis of initiatives taken to reform Indian agriculture

Background:
When the present government came into power, it was believed that the Gujarat model of agricultural development, which delivered 8% growth in agriculture during fiscal years 2003-14, would be replicated in the country.

- Out of the government's four years , FY15 and FY16 were affected by drought and it did well to manage the crisis.
- A number of welcome initiatives have been launched in the last four years, including schemes for crop insurance, irrigation, soil testing, electronic national agricultural market (e-NAM), and use of Aadhaar for the public distribution system (PDS) and purchase of fertilizer.

While there are several creditable achievements, it is the deeper structural reforms where expectations have not been met.

Reigning in inflation: Success
The government took pro-active measures to rein in food inflation. These included-

- Release of wheat and rice from government stocks. Restrictions on exports. Small increases in minimum support prices (MSP) (except pulses).
- Raids on traders under the Essential Commodities Act, and even income-tax investigations.
- The states giving bonus on wheat and paddy were told to discontinue it. In order to reduce excessive procurement of rice, the 50% levy on rice mills was also abolished.
- To check food inflation, a price stabilization fund was set up with a corpus of Rs 500 crore and onion and potato were bought by the National Agricultural Cooperative Marketing Federation and Small Farmers' Agribusiness Consortium for release in the market when prices rose.
- Another successful policy intervention was to offer a handsome increase in the MSP of pulses and create a buffer stock of two million tonnes.

Restructuring of FCI: Criticism
In August 2014, a committee under Shanta Kumar to recommend restructuring of the Food Corporation of India (FCI) was set up.
It made far-reaching recommendations about agriculture policy, subsidies on food and fertilizers, and the role of FCI.

- It recommended that coverage of beneficiaries under PDS be reduced from 67% to 40% and cash transfers introduced instead of foodgrains in cities with a population of more than one million.

- In the case of fertilizers, the committee recommended deregulation and payment of subsidy to farmers through direct benefit transfers (DBT).

Criticism:
- Opposition-ruled states didn't agree to the suggested reforms.
- The government did not make any serious effort to persuade even the National Democratic Alliance (NDA)-ruled states to go for DBTs for PDS, even in food-surplus regions.
- There was no effort to deregulate urea prices and transfer subsidy to farmers directly. Aadhaar-based sale of foodgrains and fertilizer is only a small step towards reform of the subsidy regime.
- Free electricity continues to cause excessive drawal of underground water in several states. No serious effort was made to persuade states to transfer electricity subsidy through DBT.

The Pradhan Mantri Fasal Bima Yojna: Criticism
It was introduced from *kharif* 2016. It reduced the farmers' premium to 1.5% and 2% for *rabi* and *kharif* crops, respectively, and removed the ceiling on claims to be paid to farmers.
- Several states have refused to follow the discipline of the scheme and timelines are violated with impunity.
- Farmers in several states have not been paid their claims long after suffering losses.
- Many states have not even paid their share of premium subsidy for *kharif* 2017.

e-NAM initiative: Criticism
It has the potential of freeing up the agricultural markets. It was expected to bring transparency to auctions in *mandis*.
However, the real intent of e-NAM has not been achieved and some states even showed procurement under MSP as e-NAM turnover.

Conclusion:
Since 2016, the buzzwords have been doubling farmers' income. The prices of most crops in mandis have crashed after demonetization and restrictions on trading and transportation of livestock have sharply depressed the prices of livestock, directly hitting farmers' income. Deep agricultural reforms are yet awaited.

Connecting the dots:
- Several initiatives have been taken by the present to reform Indian agriculture. How far it has been successful? Analyze.

Contract farming: Model law

Part of: Mains GS Paper III- Indian agriculture

Key pointers:

- After two drafts that received wide criticism from both industry and farmers groups, Agriculture Ministry has recently released the model law.
- Ashok Dalwai, CEO, National Rainfed Area Authority, who chaired the committee that drafted the model law.
- The law is aimed at reducing farmers' risks by creating an assured market for their produce at a pre-agreed price, while encouraging investment from agribusiness and food processing industries by enhancing productivity and cost efficiency.
- It provides for State-level boards to be set-up to promote and facilitate — rather than regulate — contract farming and sets out a framework for registering and recording agreements.
- It also provides for a dispute settlement authority.
- The model law stipulates that the sponsor will not be allowed to build any permanent structure on the farmers' land.
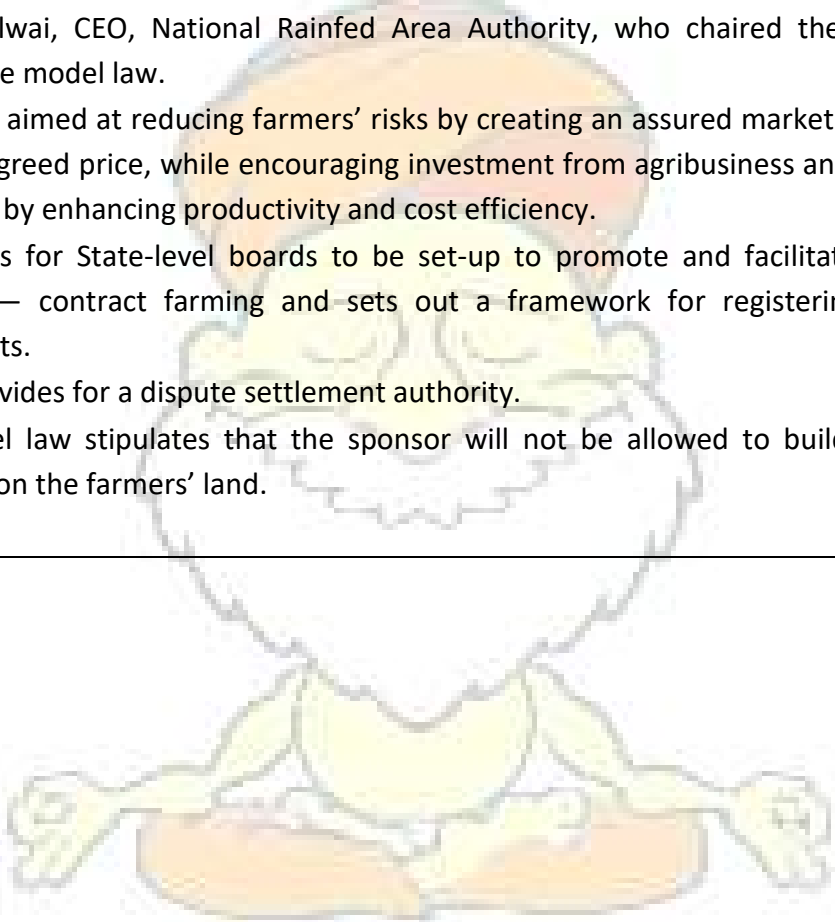
ENVIRONMENT

Climate Change Talks (Bonn Meeting): Key Issues

Background:
2018 is an important year for making progress on the Paris Agreement (PA). The PA was discussed at the climate meeting called the Conference of Parties (COP-21) to the UN Framework Convention on Climate Change (UNFCCC) in December 2015. It entered into force in November 2016.

Bonn meeting:
A two-week-long meeting was recently concluded in Bonn (April 30-May 10) where the operational guidelines for implementing the PA were to be discussed and agreed upon by all parties.
This meeting was the 48th session of the UNFCCC Subsidiary Body for Implementation (SBI) and Subsidiary Body for Scientific and Technological Advice (SBSTA), referred to as SB48.

Expectations from the Bonn meeting:
- A common, consistent framework of how each country would define and measure its commitments.
- Proposals for how action taken could be monitored, accounted for and kept transparent while providing some level of flexibility.

The barriers:
1st Barrier- The Scope of the rulebook:
- Developing countries want them to cover mitigation targets, adaptation and the means of implementation for the NDCs.
- Developed or rich countries would like the rulebook to be limited to mitigation, the reduction of greenhouse gases.

Adaptation:
Since most countries require adaptation programmes in a warming world and need support to implement their national targets, it is essential that these be included too.

The "means of implementation":

These are about financial support and technology transfer to build capacity in poorer countries and have always been contentious. At various sessions and discussions on climate change, this issue has turned out to be a deal breaker.

- At the Copenhagen summit, it was agreed that from 2020, rich countries would provide a minimum of $100 billion each year to poor and developing countries. There is little sign that these funds will be available.
- The discussion on finance has changed direction towards: how to increase the number of donors who will provide funds; which countries should perhaps be excluded from these funds; and whether these funds are a part of or distinct from the official development assistance, and so on.

According to the principle of common but differentiated responsibilities of the UNFCCC, while actions need to be ambitious to limit warming, providing support is essential for equitable action.

2nd Barrier- Loss and damage (L&D) related issues:

L&D is a means to provide assistance to poor countries that experience severe impacts from climate change but have contributed very little to the greenhouse gases responsible for the warming and its effects.

This is a very important issue for the least developed countries and for small islands, which are already experiencing the brunt of sea level rise.

There has been little progress on the funds that could be used to support L&D.

Result of the Bonn meeting:

- Participants could not come to an agreement on any significant issue and thus have not produced a draft document to guide full implementation of the PA.
- With insufficient progress towards goals, another interim meeting has been proposed in Bangkok ahead of COP-24 in Katowice, Poland, in December 2018.

Even if the current NDCs are implemented, the world would be on track to be warmer by about 3°Celsius.

The discussions at Bangkok in early September are therefore crucial and continue the incomplete task from this Bonn meeting.

The UN is also expected to release the report on the impacts from a 1.5°C warming around the same time.

The path ahead:

- A good draft on the rulebook ought to be ready before the COP. Ideally, these guidelines should help countries develop ambitious targets for the next level of the Nationally Determined Contributions (NDCs).

- There should also be a regularised and dependable flow of funds from rich countries so that climate action can be implemented in developing nations. Countries can then develop along a path of sustainable development that is low carbon and inclusive of poor and other marginalised communities.

Conclusion: Involving the youth

Given the lack of consensus on various issues after more than two decades of intense climate talks, pressure from youth, especially in rich countries, is vital. Unless they remind governments and the public of the responsibilities of their countries towards mitigation, adaptation and support for means of implementation, keeping global warming under reasonably safe levels for humankind could be impossible.

Connecting the dots:

- There exists lack of consensus on various issues after more than two decades of intense climate talks. What are these issues? Discuss in detail.

Economic growth versus Pollution

Introduction:

In recent years, the pollution load has increased, sometimes beyond the carrying capacity of the environment.

Though various measures have been adopted to manage pollution, significant progress has not been achieved.

The environmental Kuznets curve:

India's developmental activities are affecting the environment to a considerable extent, through over-exploitation of natural resources and indiscriminate discharge of waste. This has been interpreted by the environmental Kuznets curve (EKC) hypothesis.

The EKC hypothesis:

As per the hypothesis, as per capita income grows, the increase in environmental impact hits the maximum and thereafter declines.

In the initial stages of economic growth, when more resources are used, there is greater waste generation and more emissions. But when a country has achieved a certain level of development, pollution reduces with greater protection of the environment, technological

improvements, diversification of the economy from manufacturing to services, and increasing scarcity and prices of environmental resources, leading to lower consumption.

Where does India lies?
India is on the *upward part of the EKC*.
For achieving sustainable development, it must move to the second stage. However, it is not wise to wait for that stage. India can't ignore the environmental consequences of its rapid growth.

Environmental consequences of India's growth:

Over the last few decades, water-intensive and polluting industries such as textiles, leather, sugar and paper have shifted from developed to developing countries. They withdraw huge quantities of water and discharge effluents without adequate treatment.

Before 1980, countries like the U.K. and the U.S. played a vital role in textile production and export. But by 2000, their dominance had substantially reduced and the share of developing countries like India and China had increased. One of the factors attributed to this shift is that there are relatively less stringent environmental policies in developing nations. Countries like India are now manufacturing products which contribute to pollution for domestic and international markets.

Impact of pollution:
- At the household level, the economic loss on account of pollution includes the cost of treatment and wage loss during sickness.
- Pollution impacts ecosystems and related economic activities like agriculture and livestock.
- Air pollution causes climate change.

Hence, pollution leads to the real and potential loss of the overall development opportunity in an economy.

Generally, pollution impacts the socially vulnerable and poor communities more due to their weak coping options.
When traditional drinking water sources get contaminated, the rich can buy packaged water.
But the poor cannot afford it and are hence compelled to use contaminated water. They are also less aware of the health hazards caused by pollution.

Concerns:
Pollution is not a disease, it is only a symptom. Hence, its root cause should be investigated.

- Natural resources management agencies have centralised structures and function without the consultation of multi stakeholders.
- Emission-based standards have not been very effective so far, since they are rarely monitored and only occasionally enforced.
- The 'polluters pay' principle is not in force. For the most part, polluters are not willing to internalise the external and social costs.
- Pollution is also neglected by funding agencies worldwide and by governments in budgets.

Remedial measures:
Economic growth is an inevitable requirement, but it need not be at the cost of health. To tackle pollution, there should be-
- Public awareness about its consequences.
- Adequate pollution-linked databases.
- Integration of pollution prevention policies into the development sector.
- Strict enforcement of pollution control policies.
- Eco-friendly inputs in production.
- Reliance on renewable energy.
- Introduction of market-based/economic instruments (charges/taxes/levies, tradable permits, subsidies and soft loans).
- Increase in ecosystem resilience through the conservation of biodiversity.

Conclusion:
Experiences from the U.S. and Europe reveal that pollution mitigation can yield large gains to human health and the economy. With India growing fast, we shouldn't wait for us to reach to the second stage of Kuzents curve. Sustainable economic growth is only way forward.

Connecting the dots:
- Pollution is a challenge to developing countries like India which try to achieve rapid economic development without adequately managing the environment. This needs to change. Comment.

Polluted Cities in India: WHO report

In news:
The latest survey by the World Health Organisation (WHO) — conducted every two years — of the most polluted air in cities around the world- shows that 14 of the 15 worst cities were from north India, forming a band from Jodhpur in the west to Muzaffarpur in the east.

India cities:

Kanpur figured on top of the list. Kanpur's average PM 2.5 levels were 17 times the WHO limit in 2016, the cut-off year for the current study.

It was followed by Faridabad, Varanasi, Gaya and Patna. Delhi figured sixth, which is hardly any consolation. In 2014, the WHO listed Delhi the worst in the world in terms of PM.

(Particulate matter (PM) 2.5 is the smallest measurable pollutant, 30 times less than the width of human hair, and is most hazardous.)

What makes north Indian cities the most polluted in the world?

- The northern Indian phenomenon is a combination of rapid increase in pollution sources due to urbanisation and its inherent geographical disadvantage that is landlocked that makes the region extremely vulnerable to winter inversion leading to massive trapping of pollution. The region does not have the advantage of a coastline.
- Other experts have cited how the Indo-Gangetic plains are sandwiched between the Himalayas and the Vindhyas and are home to more than 600 million people with winds blowing from north-west to east, especially in winter, which carry pollutants from other regions.
- Regional meteorological conditions alone are not responsible for causing pollution in north Indian cities. Global climate change is also responsible for these increasingly high temperatures and frequent storms and much of this is man-made.
- Proliferation of air pollution sources includes motorisation, proliferation of industrial units using extremely dirty fuels without pollution control, extensive use of solid fuels for cooking, massive construction activities, enormous problem of waste mismanagement and big dust impacts.
  The usual suspects are - The burning of crop residue, Dust from construction debris, Vehicle exhaust.

The region thus, requires more stringent interventions to counter its disadvantages.

A national public health emergency:

- Two years ago, a study on the cost of air pollution co-authored by the World Bank found that the country lost 1.4 million lives due to such contamination in 2013, shaving off a massive 8.5 per cent of GDP.
  The case for controlling such pollution is thus incontrovertible in economic terms, if not in saving lives. Indians can live four years longer if we comply with WHO norms.

- A study on the global burden of disease by the Health Effect Institute in the US, showed that India tops the list of countries — beating China — in registering the highest number of early deaths due to ozone pollution.

To adapt: Think regionally, but act locally
Beijing, Shanghai and other Chinese cities have demonstrated that where there is the political will, there is a way to tackle air pollution.
Measures that need to be taken aren't rocket science:
- More efficient means of treating crop residue.
- Replacing smoky chulhas with efficient models if not LPG cylinders.
- Ccracking down on construction debris and polluting thermal power stations.
- Restricting the number of vehicles.
In order of priority, the chulhas are probably the most urgent because 200 million households continue to burn biomass within homes.
Switching to mass public transport in cities — not necessarily expensive metros, which many can't afford — is well within the capacity of every city.

Connecting the dots:
- A survey by the World Health Organisation (WHO), of the most polluted air in cities around the world, shows that 14 of the 15 worst cities were from north India. What makes north Indian cities the most polluted in the world? Discuss.

Cauvery riverine ecosystem on decline

Introduction:
The Cauvery has become a never-ending water-sharing dispute between Tamil Nadu and Karnataka. The complete riverine ecosystem in terminal decline.

Problems at the source:
The loss of forest cover and change in land use has meant a decline in rainfall levels, adversely affecting the inflow of water into the Cauvery and its tributaries upstream. A rise in temperature has been caused due to the rapid loss of tree cover due to reckless urbanisation in the town. A research shows how the doubling of land under coffee plantations, and developmental projects such as the construction of dams and roads, has resulted into the loss of 28% of the forest cover during the 30-year study period starting in 1977.

Inter-State dispute:

The inter-State water dispute is over a century old. The fight is over an overexploited river basin where demand has far outstripped the supply of water. Despite many attempts at resolving the dispute, neither the orders of the Cauvery Water Disputes Tribunal nor those of the Supreme Court have been implemented faithfully.

- The Centre has not yet framed a Cauvery 'scheme' despite the court's orders.
- Political parties and farmers in Tamil Nadu have been pressing hard for the constitution of a Cauvery Management Board.

According to the court, the Board's mandate is to manage the distribution of water between the States during distress periods and control the schedule of release of water from the reservoirs.

Concerns:

- Deep borewells- Excessive withdrawal of groundwater using bore wells has caused a significant decline in the base flow of the river. The Bengaluru-based environmental research organisation ATREE has documented how the Arkavathi, a major tributary of the Cauvery in Karnataka, has been sucked dry by farmers using deep bore wells.
- Reclamation of riverbed- In the Cauvery delta districts of Tamil Nadu too, similar unsustainable farm practices are common.
  With the riverbed remaining dry for most of the year, farmers are reclaiming it for cultivation. In the 25-km stretch from Melur in Tiruchi to the Grand Anicut, there are several banana plantations and coconut trees on the riverbed, irrigated by motor pumps sunk deep into the river.
- The riverbed is heavily encroached on both sides in several stretches. In Tiruchi, for instance, large chunks of the riverbed have been taken over for construction of residential apartments and hotels.
- In parts of Kodagu, sand mining on the banks has widened the course of the river, reducing its pace.
  While sand mining on the riverbed was a major issue in Karnataka and Tamil Nadu until recently, judicial interventions and a concerted effort to switch to M-sand (manufactured sand produced from crushed granite) for construction has curbed this menace to a considerable extent.
- Hydel power projects on the river are also diverting too much water into reservoirs, thereby affecting the natural flow of the river.
  In 2013, the South Asia Network on Dams, Rivers and People drew attention to how 98 mini-hydel power plants commissioned or allotted on the Cauvery basin were diverting drinking water meant for Bengaluru.

- Construction of dams on the river- A Central Water Commission report in 2015 pointed out that sediment flow to the Cauvery delta has stopped due to siltation in the dams.

Way ahead:
- Sustainable alternatives such as getting factories to use recycled industrial waste water and rainwater harvesting for domestic use, should be explored.
- Rain harvesting- In the Cauvery basin in Karnataka, at present only 23% of rainwater is harvested. In Tamil Nadu too, rainwater run-off flowing towards Kerala in the Cauvery basin has not been adequately tapped.
- The issue of rampant groundwater extraction, which directly impacts the flow of water in the river, has remained outside the purview of the Tribunal and the court. This needs to be checked by involving all the stakeholders, most importantly, the farmers.

Connecting the dots:
- The complete Cauvery river ecosystem is on decline. Discuss the reasons behind.

Clean Ganga Mission spend less than a quarter of the funds

Part of: GS Prelims and Mains III – Environment and Ecology; Water Pollution
In News:
- Only about a fifth of the ₹20,000 crore allotted for the National Clean Ganga Mission (NCGM) has been utilised till March 2018.
- The NMCG [National Mission for Clean Ganga] has been able to spend less than a quarter of the funds earmarked for the project in the last two financial years. (Report by CAG in 2017)

Concerns:
- Government's Ganga-cleaning exercise has come under criticism.
- Government had promised a "visible change" in the Ganga water quality by 2019. However, only around 20% of Clean Ganga Mission funds have been spent till March.

Key pointers:
- The Ganges passes through the states of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, and West Bengal.
- Coursing 2,500 km, the Ganga is the longest river within India's borders.
- The river basin spreads across 11 States (from Uttarakhand to West Bengal)

- Much of its pollution load — chemical effluents, sewage, dead bodies, and excreta — comes from the five states which are located along the river's main stem: i.e. Uttarakhand, Uttar Pradesh, Jharkhand, Bihar and West Bengal.

Do you know?
- The industrial pollutants (volume wise) accounts for about 20%. The municipal sewage accounts for 80% of the pollution load.
- The industrial pollutants largely emanate from tanneries in Kanpur and distilleries, paper mills and sugar mills in the Kosi, Ramganga and Kali river catchments.

Important Value Additions:
- Ganges flows through the nations of India and Bangladesh.
- Source: Gangotri Glacier (Uttarakhand)
- Major left-bank tributaries include Gomti (Gumti), Ghaghara (Gogra), Gandaki (Gandak), and Kosi (Kusi)
- Major right-bank tributaries include Yamuna (Jumna), Son, Punpun and Damodar.
- The Ganges is the third largest river in the world by discharge.

About National Mission for Clean Ganga (NMCG) and National Ganga River Basin Authority (NGRBA)
- NMCG was registered as a society under the Societies Registration Act 1860.
- It acted as implementation arm of National Ganga River Basin Authority (NGRBA) which was constituted under the provisions of the Environment (Protection) Act (EPA), 1986.
- NGRBA has since been dissolved with effect from the 7th October 2016, consequent to constitution of National Council for Rejuvenation, Protection and Management of River Ganga (referred as National Ganga Council)
- National Ganga Council is under chairmanship of Hon'ble Prime Minister of India.
- Empowered Task Force (ETF) on river Ganga under chairmanship of Hon'ble Union Minister of Water Resources, River Development and Ganga Rejuvenation.

Article Link: Only 20% of Clean Ganga Mission funds spent till March 2018

Clean Ganga Mission: '70% of Ganga will be cleaned by May 2019'

Part of: GS Prelims and Mains III – Environment and Ecology; Water Pollution
In News:

- From above article we know that only about a fifth of the ₹20,000 crore allotted for the National Clean Ganga Mission (NCGM) has been utilised till March 2018.
- In response to it, Union Water Resources Minister said the government will spend ₹8,000 to ₹10,000 crore this year to ensure that at least 70% of the Ganga will be clean by next May (2019).

Taj discolouration

Part of: GS Prelims and Mains II and III – Art and Culture (Architecture); Environment and Ecology; Effects of Pollution; Conservation of Heritage sites and Monuments

Key Pointers:
- Archaeological Survey of India (ASI) has been criticized by the SC for its lack of commitment to protect the monument.
- ASI is charged with the responsibility of maintenance of the historic monument. ASI
- The ASI tells Supreme Court that the numerous footfalls everyday has taken a toll on the Taj.
- Unwashed socks worn by visitors and rampant algae seem to turn the Taj Mahal from its natural white to yellow, brown and green – according to ASI.

Other concerns:
- River Yamuna, which used to flow nearby, has dried up.
- Encroachments and industries have cropped up in the neighbourhood of the white marble mausoleum.
- Marble was yellowing on account of sulphur fumes from the surrounding industries.

Important Value Additions:
- Supreme Court is lauded for its constructive application of Article 142 in an effort to bring complete justice to various deprived sections of society or to protect the environment.
- Article 142 provides that "the Supreme Court in the exercise of its jurisdiction may pass such decree or make such order as is necessary for doing complete justice in any cause or matter pending before it…"

About Taj Mahal and its architecture:
- The most important work and the pride of Mughal Architecture, built by Shah Jahan.
- Entire structure is made of white marble quarried from Makrana.

- It has four minarets which are made in such a way that just in case if they fall, they fall outwards and not on the central structure.
- Pietra dura work has been extensively used and colourful gems have been embedded in the white marble to provide different natural and geometric motifs.
- Arabesque of Quranic verses have been written in a unique way.
- Part of UNESCO World Heritage site (since 1983).

Death by Slow Poisoning

Introduction:

An estimated 10 million people in nine districts of West Bengal drink arsenic-laden groundwater — a poisonous metalloid that sickens and kills with chronic exposure.

The World Health Organisation's (WHO) prescribed safe level is 10 mcg per litre.
However, about 15 years ago, scientists discovered that the shallow groundwater in some places had high levels of the mineral: up to 1,000 micrograms (mcg) per litre in places.
When such water is consumed for years, either directly or through the food chain, the mineral damages organs like the skin, kidneys and lungs.

Symptoms:

- The most visible symptom in early years is a classic blotchy pattern on the skin, a condition called **raindrop pigmentation**.
- If people showing such pigmentation don't switch to safer water, they develop **hyperkeratosis** — dark crusts on their palms and soles, which can get infected and make it painful to work.
- Eventually, the skin can turn **cancerous.**
- Simultaneously, arsenic can destroy the kidneys and liver tissue, cause conjunctivitis and affect the lungs, just as heavy smoking does.

Mass poisoning

- West Bengal's problem first attracted international attention in 1995 when researcher from the University of Colorado compared its scale with the Chernobyl disaster.
- But despite the grave warnings from international bodies like the WHO, the West Bengal government has moved very slowly to tackle the crisis.
- Even though multiple technologies to filter arsenic from groundwater are there, awareness of arsenic's ill-effects remains low. People continue drinking toxic water, even when alternatives exist.

Concerns:

- **Poor awareness:** Despite the availability of water treatment plant, several people continue drinking contaminated groundwater.
- **Children are worst affected.** Outwardly, the children seem symptom-free. Arsenic is a silent killer; it takes years for keratosis to show in adults and even longer in children.

  But there is extensive evidence that children are not immune to internal damage — their lungs, kidneys and other organs are slowly being ravaged. Studies also show that arsenic-exposed children have lower IQ compared to control groups. If they continue drinking this water, they will definitely develop keratosis.
- **Government's slow reaction:** The government did appoint committees in 1983, '88, '92 and '93 to examine the problem, but the findings didn't trigger substantial action.
- **Polluted wells not marked:** After denial in the initial years came some questionable decisions by the government. Even though the State had tested 1,32,267 tube wells for contamination by 2007, the polluted wells weren't marked. Instead, the government dug alternative tube wells in some spots and installed filters in some others.

Do you know? Several experts, and the United Nations Children's Fund (UNICEF), advocated that unsafe tube wells immediately be painted red, so that people would avoid them.

- Toxic arsenic sludge from both community and household filters were sometimes disposed of unsafely, sent back into the environment, instead of being treated as per protocol.
- Studies have shown that the source of arsenic is in the Ganga delta. The process is thought to have begun between 18,000 and 6,000 years ago, when small Himalayan rock particles, coated with iron oxide, entered the Ganga river delta.

Source of arsenic is the Ganga delta

The Ganga delta was also home to swampy wetlands some 5,000 years ago. The organic matter from these wetlands is now decaying slowly, alongside the arsenic.

When the bacteria responsible for this decay come in contact with the iron oxide in the arsenic-bearing rocks, they use the oxygen from the iron oxide for their own metabolism, setting both arsenic and iron free. This is why the groundwater in West Bengal and Bangladesh are rich in both minerals.

Researchers agree that shallow tube wells, less than 150 meters deep, are the worst affected, because they contain arsenic-rich sediments from the Holocene era, when the arsenic arrived in the delta.

Conversely, deep aquifers, more than 150 meters underground, are unaffected because they tap into the older Pleistocene sediments. Such deep tube wells can potentially be used for a long time without fear of contamination. However, even deep aquifers can become tainted

with the overuse of groundwater. Such overuse can disturb the clay separating the deep and shallow aquifers, allowing the arsenic to enter previously pristine waters.

Way ahead:

There is an urgent need for mitigation strategy such as - painting wells, holding door-to-door campaigns, conducting street plays and distributing flyers about the danger of using contaminated tube wells.

Unless this happened, patients would not go to government-run arsenic clinics or switch to safe tube wells.

Two solutions: State's short-term strategy is to provide Hooghly water to about half the arsenic-affected villages. The other half are to be served by community arsenic-treatment plants.

Until West Bengal is able to get safe water for all the 10 million at risk, its villages will remain dotted with tragedy.

'Swachh Survekshan 2018': Swachh rankings are out

Part of: GS Prelims and Mains III – Environment and Ecology; Biodiversity; Pollution

Key Pointers:

- Swachh Survekshan survey is released by Ministry of Housing and Urban Affairs

'Swachh Survekshan 2018' Rankings:

State-wise Ranks	City-wise Ranks
Jharkhand	Indore
Maharashtra	Bhopal
Chhattisgarh	Chandigarh

- State-wise: **Jharkhand** emerges as best performing State. **Maharashtra** stood second, while **Chhattisgarh** was at the third position in the category of 'best-performing States'.

- City-wise: **Indore** gets cleanest city tag; followed by Madhya Pradesh capital **Bhopal**, while Union Territory of **Chandigarh** stands at the third place

Mysuru has been ranked the cleanest medium-sized city in the country. Mysuru has been ranked the cleanest among cities with a population of between 3 lakh and one million.

Mangaluru has been ranked the best city in solid waste management.

'Green' cricket in India

Part of: Mains GS Paper III- Environment, conservation

Key pointers:
- The Board of Control for Cricket in India and UN Environment signed an agreement to 'green' cricket in India
- The initiative aims to reduce cricket's environmental impact by greening operations and engaging fans and cricketers in green initiatives.
- The partnership aims to spread greater awareness about key environmental challenges facing the country and highlight alternate and more sustainable solutions.
- The partnership will also focus on phasing out single-use plastic across stadiums and cricket events in the country.

#BeatPlasticPollution:
- As *global host of World Environment Day in 2018*, India is leading the global charge to #BeatPlasticPollution in the country, and around the world.
- It is estimated that the world uses 10 million plastic bags every minute, and much of ends up in our oceans and landfills and is ingested by marine animals and wildlife.

Global Wind Energy Summit

Part of: Mains GS Paper III- Environment, conservation

Key pointers:
- The first edition of the Global Wind Summit will be held in Hamburg, Germany in September, 2018.
- The conference on wind is the largest and most important meeting of the wind industry worldwide.
- The event will provide a platform for experts from across the globe to discuss innovative and green technologies for harnessing wind energy making.
- The focus of the conferences would be on three major subjects. Dynamic markets, cost efficiency and smart energy.
- India is fourth largest country -- after China, the US and Germany -- in terms of wind energy installation capacity at around 33 GW. The government has set a target of achieving 60 GW by 2022.

More tests required for GM mustard: regulator

In news:
- The Centre has demanded more tests for genetically modified mustard, a year after clearing the crop for "commercial cultivation."

- GEAC has said that GM Mustard should undergo further tests which include - field demonstration of 5 acres at 2-3 different locations with a view to generate additional data on honey bees and other pollinators and honey, and on soil microbial diversity.

Do you know?
- **Dhara Mustard Hybrid (DMH -11),** the transgenic mustard in question, had been developed by a team of scientists at Delhi University, led by former Vice-Chancellor Deepak Pental under a government-funded project.

Important Value Additions:
About GEAC:
- Genetic Engineering Appraisal Committee is the apex regulator of genetically modified crops.
- GEAC is constituted in the Ministry of Environment and Forests and Climate Change (MoEFCC) under 'Rules for Manufacture, Use, Import, Export and Storage of Hazardous Microorganisms/Genetically Engineered Organisms or Cells 1989', under the Environment Protection Act, 1986.
- GEAC is responsible for approval of activities involving large scale use of hazardous microorganisms and recombinants in research and industrial production from the environmental angle
- The GEAC is also responsible for approval of proposals relating to release of genetically engineered organisms and products into the environment including experimental field trials (Biosafety Research Level trial-I and II known as BRL-I and BRL-II)

New Bio-Fuel Policy

Part of: GS Prelims and Mains III – Environment and Ecology; Biodiversity; Pollution
In news:
- Union Cabinet approved a national policy on biofuels.

Key pointers:

The new policy seeks to help farmers dispose of their surplus stock in an economic manner and reduce India's oil-import dependence.

Scope of raw material for ethanol production expanded

The policy expands the scope of raw material for ethanol production by allowing use of –

- sugarcane juice
- sugar containing materials like sugar beet, sweet sorghum
- starch containing materials like corn, cassava
- damaged food grains like wheat, broken rice
- rotten potatoes [that are] unfit for human consumption

Policy **allows use of surplus food grains** for production of ethanol for blending with petrol with the approval of **National Biofuel Coordination Committee**.

The policy provides for a **viability gap funding scheme** for second generation (more advanced) ethanol bio-refineries in addition to tax incentives and a higher purchase price as compared to first generation biofuels.

Important Value Additions:

- A biofuel is a fuel that is produced through contemporary biological processes, such as agriculture and anaerobic digestion, rather than a fuel produced by geological processes such as those involved in the formation of fossil fuels, such as coal and petroleum, from prehistoric biological matter.
- Earlier Bio-fuel policy had proposed indicative target of 20% blending of biofuels, both for bio-diesel and bio-ethanol, by 2017.
- Ethanol run bus launched in Nagpur under 'Green Bus' Project

National Policy on Biofuel: Key features and Challenges

In news:

India's new National Policy on Biofuel has been announced recently.

Key provisions:

- The policy significantly expands the sources from which ethanol can be produced and also allows for blending ethanol from multiple bio feedstock — and not just ethanol produced from sugarcane, as was the case earlier — with petrol.
- The policy also holds significant potential gains for farmers. Under the new policy, the raw material sourcing net for ethanol is being significantly expanded to include, besides sugarcane juice, sugar beet, sweet sorghum, corn, cassava, damaged wheat, broken rice and rotten potatoes. There is also a bonus for civic

administrations, since ethanol can now be produced from municipal solid waste, as well as fuels like bio natural gas. To that extent, the policy can help turn refuse into gold.

- The policy also envisages using rice and wheat chaff and other biomasses as feedstock for ethanol production. This opens up a large and remunerative market for products on which the farmer was bearing the losses caused by erratic weather and poor storage conditions.
- Beyond this, used cooking oil can also double up as a feedstock for biodiesel which is welcome since India is one of the world's largest consumers of edible oil and generates a huge quantity of used cooking oil as waste.

Execution will be a challenge:

- To convert India's existing biofuel potential into reality, huge investments need to be made in creating bio refinery capacity. However, this is easier said than done. While state-owned oil marketing companies are in the process of setting up 12 bio-refineries, this can only be a base to build on.
  On the ground, private sector investment in this space has been hampered by financial constraints and lack of cohesive support from the Central to the local level.
- Creating the requisite supply chain infrastructure to source and efficiently transport low value biomass to the refineries is another challenge.

Way ahead:

- The Centre should ensure that it actively involves the private sector in this exercise especially for functions like procurement, storage and distribution.
- It should steer clear of micromanaging the supply chain but, instead, help in land acquisition for the bio-refineries and working with the stakeholders to fix a reasonable price for the end product.
- The policy should be followed up with coordinated action at the user end to ensure that the larger goal of the policy — of cleaning up the air, reducing the carbon footprint and shift to more sustainable renewable fuels — is not lost sight of.

Conclusion:

From encouraging the use of biofuels in public transport to ensuring that civic bodies actually realise the potential of municipal waste and sewage the policy needs to be implemented in mission mode on a nationwide basis.

Connecting the dots:

- The government has recently released National Policy on Biofuel. Disucss its key provisions. Also, highlight steps required to ensure its effective implementation.

E-waste management: Generating jobs

Introduction:

In recent years, the waste from electrical and electronic equipment, also referred to as WEEE or e-waste, has become an important focus of legislators globally. This can be attributed principally to following reasons:

- The hazardous nature of this waste component, both in terms of the health of the citizens and the environment.
- The possibility of deriving valuable materials like precious, critical and base metals from the e-waste.
- Among all urban solid waste, e-waste is the fastest growing waste stream ('UNEP 2007 E-waste Inventory Assessment'), and this trend is expected to continue, in line with advancements in the quality and quantity of technology products' consumption globally.

Such multifaceted characterisation makes handling of e-waste very challenging to address, especially considering the political, social and environmental factors involved in both developed and developing countries.

Present system:

- Most governments, like India, have followed the Extended Producer Responsibility (EPR) principle, due the crucial issue of financing the development of sound e-waste management systems due to low or absent investment capacity.
- The sustainable management of e-waste (average of the all products and including all logistics and treatment costs) is not a profitable business at the moment and, therefore, additional money is required to avoid "cherry picking" (processing only profitable products) or compromising the quality of recycling.

Untapped opportunity:

In the past 15 years, since the enactment of the e-waste legislation in Europe, the e-waste sector has shown that proper e-waste management is good for the environment and essential for a sustainable economy.

The 1.8 million tonnes of e-waste produced in India this year has the potential to generate up to 300,000 jobs, provided a new sector, valued at over $3 billion annually, is established. Many more jobs can be secured in the production sector because recycling precious and critical metals is the basis for manufacturing new products in the country, especially since resources are becoming scarce and more expensive. In Europe, our hi-tech wastes are already called the "urban mine".

Way ahead:

- To develop a prosperous market, it is necessary for products that are not being used or repaired to reach proper recycling facilities. Currently, the informal sector dominates the e-waste sector in India, using manual dismantling and crude, low quality (or non-existent) processing technology.

  However, India's *khabadiwalas* provide a much better collection service to its citizens as compared to Europe, leading to a higher collection rate of e-waste in India. This service must be strengthened by formalising the collectors and converting the informal processors into formalised dismantlers.

- Considering the challenges associated with the attitude, capacity, and capabilities of some formal recyclers in India, strong enforcement by government institutions is very important.

- Simultaneously, several producers and importers of electrical and electronic equipment who are obliged by law to take over the responsibility for the products at the end-of-life stage have adopted a "wait and see" approach by attempting to avert their financing obligation.

  A balance must be struck and regulators must take care not to over-regulate the market which could hinder healthy growth of the e-waste sector.

Conclusion:

There is a critical need for all stakeholders to join hands to make the above possible. Private households, small businesses, bulk consumers and public institutions must dispose of their obsolete equipment responsibly.

Dismantlers and recyclers must adopt the zero-waste approach.

Producers (and importers) must contribute their share by taking over the financial responsibility for responsible collection and treatment of e-waste while also improving the design of their new products to enable longer life of products and easier repair, and recycling.

A lot of our jobs in the future depend directly or indirectly on the resources that we can save or recover today.

Connecting the dots:

- E-waste produced in India has the potential to generate thousands of jobs, given the waste management system is improved and properly regulated. Disucss.

Calculating 'Green GDP': Developing a feasible transition path to a green economy

Introduction:

- A few years ago, India suffered a cost of $550 billion, about 8.5% of GDP, due to air pollution, according to a World Bank report; the cost of externalities such as water pollution and land degradation were possibly far higher.
- Through commodity exports, we effectively transfer natural capital to our trade partners, raising the risk of desertification and land being degraded significantly.
- Within a century, our food production could see a loss of 10-40% if these trends continue.

So, when we talk of GDP growth, we should also consider the decline in natural capital in our national accounts.

Natural capital:

Natural capital can cover entire ecosystems such as fisheries and forests, besides other hidden and overlooked services — for example, the regeneration of soil, nitrogen fixation, nutrient recycling, pollination and the overall hydrological cycle.

Such natural capital is often self-generating (water, clean air) but needs to be handled in a sustainable way in order to avoid depletion.

Valuing such ecosystems can be challenging, with their market value often termed as zero. Consider groundwater. Most groundwater basins in India are subjected to unrestricted extraction until the water table drops so low that new borewells are needed.

Externalities of economic growth:

While India might have a GDP of $2.65 trillion in nominal terms, it fails to take into account the externalities of such economic growth.

For example, India routinely suffers from high levels of air pollution that impose costs on local transport, health and liveability in urban and rural areas.

When economic growth leads to the destruction of forests, wetlands and woodlands for agriculture, mining or even urban expansion, it is typically the poorest of the traditional dwellers who suffer. Ecological collapse can soon come, examples being the Darfur region in Sudan and countries in the Horn of Africa. All were subject to rapid socio-economic decline.

Estimation is a challenge:

- GDP computations indicate the economic activity in a country, with rising GDP growth rate often leading to international prestige.

  However, such estimates often exclude the variations in natural capital by assuming them to be constant and indestructible.

  When pollution happens, it is actually a depletion of our natural capital as, for example, acid rain damages forests and industrial seepage affects water quality. In a modern economy, the challenge is to estimate such depreciation to natural capital.

- 'India's current national accounts incorporate environmental considerations in a limited fashion'.
  GDP includes the value of: minerals extracted; timber, fuelwood and non-timber forest products; natural growth of cultivated assets for some crops; and the output from dung manure. In addition, 'gross fixed capital formation contains output estimates from the improvement of land along with irrigation works and flood control projects'. However, even in GDP estimates of timber value, there is significant under-estimation — non-monetised goods and services provided from timber forests are not considered.

Some attempts to estimate the externalities:
India has sought to unveil "green GDP" figures in the past.

- In 2009, the Centre announced that it would publish a "green GDP" that would include the environmental costs of degrading and depleting our forests, grasslands and natural stock.
- An expert programme, sponsored by the Ministry of Statistics and Programme Implementation, released a Compendium of Environment Statistics 2013. The group recommended that India shift to a system of measuring comprehensive national wealth, which includes items such as human capital, capital equipment and natural capital. Implementation of recommendations as in the Compendium has been constrained by the lack of micro-level data on capital formation, particularly in a natural context. While the 12th Five Year Plan undertook groundwater resource mapping at the national level, a similar focus is essential for data on land usage, forests and mineral wealth.

Way ahead:
India must calculate 'its green GDP' to factor in the value of the environment in its growth. India should seek to publish "green GDP" figures that take into account depreciation of natural capital stock due to economic exploitation and environmental degradation. This can follow the template provided by the UN's System of Environmental-Economic Accounting. Adapting our national accounts in line with this framework will help in incorporating the value of the environment in our growth while helping us to focus on developing a feasible transition path to a green economy.

Connecting the dots:

- What do you mean by the terms 'Green GDP' and 'Natural capital'? India must calculate 'its green GDP' to factor in the value of the environment in its growth. Comment.

Also read: What has happened to 'Green GDP'?
https://iasbaba.com/2016/11/iasbabas-daily-current-affairs-23rd-november-2016/

Banned ozone-destroying chemical on rise: scientists

In News:

- The 1987 **Montreal Protocol** banned industrial aerosols such as **chlorofluorocarbons (CFCs)** that were chemically dissolving ozone, especially above Antarctica.

- Measurements at remote sites, including the Mauna Loa Observatory in Hawaii, of the chemical, known as CFC-11, point to East Asia as the source or renewed production.

Animal-free testing for drugs

Part of: GS Prelims and Mains II and III – Role of CSO/NGOs; Environment and Biodiversity

In News:

- Indian Pharmacopoeia Commission (IPC) approves modern animal-free testing for drugs.
- IPC replaces the **pyrogen test** and the **abnormal toxicity test** carried out on animals **with tests that can be done in test tubes**.
- New testing methodology – IPC suggests bacterial endotoxin test or a monocyte activation test which can be carried out in test tubes. (Animal-free testing)

Why this decision?

- IPC's decision is a step towards animal safety – it would spare animals from suffering due to drug experiments.
- Role of NGO/CSO - People for the Ethical Treatment of Animals (PETA) has been pushing for doing away with the cruel methods of testing on animals

Towards freeing the guinea pig Indian Pharmacopoeia Commission, a body under the Ministry of Health and Family Welfare, has replaced two animal tests:

1) Pyrogen test, carried out in rabbits, can now be replaced by bacterial endotoxin test or a monocyte activation test

2) Abnormal toxicity test can be waived if a compliance certificate from National Control Laboratory is obtained

The mandate has been listed in the eighth edition of Indian Pharmacopoeia and comes into effect from July 1

PETA'S POSITION

- It is unethical to intentionally cause pain, fear and loneliness in animals

- Animal testing is a 'bad science' because 92 out of every 100 drugs that pass animal tests fail in humans

- It is wasteful because animal testing prolongs suffering of people waiting for effective cures

Pic link:
http://www.thehindu.com/news/national/article23815683.ece/alternates/FREE_660/guinea%20pigcol

About:

Pyrogen test

- The pyrogen test is carried out to check impurity or substance that can cause adverse side-effects. For the test, the drug is injected into a rabbit and the animal is closely observed for feverish symptoms.

Abnormal toxicity test

- The abnormal toxicity test is carried out to check potential hazardous biological contamination in vaccine formulations.

Important Value Additions:

About Indian Pharmacopoeia Commission (IPC)

- IPC is an Autonomous Institution of the Ministry of Health and Family Welfare.
- IPC is created to set standards of drugs in the country. Its basic function is to update regularly the standards of drugs commonly required for treatment of diseases prevailing in this region.
- It further promotes rational use of generic medicines by publishing National Formulary of India.

'Clean Air India Initiative'

Part of: Mains GS Paper III- Environment conservation

Key pointers:

- Prime Minister of Netherlands Mark Rutte, who is in India on a two-day visit, launched the 'Clean Air India Initiative' in the national capital.
- The Clean Air India Initiative is a collaborative project between Get In The Ring, a platform for start-ups, the government of the Netherlands, Start-up India, and INDUS Forum, an online matchmaking platform of Indian and Dutch businesses.
- The campaign aims to curb air pollution in Indian cities by promoting partnerships between Indian start-ups and Dutch companies and build a network of entrepreneurs working on business solutions for cleaner air.
- A major business opportunity for Dutch firms that was highlighted included the potential for sale of equipment (such as sensors), data, and solutions concerning air quality monitoring (AQM).

It is estimated that 80% of India is not covered by AQM data collecting which is the first step toward monitoring and combating air pollution.

'INDUS impact' project:
- An 'INDUS impact' project aims to halt the hazardous burning of paddy stubble by promoting business partnerships that "upcycle" it.
- This entails using paddy straw as feedstock to make materials that would find use in construction and packaging — a technology and expertise that Dutch companies are keen to market in India.
- Severe air pollution in Delhi is caused by the burning of paddy straw in neighbouring Haryana and Punjab.

Elephant Tusks are government property

Part of: GS Prelims and Mains III – Environment and Biodiversity; Animal Conservation
Key Pointers:
- The Supreme Court has ruled that tusks are the property of the government.
- The Supreme Court observed that there is a clear "declaration" in the Wildlife (Protection) Act of 1972 on elephant tusks being government property.
- The ruling, however, may not affect individuals who have ownership certificates for declared ivory. Even in the case of captive elephants, either the government keeps custody of tusks or owners are permitted to retain them if they give an undertaking that they would not be traded.

Do you know?
- India prohibits import and export of ivory.
- The population estimation of Asian elephants in 2017 census is lower than from the last census estimate in 2012.
- Karnataka has the highest number of elephants (6,049), followed by Assam (5,719) and Kerala (3,054).

Important Value Additions:
Project Elephant
Project Elephant (PE) was launched by the Government of India in the year 1992 as a Centrally Sponsored Scheme with following objectives :
1. To protect elephants, their habitat and corridors
2. To address issues of man-animal conflict
3. Welfare of captive elephants

Monitoring of Illegal Killing of Elephants (MIKE) Programme

Mandated by COP resolution of CITES, **MIKE program started in South Asia** in the year 2003 with following purpose – To provide information needed for elephant range States to make appropriate management and enforcement decisions, and to build institutional capacity within the range States for the long-term management of their elephant populations

The main objectives of the MIKE are

- to measure levels and trends in the illegal hunting of elephants;
- to determine changes in these trends over time; and
- to determine the factors causing or associated with such changes, and
- to try and assess in particular to what extent observed trends are a result of any decisions taken by the Conference of the Parties to CITES

'Gaj Yatra' campaign launched in Meghalaya

Part of: Mains GS Paper III- Environment, conservation

Key pointers:
- Gaj Yatra is a nationwide campaign launched by the Wildlife Trust of India in collaboration with Union Environment, Forest and Climate Change on August 12, World Elephant Day, last year.
- The campaign aims to protect the elephant and its habitat.
- 'Gaj Yatra', a "journey celebrating India's national heritage animal", aims at securing 100 elephant corridors across India.
- Four of these are in Meghalaya, including the Siju-Rewak corridor that some 1,000 elephants use to travel between the Balpakram and Nokrek National Parks in the State.
- The campaign has been launched in the Garo Hills, where the people have created community forests for human-elephant harmony and conservation of animals such as hoolock gibbon.
- Meghalaya has 1,754 elephants with an overall density of 0.16 elephants per square kilometre. Much of the elephant habitat area in the state is under community forest.

Tiger Reserve in News: Satkosia Tiger Reserve

Part of: GS Prelims (Environment and Biodiversity)
In news:

- Six tigers from M.P. to be relocated to **Odisha's Satkosia Tiger Reserve**
- Odisha government plans to revive big cat population in the protected forest.
- According to the 2016 tiger census, Odisha had 40 Royal Bengal Tigers - 13 males, 24 females and three calves.

Important Value Additions:

- There are 50 tiger reserves in India which are governed by Project Tiger which is administrated by the National Tiger Conservation Authority (NTCA).
- India is home to 70 percent of tigers in the world. In 2006, there were 1,411 tigers which increased to 1,706 in 2011 and 2,226 in 2014.
- Nagarjunsagar-Srisailam Tiger Reserve (Andhra Pradesh) is the largest tiger reserve in India.
- Bor becomes smallest tiger reserve in India with four tigers. Bor Wildlife Sanctuary, located in the valley of the Wardha river in the Wardha district of Maharashtra has been given the status of a tiger reserve, making it the smallest such reserve in the country.

Vulture Conservation: Critically endangered vultures

Part of: GS Prelims and Mains III – Environment and Biodiversity; Animal Conservation
In news:

- **Palarapu cliff vulture habitat** in **Telangana**.
- Forest Department officials from Palarapu cliff vulture habitat visited **Jatayu Conservation Breeding Centre (JCBC), Pinjore, Haryana**, to study the methods and status of conservation.
- Vulture Safe Zone (VSZ) initiative of the Pinjore JCBC to be implemented in Telangana.
- The project envisages elimination of the probability of consumption of the **drug diclofenac** through animal carcasses by the vultures within a radius of 100 km which is considered to be the range of the habitat.

Important Value Additions:
Of the 9 species found in India, 4 have been listed as critically endangered.
Remember only critically endangered vultures

1. Indian White-rumped Vulture (Gyps bengalensis) -- Critically endangered
2. Long-billed Vulture or Indian Vulture (Gyps indicus) -- Critically endangered
3. Slender-billed Vulture (Gyps tenuirostris) -- Critically endangered
4. Red-headed Vulture (Sarcogyps calvus) -- Critically endangered

The Singchung Bugun Community Reserve: India Biodiversity Award 2018

Part of: Mains GS Paper III- Environment, Conservation

Key pointers:

- The Singchung Bugun Community Reserve, Arunachal Pradesh won the India Biodiversity Award 2018.
- The Singchung Bugun Community Reserve (SBVCR) — a 17 square kilometre hotspot for biodiversity- was launched in January 2017, after the tribal members of the Bugun community of Singchung Village joined hands with the Forest Department.
- The NGO won the India Biodiversity Award 2018 in the "Conservation of wildlife species" category conferred by the National Biodiversity Authority (NBA) and presented by the Union Ministry of Environment, Forest & Climate Change in association with the United Nations Development Programme.
- The Reserve was instituted under a clause of the Wildlife (Protection) Act, 1972 that enables any state government to declare a community-owned forest area as a "community reserve" if the locals are willing to participate in conservation efforts for the same.
- The Reserve lies right next to the Eaglesnest Wildlife sanctuary, a biodiversity hotspot, which is also home to the Bugun Liocichla — a new bird species that has no reported sighting anywhere else in the world.
- The NBA award especially recognises the community efforts to conserve the Liocichla.

ANIMALS IN NEWS

Australia pledges $34 million to help save koala population

Part of: GS Prelims and Mains Paper III – Environment and Conservation of Biodiversity

In News:

- The Australian Koala Foundation estimates that there may be as few as 43,000 koalas left in the wild.

- Habitat loss, dog attacks, climate change & diseases have taken their toll on the animals.

Important Value Additions:

https://i.ytimg.com/vi/1R-QFQGWYuc/maxresdefault.jpg

About Koalas

- IUCN Status: Vulnerable
- Endemic to Australia. Koalas are found in the eucalyptus forests of eastern Australia.
- It is an arboreal herbivorous marsupial native to Australia.
- Koalas typically inhabit open eucalypt woodlands, and the leaves of these trees make up most of their diet. Because this eucalypt diet has limited nutritional and caloric content, koalas are largely sedentary and sleep up to 20 hours a day.
- Koalas get almost all their moisture from the leaves they eat, and rarely drink water.
- Eucalyptus leaves are super tough and poisonous! Luckily for koalas, they have a long digestive organ called a cecum which allows them to break down the leaves unharmed.

Animal in News: Walrus

Key pointers about Walrus
- IUCN status: Vulnerable
- The walrus is a large flippered marine mammal with a discontinuous distribution about the North Pole in the Arctic Ocean and subarctic seas of the Northern Hemisphere.
- They are considered to be a "keystone species" in the Arctic marine regions.

Pic   Link:
https://d39gegkjaqduz9.cloudfront.net/TH/2018/05/11/MUM/Mumbai/TH/5_18/61bb35d3_2092042_1_mr.jpg

This species is subdivided into three subspecies:
1. the Atlantic walrus (O. r. rosmarus) which lives in the Atlantic Ocean,
2. the Pacific walrus (O. r. divergens) which lives in the Pacific Ocean, and
3. O. r. laptevi, which lives in the Laptev Sea of the Arctic Ocean.

Range: The walrus is circumpolar in its range but they are found in geographically separate areas. The Pacific walrus is found in the Bering, Chukchi, and Laptev Sea, while the Atlantic walrus inhabits the coastal regions of northeastern Canada and Greenland.

Unseen for decades, rare butterflies re-emerge

Part of: GS Prelims and Mains III – Environment and Ecology; Biodiversity

Key pointers:
- Unseen for decades, rare butterfly "**Black windmill**" (Byasa crassipes) spotted in Arunachal Pradesh's Dibang Valley.
- "**Siren butterfly**" (Hestina nicevillei) was spotted in the Daranghati Wildlife Sanctuary in Himachal Pradesh in 2012.
- The species was being photographed for the first time in history, and being sighted for the first time in India since 1917.
- Both butterfly species are listed under Schedule I of India's Wildlife Protection Act (1972), which ensures the insects the same protection as that given to tigers.
- "**Frosted duskywing**" (Erynnis pelias) was spotted in Arunachal Pradesh.

Marsupials antechinus

Part of: GS Prelims (Environment and Biodiversity)
In News:
- Two marsupial species – tiny black-tailed dusky antechinus and silver-headed antechinus – have been put on Australia's endangered list.

- These marsupial species discovered in 2013 and found in wetter, higher-altitude regions of Queensland state — are known for suicidal mating habits that include up to 14-hour sex sessions.

Earlier we had studied about another Marsupial native to Australia which was vulnerable - **Koalas**
Important Value Additions:
Do marsupials only live in Australia?
Most people think of Australia when they think of marsupials, because the most well known of the marsupials—koalas and kangaroos—live there. But opossum species, which are also marsupials, live in North, Central, and South America.

First record of invasive aphid in Kashmir Valley

Part of: GS Prelims and Mains Paper III Environment and Biodiversity
Key Pointers:

- It's bad news for Kashmir Valley, the **fruit bowl of India**.
- The **brown peach aphid** – an insect that attacks temperate fruit trees – has been recorded here for the first time.
- The spread of the aphid could affect the local economy which is dependant on fruit trees to a large extent.

Aphids feed on the saps of plants, attacking plant tissues that transport food to all different plant parts.

In India, the aphid was recorded for the first time in the 1970s from Himachal Pradesh and Punjab.

Chytrid fungus: Fungus that attacks frogs

Part of: GS Prelims and Mains III – Environment and Ecology; Biodiversity
Key Pointers:
- The chytrid fungus — which has caused amphibian declines worldwide and has been recorded in India too — possibly originated in east Asia
- The chytrid fungus has affected around 700 amphibian species worldwide and caused frog declines and even extinctions in many areas.

Newest frog: Mangaluru narrow-mouthed frog

Part of: GS Prelims and Mains III – Environment and Biodiversity
In News:
- The latest addition to India's frog fauna is the Mangaluru narrow-mouthed frog

- The new frog is christened Microhyla kodial after the city of Mangaluru (called kodial in the Konkani language)
- The frog is found only in a small industrial space in the city

INFRASTRUCTURE/ENERGY

Renewables overpower conventional energy

Part of: Mains GS Paper III- Energy security

Key pointers:
- For the first time in the country's history, renewable energy has added more capacity than conventional power.
- Capacity addition by renewables stood at 11,788 MW in in FY18, against 9,505 MW added by conventional energy, according to data provided by the Union Ministry of New and Renewable Energy.
- Capacity creation by the conventional sector fell a sharp 33 per cent in FY18. Coal-fired power units, in particular, are suddenly facing an existential crisis triggered by falling renewable tariffs, poor demand, low plant load factors and uncertainty over long-term purchase agreements with distribution companies.

Article link: https://www.thehindubusinessline.com/todays-paper/article23743188.ece

Emerging solar trends: India

Part of: Mains GS Paper III- Energy security, Infrastructure

Key pointers:
- A report on emerging solar trends has been produced by the US-based Institute for Energy Economics and Financial Analysis (IEEFA), a research body backed by a bunch of philanthropic organisations including the Rockfeller Brothers Fund and the Rockfeller Family Fund.
- Five out of the world's biggest under-construction solar parks are in India.
- Once, Bhadla Industrial Solar Park, in Rajasthan — houses solar plants to its fullest capacity (2,225 MW), it will be the world's biggest.
- When it comes to operating solar plants, India has two of the world's top ten. These two are the 1,000-MW ultra mega project in Kurnool, Andhra Pradesh and the Adani group's 648-MW Kamuthi project in Tamil Nadu.
- India has made rapid strides in installation of solar power capacity. In the calendar year 2017, India contributed 8 GW to the 98 GW global addition of solar capacity, or 8.1 per cent.

Some distinctions:

- The world's biggest single rooftop solar plant happens to be in India- The 19-MW Dera Baba rooftop solar project in Amritsar, Punjab.
- India's name also figures in the list of top 'corporate PPAs' — instances when companies directly buy solar power from developers.
- India's Kochi airport, with 40 MW, is the world's first airport to be fully powered by solar energy.

The definition of electrification in India

Part of: Mains GS Paper III- Energy Security

Key pointers:

- As per the current definition of an electrified village, **a village is counted as electrified if at least 10% of its households have an electricity connection**.
- According to the definition, in place since October 1997, a village is deemed to be electrified if basic infrastructure such as a distribution transformer and distribution lines are in place in the inhabited locality, electricity is provided to public places like schools, panchayat office, health centres, dispensaries, community centres, and at least 10% of the households in the village are electrified.
- As of today, the rural household electrification is about 83%. From State to State, it ranges from 47% to 100%.
- The government is not considering modifying the current definition. The criticism is that electrified now is about connectivity to the grid but not actual access to electricity.

More power to the people

Government data show that as on April 28, 2018, all of India's 5,97,464 census villages have been electrified. When the BJP government took office in 2014, 18,452 of them were without electricity. The graphs below capture the historical data as well as the proportion of households yet to be connected

Years of work

Government definition says that a village is 'electrified' if it has the basic electrical infrastructure and 10% of its households and public places have power. Graph plots the number of villages electrified each year

Still off the grid

'Electrified' implies that a village has been connected to the grid. It does not imply that all households have access to electricity. Data as on Monday show that of the 22.44 crore village households, 18.91 crore have been electrified (84.29%). Map shows the percentage of houses electrified in each State

Pic credits: http://www.thehindu.com/todays-paper/tp-national/article23734161.ece/alternates/FREE_660/30NDSRN01VillaG8Q3TB4UQ1jpgjpg

The Saubhagya Scheme:

- The government in September 2017 launched the **Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya),** aimed at covering the last-mile connectivity of taking electricity to the household level. The target for the scheme is March 31, 2019.
- The Saubhagya scheme defines the electrification of a household as including a service line cable, energy meter, and single point wiring.
- For unelectrified households in remote areas, electrification will involve the provision of power packs of 200 to 300 W (with battery bank) with a maximum of 5 LED lights, 1 DC Fan, and 1 DC power plug.

India doing "extremely well" on electrification: WB

Part of: Mains GS Paper III- Infrastructure, Inclusive growth

Key pointers:

- India is doing "extremely well" on electrification with nearly 85 per cent of the country's population having access to electricity, the World Bank has said.
- Between 2010 and 2016, India providing electricity to 30 million people each year, more than any other country as per the latest report of the World Bank.

- While challenges still remain to provide electricity to the rest of the 15 per cent of the 1.25 billion population, India is all set to achieve the target of universal access to electricity before the 2030 target date.
- The report comes less than a week after Prime Minister Narendra Modi announced that all the villages in the country have been electrified.
- The report said that nearly 85 per cent of the country's population has access to electricity.
- In absolute terms, India is doing more on electrification than any other countries. However, India is not the fastest country in electrification. Bangladesh and Kenya, for example are faster in electrification than India, she noted.
- However, reliability of service is an area of concern for India. In some parts of India or having the connection doesn't necessarily guarantee the energy's reliable supply.

Rural Electrification: Gap between accessibility and adoption

Introduction:
The government has recently announced the electrification of all inhabited census villages. A village is considered electrified if it possesses basic electrical infrastructure and 10% of its homes have access to power.
However, nearly one-fifth of India's rural households (around 31 million) still remain in acute darkness.
The government is committed to reaching these households through the Saubhagya scheme by 31 December 2018—a deadline that has been moved up from 31 March 2019. The project's ambition is praiseworthy.

Electrification schemes:
Like the previous Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY), and the ongoing Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Saubhagya schemes have focused on *establishing village electricity infrastructure*.
DDUGJY provided electricity access to the remaining 18,452 inhabited villages. There are issues with these schemes-
- Confusion over data regarding the number of households in the country.
- Inconsistencies in the data put out by state electricity discoms.
- Lack of focus on supply-side barriers.

Gap between electricity accessibility and adoption:

The rapid pace of rural electrification has clearly not been matched by adoption at the household level.

According to a 2015 World Bank study, *Power For All: Electricity Access Challenge In India*, "even where electricity service has been locally available, many village households choose not to adopt a connection".

For instance, states like Tripura and Sikkim, despite almost universal access, have among the lowest consumption rates.

Reasons behind:

Poor power reliability:

India faces a terrible power reliability situation.

Load shedding and power outages are frequent enough to make the term a mere technicality. A study shows that only six states had, on average, 24-hour power supply in rural areas as of December 2017.

This lack of reliability often discourages households from adopting electricity, which disincentivises discoms, thus undermining investment in rural electrification. This makes power supply even more unreliable, perpetuating a vicious cycle.

Challenges faced by Discoms:

Discoms face multiple challenges, ranging from-

- Revenue losses due to high costs of power procurement
- Power theft and Irregularity
- Delay in disbursement of state subsidies assured to domestic and agriculture consumers.
- The lack of political will across governments to rationalize tariffs and slash these subsidies is a long-running problem.

UDAY Yojana:

The government's attempt to address discoms' financial stress via the Ujwal Discom Assurance Yojana (Uday), rolled out in 2015, is the latest in a long line of government bailouts.

It hasn't been more successful than previous attempts.

The continued stress has negative consequences on the demand side in the form of reduced investment in network modernization, upgradation of transformers and unreliable power supply.

Summary:

The economic logic suggests that the rural households in areas with poor power reliability adopting grid electricity connection will not adopt electricity in first place.

They have to pay a monthly fixed minimum charge irrespective of brownouts and blackouts. Meanwhile, poor reliability forces them to also use traditional fuels, like kerosene and fuelwood, for lighting and cooking purposes.

In effect, these households end up *paying for two power sources*. This affects rural households' decision making when it comes to electricity adoption.

Conclusion:

While India has made remarkable progress in bringing electricity to every village, the achievement on this front still faces challenges.

There's still a long way to go for lowering barriers to adoption, easing discoms' financial stress and incentivising rural adoption.

Connecting the dots:

- India has made remarkable progress in bringing electricity to every village. Still much remains to be done. The biggest challenge in this regard is lack of adoption of electricity at household level in rural areas. Analyse.

Also read: Saubhagya Scheme: Critical analysis

https://iasbaba.com/2017/10/iasbabas-daily-current-affairs-31st-oct-2017/

The Praapti Web Portal

Part of: Mains GS Paper III- Infrastructure

Key pointers:

- In a bid to rein in errant distribution companies (discoms) that delay payments to power generation companies, the Power Ministry has launched the Praapti web portal.
- 'Praapti' stands for 'Payment ratification and analysis in power procurement for bringing transparency in involving of generators'.
- This portal will help power distribution companies be apprised of invoicing by generators and also bring transparency in their payments to them. The power distribution companies can clear the invoices and reply to claims raised by the generators on this portal.
- The portal will also compare and rank State discoms on outstanding bills and the frequency of clearing them.

The Perform, Achieve and Trade (PAT) Scheme: An analysis

Introduction:
The Perform, Achieve and Trade (PAT) Scheme is a programme launched by the Bureau of Energy Efficiency (BEE) to *reduce energy consumption* and *promote enhanced energy efficiency* among specific energy intensive industries in the country.

In the first cycle of this scheme from 2011-14:
478 energy-intensive units from eight large industrial sectors, namely thermal power plants, fertilisers, cement, aluminium, pulp and paper, iron and steel, textiles, and chlor-alkali were given specific energy reduction targets to be achieved.

- Those that overachieved the targets were awarded Energy Saving Certificates or ESCerts, each equal to 1 metric tonne of oil (MTOe).
- Those unable to meet their assigned targets were required to purchase ESCerts (from the overachievers) through a centralised online trading mechanism hosted by the Indian Energy Exchange (IEX).

Cumulatively, this was meant to achieve an energy savings of 6.68 MTOE by the end of 2014-15.

Performance assessment:
India has committed to a 20-25 per cent emission intensity reduction target as compared to 2005 levels in its Nationally Determined Contributions (NDC) as per the Paris Agreement.

- According to the BEE, PAT Cycle 1 has achieved more than 30 per cent of this targeted energy saving, along with an almost 2 per cent reduction in emissions.

With Cycle 1 being completed, this is an opportune moment to evaluate the experience of the scheme, so that future versions of PAT benefit from the learnings of PAT Cycle 1.

Moving forward:
- Those who didn't achieve their targets in cycle 1 were able to continue to delay investments in energy efficiency, and those who achieved their targets failed to gain supplementary finance. This situation needs to be fixed in PAT Cycle 2.
- It was stated that facilities that didn't achieve their targets would be liable to pay an additional penalty of Rs. 10,00,000 if they failed to purchase ESCerts. In the case of continued failure to meet targets, further penalties would be levied. However, there is no clarity on enforcement or timelines for defaulters to make these applicable. This needs to change.
- Bringing more transparency and clarity in the trading mechanism and regulations will build confidence amongst industries, and control liquidity interactions and balance in the system.

- India could learn from similar efforts in other countries including, Italy's 2017 rules for white certificate trading to control effective obtainment of energy savings; liability for the implementation of energy efficiency interventions, stricter rules to calculate the baseline energy and associated energy savings. This is expected to maintain the liquidity and stability of the white certificate in market.

Conclusion:
While PAT Cycle 1 was a good start, Cycle 2 should see benefit from the lessons and experience of Cycle 1, while also lessons from similar efforts in other countries attempting to enhance their energy efficiency, and to design future policies in an effective and efficient manner.

Connecting the dots:
- What was the objective of the Perform, Achieve and Trade (PAT) Scheme? Analyse the success of cycle 1 of the PAT scheme and how cycle 2 should be tweaked and implemented.

Draft National Telecom Policy, 2018

Part of: Mains GS Paper III- Infrastructure, Inclusive growth

Key pointers:
- With the goal of making the nation's telecom infrastructure and services ready for a digital future, the Department of Telecommunications (DoT) has laid out a blueprint for large-scale reforms in the existing policy framework.
- If the National Telecom Policy (NTP), 2018, aka the National Digital Communications Policy, 2018 framework achieves its objectives, India will move from the 134th rank into the top 50 in the ICT Development Index of the International Telecommunication Union, by 2022.
- The policy aims to provide broadband connectivity for all, generating 40 lakh jobs and requiring an investment of $100 billion in the next four years.
- The Policy also aims to increase the contribution of the digital communications sector to GDP to 8 per cent, from the estimated 6 per cent in 2017.
- The NTP also proposes to set up a new National Fibre Authority to ensure efficient rollout of broadband infrastructure.

Universal broadband:
- The policy aims to provide universal broadband coverage with 50 Mbps speed to every citizen.

- It also envisages 1 Gbps connectivity to all gram panchayats by 2020 and 10 Gbps by 2022 under the National Broadband Mission, fixed-line broadband access to 50 per cent of households, and a 'unique mobile subscriber density' of 55 by 2020 and 65 by 2022.

Public Wi-Fi hotspots:
- Other key highlights include deployment of public Wi-Fi hotspots to reach 50 lakh users by 2020 and 1 crore by 2022.
- The policy is committed to providing high-speed internet to all by various initiatives such as BharatNet, GramNet, NagarNet and Jan Wi-Fi.

Article link: https://www.thehindubusinessline.com/todays-paper/article23755138.ece

India on its path to becoming an Electric Vehicle hub

Background:
Over the past 12 months, the government has been steadfastly advocating a move to phase out petrol and diesel cars completely and transforming the country into an all-electric market by the year 2030. Action plans have been formulated.
The question remains, however, is India on the right track to becoming an EV hub?

Benefits of shifting to EV:
- Cut down on fuel bills.
- Reduce emissions.
- Cut the escalating demand for road infrastructure.
- Above all, it will change the face of the automotive industry and transform India into the leading electric vehicle market in the region and perhaps the world.

Opportunities:
- All eyes remain on India to excel in this space, not only due to the strong presence of many of the world's leading automotive brands, but also the government's clearly voiced support. Malaysia has announced recently that it plans to lean on Indian expertise in developing its own auto industry.
- Many leading companies are already gearing up for EVs. Maruti Suzuki and Hyundai announced their plans to introduce their first electric vehicles in India by 2020 and 2019, respectively.

Challenges:

- With more than half of the automotive suppliers in India based on engine-and-transmission systems, the industry is likely to take a hit.
  Strong government support will be required to help transform these companies.
- The risk falls on the industry in determining the market readiness of electric vehicles.

Charging infrastructure:

- While the EV fleet and charging networks across the world have grown concurrently, it has led to the emergence of different charging standards in different regions.
- Every car has a different charging system. All models of different manufacturers cannot be charged at any station.
- At present, there are very few charging stations in India, which makes long-distance travel almost impossible.
  Given that more than 80 per cent of car owners in India state that they have only one car for their household, this limitation has always been a big hurdle to accepting EVs.

Government incentives such as offering subsidised electricity tariffs and promoting public awareness will help in developing the infrastructure.

The recent government initiative to set up EV charging stations at parking lots of railway stations is likely to generate greater interest and acceptability.

Other focus areas:

- Platforms to develop battery cell technologies and pack, innovative software, and telematics — whereby detailed data about the areas in a city that have the most number of EVs at any point in time, should be developed.
- The strategic placement of charging points at coffee shops, restaurants, and malls — will help in easing the potential hiccups faced by the prospect of charging EVs outside key hub spots.

Increased energy generation:

There are opportunities for energy and renewable energy firms to leverage on the eventual increased demand for electricity (by the EVs). Addressing the increased energy needs hand-in-hand should thus go hand in hand with discussions surrounding the EV sector. India's largest power generation utility, NTPC, is currently seeking a pan-India licence to set up charging stations.

In order to increase the momentum of electrification development, an innovative and pragmatic approach should be adopted to address energy supplies.

Govt support:

Short-term incentives such as cash subsidies, lowering road taxes and cutting GST for EVs, along with other measures such as tax rebates, would help to project a stronger long-term committed strategy.

The industry awaits further clarity on the government's position on electric vehicles (EVs) regarding:

- Availability of charging infrastructure.
- Investment and incentive guidelines.
- The role of state governments to support the launch of EVs.

China example:

China has already shown the way on how to support growth in this sector.

- Besides offering EV owners generous subsidies, China has also introduced a preferential vehicle licensing system, whereby EV buyers get their license plates free and with least delay.
- China is focusing investments into EV charging stations.

These measures have culminated in a boom for the industry with sales of electric vehicles and hybrid vehicles up 53 per cent in 2016.

If India can look to replicate at least some of these measures, the EV industry would respond positively.

Conclusion:

India's automotive industry is headed for an inflection point. **To make India an EV hub setting up the required infrastructure is most crucial. Also, k**eeping the industry and its customers at the core of all relevant smart mobility plans is crucial to ensure that India stays on the right track to becoming an EV hub.

Connecting the dots:

- India's automotive industry is headed for an inflection point. To make India an EV hub setting up the required infrastructure is most crucial. Discuss.

Zojila: Asia's longest bi-directional road tunnel

Part of: GS Prelims and Mains III – Infrastructure
Key pointers:

- Zoji La will provide all-weather connectivity between Ladakh and Kashmir.
- It is said to be Asia's longest bi-directional tunnel
- Situated at an altitude of 11,578 feet on the Srinagar-Kargil-Leh National Highway

- The project, on completion, would lead to enormous boost in employment as local businesses will get linked to the national market and the beautiful region is able to receive round-the-year tourist traffic.
- It will also be of strategic value to the armed forces.
- Part of Bharatmala project
- The government has set an ambitious target of construction of 35,000 km of national highways in the next five years involving an investment of Rs 5,35,000 crore under Bharatmala.

India launches 2nd IT corridor in China

Part of: Mains GS Paper II, III- International relations, Infrastructure

Key pointers:
- India recently launched its second IT corridor in China to get access to the growing Chinese software market. It will provide market access to Indian IT firms in the huge Chinese market.
- The new IT corridor in Guiyang.
- The corridor is aimed at setting up local offices and assisting companies from Guiyang to establish software and IT units in India.
- Few months back NASSCOM had established its first Digital Collaborative Opportunities Plaza or SIDCOP platform in the Chinese port city of Dalian.
- Dalian corridor's focus was on Internet of Things- IoT but the Guiyang corridor will focus on Big Data.
- The platform in Guiyang intends to create online and offline presence to promote a "co-create culture" between two large neighbours in the Big Data space.

Background:
- India IT firms have a presence in more than 70 countries in the world, generating employment for up to 12 million people worldwide. In China, Indian IT companies are present in 10 cities around the country, with a total work-force of around 25,000 employees.
- For India, getting access to China's IT market is important to address the massive trade deficit which has now spiralled to over USD 51 billion.
- India has been demanding China to provide market access to Indian IT and pharmaceutical firms for several years to reduce bilateral trade deficit.

SCIENCE AND TECHNOLOGY

NASA launches InSight

Part of: GS Prelims and Mains III – Science and Tech

In News:
- NASA launched its latest Mars lander, InSight.
- It is designed to perch on the surface of the red planet and listen for 'Marsquakes'.
- The key instrument on board is a seismometer, called the Seismic Experiment for Interior Structure.
- Understanding the temperature on Mars is crucial to NASA's efforts to send people there by the 2030s, and how much a human habitat might need to be heated under frigid conditions.

Do you know?
- InSight, is short for Interior Exploration using Seismic Investigations, Geodesy and Heat Transport.

ISRO making green propellant

Part of: GS Prelims and Mains III – Environment and Ecology; Science and Technology
In News:
- Scientists at the Indian Space Research Organisation (ISRO) are developing an environment-friendly propellant to power satellites and spacecraft.

- If successful, the conventional hydrazine rocket fuel, a highly toxic and carcinogenic chemical will be replaced with a greener propellant blend based on **hydroxylammonium nitrate (HAN)** for future missions.

A greener alternative

Is hydrazine, the much-used monopropellant, on its way out?

• Hydrazine has one of the highest specific impulses (kilograms of thrust obtained by the consumption of one kilogram of propellant in one second). Thus, despite its hazardous nature, it is preferred as a propellant

Drawbacks of hydrazine:
• Highly corrosive
• Carcinogenic and toxic
• Storage, handling issues

Replacing Hydrazine:
• ISRO is working on a hydroxylammonium nitrate-based monopropellant (HAN) to replace hydrazine

Low toxicity: HAN is less toxic than hydrazine

Performance: HAN has a density of 1.4 to 1.5 g/cm3, much higher than 1.0 g/cm3 of hydrazine propellants

Safety: HAN is known to not be combustible, thus is a safer alternative

Source: ISRO , NASA

Incorporating Artificial Intelligence in military

Part of: Mains GS Paper III- Internal Security

Key pointers:
- In an ambitious defence project, the government has started work on incorporating artificial intelligence (AI) to enhance the operational preparedness of the armed forces in a significant way.
- It would include equipping them with unmanned tanks, vessels, aerial vehicles and robotic weaponry.
- A high-powered task force headed by Tata Sons chairman N. Chandrasekaran is finalising the specifics and framework of the project, which would be implemented in a "partnership model" between the armed forces and the private sector.
- The application of AI in border surveillance could significantly ease the pressure on armed forces personnel guarding the sensitive frontiers with China and Pakistan.
- The move comes amid rising Chinese investments in AI — an area of computer science devoted to creating intelligent machines — for its military. China has been pouring billions of dollars into AI research and machine learning.
- The U.S., Britain, France and the European Union are also investing significantly in AI. The U.S. has been carrying out successful operations targeting terrorist hideouts in

Afghanistan and northwest Pakistan using drones which operate with the help of artificial intelligence.

The Internet of Things: Risks involved

Background:

By 2020, there will be more than 20 billion devices connected to the Internet of Things (IoT), according to Gartner — that's roughly 2.5 devices for every single person on the planet.

What is IoT?

The Internet of things (IoT) is the inter-networking of physical devices, vehicles, buildings, and other items—embedded with electronics, software, sensors, and network connectivity that enable these objects to collect and exchange data.

The IoT allows objects to be sensed or controlled remotely across existing network infrastructure, creating opportunities for more direct integration of the physical world into computer-based systems, and resulting in improved efficiency, accuracy and economic benefit in addition to reduced human intervention.

The IoT ecosystem:

We already rely on IoT on a daily basis. This ecosystem will become even more indispensable in the future.

Not only will it enhance quality of life for individuals — allowing us to control our homes with just a swipe on our smartphones, for example — it will allow companies to create new business models and to be more proactive in how they maintain their assets and equipment. In India, which suffers from congestion in many urban areas, IoT can act as a platform for smart cities by empowering local authorities to effectively manage traffic and to reduce noise and pollution.

Risks:

Like all emerging technologies IoT fuels emerging risks.

Four main risks that require careful consideration and the implementation of strict cyber-security controls are:

- The risk of an IoT network being hacked.

  Example- A hacker can inflict human and physical damage by taking control of a self-driving car.

  Security should be a fundamental pillar of any IoT network, and it should be in place from the outset.

- Testing IoT infrastructure presents a significant risk.
  IoT is currently being implemented in a fairly agile(quick) way, with new devices and sensors being introduced on an ad-hoc basis and people experimenting as they go along. With IoT the infrastructure is not being tested at all. No one is necessarily checking that the data sent by the sensors on different devices is actually accurate. Instead, people tend to assume that the sensors are properly calibrated and the information they provide is secure and correct.
  Having accurate data is critical in an environment in which machines are talking to other machines and making decisions without interacting with humans. Organisations should use tools like artificial intelligence (AI) and statistical analysis to identify those sensors that are producing accurate data, and those that are not.

- IoT is giving rise to new privacy issues that need to be addressed. Lack of awareness around privacy controls may expose customers' personal data so it can be used for unauthorised purposes.
  In addition, IoT devices generate a lot of unstructured data; any data analysis conducted on this raw data could generate an inaccurate representation of the individual and reflect incorrect behavioural patterns.

- Human behaviours and social engineering are major risk factors in an IoT environment. Example- Traffic lights. We all know that red means stop, yellow means wait and green means go. What would happen if someone were to turn all the traffic lights in a smart city to green?
  Just as infrastructure needs to be protected from cyber threats, people need to be educated so they are able to challenge algorithms generated by machines that are responding to incorrect information.

Indian context:

India is at a nascent stage when it comes to IoT, and adoption is slow compared with the rest of the globe.

Many Indian organisations are still content with legacy IT over cloud infrastructure, making IoT a low priority in terms of changing business processes.

Conclusion:

The government's 'Digital India' and 'Smart Cities' initiatives are accelerating India's journey towards adopting digitisation.

On this journey, it is imperative that adequate measures are taken to secure the IoT ecosystem, and to prepare organisations to unleash the full potential of IoT by mitigating the associated governance, privacy and security risks.

Connecting the dots:

- What do you mean by Internet of Things(IoT)? Discuss its potential benefits and the risks associated with the IoT ecosystem.

Nipah Virus

Part of: Mains GS Paper II- Government internventions in key sectors

Key pointers:

- Nipah Virus is an emerging infectious disease that broke out in Malaysia and Singapore in 1998 and 1999.
- It first appeared in domestic pigs and has been found among several species of domestic animals including dogs, cats, goats, horses and sheep.
- The infection is also known to affect human beings.
- The organism which causes Nipah Virus encephalitis is an RNA or Ribonucleic acid virus.
- Nipah virus infection gets its name from the village in Malaysia where the person from whom the virus was first isolated succumbed to the disease.

How does Nipah spread or get transmitted?

- The disease spreads through fruit bats or 'flying foxes,' of the genus Pteropus, who are natural reservoir hosts of the Nipah and Hendra viruses.
- The virus is present in bat urine and potentially, bat faeces, saliva, and birthing fluids.
- Nipah Virus, which is a zoonotic disease, was known to affect humans in Malaysia and Singapore after coming in direct contact with the excretions or secretions of infected pigs.

Symptoms of the Nipah infection:

- The human infection presents as an encephalitic syndrome marked by fever, headache, drowsiness, disorientation, mental confusion, coma, and potentially death.
- There is no specific treatment for Nipah Virus. The primary treatment for human cases is intensive supportive care.

Ruthenium: Fourth single element to show ferromagnetism

Part of: Mains GS Paper III- Science & Technology

Key pointers:

- Scientists have demonstrated that the chemical element ruthenium (Ru) is the fourth single element to have unique magnetic properties at room temperature.
- It could be used to improve sensors, devices in the computer memory and logic industry, or other devices using magnetic materials.
- Ferromagnetism is the basic mechanism by which certain materials (such as iron) form permanent magnets or are attracted to magnets.
- Till now only three elements on the periodic table have been found to be ferromagnetic at room temperature -- iron (Fe), cobalt (Co), and nickel (Ni).

DEFENCE

China's first indigenous aircraft carrier "Type 001A"

In News:
- China's first domestically manufactured aircraft carrier started sea trials.

- The carrier is known as **"Type 001A"**

- The ship will give China a second aircraft carrier as it asserts its claims in the South China Sea and seeks to deter any independence movements in Taiwan.

- China's sole operational aircraft carrier, the **Liaoning**, is a repurposed Soviet ship bought from Ukraine, which went into service in 2012.

Do you know?
- Indigenous Aircraft Carrier (IAC-1) Vikrant - is India's first Indigenous Aircraft Carrier

All-women crew of INSV Tarini to return

Part of: GS Prelims – Defence/Science
In news:
- INSV Tarini, the naval sail ship with an all-women crew circumnavigating the globe for the past nine months, will return to India this week after successful completion of the ambitious mission.
- The expedition is named as 'Navika Sagar Parikrama'

Important Value Additions:
- INSV Tarini is almost identical to her illustrious predecessor, the iconic Mhadei which has sailed over 115000 nautical miles in the past eight years.

About Tarani and Mhadei
- The boat draws her origin from the famous Tara-Tarini temple of Orissa's Ganjam district.
- The word Tarini means a Boat and is also a Sanskrit word for Saviour.
- Tara-Tarini is a patron deity for sailors and merchants and is worshipped for safety and success at sea.

- Tara-Tarini of Orissa is known to have historical linkages with the river Goddess Mhadei- the exclusive boat deity of the Mhadei river of Goa.
- Both the deities Tarini and Mhadei have sculptural similarities.

Defence Planning Committee: Apprehensions

Introduction:
The government has set up a defence planning committee last month to reboot defence planning in India. The step has been taken four years too late.

Also read: Setting up of Defence Planning Committee: As significant policy reform https://iasbaba.com/2018/04/iasbabas-daily-current-affairs-prelims-mains-focus-20th-april-2018/

Apprehensions:
- The step calls into question the relevance of the existing long-term, five-year and annual plans of the armed forces, which form the basis of several procurement proposals that are in the pipeline.
- The move also infuses uncertainty in the rollout of several steps taken to promote Make in India in defence.
- Revamping of the "make" procedure for indigenous design and development of equipment and the introduction of the strategic partnership scheme for production of aircraft, helicopters, submarines and armoured fighting vehicles were expected to rejuvenate the defence industry.
  Now there is no saying whether all this will fit into the new strategies and plans prepared by the committee.
- The committee consists of extremely busy persons like the national security advisor, service chiefs and secretaries of three of the most important ministries of the government. It will require extraordinary effort on their part to meet often enough to do justice to the committee's charter.
- The committee will be assisted by four sub-committees on policy and strategy, plans and capability development, defence diplomacy and defence manufacturing ecosystem. Their usefulness will depend on their composition and terms of reference, both of which are yet to be decided.

- A challenge for the sub-committees is to ensure that deliberations are free from presumptions and prejudice. This has been the bane of defence planning. It's important that the committee makes ready-to-implement recommendations.
- The committee will be required to submit its reports to the defence minister, which implies that these would be subjected to examination by the ministry officials who may not find all the recommendations workable.

   This has happened in the past with many committees recommending measures like appointing a chief of defence staff or integrating the services headquarters with the MoD but the latter finding these suggestions impractical for various reasons.

Conclusion:

All the apprehensions notwithstanding, any effort, even if belated, to set right the problems besetting defence planning should be welcomed.

The establishment of Defence Planning Committee recently, is expected to have a far-reaching consequence on the way defence planning is undertaken and on defence preparedness. And for this to happen the above mentioned issues must be resolved.

Connecting the dots:

- The government has set up a defence planning committee recently to reboot defence planning in India. The step will strengthen the process of defence planning in India. Analyse critically.
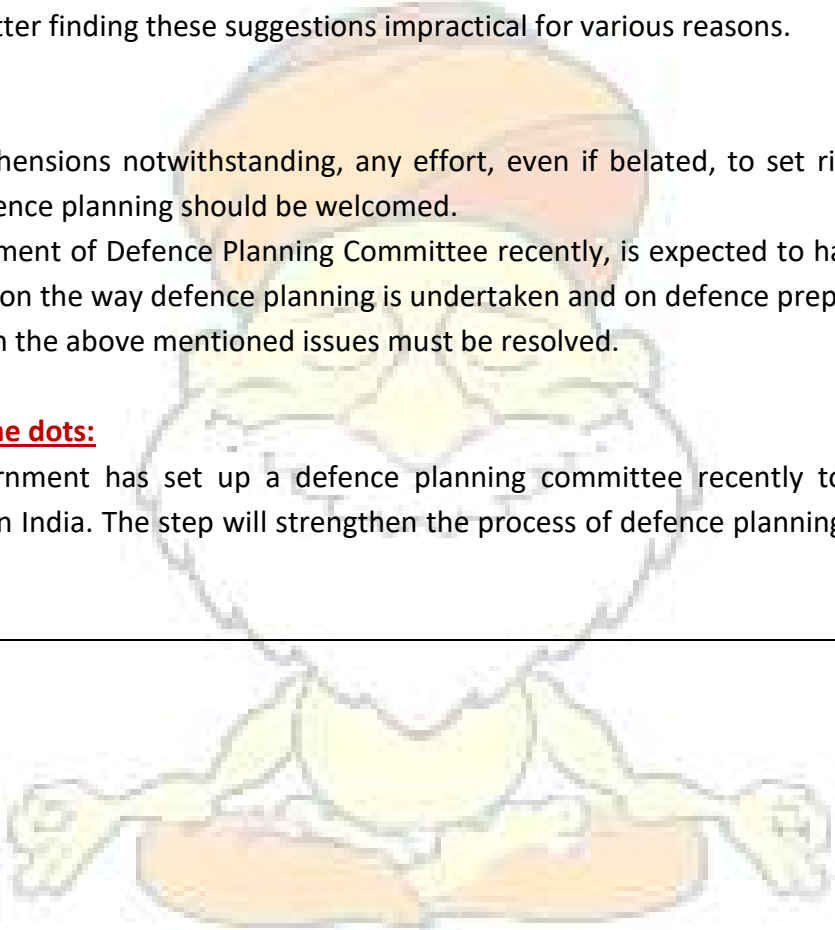
DISASTER MANAGEMENT

Rail Accidents: Need for amendments in Railways Act

In news:

The recent deaths of schoolchildren at an unmanned rail crossing highlight why the Railways Act must be amended.

Flaw in compensation or claims procedure

- In relation to claims for railway accidents, the Railways Act provides for fixed compensation on predetermined scales.
- It also provides a forum for passengers to make claims in the form of Railway Claims Tribunals situated in different parts of India. But there is a limitation.
- Only a passenger on a train can make a claim before the Tribunal.

Concern: Passengers of a bus or motor vehicle who may have been harmed after a collision with a train can only approach the Motor Accidents Claims Tribunal.

Important case:

- In **Donoghue v. Stevenson (1932) case**, SC held that - the duty of care for the Railways extends not only to those who use the Railways' services but also to people who are "neighbours" — namely, users of vehicles on roads that intersect with tracks.
- In other words, there is a common law liability for the railway administration for an accident at an unmanned crossing, even in the absence of specific provisions in the Railways Act.
- An action at common law can be filed against Railways because the Railways was involved in what are recognised as dangerous operations and hence is bound to take care of road users.
- Railways should take all precautions that will reduce danger to the minimum.

What does the Railways Act say?

The Railways Act 1989 (through Section 124) provides compensation on strict liability basis. This means that "when an accident occurs in the course of working a railway" (a collision between trains, or when one is a train carrying passengers, or derailment, or any other accident with a train or any part of a train carrying passengers), then whether or not there has been any wrongful act, neglect or default on the part of the railway administration, an injured passenger or one who has suffered a loss can lawfully maintain an action and recover damages.

Way ahead:

It is time the government amends the Railways Act to provide for compensation on a proactive basis without driving victims or their families to file applications in Tribunals or Courts.

It is also essential to include within Section 124 of the Railways Act a provision for a claim from a "neighbour to a passenger" in the manner that the Supreme Court recognises, namely, a road user of a motor vehicle.

Connecting the dots:

- Safety standards and associated institutional framework in the railways need immediate attention. Comment.
- Railways is considered to be the lifeline of our country but the frequency of fatal accidents have only increased in the recent past. What does it tell about Indian Railway's ecosystem? Critically analyse.

Cyclone Mora and Cyclone Ockhi

Part of: GS Prelims and Mains III - Disaster and disaster management.

In News:

Defence Minister Nirmala Sitharaman highlighted the Navy's responses to numerous crisis situations around the IOR in the last year (esp. during Cyclone Mora and Ockhi).

Important Value Additions:

Cyclone Mora

Mora was a strong tropical cyclone that caused widespread impacts by devastation and severe flooding across Sri Lanka, Andaman and Nicobar Islands, Bangladesh, Myanmar and Northeast India in May 2017.

Mora developed from an area of low pressure over the southeastern Bay of Bengal.

Cyclone Ockhi

Cyclone Ockhi was named by Bangladesh after the Bengali word for "eye" and is considered to be the most intense cyclone to transverse the Arabian Sea since 2015's Cyclone Megh that affected Oman, Somalia and Yemen, killing 18 people. Originating near Sri Lanka over the Bay of Bengal on November 29, Cyclone Ockhi moved over the Arabian Sea via Kanyakumari, triggering heavy rains and high speed wind.

Do you know?

According to weather reports and experts, the coastal region of Bangladesh is prone to storm surges and that the topography along with high population density has earlier resulted in eight out of the top ten 'deadliest' cyclones to originate in the Bay of Bengal.

Frequency of the cyclones is lower in Arabian sea when compared to Bay of Bengal

Bay of Bengal being a closed and a smaller water body, it has higher surface temperature compared to Arabian sea.

North Western region of Pacific ocean has the highest proportion of global tropical cyclones. These cyclones which originate in the Pacific ocean start moving towards south western direction and finally reach Bay of Bengal. But by the time they reach, they almost lose their energy and only remnants of cyclones reach Bay of Bengal. Similarly the cyclones originated in Bay of Bengal reach Arabian sea but only remnants of cyclones after shedding their energy while traversing over the peninsular landmass.

IMD in damage-control mode

Part of: GS Prelims and Mains paper III – Disaster Management

Key Pointers:
India Meteorological Department (IMD) issues four types colour codes signifying the level of caution:
1. green (which means no action),
2. yellow (situation to be watched),
3. amber (government agencies be prepared for severe weather) and
4. red (action needed by the agencies).

IMD had recently issued an amber-coloured alert for J&K, Uttarakhand, Himachal, Haryana, Delhi and west U.P. with a forecast of severe thunderstorm.

Article Link: IMD in damage-control mode - NATIONAL - The Hindu

INTERNAL SECURITY/SECURITY

AFSPA: Active Areas

Part of: Mains GS Paper II- Internal Security

Key pointers:

- AFSPA, the Armed Forces (Special Powers) Act, 1958, to continue in Nagaland as it is a "special case" and the "peace agreement" hasn't been finalised there yet.
- Nagaland, Manipur and Assam are the only three States in the northeast that continue to be under AFSPA.
- The Act gives powers to the Army and the Central forces deployed in "disturbed areas" to kill anyone acting in contravention of law, arrest and search any premises without a warrant and provide cover to forces from prosecution and legal suits without the Centre's sanction.

Drawdown

The Armed Forces (Special Powers) Act gives power to the Army and central forces deployed in 'disturbed areas' to kill anyone acting in contravention of Law, arrest and search any premises without a warrant and provide cover to forces from prosecution and legal suits without the Centre's sanction

Active areas as of November 2016:
- Nagaland | ■ Assam
- Manipur (excluding 7 Assembly seats of Imphal)
- Parts of Arunachal Pradesh
- A 20 km wide belt on the Meghalaya border
- Entire State of Jammu & Kashmir, except the districts of Kargil and Leh (Ladakh)

Changes on April 1, 2018:
AFSPA revoked from the State of Meghalaya entirely. In Arunachal Pradesh, it was imposed only in 8 police stations, instead of the earlier 16.

Revocation of AFSPA in Meghalaya is definitely related to the improvement of security scenario in the northeast
KIREN RIJIJU, Minister of State for home

Pic link: http://www.thehindu.com/todays-paper/article23734279.ece/alternates/FREE_300/th30-vijaita-AFG8Q3TB1551jpgjpg

Forging peace in Nagaland

Important Note:

For those who are not aware of Nagaland issue, IASbaba recommends you to read our old article - **NAGALAND ISSUE: FULL STORY**

After reading above article, one should be aware of the following –

- Why Nagaland issue originated?
- Basic idea of Naga National Council (NNC), Naga Federal Government (NFG) and Naga Federal Army (NFA)
- Failure of 1967 Peace Mission
- 1975 Shillong Accord
- Thuingaleng Muivah and group refuses to accept Shillong Accord – Formation of National Socialist Council of Nagaland in 1980
- 1988 Split - National Socialist Council of Nagaland split into NSCN (IM) and NSCN (K)
- NSCN (IM) and NSCN (K)
- 1997 ceasefire agreement with NSCN (IM)
- Naga Framework Agreement, 2015

Key Pointers from Editorial:

We know that, on Aug 3, 2015, Framework Agreement was signed between Union government and the National Socialist Council of Nagalim (Isak-Muivah), or NSCN-IM.

Idea of a **pan-Naga Hoho** (a proposed statutory body as part of the Framework Agreement) that will enjoy independent executive and budgetary powers to look after the welfare of Naga inhabited areas outside Nagaland – has raised expectations among the Naga people but also apprehension in neighbouring Assam, Arunachal Pradesh and Manipur.

Neighbouring states that have been created after due consideration of a number of factors and their geographical boundaries clearly mapped out can hardly be expected to take kindly to any attempt at rearranging those boundaries.

The editorial deals with few questions –

- Why should National Socialist Council of Nagalim (Isak-Muivah) headed by a Tangkhul Naga decide the future of the Nagas of Nagaland vide the Framework Agreement?
- Why large sections of the population have no say? So what democracy are they talking about?

Why NSCN-IM?

NSCN-IM had, for several decades, used the gun to silence its detractors, and indulged in large-scale extortion and imposed its diktat on the Nagas.

It has also tried to sabotage platforms such as the Forum for Naga Reconciliation for alternative discourses on the peace process.

But to be fair to the NSCN-IM, its leaders have remained steadfast to the goal of wresting an "honourable settlement" for the Naga people from the Government of India.

Moreover, even today the tribes of this region are not influenced by the "Indian" culture. They are proud inheritors of a unique culture.

The Nagas contend that they never signed the Instrument of Accession to India (which the Khasi chieftains of present-day Meghalaya and the Maharajahs of Manipur and Tripura did) and hence cannot be made prisoners to a Constitution they never had a hand in crafting.

Today it is those in Naga civil society and political leaders who make visits to Delhi to prevail upon the 'Indian' establishment to take a more pragmatic view of the peace deal.

The way ahead:

Nagas must admit that they have journeyed a long way with the rest of India. Both have developed a comfort level with each other. Therefore, it is time to shed political egos and move on keeping in mind the best interests of the next generation of aspirational Nagas.

A comprehensive plan with flexibility that is prepared on the ground in broad consultation with stakeholders for development of the region is the need of the hour.

It is understandable that without significantly developing all the states in the Northeast, realising the vision of the Act East policy from all dimensions remain to be a difficult proposition.

There is a need to comprehensively engage India's Northeast with the strategic community based in New Delhi and to transform the NER as a gateway for trade and commerce with ASEAN countries.

For any meaningful outcome, all factions of the undergrounds even including overgrounds, shall have to be involved, otherwise piecemeal peace/dialogue will not bring a satisfactory political solution.

A lasting solution lies in more autonomy to the state, genuine economic development, accelerated infrastructural development, new trade routes, less Central funds and a little bit of pressure on militant groups to accept the peace proposal. Sincerity on the part of political and insurgent leadership alone can bring 'peace to the land of the exhilarating Nagas'.

Connecting the dots:
- The North East states require economic freedom along with political freedom to truly explore their development options. Comment.
- Discuss the reasons behind the ongoing crisis in Nagaland. Why does North East India remain a theatre of political crisis even after 70 years of independence? Analyse.

GravityRAT

Part of: GS Prelims and Mains GS III Cyber Security

In news:
GravityRAT, a malware allegedly designed by Pakistani hackers to infliltrate computers, steal the data of users, and relay it to command and control centres in other countries.
The RAT was first detected by Indian Computer Emergency Response Team, CERT-In, on various computers in 2017.
The 'RAT' in its name stands for Remote Access Trojan, which is a program capable of being controlled remotely and thus difficult to trace.

Important Value Additions:
CERT-In is operational since January 2004.
CERT-In is the national nodal agency for responding to computer security incidents as and when they occur.
In the recent Information Technology Amendment Act 2008, CERT-In has been designated to serve as the national agency to perform the following functions in the area of cyber security:

- Collection, analysis and dissemination of information on cyber incidents.
- Forecast and alerts of cyber security incidents.
- Emergency measures for handling cyber security incidents.
- Coordination of cyber incident response activities.
- Issue guidelines, advisories, vulnerability notes and whitepapers relating to information security practices, procedures, prevention, response and reporting of cyber Incidents.
- Such other functions relating to cyber security as may be prescribed.

The EU's Data Protection Regulation: Lessons for India

Introduction:
The European Union's General Data Protection Regulation (GDPR) is the latest new regulation to address the issue of data privacy.
The GDPR adopts a rights-based, consent-driven approach towards protecting the data of natural persons.

Key features of GDPR:

- The GDPR applies to any act of processing data. The scope of the term 'processing' is broad enough to cover any operation, from data collection to analysis, storage, transfer, erasure and others.
- The GDPR's territorial applicability clause states that it can be applicable to you in one of three ways: An establishment in an EU member-state, one offering goods or services to natural persons in the EU and one monitoring the behaviour of natural persons in the EU.
- The GDPR is not merely applicable to entities which collect or order the collection of data from EU natural persons for their own purposes, but also places liabilities on people who process this data on behalf of controllers.
- The GDPR addresses the concerns related to the transfer of personal data to third countries or international organisations.
- In addition to providing for compensation to natural persons whose privacy rights are violated, the GDPR empowers EU statutory authorities to impose administrative fines of up to €20 million or 4 per cent of total group turnover of a company, and to impose bans on data processing.

A new paradigm in global privacy regulation:
Any person processing data, whether on their own or on someone else's behalf, having any kind of 'establishment' in the EU, or offering goods or services to natural persons in the EU, or monitoring the behaviour of natural persons in the EU, is subject to the GDPR. It is this factor that sets the GDPR up to become a new paradigm in global privacy regulation.

Indian rules:
Under India's existing data protection regime, the Information Technology Act, 2000 (the IT Act) has attempted to deal with data protection in a comprehensive manner. The manner in which the GDPR addresses data protection compliance is hard to compare to the approach taken by the IT-RS Rules.
- The IT-RS Rules commit a portion of a single provision to consent, requiring that consent be obtained in writing through electronic communication.
  The GDPR, in contrast, commits five detailed provisions to the essentiality of lawful consent for processing data, factors to determine whether consent was lawfully obtained, conditions for consent etc.
  The language of the GDPR indicates that consent is interwoven through most of its important provisions, making it a key foundation of GDPR compliance.
- There are certain aspects of the GDPR which are not reflected anywhere in the IT-RS, such as the adoption of a rights-based approach to data privacy.
  The GDPR makes it clear at the very outset that it protects the fundamental right to protection of data of natural persons.

Future of data regulation in India:

The GDPR is being adopted at a time where India is arguably at a cusp regarding data privacy.

- The August 2017 decision of the Supreme Court in Justice *Puttusamy vs Union of India* confirmed the existence of a fundamental right to privacy, recognised the concept of informational privacy and noted that legislation should be enacted to ensure enforceability against non-State actors (private entities).
- The Justice Srikrishna Committee, established to make recommendations for a proposed data protection legislation in India, released a white paper on Data Protection Framework in India which utilises much of the GDPR's terminology and approach.

Conclusion:

A future data protection legislation in India should be set by the standards set by the GDPR. GDPR compliance may be considered an opportunity for Indian companies to achieve early compliance with a potential Indian data privacy legislation.

Connecting the dots:

- The European Union's General Data Protection Regulation (GDPR) is the latest new regulation to address the issue of data privacy. Discuss its key features. A future data protection legislation in India should be set by the standards set by the GDPR. Discuss.

Protecting Digital Health Data: DISHA

In news:

Recently, the government has put in place the draft of a new law - Digital Information Security in HealthCare Act (DISHA). The law is meant to protect digital health data. With healthcare providers' growing dependence on IT, there's all the more need for stronger data protection laws.

Data leakages:

- The recent reports of Aadhaar data leakage and the still recent breach of information by Facebook of its registered users have posed more questions on the significance of data protection and the need to have strict laws for the same.
- In a serious breach of data safety, the health data of about 35,000 people in a pathology laboratory in Maharashtra was leaked in 2016. Notably, it was the EMRs (electronic medical records) that were leaked.

As we use computers on a routine basis and depend on them to process the data of a large number of patients, we are increasingly susceptible to hacking attempts and data theft.

IT Technology: A necessity
Computer or IT technology is no longer a luxury or value addition, it has become a necessity.
- 'Big Data Analytics' is the new buzzword in the field of healthcare with data analysis being used by healthcare providers to record, share and study a number of parameters associated with diseases, their types and demography.
- In healthcare, IT is being increasingly used today for analysing, simplifying and applying algorithms to data collected from patients for further productive purposes.
- This practice is also duly included in the Clinical Establishments (Registration & Regulation) Act 2010, which mandates maintenance and provision of EMR for every patient by clinical establishments. Maintenance of data in electronic form provides several benefits to the hospitals for clinical establishment.
- It also helps the government in analysing mass data and formulating public policies.

Thus, the solution lies not in doing away with IT but to have strong data protection laws with sufficient deterrent against theft and hacking attempts.

Where are we today at data protection?
The need for data security is recognised in Indian healthcare to save the data of patients from being misused or leaked.
- Under the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002, doctors are required to maintain confidentiality of all patients during various stages of the medical treatment and procedures and also of the information provided by them. However, it failed to clearly define the time-line for accessing data of patients. It also failed to include URLs and IP addresses as sensitive information, something which is of paramount significance in the internet driven world today.
- Certain sections of the Information Technology Act also provide a basic framework for the protection of personal information in India, but these suffer from a number of flaws. For example, Section 43(a) is applicable only to a 'body corporate' and leaves out individuals and legal entities like trusts or NGOs and many others from its purview.

'Electronic Health Records Standards for India':
To overcome some of these shortcomings, the government came out with 'Electronic Health Records Standards for India' in 2013.
These standards safeguard patients' data in many ways and require safeguarding of financial information of patients.

These standards also require healthcare providers to designate "a privacy officer who will be responsible for implementing privacy policies, audit and quality assurance". It also has a provision for patients "to request a healthcare organisation that holds their health records, to withhold specific information that he/she does not want disclosed to other organisations or individuals."

The new Digital Information Security in HealthCare Act (DISHA):

- It makes any breach punishable with up to five years' imprisonment and a fine of Rs. 5 lakh.
- It redefines personal information of the patients. It adds, "use of narcotic or psychotropic substances, consumption of alcohol, human immunodeficiency virus status, sexually transmitted infections treatment, and abortion" related information of the patient to the list of sensitive information.
- DISHA also defines a 'clinical establishment' as well as the term 'entity' clearly and unambiguously to include individuals, trusts, private and public establishments, hospitals, diagnostic centres, pathological laboratories, radiology laboratories, etc.
- It also accords great significance to "informed consent" of individuals and emphasises on obtaining explicit consent before transfer and use of digital health data.

While it is yet to be seen what the final shape of this new law will be, it is definitely a move in the right direction as it ensures protection of digital health data at every step, including at the time of their generation, collection, storage and transmission.

Conclusion:

As it is true for any law, the devil lies in implementation. Unless implemented effectively, no law, howsoever stringent, can have the desired impact. It will be pertinent to look at actual cases of data theft after DISHA is implemented and other emerging trends to revise and replenish this legislation from time to time.

Connecting the dots:

- Recently, the government has put in place the draft of a new law - Digital Information Security in HealthCare Act (DISHA). It is definitely a move in the right direction as it ensures protection of digital health data. Discuss.

MISCALLANEOUS

Person in News: Mahathir Mohamad

Part of: GS Prelims – World/Current Affairs

In News:
- Mahathir Mohamad becomes the world's oldest elected leader (aged 92 years)
- He was sworn in as Malaysia's Prime Minister
- He had previously ruled the country for 22 years

Putin sworn in for fourth term

In News:

- Vladimir Putin was sworn in as Russia's President for a fourth term
- The 65-year-old, in power since 1999, is on course to become the longest-serving Russian leader since Joseph Stalin.

Important Value Additions:
Russian Constitution says -
- The President of Russia is directly elected for a term of six years.
- Any citizen of the Russian Federation not younger than 35 years of age and with a permanent residence record in the Russian Federation of not less than 10 years may be elected President of the Russian Federation.
- One and the same person may not be elected President of the Russian Federation for more than two terms running.

Now you may think – Article says 4th term, but in Russia, President may not be elected for more than two terms running.
Answer: It is his second consecutive—and fourth overall—term as president.

Person in News: E.C.G. Sudarshan

Part of: GS Prelims

In news:
- Ennackal Chandy George Sudarshan, popularly known as E.C.G. Sudarshan, who made path-breaking discoveries in the realm of **quantum optics** died aged 86 in Texas.
- He was recommended for the Nobel Prize nine times , but never awarded.
- Professor Sudarshan made significant contributions to the field of theoretical physics — optical coherence, tachyons, quantum zeno effect, open quantum system, spin-statistics theorem, non-invariance groups, positive maps of density matrices and quantum computation, to name a few.

Contributions ignored
- Professor Sudarshan also developed a **quantum representation of coherent light** later known as Sudarshan-Glauber representation.
- **Roy J. Glauber was awarded 2005 Nobel Prize** for the contribution to the quantum theory of optical coherence. Scientists in India and abroad had then observed that the Nobel Committee had ignored the contribution of Professor Sudarshan, who justly deserved to share the coveted award.
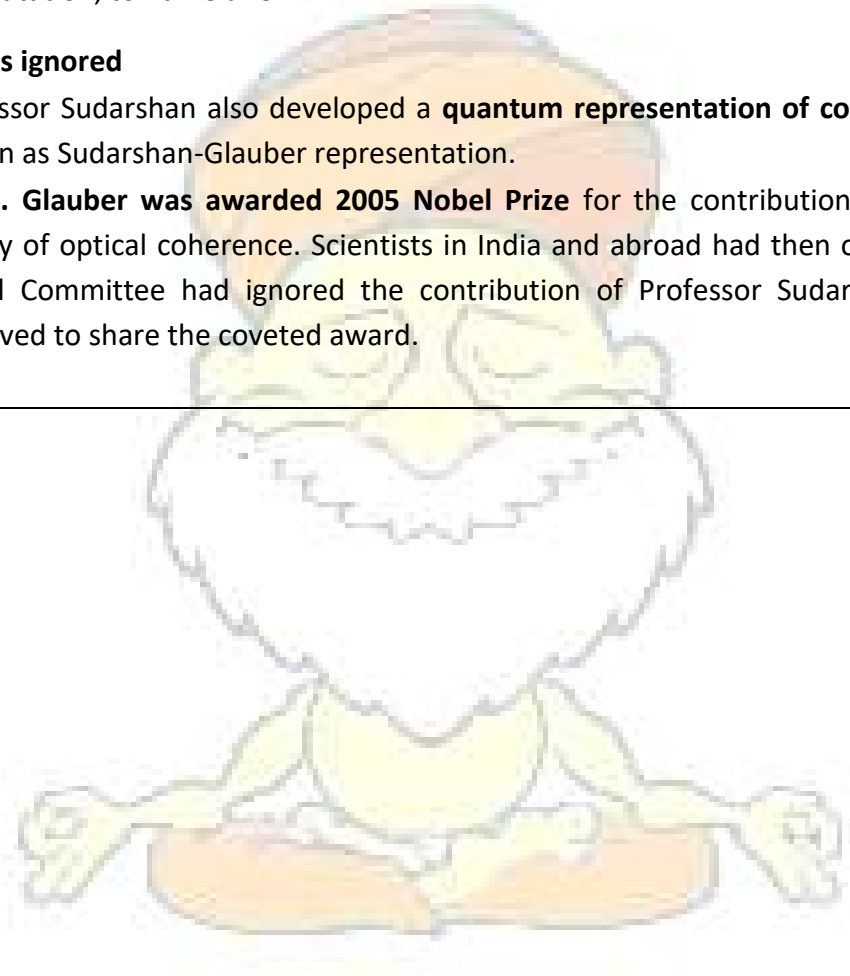
Model questions: Answers are marked as BOLD

Q.1) Which among the following is/are countries of South America?

1. Gautemala
2. Panama
3. Peru
4. Guyana
5. Ecuador

Choose the correct answer:
   a) 1, 2 and 3
   b) 2, 3 and 4
   c) 3, 4 and 5
   d) 2, 3, 4 and 5

Q.2) Which among the following countries are located in between and touches both Pacific ocean and Caribbean Sea?

1. Peru
2. Panama
3. Gautemala
4. Nicaragua

Choose the correct answer:
   a) 2 and 3
   b) 3 only
   c) 1, 2 and 3
   d) 2, 3 and 4

Q.3) Lake Titicaca, largest lake in South America and world's highest navigable body of water, is located between –
   a) Peru and Bolivia
   b) Panama and Gautemala
   c) Peru and Chile
   d) Ecuador and Nicaragua

Q.4) Which among the following countries does not border the Mediterranean sea?

a) France

b) Italy

c) Serbia

d) Syria

Q.5) What is the name of the tropical cyclone that made landfall in Bangladesh recently?

a) Cyclone Mora

b) Cyclone Phaline

c) Cyclone Tora

d) Cyclone Humsa

Q.6) The frequency of the cyclones is lower in Arabian sea when compared to Bay of Bengal. This is because

1. Arabian sea surface temperature is higher compared to that of Bay of Bengal.
2. Bay of Bengal receives the remnants of the typhoons originated in Northwestern Pacific ocean.
3. Arabian sea receives the remnants of cyclones from Bay of Bengal.

Choose the correct code from the following

a) 1 and 2 only

b) 1 and 3 only

c) 2 and 3 only

d) 1, 2 and 3

Q.7) The area known as 'Golan Heights' sometimes appears in the news in the context of the events related to

a) Central Asia

b) Middle East

c) South-East Asia

d) Central Africa

Q.8) Consider the following statements:

1. Sea of Galilee is between Syria and Lebanon
2. Golan Heights is a grassland plain in south-western Syria but annexed by Israel

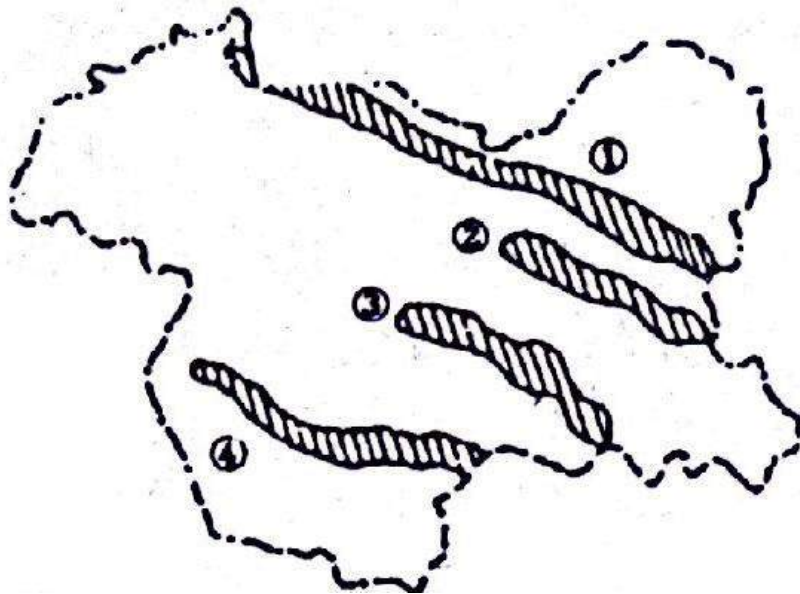3. Rainwater from the Golan's catchment feeds into the Jordan River.

Which of the above statements is/are correct?
   a) 1 and 2 only
   b) 3 only
   c) 1, 2 and 3
   d) None

Q.9) Siachen Glacier is part of –
   a) Pir Panjal Range
   b) **Karakoram Range**
   c) Zanskar Range
   d) Ladakh Range

Q.10) Consider the below map:

Identify the mountain ranges marked 1, 2, 3 and 4 respectively:
   a) Ladakh, Zaskar, Karakoram and Pir Panjal
   b) Karakoram, Zaskar, Pir Panjal and Ladakh
   c) Ladakh, Pir Panjal, Karakoram and Zaskar
   d) Karakoram, Ladakh, Zaskar and Pir Panjal

Q.11) The world's first oldest rock was discovered in?
   a) Singhbhum, Odisha

b) Kendujhar, Odisha
c) **Jack Hill, Australia**
d) Both a and b

Q.12) Which of the below given pairs is/are correct?

(Piligrim place) : : (Associated State)

1. Bhadrachalam : : Andhra Pradesh
2. Hampi : : Karnataka
3. Buxar : : UP
4. Mahendragiri : : Odisha

Choose the appropriate answer:

a. 1 and 2 only
b. **2 and 4 only**
c. 1, 2 and 3
d. 2, 3 and 4

Q.13) Consider the following statements with respect to Food Safety and Standards Authority of India (FSSAI)

1. It is established under the Food Safety and Standards Act, 2006
2. Ministry of Consumer Affairs, Food and Public Distribution is administrative ministry for the implementation of FSSAI

Which of the following statements is/are correct?

a) **Only 1**
b) Only 2
c) Both 1 and 2
d) None of the above

Q.14) Which of the following statements about National Nutrition Mission is/are true?

1. The programme through the targets will strive to reduce the level of stunting, under-nutrition, anemia and low birth weight babies.
2. It aims at reaching 10 crore beneficiaries in three phases between 2017 and 2020 across all districts of the country.
3. Beneficiaries of the programme include children upto the age of 12 years, pregnant women and lactating mothers.

Choose the appropriate answer:

a) 1 only

b) **1 and 2 only**
c) 2 and 3 only
d) 1, 2 and 3

Q.15) Which organization recently signed an agreement with India to provide a $200 million loan for implementing National Nutrition Mission?
   a) **World Bank**
   b) World Health Organization
   c) International Monetary Fund
   d) Bill & Melinda Gates Foundation

Q.16) Consider the following statements:
   1. Under the Swadesh Darshan scheme, thirteen thematic circuits have been identified, for development.
   2. Ramayana Circuit is part of this Swadesh Darshan scheme.
   3. Under Swadesh Darshan scheme, the Ministry of Tourism provides Central Financial Assistance (CFA) to State Governments/Union Territory Administrations, for various tourism projects.

Which of the above statements is/are correct?
   a) 1 and 2 only
   b) 2 only
   c) **1, 2 and 3**
   d) None

Q.17) Consider the following statements about Asia-Pacific Economic Cooperation (APEC) and identify the incorrect statement:
   a) It is a regional economic forum established in 1989.
   b) **India is a founding member of APEC.**
   c) It is a forum for 21 Pacific Rim member economies that promotes free trade throughout the Asia-Pacific region.
   d) China is also a part of APEC.

Q.18) Consider the following statements
   1. India is a founder member of International North South Transport Corridor (INSTC)
   2. India was formally admitted as member in Shanghai Cooperation Organisation last year

Which of the statements given above is/are correct?
   a) 1 only

b) 2 only
c) **Both 1 and 2**
d) None

**Q.19) Windrush scandal or Windrush Generation is often in new. It deals with –**
a) Corruption in India's wind energy association, which is accused of blatant fakery.
b) **UK's tough immigration policy and ill treatment of Caribbean and other Commonwealth nationals.**
c) OPEC members' straightforward corruption scandal that started with some of their state-owned oil companies.
d) Agusta-Westland chopper scam or Choppergate

Q.20) Consider the below statements about United Nations Security Council Resolution 242:
1. United Nations Security Council Resolution 242 deals with Six-Day War.
2. It was adopted under Chapter VI of the UN Charter.

Which of the above statements is/are correct?
a) 1 only
b) 2 only
c) **Both 1 and 2**
d) Neither 1 nor 2
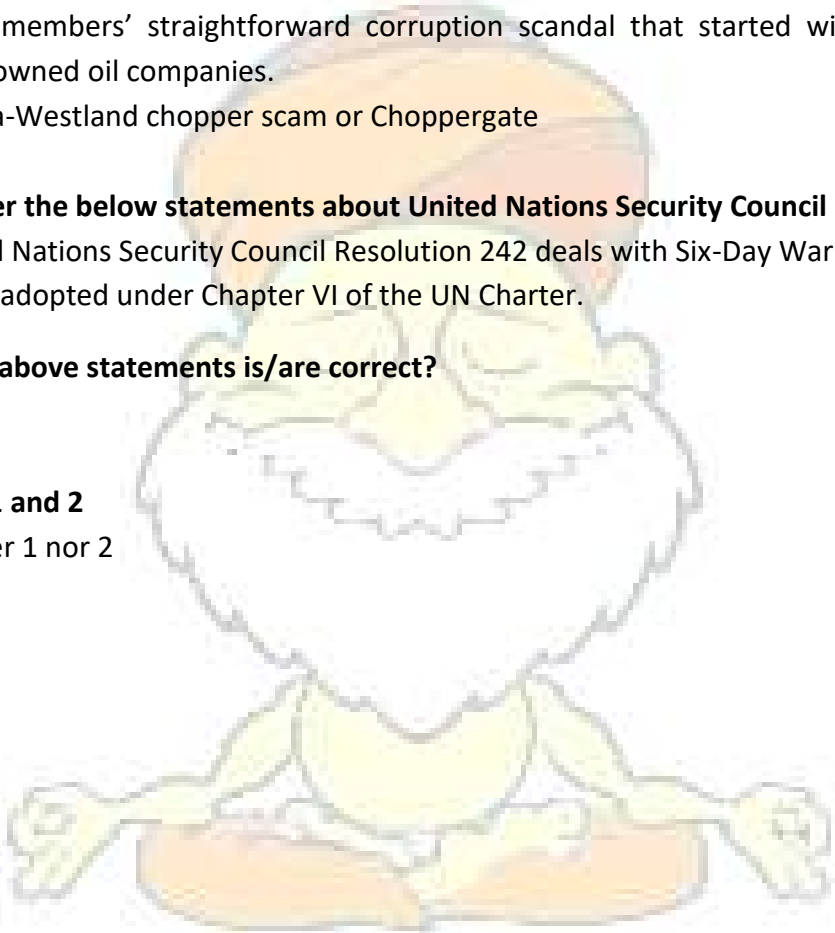
Q.21) Consider the following statements with regard to GST Council:

1. It is a constitutional body.
2. Prime Minister is the Chairperson of the Council.
3. Members of the Council include Union Finance Minister and States Finance Minister

Which of the statements provided above is/are correct?

a) 1 only
b) 1 and 2 only
c) 2 and 3 only
d) 1, 2 and 3

Q.22) Economic and Social Survey of Asia and the Pacific 2018 is a flagship report published by

a) WB
b) IMF
c) WEF
d) UN

Q.23) Which among the following acquisition is the largest ever Indian acquisition by a foreign firm, which was in news recently?

a) Walmart-Flipkart deal
b) Amazon-Flipkart deal
c) Vodafone- Hutchison deal
d) Alibaba-Jio deal

Q.24) Consider the following statements:

1. The security market of India is regulated by SEBI.
2. SEBI regulates Mergers and Acquisitions transactions involving entities listed on recognised stock exchanges in India.

Which of the above statements is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) None

Q.25) Which among the following institution recently approved modern animal-free testing for drugs replacing the pyrogen test and the abnormal toxicity test carried out on animals?
   a) Indian Drugs Manufacturers' Association (IDMA)
   b) Indian Pharmacopoeia Commission (IPC)
   c) Federation of Indian Chambers of Commerce & Industry (FICCI)
   d) Central Drugs Standard Control Organization

Q.26) Consider the following statements with reference to river Ganga:
   1. The municipal sewage accounts for 20% of the pollution load.
   2. The industrial pollutants (volume wise) accounts for about 80%.
   3. The river basin spreads across 5 states.

Which of the statements given above is/are correct?
   a) 1 and 2 only
   b) 3 only
   c) 1, 2 and 3
   d) None

Q.27) Which among the following are part of major left-bank tributaries of river Ganga?
   1. Gomti
   2. Ghaghara
   3. Damodar
   4. Kosi
   5. Yamuna

Choose the correct code from the following
   a) 3 and 5
   b) 1, 2 and 3
   c) 1, 2 and 4
   d) 1, 2, 3 and 4

Q.28) Which of the statements given below is/are correct?
   1. National Ganga Council is under chairmanship of Hon'ble Prime Minister of India.
   2. Empowered Task Force (ETF) on river Ganga under chairmanship of Hon'ble Union Minister of Water Resources, River Development and Ganga Rejuvenation.

Choose the correct code from the following
   a) 1 only

b) 2 only
c) **Both**
d) None

Q.29) Consider the below statements with reference to Koalas:
1. Koala bears are carnivoran mammals of the family Ursidae.
2. They are found on the continents of North America, Europe, and Australia.
3. They are considered to be vulnerable according to IUCN.

Which of the statements given above is/are correct?
a) 1 only
b) **3 only**
c) 2 and 3 only
d) 1 and 3 only

Q.30) Which of the following species are known as the 'Panda of the sea'?
a) King Penguin
b) Walrus
c) **Vaquita porpoise**
d) Indian Dugong

Q.31) GravityRAT was in news recently. What is it about?
a) Einstein's theory of general relativity.
b) **A RAT that spies on computers.**
c) NASA's latest Mars lander designed to perch on the surface of the red planet and listen for 'Marsquakes'.
d) The most advanced computer mouse which can work with or without a surface.

Q.32) Who is considered to be the world's oldest elected leader?
a) Joko Widodo
b) **Mahathir Mohamad**
c) Elizabeth II
d) Sheikh Sabah Al-Ahmad

Q.33) Exercise MALABAR is a joint military exercise between which of the following given countries:
a) India, USA, and Indonesia
b) Japan, India, and Australia

c) India, USA and France
d) **India, Japan and USA**

Q.34) "Pitch Black" Air exercise is between which of the following given countries:
a) India and USA
b) India and New Zealand
c) India, USA and Australia
d) **India and Australia**

Q.35) Vishaka Vs State of Rajasthan case deals with –
a) 2012 gang rape case which involved a rape and fatal assault.
b) **Enforcement of the fundamental rights of working women under Articles 14, 19 and 21 of the Constitution of India.**
c) Landmark judgment which declared that Preamble is part of the Constitution.
d) Landmark judgment which played the most significant role towards the transformation of the judicial view on Article 21 of the Constitution of India so as to imply many more fundamental rights from article 21.

Q.36) Sexual Harassment at Workplace Act 2013, was passed to protect women from sexual harassment. Which of the following statements are correct regarding this act?
1. It is compulsory for an organization with atleast 100 or more employees to set up an internal complaints committee for addressing complaints of sexual harassment.
2. It covers all kinds of work places including non – traditional ones as well as transport provided for work.
3. It includes, unwelcome physical, verbal or non-verbal conduct of sexual nature, showing pornography, physical contact or advances, and making sexually-coloured remarks.

Select the code from following:
a) 1 and 2
b) **2 and 3**
c) 1 and 3
d) All of the above

Q.37) Consider the below statements:
1. India prohibits import and export of ivory.

2. Karnataka has the highest number of elephants.
3. Elephant tusks are the property of the government, according to the Wildlife (Protection) Act of 1972.

Which of the above statements is/are correct?
   a) 2 only
   b) 1 and 2 only
   c) 1 and 3 only
   d) **1, 2 and 3**

Q.38) Consider the following statements about elephant conservation:
   1. Under Wildlife (Protection) Act, 1972 Elephant is a Schedule I animal.
   2. Asian elephants are listed as "endangered" in the IUCN Red List of threatened species.
   3. Project Elephant is a Centrally Sponsored Scheme.

Which of the above statements is/are incorrect?
   a) 2 only
   b) 2 and 3 only
   c) All the above
   d) **None**

Q.39) Who among the following can be punished under Domestic Violence Act - meant to punish men who abuse women in a relationship?
   1. Husband
   2. Former Husband
   3. Brother
   4. Son

Choose the appropriate code:
   a) 1 only
   b) 1 and 2 only
   c) 1, 3 and 4
   d) **1, 2, 3 and 4**

Q.40) Consider the below statements in regard to Shangri-La dialogue:
   1. It is a "Track One" inter-governmental security forum attended by defense ministers, permanent heads of ministries and military chiefs of 28 Asia-Pacific states.
   2. It is held annually and run by the Singapore government.

Which of the above statements is/are correct?
   a) **1 only**
   b) 2 only
   c) Both 1 and 2
   d) Neither 1 nor 2

Q.41) Consider the below statements about Shanghai Cooperation Organisation (SCO):
   1. It is a Eurasian political, economic, and security organisation.
   2. Its members include all Central Asian Countries except Uzbekistan.
   3. India and Pakistan joined SCO as full members.

Which of the above statements is/are correct?
   a) 1 only
   b) 1 and 2 only
   c) **1 and 3 only**
   d) 1, 2 and 3

Q.42) MIKE program started in South Asia deals with –
   a) **Conservation of Elephants**
   b) Conservation of Tigers
   c) Conservation of Vultures
   d) Conservation of Rhinos

Q.43) Scientists at the Indian Space Research Organisation (ISRO) are developing an environment-friendly propellant to power satellites and spacecraft. The green propellant blend is based on –
   a) hydrazine rocket fuel
   b) cryogenic technology
   c) **hydroxylammonium nitrate (HAN)**
   d) hybrid NEMA oxidizer

Q.44) Recently, China started sea trials with it's first domestically manufactured aircraft carrier. Identify the name of the carrier from below –
   a) **Type 001A**
   b) Liaoning
   c) Tiangong-1
   d) Senpai-1

Q.45) Consider the following statements

1. West Bank is more close to Mediterranean Sea while Gaza Strip is far
2. Gaza strip is more close to Mediterranean Sea than Dead sea
3. West Bank is close to Dead Sea than Mediterranean Sea
4. Gaza Strip is close to Dead Sea than Mediterranean Sea

Identify the correct statement/s

a) 1 and 4
b) 2 and 3
c) 1 and 3
d) 2, 3 and 4

Q.46) The Genetic Engineering Appraisal Committee is constituted under the

a) Food Safety and Standards Act, 2006
b) Geographical Indications of Goods (Registration and Protection) Act, 1999
c) Environment (Protection) Act, 1986
d) Wildlife (Protection) Act, 1972

Q.47) Rafah Crossing Point is the crossing point between

a) Egypt and Gaza Strip
b) Jordan and Syria
c) Kuwait and Iraq
d) Lebanon and Israel

Q.48) Consider the following statements with respect to Genetic Engineering Appraisal Committee (GEAC)

1. It is under the Ministry of Science and Technology
2. It is the apex body for approval of activities involving large scale use of hazardous microorganisms and recombinants
3. It is responsible for approval of proposals relating to release of genetically engineered organisms and products into the environment including experimental field trials

Which of the following statements is/are correct?

a) 1 and 2
b) 1 and 3
c) 2 and 3
d) All of the above

Q.49) Satkosia Tiger Reserve was in news recently. It belongs to which state?

a) Karnataka

b) Maharashtra

c) Madhya Pradesh

d) **Odisha**

Q.50) Consider the following statements

1. National Tiger Conservation Authority is a statutory body under the Ministry of Environment, Forests and Climate Change.

2. Prime Minister is the Chairperson of NTCA.

3. Nagarjunsagar-Srisailam Tiger Reserve is the largest and Bor Tiger Reserve is the smallest tiger reserve in India.

Which of the following statements is/are correct?

a) 1 and 2

b) **1 and 3**

c) 2 and 3

d) All of the above

Q.51) Which of the following statements regarding Marsupial mammals are correct?

1. Marsupial females have a pouch to carry and protect their babies.

2. The young ones are born premature and the embryo climbs from the mother's birth canal to the nipple.

3. They have a longer gestation period as compared to placental mammal of the same size.

Select the code from below:

a) **1 and 2**

b) 2 and 3

c) 1 and 3

d) All of the above

Q.52) Consider the following related to position of 'Water' in Indian Constitution.

1. The provision for water being in the Union, State and Concurrent List is the major bone of contention in present day Inter-Water dispute.

2. Article 262 deals with adjudication of disputes relating to waters of inter State Rivers or river valleys

3. Indian Constitution explicitly grants parliament the right to legislate over the matters in Entry 56, and also gives it primacy over the Supreme Court.

Which of the above statements is/are correct?

a) 1 and 3 only
b) 1 and 2 only
c) 2 and 3 only
d) All the above

Q.53) Consider the following statements with reference to MGNREGA.
1. At least one-third beneficiaries are to be women.
2. Use of heavy machinery is allowed for expediting the work.
3. It provides work for skilled workers in the rural areas.

Which of the above statements is _incorrect_?
a) 1 and 2 only
b) 2 and 3 only
c) 1 and 3 only
d) None of the above

Q.54) In which of the following cases, Governor can use situational discretion?
1. During appointment of chief minister when no party has a clear-cut majority in the state legislative assembly.
2. When the chief minister in office dies suddenly and there is no obvious successor.
3. Dismissal of the council of ministers when it cannot prove the confidence of the state legislative assembly.
4. Dissolution of the state legislative assembly if the council of ministers has lost its majority.

Choose appropriate code:
a) 2 and 3 only
b) 1, 3 and 4
c) 1, 2 and 3
d) 1, 2, 4 and 4

Q.55) Consider the following statements
1. Constitution does not contain any specific procedure for the selection and appointment of the Chief Minister.

2. According to the Indian Constitution, in case of no pre-poll alliance among parties, the Governor should give first preference to the single largest party.
3. Governor has provision to exercise his/her personal discretion in the selection and appointment of the Chief Minister, when no party has a clear majority in the assembly.

Which of the following statements is/are correct?
   a) 1 and 2
   b) 1 and 3
   c) 2 and 3
   d) All of the above

Q.56) The oath of office and secrecy is administered to the Chief Minister by
   a) Speaker of Legislative Assembly
   b) Governor
   c) Chief Justice of the High Court
   d) Senior most Member of Legislative Assembly

Q.57) 'Navika Sagar Parikrama' is a voyage of circumnavigation of Globe by an India crew. What is special about it?
   a) It is first ever attempt to circumnavigate the globe by an Indian crew.
   b) It is the first time an indigenous ship is being used to circumnavigate the globe.
   c) This is the first-ever Indian circumnavigation of the globe by an all-women crew.
   d) This is the first ever circumnavigation of globe attempted in History.

Q.58) Pakistan has objected over the India's 330 MW Kishanganga hydroelectric project in kishanganga river, Kishanganga is a tributary of which river?
   a) Jhelum
   b) Indus
   c) Chenab
   d) None of the above

Q.59) Consider the below statements in reference to Permanent Court of Arbitration (CoA)
   1. It is an intergovernmental organization, located at The Hague in the Netherlands.
   2. The organization is not a United Nations agency, but PCA is an official United Nations Observer.

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) **Both 1 and 2**
d) Neither 1 nor 2

Q.60) Jatayu Conservation Breeding Centre (JCBC) is part of –
a) Telangana's vulture conservation programme
b) **Haryana's vulture conservation programme**
c) Maharashtra's vulture conservation programme
d) Madhya Pradesh's vulture conservation programme

Q.61) Vultures are considered to be declining in population mostly due to consumption of carcasses of livestock and cattle injected with
a) Ketoprofen
b) Diclofenac
c) **Both (a) and (b)**
d) Neither (a) nor (b)

Q.62) Consider the below statements with regard to Swachh Survekshan 2018':
1. Swachh Survekshan survey is released by Ministry of Health and Family Welfare.
2. Mysuru has been ranked the best city in solid waste management.
3. Indore gets cleanest city tag; followed by Madhya Pradesh capital Bhopal, while Union Territory of Chandigarh stands at the third place.

Which of the following statements are correct?
a) **3 only**
b) 1 and 3
c) 2 and 3
d) All of the above

Q.63) Which among the following can be used as raw material for ethanol production?
1. Sugarcane
2. sugar beet
3. broken rice
4. rotten potatoes
5. corn

Choose appropriate answer:
a) 1, 2 and 5

b) 1, 2, 4 and 5
c) 1, 2 and 4
d) **1, 2, 3, 4 and 5**

Q.64) Consider the following statements with regard to 'Prompt Corrective Action (PCA) Framework', which was in news recently. Identify the correct statement –

a) RBI has come out with this framework in order to contain NPAs of Public Sector Banks only.
b) **NABARD has come out with this framework for regional rural banks (RRBs).**
c) Ministry of Home Affairs has come out with this framework for directing all NGOs and entities receiving foreign fundings.
d) Lodha Panel has come out with this framework that will sort out the mess in sports once and for all.

Q.65) World Urbanization Prospects is released by –
a) WEF
b) IMF
c) **UN**
d) WB

Q.66) Consider the following pairs

Passes	Connects
1. Banihal	Jammu and Srinagar
2. Zoji La	Srinagar and Leh
3. Shipki La	Himachal Pradesh and Tibet
4. Mana pass	Uttarakhand and Tibet

Which of the above pairs is/are correctly matched?
a) 1 only
b) 2 only
c) 1 and 3 only
d) **All the above**

Q.67) Consider the following statements about 'Zoji La Pass Tunnel Project'
1. It will be the longest tunnel in Asia when completed

2. It is an upcoming project which aims at providing all weather connectivity between Srinagar, Kargil and Leh.

Select the correct statements
   a) 1 only
   b) 2 only
   c) Both 1 and 2
   d) Neither 1 nor 2

Q.68) The N. Chandrasekaran committee is related to which of the following:
Select the correct statements

   a) Data protection law in India
   b) To study Artificial intelligence in military
   c) 15th Finance Commission
   d) None of the above

Q.69) Which of the following statements are true regarding the Permanent Residency Status Scheme.
   1. The scheme was introduced so as to boost foreign tourism in India.
   2. Is open for foreign investors and the should result in generating employment to at least 20 Indians per financial year.
   3. PRS will be granted for a period of 10 years with multiple entry.

Select the correct option
   a) 1 only
   b) 2 only
   c) 2 and 3
   d) None of the above

Q.70) The Ashok Dalwai committee is related to which of the following:
Select the correct statements

   a) Data protection law in India
   b) To study Artificial intelligence in military
   c) 15th Finance Commission
   d) Model law on contract farming

Q.71) Which of the following statements are true regarding solar power infrastructure in India.

1. Once at its full capacity, the Bhadla Industrial Solar Park located in Madhya Pradesh will be the world's biggest
2. The world's biggest single rooftop solar plant happens to be in India.
3. India's Mangalore airport, with 40 MW, is the world's first airport to be fully powered by solar energy.

Select the correct option

a) 1 only
b) 2 only
c) 2 and 3 only
d) None of the above

Q.72) Which of the following statements are true regarding Chemical Weapons Convention.

1. The Organisation for the Prohibition of Chemical Weapons (OPCW), an intergovernmental organisation, is the implementing body for the CWC.
2. The CWC prohibits the development, production, acquisition and stockpiling of chemical weapons by its member states.
3. Five countries, including Israel and Palestine, are yet to sign up to the CWC

Select the correct option

a) 1 and 2 only
b) 1 and 3 only
c) 1, 2 and 3
d) None of the above

Q.73) Which of the following statements are true regarding solar power infrastructure in India.

1. Nipah virus infection gets its name from the village in Singapore where the person from whom the virus was first isolated succumbed to the disease.
2. Nipah Virus is a zoonotic disease.
3. It spreads from animal to humans through animal bite.

Select the correct option

a) 1 only
b) 2 only

c) 2 and 3 only

d) None of the above

Q.74) Which of the following statements is/are true regarding 'Samagra Shiksha' Programme'.

1. It aims to make school education an integrated whole from pre-school to Class-12.
2. The programme will subsume three existing schemes: Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shikskha Abhiyan (RMSA) and Teacher Education (TE).
3. The programme will focus on quality education and enhancing learning outcomes of students, bridging social and gender gaps in the school education, and promoting vocalisation of education.

Select the correct option

a) 1 only

b) 1 and 2 only

c) 2 and 3 only

d) 1,2 and 3

Q.75) Which of the following statements is/are true regarding 'Clean Air India Initiative'.

1. It is a joint initiative between Indian and Netherlands governments.
2. The campaign aims to curb air pollution in Indian cities.
3. On similar lines, 'INDUS impact' project aims to halt the hazardous burning of paddy stubble by promoting business partnerships that "upcycle" it.

Select the correct option

a) 1 only

b) 1 and 2 only

c) 2 and 3 only

d) 1,2 and 3

Q.76) Nepal has become the first in WHO's South-East Asia Region to defeat Trachoma. The disease Trachoma affects which body part:
Select the correct option

a) Eyes

b) Ears

c) Eyes and ears

d) None of the above

Q.77) In which state is the first national sports university proposed to be set up.
Select the correct option

a) **Manipur**
b) Meghalaya
c) Nagaland
d) Assam

Q.78) The Singchung Bugun Community Reserve has won the India Biodiversity Award 2018. Which of the following statements are true regarding the reserve?

1. It is located in Arunachal Pradesh.
2. The NGO won the India Biodiversity Award 2018 in the "Conservation of domesticated species" category.
3. The NBA award recognises the Bungun community efforts to conserve the Liocichla bird found in the region.

Select the correct option

a) 1 and 2 only
b) **1 and 3 only**
c) 1, 2 and 3
d) None of the above

Q.79) The V K Agnihotri committee is related to which of the following:
Select the correct option

a) Data protection law in India
b) To study Artificial intelligence in military
c) **Rules of procedure of the Upper House**
d) Model law on contract farming

Q.80) Which of the following statements are true regarding the 'Gaj Yatra' campaign?

1. It is a nationwide campaign launched by the Wildlife Trust of India in collaboration with Union Environment, Forest and Climate Change.

2. The campaign aims to protect the elephant and its habitat and at securing 100 elephant corridors across India.

Select the correct option

a) 1 only
b) 2 only
c) **1 and 2 both**
d) None of the above

Q.81) Which of the following statements is/are true regarding the agreement to 'green' cricket in India?

1. It has been signed between the BCCI and UN Environment.
2. The initiative aims to reduce cricket's environmental impact by greening operations and engaging fans and cricketers in green initiatives.
3. The partnership will also focus on phasing out single-use plastic across stadiums and cricket events in the country.

Select the correct option

a) 1 and 2 only
b) 1 and 3 only
c) **1, 2 and 3**
d) None of the above

Q.82) The Praapti web portal is related to which of the following:
Select the correct option

a) **Power sector**
b) Women Empowerment
c) Law and order
d) None of the above

Q.83) Which of the following statements are true?

1. GI tags are given on the basis of the Geographical Indications of Goods (Registration and Protection) Act, 1999.

2. A GI tag connects the quality and authenticity of a given product to a particular geographical origin, thereby ensuring that no one other than the authorised user can use the popular product's name.
3. The first product to be included in the GI list was Chanderi Sarees.

Select the correct option

a) **1 and 2 only**
b) 1 and 3 only
c) 1, 2 and 3
d) None of the above

Q.84) Which of the following elements shows ferromagnetism?
Select the correct option

a) Cobalt (Co)
b) Nickel (Ni)
c) Ruthenium (Ru)
d) **All of the above**